PARENT-CHILD INTERACTION THERAPY AND RESILIENCE WITHIN CHILD WELFARE

by

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A Dissertation Submitted in

Partial Fulfillment of the

Requirements for the Degree of

Doctor of Philosophy

in Social Work

at

The University of Wisconsin-Milwaukee

May 2018

ABSTRACT

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The University of Wisconsin-Milwaukee, 2018
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Background: Children in foster care and their substitute caregivers (i.e., foster parents) lack access to evidence-based interventions designed to 1) mitigate the effects of maltreatment on child behavior and 2) strengthen parenting skills needed to effectively care for children with a history of maltreatment. Previous research has established that Parent-Child Interaction Therapy (PCIT) is an evidence-based intervention for children with a history of maltreatment. Yet, PCIT's broader impact on child welfare outcomes (i.e., placement and permanence) and the implications of adapting PCIT for foster families remains largely unknown. Furthermore, intervention effects on children's resilience remain largely unstudied, although interventions that facilitate child resilience may help to advance children's overall well-being.

Methods: First, using foster parent reports from a randomized controlled trial of group PCIT and child welfare administrative data, logistic regression and survival analyses were employed to compare placement outcomes, permanency outcomes, and whether foster parents maintained their licenses between foster parent-child dyads who received group PCIT and foster parent-child dyads who received child welfare services-as-usual while accounting for child and parent-level covariates. Second, thematic analysis of focus group data explored PCIT practitioners' and foster parents' perceptions of PCIT within the context of child welfare. Third, a new measure of child resilience, the Early Childhood Measure of Resilience (ECMR), was developed and piloted

with a sample of foster parent-child dyads to examine its psychometric properties using traditional and contemporary (i.e., Rasch modeling) analysis strategies.

Results: Results from the first study indicated that children who received group PCIT were significantly more likely to have permanence within 12 months post-baseline compared to children who received services-as-usual. Furthermore, differences were observed across the groups on placement disruption, with children in the intervention condition having better placement stability, though analyses did not rise to the level of statistical significance. Foster parents' license status was comparable across the intervention and control groups. In the second study, analysis of PCIT practitioners' and foster parents' perceptions resulted in four exploratory themes related to the implementation of PCIT within child welfare: 1) Barriers to implementing PCIT in child welfare, 2) Factors that facilitate the implementation of PCIT in child welfare, 3) Developing a trauma-informed approach to PCIT, and 4) Strategies to facilitate the translation of PCIT into child welfare. Results from the third study revealed that the ECMR had acceptable internal consistency, concurrent validity, divergent validity, test re-test reliability, person reliability and item reliability. Exploratory factor analysis revealed four factors underlying the ECMR. Rasch analyses provided insight into future instrument refinement.

Implications: The current study findings contribute to the field's understanding of the effects of PCIT on placement and permanence, highlight the potential benefits of relying on multiple stakeholders' perspectives to help guide PCIT implementation within child welfare, and draw attention to assessing positive well-being (e.g., resilience across various domains of functioning). Collectively, study results help to support the translation of PCIT and the resilience framework into child welfare.

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ACKNOWLEDGMENTS

I certainly never expected that this section of my dissertation would be the most difficult to write. However, it is extremely difficult to put into words how the support I have received, beginning as early as 2012, has helped to guide me along this path. Dr. James 'Dimitri' Topitzes has exemplified all that I have aimed to be- a researcher with a practitioner's heart whose work both produces knowledge and has implications for the real world. Dimitri, your dedication to providing feedback and guidance that is helpful, filled with humanity, and allows me to pursue options that I feel are in my best interest will leave a lasting impression on me. I sincerely hope that we continue to collaborate. Dr. Michael Brondino has provided me with the necessary skills, and resources, to advance my dissertation and to pursue a wide variety of employment opportunities. His willingness to work through any problem (even when you just show up at his office) has been invaluable. Dr. Joshua Mersky has continually reminded me to engage in the process and not just focus on the end product. I have always been able to count on his willingness to reach out to other scholars on my behalf, and I hope to be able to return the favor someday. Dr. Cheryl McNeil trained me in PCIT in 2014 and thanks to her superior clinical skills and dedication to research, I have learned to ground my research with practice and vice versa. I fondly think of Cheryl as the Yoda of PCIT. Dr. Nancy Rolock has pushed my thinking, and my work has always benefitted from it. I look forward to collaborating with her on child welfare research. Dr. Erin Winkler has been an incredible teacher, mentor and advocate. Her insights into qualitative research, coupled with her personable demeanor, always makes me feel comfortable sharing my work with her because I know she will give practical feedback and be an ally in a world dominated by prediction and control.

It would be remiss of me not to mention Dr. Steve McMurtry, Dr. Lisa Berger, Mike

Maletis, everyone at the Institute for Child and Family Well-Being, and my fellow PhD students. Dr. McMurtry has a wealth of knowledge on seemingly everything one needs to know about navigating the PhD program and the job market. Dr. Berger was single-handedly responsible in shaping my aspirations as a teacher; if you read my teaching philosophy you will find evidence of how her teaching style has made an impression on me. Mike Maletis expanded my knowledge on trauma and how to work with families in crisis during a very formative time in the program, my first year. Undoubtedly, my understanding of how trauma affects children was shaped by Mike's mentorship. Throughout the years, he has remained in touch, which has been one of my greatest sources of moral support and why I consider him a mentor and a friend. The people at the Institute for Child Well-Being have supported me as I tried on many hats and I hope to remain affiliated with the Institute and to help advance its mission. My fellow PhD students have suffered with me, and have helped me to see the light at the end of the tunnel.

CHAPTER ONE

Introduction

Statement of the Problem

In 2016, 676,000 children across the United States were exposed to substantiated maltreatment (U.S. Department of Health and Human Services, 2018). For children with substantiated maltreatment who cannot remain in their home, foster care provides a temporary placement intended to facilitate safety, stability and even permanence, e.g., through pre-adoption services. However, research on children in foster care has documented placement instability (e.g., Oosterman, Schuengel, Slot, Bullens & Doreleijers, 2007), lengthy time to permanence (Child Welfare Information Gateway, 2017), and little positive influence of foster care on children's well-being (Berger, Bruch, Johnson, James & Rubin, 2009). The primary mental health problem among children in foster care is externalizing disorders (Brosnard et al., 2016). Yet, mental health services are underutilized for children in foster care (Pecora, Jensen, Romanelli, Jackson & Ortiz, 2009).

Parent management programs (parent training) represent a promising treatment approach for children with externalizing behavior problems (Landsverk, 2017). Though individual interventions may differ in their implementation, the common components include 1) assessing parenting problems, 2) teaching parents new skills, 3) parents applying the skills with their children, and 4) providing feedback to parents on their use of skills (Barth et al., 2005). Parent-Child Interaction Therapy (PCIT), which provides parenting training to parents and their children ages 2-7 who exhibit behavior problems, is one example of an evidence-based parent training intervention. The PCIT model consists of two mastery-based, sequential stages of treatment in which the parent-child dyad participates in conjoint sessions with a therapist who coaches the parent using a bug-in-the-ear device from behind a one-way mirror. The first stage, Child-Directed Interaction (CDI), aims to strengthen the parent-child relationship while the second

stage, Parent-Directed Interaction (PDI), teaches parents how to address challenging child behavior (e.g., non-compliance) using positive discipline (McNeil & Hembree-Kigin, 2010).

Early studies of PCIT with clinical outpatient samples found improvements in self-report parental functioning from baseline to post-baseline (e.g., Eyberg & Robinson, 1982) and families who received PCIT reported significant changes in child behavior compared to families in a wait-list control condition (Schuhmann, Foote, Eyberg, Boggs & Algina, 1998). In samples of biological parent-child dyads involved with child welfare, three randomized controlled trials have demonstrated that PCIT reduces negative parenting behaviors related to maltreatment recidivism and child behavior problems (Chaffin et al., 2004; Thomas & Zimmer-Gembeck, 2011; 2012). PCIT has also been translated into child welfare for foster parent-child dyads PCIT. Timmer, Urquiza and Zebell (2006) found that PCIT was equally effective among biological parent-child dyads and foster parent-child dyads in reducing child behavior problems and caregiver distress from baseline to post-baseline. Furthermore, researchers have examined the effects of brief, group PCIT with foster parent-child dyads and found significant reductions in child externalizing behavior problems and parenting stress (McNeil, Herschell, Gurwitch and Clemens-Mowrer, 2005; Mersky, Topitzes, Grant-Savela, Brondino & McNeil, 2016; Mersky et al,, 2015) and improvements in parenting skills, compared to dyads who received child welfare services-as-usual (Mersky et al., 2015). Consequently, this dissertation focuses on the translation of PCIT with foster parent-child dyads into child welfare, along with the translation of the resilience framework, which may have implications for parent training interventions, into child welfare.

Significance of the Problem

The translation of PCIT into child welfare is warranted for several reasons. First, PCIT is

evidence-based, meaning the intervention has been documented as effective with consistent positive effects on both child and caregiver outcomes (Center for Substance Abuse Prevention, 2009). For instance, two recent meta-analyses of PCIT studies found positive impacts on child externalizing behaviors, child temperament and self-regulatory abilities, the frequency of child behavior problems, caregiver tolerance for child behaviors, the difficulty of caregiver–child interactions, and overall caregiver distress (Cooley, Veldorale-Griffin, Petren & Mullis, 2014; Thomas, Abell, Webb, Avdagic & Zimmer-Gembeck, 2017). Second, PCIT is considered to be a trauma-informed intervention by the National Child Traumatic Stress Network (2008), meaning throughout the intervention an emphasis is placed on recognizing and responding to the causes and consequences of trauma, particularly child maltreatment (Substance Abuse and Mental Health Service Administration, 2014). This is a key consideration because children in foster care are often exposed to complex trauma (Greeson et al., 2011). Finally, previous research has demonstrated positive caregiver and child outcomes when PCIT was implemented with families involved with child welfare (see Wilsie, Campbell, Chaffin & Funderburk, 2017 for a review). As such, the empirical research to date suggests that PCIT effectively targets the intended outcomes of improved child and parent functioning.

These positive results notwithstanding, several gaps in the literature exist. First, there is a dearth of empirical evidence regarding PCIT's system-level impact. No studies to date with child welfare samples have examined the effects of PCIT on child welfare outcomes related to placement and permanence. Second, while quantitative studies of PCIT with the child welfare population have expanded the field's understanding, less is known about the experiences of individuals who deliver or receive PCIT within the context of child welfare. As such, a greater understanding of implementation from the perspective of multiple stakeholders is needed.

Furthermore, PCIT research within and outside of child welfare has largely ignored indicators of well-being, apart from maladaptive behavioral functioning. For instance, PCIT researchers have yet to examine the potential program effects on child resilience (i.e., adaptive functioning after exposure to adversity), an indicator related to well-being. This is perhaps due to a limited number of existing measures aimed at assessing resilience in young children (see Kordich-Hall, 2010 for a review).

Overarching Theoretical Foundation

The overarching framework that guided this dissertation was that of translational research, and specifically the translation of evidence-based practice (EBP) into child welfare. The National Institute of Health (NIH) defined translational research as "the process of applying ideas, insights, and discoveries generated through basic scientific inquiry to the treatment or prevention of human disease" (NIH, 2009 as cited in Rubio et al., 2010). The phases of translational research include T1 (experimental research), T2 (expansion of research to real-world conditions), and T3 (dissemination and/or implementation) (Novins, Green, Legha & Aarons, 2013; Palinkis & Soydan, 2012; Woolf, 2008). At its cores, translational research aims to move EBPs, such as PCIT, from the "bench to the bedside".

In an effort to bridge the research-practice gap and translate best practices to child welfare settings, the U.S. Children's Bureau commissioned child welfare experts to conceptualize and disseminate, "A Framework to Design, Test, Spread, and Sustain Effective Practice in Child Welfare" (Framework Workgroup, 2014; Testa et al., 2014). The framework consists of five (sequential, yet iterative) phases and can guide funders, decision-makers, researchers and program evaluators. First, the aim of the explorative phase (technically a separate and broader phase) is to identify an intervention for implementation or development that

will solve a problem and produce intended outcomes in a target population. Second, the aim of the formative stage is to demonstrate that the intervention improves target outcomes, is replicable, and is predictably associated with measures of fidelity and dosage effects. Third, the aim of the summative stage is to produce a report on the intervention's overall efficacy using empirical data (e.g., meta-analysis). Fourth, the aim of the translative phase is to disseminate the intervention into services-as-usual and to adapt as necessary for different populations and/or contexts. Fifth, the aim of the confirmative phase is to sustain changes in practice and practitioners' expertise using continuous quality improvement. Through these phases, researchers (and other stakeholders) can identify and explore, develop and test, compare and learn, replicate and adapt, and apply and improve evidence-based practice (Testa et al., 2014).

Overview of the Literature

PCIT for Biological Parent-Child Dyads

Parent-Child Interaction Therapy was originally developed in the 1970's as an intervention designed to reduce externalizing child behavior problems in children ages 2-7. The process of translating PCIT into child welfare began over two decades ago and the explorative phase was launched as researchers hypothesized that PCIT may reduce harsh parenting for families with a history of physical abuse, in addition to reducing challenging child behavior problems and improving parenting skills (e.g., Urquiza & McNeil, 1996). In the formative phase, researchers tested the application of PCIT to biological parent-child dyads involved in child welfare and found that the intervention produced the intended results of reducing externalizing child behavior problems, improving parenting skills and reducing maltreatment recidivism (e.g., Chaffin et al., 2004; Herschell & McNeil, 2005; Timmer, Urquiza, Zebell & McGrath, 2005; Thomas & Zimmer-Gembeck, 2011; 2012). The summative phase included

meta-analyses of PCIT within child welfare (e.g., Kennedy, Kim, Tripodi, Brown & Gowdy, 2016; Vlahovicova, Melendez-Torres, Leijten, Knerr & Gardner, 2017), which demonstrated positive results on reducing behavior problems in children and improving parenting stress. The translative phase included an adaptation to the PCIT model to better fit child welfare, including a motivational component to reduce attrition (Chaffin et al., 2011; Webb, Thomas, McGregor, Avdagic & Zimmer-Gembeck, 2017), and to a different population, namely foster parents (e.g., Mersky et al., 2016; McNeil et al., 2005; Timmer, Sedlar & Urquiza, 2004; Timmer, Urquiza & Zebell, 2006). The confirmative phase, which includes the widespread dissemination of PCIT into child welfare, is currently on-going (e.g., Scudder et al., 2017).

PCIT for Foster Parent-Child Dyads

Although PCIT with foster parent-child dyads represents a part of the translative phase in the overall translation of PCIT into child welfare, it can also be viewed as a new cycle of the Framework to Design, Test, Spread, and Sustain Effective Practice in Child Welfare (Framework Workgroup, 2014; Testa et al., 2014). In this cycle, the explorative phase consisted of researchers identifying a need to better train foster parents to care for children with externalizing behavior problems, and deciding to employ PCIT to fill that need (e.g., McNeil et al., 2005; Topitzes, Mersky & McNeil, 2015). The formative phase consisted of testing both a traditional PCIT model (i.e., individual) (e.g., Fricker-Elhai, Ruggiero & Smith, 2005; Timmer et al., 2006) and a group PCIT model (McNeil et al., 2005) with foster parent-child dyads, both of which have produced positive outcomes at the child and foster parent levels, including reductions in children's externalizing behavior and parenting stress. In this cycle, the research behind the summative phase is on-going. Timmer and colleagues (2006) compared the outcomes between a sample of biological parent-child dyads to a sample of foster parent-child dyads and found that

PCIT was effective in reducing child behavior problems and parenting distress in both groups. The translative phase consisted of a study that replicated and extended the group model of PCIT with promising results, including changes in foster parents' skills and decreased child behavior problems and parenting stress for dyads who received the intervention compared to dyads who received child welfare services-as-usual (Mersky et al., 2015; Mersky et al., 2016). Work on the confirmative phase to widely disseminate PCIT for foster parent-child dyads continues to emerge (Topitzes, Mersky & McNeil, 2016; Mersky, Topitzes & Blair, 2017).

Overall, the research behind each phase suggests that the implementation and dissemination of PCIT for foster parent-child dyads in child welfare is a promising area of translational research. However, gaps in the literature still exist. First, no studies to date have examined the effects of PCIT on system-level child welfare outcomes, which represents a gap in the literature on the formative phase. Child behavior problems robustly predict negative placement (e.g., Barth et al., 2007; Chamberlain et al., 2006; Koh, Rolock, Cross & Eblen-Manning, 2014; Oosterman et al., 2007) and permanency outcomes (e.g., Akin, 2011; Becker, Jordan & Larson, 2007; Connell, Katz, Saunders & Tebes, 2006). Moreover, scholars have found evidence of a cycle in which child behavior problems contribute to placement instability, and the placement instability subsequently exasperates child behavior problems (Rubin, O'Reilly, Luan & Localio, 2007). Given the theoretical underpinnings and empirical evidence suggesting that PCIT reduces externalizing behavior and improves foster parents' skills, research on the intervention effects of PCIT on child welfare outcomes (e.g., placement and permanency outcomes) seems to be a promising area worthy of research.

Second, the translation of PCIT into child welfare for foster parent-child dyads is built upon its integration and alignment with the cultural context, clients' needs and preferences, and

practitioners' knowledge (Testa et al., 2014). Yet, studies in the translative phase that aim to explore implementation from practitioners' and/or foster parents' perspectives are lacking, thus limiting the field's understanding of how, if at all, the child welfare context affects implementation. Moreover, we cannot know the extent to which an intervention aligns with the unique needs of the target population. Thus, diverse research with multiple stakeholders in the translative phase may help to illuminate where, when, why and for whom an intervention works, and subsequent future strategies to replicate or further adapt an intervention (Testa et al., 2014).

Resilience

The study of resilience, which grew out of developmental psychopathology studies in the early 1970's, is dedicated to understanding, assessing and improving positive adaptation or functioning following adversity. Resilience researchers often study risk and protective factors at multiple ecological levels, which are thought to influence resilience across various domains of functioning. Though various conceptual definitions of resilience have been used over the years, the central theme is that resilience is a dynamic process, rather than a personality trait, which can change over time and across contexts (Masten, 2015).

When translated into child welfare, the resilience framework shifts the focus to "more positive approaches in the missions, models, measures and methods of practice" (Masten, 2006, pg. 9). Though resilience research in child welfare is still in the explorative and formative phases of translation, the broad goal of translation is to advance the child welfare system's goal of enhancing children's well-being.

When interventions are informed by the resilience framework, the focus shifts to positive processes and outcomes (Masten, 2006), in addition to maladaptive processes and outcomes among children who have been exposed to adversity (e.g., maltreatment). Masten (2015) noted

"there is growing attention to the possibility that interventions focused on promoting competence and resilience, particularly if timed and targeted strategically, offer high benefit-to-cost returns and potentially more cascade effects than efforts focused exclusively on reducing problems" (pg. 300). Luthar and Cicchetti (2000) described the tenets of interventions informed by the resilience framework as seeking to enhance functioning, giving attention to strengths (and deficits), and testing for underlying processes that may explain how salient risk and protective factors operate.

Unfortunately, varying conceptual and operational definitions of resilience have thwarted researchers' attempts to measure and detect intervention effects on resilience. As such, measures that assess positive adaptation across numerous domains of developmental functioning are needed (Masten, 2006). Studies of this nature may help researchers and practitioners to assess intervention effects (e.g., during PCIT) on children's resilience, and perhaps even facilitate the translation of resilience-focused interventions into child welfare.

Summary of Research Questions and Methods

Chapters 2-4 report results from three distinct yet conceptually related studies of the translation of PCIT and the resilience framework into child welfare. The first two studies add to the formative and translative phases, respectively, on the translation of PCIT into child welfare for foster parent-child dyads. The third study adds to the explorative and formative phases on the translation of resilience-focused interventions into child welfare. The research questions of each study and the methods and analyses employed within each chapter are summarized below.

Chapter Two: The Effect of Parent-Child Interaction Therapy on Placement Disruption, Permanence and Foster Parents' Licenses in a Child Welfare Sample

Given the extant literature on the relationship between child behavior problems and child

welfare outcomes, along with prior research on the effect of PCIT on children's externalizing behavior, the primary aim of this study was to examine the effect of PCIT on system-level child welfare outcomes using data from a randomized controlled trial of group PCIT and longitudinal child welfare administrative data.

In addition to the overarching theoretical framework, the underlying intervention theory of PCIT guided this study. PCIT is modeled after Hanf's (1969) two-stage treatment model and Baumrind's (1967) work on authoritative parenting and combines play therapy to strengthen the caregiver-child relationship and behavior therapy to help caregivers set limits for children without using coercive discipline (Funderburk & Eyberg, 2011). Drawing from Attachment theory, PCIT focuses on relationship enhancement to form a secure bond between a caregiver and child. For instance, caregivers are coached to consistently meet the child's needs, respond sensitively and warmly to the child, and to be available, responsive and helpful to their children, as these characteristics are thought describe a parent who is fostering a secure attachment (Bowlby, 1969). Drawing from Social Learning Theory (Bandura & Walters, 1977), caregivers are coached to positively reinforce children's positive behaviors and emotions and to use negative punishment, which serves as a brief, time-limited removal from stimuli (Greco, Sorell & McNeil, 2001), to decrease attention-seeking behaviors and child non-compliance. The combination of parental warmth and positive discipline may help to promote an authoritative parenting style, which is associated with positive psychological outcomes (e.g., Choe, Olson & Sameroff, 2013) and fewer child behavioral problems (Querido, Warner, & Eyberg, 2002). As such, the theories underlying PCIT suggest that improving positive parenting skills, reducing negative parenting skills and strengthening the caregiver-child relationship lead to reductions in child behavior problems (e.g., externalizing behavior), which is a significant risk factor for

placement disruption and poor permanence.

Research questions. The research questions for this study were: 1) What is the effect of group PCIT on child placement disruption for children in the intervention group compared to children in the control group? 2) What is the effect of group PCIT on permanence for children in the intervention group compared to children in the control group?, and 3) What is the effect of group PCIT on whether foster parents maintain their licenses for foster parents in the intervention group compared to foster parents in the control group?

Methods. This study examined the effects of PCIT on longitudinal child welfare outcomes for 126 foster parent-child dyads who were randomly assigned to receive group PCIT or child welfare services-as-usual. Using data from the Wisconsin Department of Children and Families, placement disruption (i.e., any post-treatment move to a nonpermanent placement), permanence (i.e., discharge from child welfare as a result of reunification, adoption or guardianship), and whether foster parents maintained their licenses (i.e., expired or closed foster parent license) were examined while controlling for child and foster parent characteristics.

Two multivariate approaches were used to compare the effect of treatment condition on dyads who received group PCIT (n=80) to dyads who were in the control group and received services-as-usual (n=43). First, three logistic regression analyses were employed to examine whether the intervention condition predicted placement disruption or permanence within 12 months post-baseline, or whether intervention condition predicted the status of foster parents' licenses. Second, two survival analyses, specifically Cox Regression, were conducted to examine time to placement disruption and permanence, which allowed for the predictor and covariates to be modeled simultaneously.

Results and implications. Results indicated that children who received group PCIT were significantly more likely to have permanence within 12 months post-baseline compared to children who received services-as-usual. Differences were observed across the groups on placement disruption, with children in the intervention condition having better placement stability, though analyses did not rise to the level of statistical significance. Foster parents maintained their licenses at comparable rates across the intervention and control groups. In sum, the results suggest that PCIT may have practical significance for permanence.

Chapter Three: Parent-Child Interaction Therapy in Child Welfare: Findings from a Qualitative Study with Practitioners and Foster Parents

The vast majority of research on PCIT with foster parent-child dyads has employed quantitative methods to examine the translation of PCIT into child welfare. Given the promising results from these studies, the widespread dissemination of PCIT may be warranted. However, qualitative research may also enrich the field's understanding of implementation challenges and drivers, and areas for future research (e.g., potential adaptations). As such, the aim of this qualitative study was to gain a deeper understanding of practitioners' and foster parents' experiences and perceptions of PCIT.

Research questions. The primary research question addressed was: What are the experiences of practitioners who delivered PCIT and foster parents who completed PCIT within the context of community-based, child welfare services? Additionally, three sub-questions guided the study: 1) What are the barriers to delivering or participating in PCIT, if any? 2) What factors facilitate the delivery or receipt of PCIT, if any? and 3) What adaptations may be needed to facilitate the delivery or receipt of PCIT within child welfare?

Methods. Two focus groups with PCIT practitioners and two focus groups with foster

parents were conducted and data were analyzed using thematic analysis (Braun & Clarke, 2006) to identify emergent themes to guide future research. Data analysis proceeded as follows. First, the transcripts were coded using open coding to identify as many potential themes/patterns as possible. Second, the initial codes were sorted into broader, initial themes. Third, the initial themes were further refined to ensure that each theme had enough supporting data and was distinct from all other themes. Finally, the themes were further defined and refined and the data within each theme were analyzed. The final analytic narrative describes the results, illustrates the potential implications of each theme, and discusses what the overall study reveals about the topic (Braun & Clarke, 2006).

Results and implications. Analysis of PCIT practitioners' and foster parents' perceptions resulted in four exploratory themes related to the implementation of PCIT within the context of child welfare: 1) Barriers to implementing PCIT in child welfare (e.g., perceived stigma around asking for or receiving treatment), 2) Factors that facilitate the implementation of PCIT in child welfare (e.g., differentiating the role of the practitioner from the role of the child welfare case manager), 3) Developing a trauma-informed approach to PCIT (e.g., providing psychoeducation on trauma), and 4) Strategies to facilitate the translation of PCIT into child welfare (e.g., translating PCIT into a routine foster parent training). The findings yielded implications for implementation and dissemination by identifying adaptations for further research that may aid in the translation of PCIT for foster parent-child dyads. In sum, there were benefits to bringing practitioners and foster parents into the conversation because their perspectives may help to guide future research.

Chapter Four: The Early Childhood Measure of Resilience: Initial Validation Results from a Pilot Study with Foster Parents

The translation of evidence-based interventions that facilitate children's resilience into child welfare may help to enhance children's well-being, a third goal of the child welfare system. PCIT may be one example of such an intervention, given that it aims to enhance several adaptive processes (e.g., the caregiver-child relationship). However, measures of child resilience are needed to detect intervention effects and, therefore perhaps contribute to the translational research on resilience. This study was guided by the resilience framework, which asserts that 1) resilience can be considered as positive adaptation in the face of adversity, 2) resilience manifests as adaptive functioning in various domains, and 3) resilience is dynamic and therefore can be facilitated (Masten, 2015). The aim of the study was to develop, pilot and examine the preliminary psychometric properties of a measure of resilience for young children called the Early Childhood Measure of Resilience (ECMR).

Research questions. 1) Does the ECMR demonstrate preliminary content, concurrent and divergent validity? 2) Does the ECMR demonstrate preliminary internal consistency and test re-test reliability? 3) What is the factor structure of the ECMR? 4) Which Rasch measurement model should be used to analyze the ECMR, and do the item and person data fit the Rasch Model? 5) Based on the results of the Rasch analyses, what revisions may need to be made to the ECMR?

Methods. After developing and refining items for the ECMR, the instrument was piloted with a sample of foster parent-child dyads (n=174) to assess its measurement properties. Traditional indices of validity and reliability were calculated, including internal consistency, concurrent validity, divergent validity and test re-test reliability. Exploratory factor analysis was employed to examine the factor structure of the ECMR. Finally, Rasch analysis, a contemporary method for establishing measurement properties, was employed to examine the appropriate

measurement model underlying the ECMR, person and item fit statistics and reliability estimates, the degree to which items accurately assessed each construct, and to guide future instrument refinement efforts.

Results and implications. Results revealed that the ECMR had acceptable internal consistency, concurrent validity, divergent validity, test re-test reliability, person reliability and item reliability. Exploratory factor analysis revealed four factors underlying the ECMR. Rasch analyses provided insight into future instrument refinement. In sum, the results suggest that the ECMR is a promising measure for assessing resilience in early childhood, though continued research is needed to further validate the measure with a larger, more diverse samples.

Chapter Five: Conclusion

Together, the studies contribute to the literature on translating evidence-based practice (i.e., PCIT) and the resilience framework into child welfare for foster parent-child dyads. The final chapter in this dissertation synthesizes the findings across all studies and discusses the research, practice and policy implications. The findings from each study are qualified in relation to the studies' limitations. The chapter concludes with an overview of areas for future research.

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CHAPTER TWO

The Effect of Parent-Child Interaction Therapy on Placement Disruption, Permanence and Foster Parents' Licenses in a Child Welfare Sample

Abstract

Placement disruptions, untimely permanence, and shortages of well-trained, high quality foster parents undermine child well-being. Using data from a randomized controlled trial of group PCIT delivered to foster parent-foster child dyads within the context of child welfare services and child welfare administrative records, this study examined the effect of group PCIT on placement disruption, permanence and foster parents' maintenance of their licenses using logistic regression and survival analyses. The intervention increased the likelihood of permanence within 12 months post-baseline, while externalizing behaviors were associated with negative placement and permanency outcomes. There were no group differences on placement disruption or foster parents' maintenance of their licenses. Interventions that reduce child externalizing behavior and improve parenting skills may facilitate positive child welfare outcomes for children in out-of-home care.

Keywords: Parent-Child Interaction Therapy, Child welfare, Permanence, Placement, Foster parent license

In an effort to promote child safety, placement stability, timely permanence for foster children and positive child development, the Adoption and Safe Families Act (ASFA) of 1997 was enacted. The law legally established safety, permanence and well-being as the goals of child welfare (Adler, 2001; Child and Family Services Review, 2018; Murry, 2010). A critical component of the child welfare system is to facilitate safety and permanence for children in foster care. As of 2016, this impacted 437,465 children (U.S. Department of Health and Human Services, 2017).

Research has documented placement instability (e.g., Oosterman, Schuengel, Slot, Bullens & Doreleijers, 2007) and lengthy time to permanence for children in foster care. Data from 2015 showed that over 149,500 (35%) children had more than two placements and over 65,600 (27%) children were in foster care for two years or longer (U.S. Department of Health and Human Services, 2016). Placement instability has been linked to poor physical and behavioral outcomes (e.g., Villodas, Litrownik, Newton, & Davis, 2015), and the longer children remain in foster care, the less likely they are to achieve legal permanence (Ringeisen, Tueller, Testa, Dolan & Smith, 2013). These challenges, coupled with the shortage of foster parents (e.g., Price, Chamberlain, Landsverk & Reid, 2009), underscore the need for interventions that improve placement stability, permanence, and foster parent retention.

Literature Review

Placement

Placement instability. Placement instability has been conceptualized and operationalized in a number of different ways in the extant research literature. For instance, scholars have studied placement disruption, such as the end of a nonpermanent placement

followed by another nonpermanent placement (e.g., Leathers, 2005), along with placement instability, such as two or more nonpermanent placements (e.g., Barber et al., 2001). Investigators have also explored reasons for placement changes (e.g., James, 2004), number of placement moves (e.g., Wulczyn et al., 2003), and time to placement disruption, such as the number of months between a placement start and end date (Chamberlain et al., 2006) (see Oosterman et al., 2007 for a full review). While there are a variety of indicators of placement failure, the common finding across studies is that multiple placement moves are disadvantageous for children in foster care (Oosterman et al., 2007), whereas placement stability is associated with greater child well-being (Rubin, O'Reilly, Luan & Localio, 2007). As such, a greater understanding of how to facilitate children's placement stability is needed.

Factors associated with placement instability. Researchers have studied a number of variables thought to be associated with placement disruption. Child factors, such as age, gender, race and behavior problems, have been studied by a number of researchers. Child age was found to be a consistent, significant predictor associated with greater placement disruption in the meta-analysis conducted by Oosterman and colleagues (2007) and in a study conducted by Helton (2011). That is, older children were at greater risk for placement instability compared to younger children. However, other studies have found null effects for child age (e.g., Chamberlain et al., 2006; DeGarmo, Chamberlain, Leve & Price, 2009; Hurlburt, Chamberlain, DeGarmo, Zhang & Price, 2010), suggesting that the statistical methods utilized (e.g., propensity score matching) may result in differences across studies (Koh, Rolock, Cross & Eblen-Manning, 2014).

Similarly, findings for gender have been mixed, with some studies reporting gender to be a significant predictor of placement instability (e.g., Smith, Stormshak, Chamberlain & Bridges

Whaley, 2001; Webster, Barth & Needell, 2000) and other studies reporting null effects (e.g., DeGarmo et al., 2009; Koh et al., 2014; Oosterman et al., 2007; Price et al., 2008) . With regards to race, Webster and colleagues (2000) found that African American children were significantly less likely to experience placement instability compared to White children, and Koh and colleagues (2014) found (in an unmatched sample) that children with stable placements were more likely to be African American than children with multiple placements. Leathers (2006) found that the risk of placement disruption was higher for African American children than children of other races. However, Wulczyn and colleagues (2003) and James (2004) found null effects for race.

Unlike demographic variables, child behavior problems emerged as a significant and consistent predictor in a host of studies (e.g., Barth et al., 2007; Chamberlain et al., 2006; Koh et al., 2014; Oosterman et al., 2007) and is considered to be a known risk factor (DeGarmo et al., 2009) for negative placement outcomes (e.g., instability and/or disruption). Moreover, in addition to the findings that child behavior problems can predict changes in placement, the subsequent placement instability may exasperate child behavior problems (Rubin, O'Reilly, Luan & Localio, 2007), though not all scholars have found this to be true (Aarons et al., 2010). Regardless, it is clear that an emphasis on reducing child behavior problems is warranted, especially given that a recent systematic review and meta-analysis found that nearly one in two foster children met criteria for a mental disorder, with the most common mental disorder being disruptive disorder (Bronsard et al., 2016).

Characteristics of the foster parent, such as age, race and education, have received less attention in the literature in relation to placement disruption. Of the studies that have included

foster parent characteristics, findings have been inconsistent (Oosterman et al., 2007). DeGarmo and colleagues (2009) and Hartnett, Leathers, Falconnier and Testa (1999) found null effects for foster parent age and race and Chamberlain and colleagues (2006) found null effects for foster parent race.

Intervention effects. A review of the literature revealed there to be a dearth of randomized controlled trials with young children (i.e., school-age and below) and their foster parents that assessed intervention effects on placement instability. Chamberlain, Moreland and Reid (1992) conducted a randomized controlled trial in which foster parent-foster child dyads were randomly assigned to one of three groups: 1) 31 foster parents received enhanced support and training, plus $70 a month, 2) 14 foster parents received $70 a month, and 3) 27 foster parents received services-as-usual and thus served as the control condition. According to Price and colleagues (2008), the support and training were elements of the Multidimensional Treatment Foster Care (MTFC) model. Chamberlain and colleagues (1992) found that children whose foster parents had received enhanced support and training and a stipend of $70/month experienced significantly greater placement stability (i.e., remained in the study foster home) compared to children in the stipend-only and control conditions.

Price and colleagues (2008) used the same treatment approach and extended the research of Chamberlain and colleagues (1992) by conducting a randomized controlled trial of the KEEP (Keeping Foster Parents Trained and Supported) intervention. The KEEP intervention is a group-based foster parenting training that has been shown to effectively reduce child behavior problems (Chamberlain et al., 2008). The results from the study conducted by Price and colleagues (2008), in which 700 families were randomly assigned to receive the KEEP

intervention or services-as-usual, showed that children in the intervention group were significantly more likely to have positive placement changes (e.g., reunification with a primary caregiver or adoption) compared to children in the control group. No significant differences between the intervention group and control group were detected when researchers examined the effect of the intervention on negative placement changes (e.g., placement disruptions, such as a move to a more restrictive setting). The researchers concluded that implementing interventions characterized by a parent management training model into child welfare services may have beneficial impacts on placement outcomes for children in out-of-home care (Price et al., 2008).

Promoting First Relationships (PFR; Kelly, Sandoval, Zuckerman, & Buehlman, 2008) is a home-based intervention that has been shown to improve caregivers' sensitivity and responsiveness (Spieker, Oxford, Kelly, Nelson & Fleming, 2012). To understand the effects of PFR on child welfare outcomes, Spieker, Oxford & Fleming (2014) analyzed data from a randomized controlled trial of PFR in which 210 children and their biological or foster parents were randomly assigned to one of two conditions. Dyads in the intervention condition received PFR over the course of 10 weekly, 60-75 minute in-home sessions. Dyads in the comparison condition received Early Education Support (EES), which provided child developmental guidance, resources and referrals over the course of 3 monthly, 90 minute in-home sessions. The results demonstrated that the overall intervention effect on placement stability (i.e., no interruptions or disruptions from baseline to 24 months post-baseline) was nonsignificant, though there was a trend indicating that foster parents who received PFR provided increased placement stability for children than foster parents who received EES (Spieker, Oxford & Fleming, 2014). Thus, the findings suggest that investing in interventions, particularly those that reduce child

behavior problems and strengthen foster parent skills, to improve placement outcomes for children may be beneficial.

Permanence

Permanency outcomes. Upon the placement of children in out-of-home care, child welfare service providers work to ensure that children achieve legal permanence. Specifically, legal permanence (e.g., reunification, adoption or guardianship) signifies that a child has a stable, permanent home and that the caregiver-child relationship is recognized by law (P.L.105-89, the Adoption and Safe Families Act of 1997) As is most often the case, the majority of children who were discharged from foster care in 2016 were reunified with their primary caregiver (51%), followed by adoption (23%) and then guardianship (10%) (U.S. Department of Health and Human Services, 2017). As with placement disruption, permanency outcomes have received a great deal of attention in the literature as scholars recognize that permanence, and the stable attachments promoted by placement stability and permanence, are integral to healthy child development (Bowlby, 2008). While permanence can have a number of definitions, for the purposes of this study, legal permanence was defined as reunification with a primary caregiver, adoption, or guardianship.

Factors associated with permanency outcomes. The child characteristics associated with permanency outcomes mirror the child characteristics associated with placement outcomes. For instance, child's age is the most commonly studied child characteristic with respect to permanence (Akin, 2011), with many studies documenting its predictive effect (e.g., Akin, 2011; Becker, Jordan & Larson, 2007; Koh & Testa, 2008; Spieker et al., 2014), and specifically, older children are less likely to achieve (or exit foster care to) permanence. However, some studies

have found a null effect for age (e.g., Pabustan-Claar, 2007; Price et al., 2008). Most studies found a non-significant effect for child gender (e.g., Akin, 2011; Becker et al., 2007; Pabustan-Claar, 2007; Price et al., 2008), though Snowden, Leon and Sieracki (2008) found a significant effect indicating that females were more likely to be adopted than their male counterparts. The effect of race on permanency outcomes has been mixed. For instance, McDonald, Poertner and Jennings (2007) and Connell, Katz, Saunders and Tebes (2006) found that African American children were less likely to be reunified with their primary caregiver compared to children of other races, whereas Akin (2011) found that White children were less likely to be reunified compared to African American children. Furthermore, Akin (2011) found that African American children were less likely to be adopted compared to White children. As such, these findings suggest that more research on the effect of child race is needed, particularly on various types of exits to permanence. Finally, studies have shown that child behavior problems is a significant predictor of permanence, with greater levels of behavior problems associated with decreased permanence (e.g., Akin, 2011; Becker et al., 2007; Connell et al., 2006).

Intervention effects. Few randomized controlled trials with young children and their foster parents have investigated intervention effects on permanency outcomes. In addition to examining the effects of PFR on placement outcomes, Spieker and colleagues (2014) examined the effects of PFR on permanency outcomes in the same study. Permanence was defined as reunification and child welfare discharge to a caregiver who participated in treatment (i.e., the biological parent, adoption by a kin or non-kin foster parent, or legal guardianship by a kin foster parent). The overall effect for intervention condition on permanence was found to be nonsignficant.

Fisher, Burraston and Pears (2005) and Fisher, Kim and Pears (2009) examined the effects of Early Intervention Foster Care (EIFC), an intervention that provides special training and support to foster parents (e.g., a foster parent support group and foster parent consultant) on permanency outcomes 24 months post enrollment. In the randomized controlled trial, 90 children ages 3-6 years old who were entering foster care or entering a new foster care placement were randomly assigned to receive EIFC or regular foster care (RFC) over the course of 9-12 months. Fisher and colleagues (2005) found that children in the EIFC condition had significantly fewer failed permanent placements compared to children in the RFC condition. Fisher and colleagues (2009) analyzed a subset of the randomized controlled trial data by further examining permanency outcomes among children with a history of four or more placements. The researchers found that children in the EIFC condition had significantly greater successful permanency attempts and overall permanence compared to children in the RFC condition (Fisher, Kim & Pears, 2009). In summary, the promising results from the studies on PFR and EIFC may lead to additional implementation projects designed to enhance permanence by promoting foster parent skills and/or foster parent-child relationship quality.

Foster Parent Attrition

Retaining foster parents is an important though relatively understudied facet of the foster care system (Crum, 2010). In addition to providing homes for the large number of children in foster care, high quality foster parenting is associated with increased placement stability for children (Crum, 2010). Thus, researchers and practitioners might consider strategies to retain foster parents, particularly well-trained and high quality foster parents.

Factors associated with foster parent attrition. A review of the literature on the factors associated with foster parent attrition revealed few studies and mixed findings. Foster parent characteristics, including age and race, were found to be significant predictors in two studies, with younger foster parents and African American parents significantly more likely to close their licenses compared to older foster parents and White foster parents (Gibbs & Wildfire, 2007 Ahn, Greeno, Bright, Hartzel & Reiman, 2017). On the other hand, Geiger, Hayes and Lietz (2013) found null effects for age and number of years fostering on the foster parent's intention to discontinue fostering. Beyond foster parent characteristics, inadequate training was associated with attrition (Triseliotis, Borland & Hill, 1998), while foster parent satisfaction (e.g., Mihalo, Strickler, Triplett & Trunzo, 2016), parenting self-efficacy (Whenan, Oxlad & Lushington, 2009), and adequate training (Hudson & Levasseur, 2002) were associated with foster parent retention. In general, parenting stress is thought to be associated with attrition (Whenan et al., 2009), though no studies examining the effect of parenting stress on attrition were found.

Intervention effects. Chamberlain, Moreland and Reid (1992) examined whether random assignment to 1) an enhanced support and training, plus a stipend condition, 2) stipend-only condition or 3) control group was associated with foster parent attrition over a two year study period. The results demonstrated that foster parents randomized to the first two conditions were less likely to drop out compared to foster parents in the control group.

Gaps in the Literature

Undoubtedly, the results from the evaluations of the KEEP intervention, PFR intervention and EIFC intervention yielded insights into the promising effects of foster parent-

foster child interventions on child welfare outcomes. Nevertheless, the lack of randomized controlled trials with young children and their foster parents examining the effects of interventions on placement and permanency outcomes represents a significant gap in the literature. Furthermore, according to the California Evidence-Based Clearinghouse for Child Welfare (2018), the PFR and KEEP interventions have promising research evidence (i.e., scientific rating of 3) and the EIFC intervention (now called Multidimensional Treatment Foster Care for Preschoolers) is supported by research evidence (i.e., scientific rating of 2), though no study to date has examined the effects of an intervention that has been determined to be well-supported by research evidence (i.e., scientific rating scale of 1) on placement and permanency outcomes.

Current Study

Parent-Child Interaction Therapy (PCIT), an intervention that belongs to family of models collectively referred to as parent management training, is a dyadic, evidence-based intervention designed to treat child behavior problems, such as externalizing behaviors, in children ages 2-7 (e.g., Thomas, Abell, Webb, Avdagic & Zimmer-Gembeck, 2017). Drawing on attachment and social learning theories, PCIT consists of two stages, Child-Directed Interaction (CDI) and Parent-Directed Interaction (PDI), in which principles of authoritative parenting are taught to caregivers and coached by practitioners to strengthen the caregiver-child relationship and improve parenting skills and child behavior (e.g., Hembree-Kigin & McNeil, 2013). PCIT is delivered to caregiver-child dyads during individual sessions until the caregiver masters the skills and child behavior is within normal limits, which typically occurs within 12-20 sessions (PCIT International, 2018).

In an effort to meet the mental health needs of children in foster care and to translate PCIT into a cost-effective, child welfare-friendly format (Topitzes, Mersky & McNeil, 2015), researchers conducted a randomized controlled trial of a group-based version of PCIT to examine the efficacy of the intervention for reducing child behavior problems, improving parenting skills and reducing caregiver stress. The intervention was delivered as a foster parent training that retained the key ingredient of PCIT (i.e., live coaching) but shortened the intervention to two or three, eight-hour days of training (one day of CDI and one or two days of PDI) and supporting phone calls. Specifically, caregiver-child dyads were randomized to one of three conditions: a brief condition (two days of training and eight weeks of phone calls), an extended condition (two days of training and fourteen weeks of phone calls, plus a third day of training as a booster session), or a control condition (services-as-usual, such as individual therapy). The full results have been reported elsewhere but in brief, researchers found that caregiver-child dyads who received the intervention had significantly greater reductions in child behavior problems and parenting stress, and significantly greater improvements in parenting skills, compared to caregiver-child dyads in the control group (Mersky et al., 2014; Mersky et al., 2015).

The aim of the current study is to examine the effects of group PCIT on child welfare outcomes. The research questions for the current study are: 1) What is the effect of group PCIT on child placement disruption for children in the intervention group compared to children in the control group?, 2) What is the effect of group PCIT on permanence for children in the intervention group compared to children in the control group?, and 3) What is the effect of group PCIT on foster parents' maintenance of their licenses for foster parents in the intervention group compared to foster parents in the control group?

Given that group PCIT addresses child behavior problems along with parenting practices that may be associated with placement outcomes (e.g., caregiver's ability to manage challenging child behaviors), it was hypothesized that the intervention would have positive effects on placement outcomes by 1) reducing the likelihood of placement disruptions within 12 months post-baseline, and 2) increasing the time to a placement disruption. Additionally, it was hypothesized that group PCIT would have positive effects on permanency outcomes by 1) increasing the likelihood of permanence within 12 weeks post-baseline, and 2) reducing the time to permanence. Finally, group PCIT was conceptualized as a foster parent training and therefore hypothesized to target caregivers' skills and parenting stress. As evidenced by the literature review, adequate foster parent training is likely associated with foster parents' willingness to continue providing care for foster children. Thus, it was hypothesized that foster parents who received the intervention would be more likely to maintain their foster parent licenses.

Methods

Data and Study Sample

Caregiver-child dyads who participated in the original study were randomly assigned to receive brief PCIT (n=48), extended PCIT (n=35) or services-as-usual (n=46) (see Mersky et al., 2016 for a full description of the study procedures, including the randomization procedures). Due to a lack of distinct treatment intervention effects in previous analyses (Mersky et al., 2016), the two intervention groups were collapsed in this study. In this study, data on 123 caregiver-child dyads were analyzed from the randomized controlled trial that took place in Milwaukee, Wisconsin. Caregiver-child dyads were selected if outcome data from the randomized controlled trial could be matched by child name, date of birth and child identification number with administrative records provided by the Wisconsin Department of Children and Families from

June 1st, 2010 to June 30th, 2016 (n=6 missing due to inability to match the study records with administrate records or insufficient data). Three time points were created across each child's episode of care during which the study took place: time 0 (PCIT study baseline assessments), time 1 (12 months post-baseline) and time 2 (end of study observation period on June 30th, 2016).

Measures

Outcomes. Placement disruption was examined in two ways. First, a dichotomous variable representing placement disruption was coded to reflect whether a foster child's placement disrupted within 12 months post-baseline (i.e., a child moved to a nonpermanent foster care placement) (time 1). Second, time to placement disruption was measured in months, beginning at time 0 and ending at time 2 (or when a child experienced their first exit from foster care during this time frame).

Permanency outcomes were also examined two ways. First, permanency status was dichotomized to reflect whether a child had a permanent placement (adoption, guardianship, reunification) or not (still in out-of-home care) within 12 months post-baseline (time 1). Second, time to permanency was measured in months, beginning at time 0 and ending at time 2 (or when a child experienced their first exit from foster care during this time frame).

A third outcome examined whether foster parents maintained active licenses at time 2 using data that originated from the Wisconsin Department of Children and Families. This measure represents a proxy variable to better understand foster parents' intentions to continue fostering. While this outcome does not fully capture all of the factors pertaining to foster parents' decision to continue fostering, it represented the best available measure in this study.

Predictors. The primary independent variable for this study was treatment condition. Dyads who received group PCIT (n=80) were in the treatment condition and were compared to dyads received services-as-usual (n=43) and were in the control condition. All analyses were also conducted with three treatment groups to ensure that the larger sample size in the treatment condition did not bias results and the results were found to be similar across all analyses (see Appendix).

Covariates. Covariates related to the child included child's age at baseline, gender, race, the number of placements pre-intervention, the time in out-of-home care prior to enrollment in the study, and baseline scores on the Child Behavior Checklist (CBCL; Achenbach, 1991), a widely-used assessment with strong psychometric properties that measures caregiver-report of child externalizing problems (Ivanova et al., 2010; Rescorla et al., 2011). For this study, the scores on individual items for the Externalizing scale were summed and higher scores indicated greater levels externalizing behaviors. Data on children's demographic information and CBCL scores originated from foster parents' reports, while placement records originated from the Department of Children and Families (i.e., number of placements at baseline and post-baseline and time spent in out-of-home care). For the purposes of this study, race was condensed into two categories (African-American or Other) due to a lack of variation in the data.

Covariates related to the foster parent included self-reported age at baseline, race, education level (high school diploma/GED, some college or college degree), length of time as a foster parent at baseline and baseline scores on the Parenting Stress Index-Short Form (PSI-SF; Abidin, 1990), a well-validated self-report assessment with good internal consistency, reliability and concurrent validity (Abidin, 1990; Haskett, Ahern, Ward, & Allaire, 2006; Hutcheson &

Black, 1996). For this study, the scores on individual items for Total Stress scale were summed and higher scores indicated greater levels of parenting stress. For the purposes of this study, race was condensed into two categories (African-American or Other) and education into three categories due to a lack of variation in the data and foster parent gender was not included due to the vast majority of female foster parents.

Data Analyses

Missing data were analyzed and the results of Little's MCAR test (Little, 1988) demonstrated that missing data on the baseline assessments were missing completely at random, $\chi 2 = .894$ (df = 3; p=.827). Missing values on the CBCL, PSI-SF and foster parent's education were imputed using Multiple Imputation (n=5). All analyses were completed first using the original (i.e., non-imputed) data and then again using data derived from multiple imputation to ensure the results yielded consistent findings (see Appendix). The results from the pooled multiple imputation values are reported in this paper.

To answer research question one, logistic regression was employed to examine the effects of treatment condition, baseline assessment scores (CBCL and PSI-SF), child characteristics (number of pre-intervention placements, age, gender and race), and foster parent characteristics (age, race and education) on placement disruption within 12 months post-baseline. Then, Cox regression, a multivariate survival analysis, was employed to examine the effects of treatment condition, baseline assessment scores (CBCL and PSI-SF), child characteristics (number of pre-intervention placements, age, gender and race) or foster parent characteristics (age, race and education) on time to placement disruption. The proportional hazard assumption for all continuous variables was met (see Appendix).

To answer research question two, logistic regression was employed to examine the effects of treatment condition, baseline assessment scores (CBCL), and child characteristics (age, gender and race) on permanence within 12 months post-baseline. Cox regression was employed to examine the effects of treatment condition and child characteristics (age, gender, race, CBCL, and time spent in out-of-home care pre-baseline) on time to permanence. The proportional hazard assumption for all continuous variables was met (see Appendix).

To answer research question three, logistic regression was employed to examine the effects of treatment condition and foster parent characteristics (age, race, education and number of years as a foster parent at baseline) on foster parents' license status.

Sensitivity analyses were conducted to examine the bivariate associations between treatment condition and each categorical outcome. The results aligned with all of the results reported below (see Appendix). All analyses were completed in SPSS v. 25.

Results

Demographics and Descriptive Statistics

At time 0, foster parent participants were, on average, 44.7 years of age (*SD*=11.12). The majority (89.4%) were female, 48.4% were White, 45.9%, African-American, 5.7% were coded as 'Other', 41.5% had a college degree, 36.4% attended some college, and 22% had a high school degree/GED. The average length of time as a foster parent was 50 months (*SD*=69.02).

At time 0, children were, on average, 4.6 years of age (*SD*=1.31). Of the child sample, 56.9% were female; 56.1% were African-American; 19.5% were White; 12.2% were Hispanic/Latino; and 12.2% were coded as 'Other'. A full 96.5% had externalizing behavior in the clinical range at baseline. At the end of the study window, 66.7% of children had been

legally adopted, 13.0% were reunified with their primary caregiver, 8.9% were in guardianship and 11.4% were still in out-of-home care.

Across the entire sample, children spent an average of 20.11 months in care prior to study enrollment (*SD*=13.96) and 18.6 months in care post-baseline (*SD*=12.0). Overall, children experienced an average of 2.59 placements (*SD*=1.43). The average number of placements prior to study enrollment was 1.15 (*SD*=1.09) and the average number of placements post-baseline was .46 (*SD*=1.00). The average length of time spent in the target placement before placement disruption occurred was 14.41 months post-baseline (*SD*=13.71). There were no statistically significant differences between the treatment group and the control group. Descriptive information comparing the intervention and control conditions on baseline and post-baseline variables can be found in Table 2.1. The results show comparability across groups on the placement disruption outcomes, with a tendency for children in the intervention group to have fewer placement disruptions compared to children in the control group. Regarding permanency outcomes, 46.3% of children in the intervention group achieved permanence within 12 months compared to 27.9% of children in the control group. Children in the treatment group having a median time to permanence of 14.00 months and children in the control group having a median time to permanence of 21 months. Finally, a similar percentage of foster parents in the intervention and control groups closed their foster parent licenses.

Research Question One: Placement Outcomes

The results of the logistic regression (see Table 2.2) revealed that children in the treatment group had .659 lower odds of experiencing a placement disruption within 12 months post-baseline compared to children in the control group, 95% CIs [.250, 1.733], though the result

was not statistically significant. The externalizing subscale of the CBCL was found to be a significant predictor of placement disruption, with higher baseline scores significantly associated with placement disruption within the first 12 months post-baseline (OR=1.065, 95% CIs 1.009, 1.125). For every one unit increase on the externalizing subscale of the CBCL, the odds of experiencing a placement disruption increased by 6.5%. All other variables produced null effects. The results of the Cox regression revealed that there was a .846 decrease in the incidence of placement disruption within the first 12 months for children in the intervention group, 95% CIs [.409, 1.750], though the result was not statistically significant (see Figure 2.1). Externalizing scores on the CBCL significantly predicted time to placement disruption (OR=1.042, 95% CIs 1.003, 1.082). For every one unit increase on the externalizing subscale of the CBCL, there was a 4.2% increase in the incidence of placement disruption. All other variables produced null effects.

Research Question Two: Permanence Outcomes

The results of the logistic regression analysis (see Table 2.3) demonstrated that treatment condition was a significant predictor of permanence. The odds of children in the treatment group achieving legal permanence within 12 months post-baseline were 2.632 times higher compared to children in the control group, 95% CIs [1.098, 6.310]. Additionally, baseline externalizing scores on the CBCL significantly predicted permanence (OR=.957, 95% CIs .916, 1.000). The odds of children with higher levels of externalizing behavior achieving permanence within 12 months post-baseline on the CBCL were .957 lower compared to children with lower levels of externalizing behavior. All other variables produced null effects. The results of the Cox regression demonstrated that children in the treatment group had a 1.753 higher incidence of

permanence within 12 months post-baseline, 95% CIs [.905, 3.397], though the result was not statistically significant (see Figure 2.2). Baseline scores on the externalizing subscale of the CBCL and time spent in out-of-home care prior to baseline were significantly associated with time to permanence. For every one unit increase on the externalizing subscale of the CBCL, the incidence of permanence within 12 months post-baseline decreased by .977, 95% CIs [.958, 996]. For every one month increase in time spent in out-of-home care prior to baseline, there was a 1.023 (or 2.3%) increase in the incidence of permanence with 12 months post-baseline, 95% CIs [1.009, 1.038]. All other variables produced null effects.

Research Question Three: Foster Parents' Maintenance of Licenses

Data on foster parents' license status was available for 104 participants. At the end of the study window, 85 (69.1%) foster parents no longer had an active license, while 19 (15.4%) foster parents had active licenses. The results of the logistic regression analysis revealed no treatment effect on the decision to maintain a foster parent license. In addition, there were null effects for all variables (see Table 2.4).

Discussion

This study examined the effect of group PCIT for foster parent-child dyads on placement outcomes, permanency outcomes and foster parents' maintenance of licenses using data from a randomized controlled trial and child welfare administrative records. Group PCIT was found to have a significant positive effect on whether children had permanence within 12 months post-baseline. This study marks the first longitudinal investigation into the effect of PCIT on permanence. Furthermore, there have yet to any short-term studies that would suggest PCIT would have an effect on a long-term child welfare outcome. As such, detecting even one

significant effect on a long-term child welfare outcome, especially considering that intervention was not originally designed to promote legal permanence or target all of the variables that likely contribute to it (e.g., biological parent factors), is promising. The finding reinforces the underlying theory of PCIT, which suggests that reducing children's behavior problems is paramount to improving their quality of interactions with caregivers. The study finding also aligns with previous research on the importance of reducing children's externalizing behavior problems (Oosterman et al., 2007) and with the findings from Fisher et al's 2009) study in Early Intervention Foster Care had a significant effect on overall permanence compared to children in the RFC condition (Fisher, Kim & Pears, 2009).

Overall, intervention effects for group PCIT proved difficult to detect. There were no significant treatment effects on if, or when, a placement disrupted, or whether foster parents maintained their licenses. Though it is only speculation, there are four plausible explanations. First, the analyses employed to detect intervention effects may not have reached statistical significance due to underpowered tests as a result of the small sample size. Second, perhaps the "dose" of PCIT needs to be greater to have an effect on children's long-term placement stability. Third, dyads in the intervention group received PCIT within the context of a randomized controlled trial under tightly controlled, standardized conditions, and perhaps some families may have received greater benefits from individually-tailored services (e.g., coaching sessions in the home to help new skills generalize to the home setting) or from services in addition to PCIT (e.g., family therapy). Finally, perhaps PCIT would have a greater effect on foster parent-child dyads if the intervention were implemented within the context of evidence-based service planning. The target population of children for PCIT, children with behavior problems, likely face a number of challenges and as such, comprehensive services that target multiple aspects of

the child's life, in addition to PCIT, may result in better short and long-term child welfare outcomes.

Nevertheless, group PCIT likely has practical significance for foster children as it reduces externalizing behavior problems (Mersky et al., 2016), which may contribute to more stable placements and timely reunification. More research is needed to further elucidate the effect of PCIT on child welfare outcomes, though at least the findings suggest that children in the treatment control had similar outcomes to children in the control group.

Two covariates were found to be associated with placement and permanency outcomes. Consistent with the extant literature, child externalizing behaviors were found to be associated with all of the placement and permanence outcomes. The findings were consistent across short and long-term outcomes (i.e., time 1 and time 2), despite the fact that children in the intervention group were successfully treated for externalizing behavior problems (Mersky et al., 2016). Clearly, a high level of child behavior problems is a robust predictor of poor stability and permanence. Furthermore, the time that children spent in out-of-home care prior to study enrollment was associated with time to permanence. Thus, early intervention for children with behavior problems may help to further facilitate timely permanence.

Limitations

The findings from this study must be qualified by its limitations. First, the sample size was small, and as previously mentioned, may have made it difficult to detect intervention effects. Second, little variation in two of the covariates, race and foster parent education, resulted in the need to condense categories, which precluded examination of the full range of those variables on the outcomes. Third, caution should be used when generalizing the findings of this study to

populations who may have received individual PCIT as the outcomes associated with group PCIT may differ. Finally, the foster parents who participated in the original randomized controlled trial of group PCIT self-selected into the study, and as such findings may not be generalizable to foster parent-child dyads who are referred to treatment by child welfare services providers.

Implications and Future Directions

Parent management training represents a host of interventions that theoretically and empirically improve child level and parent level outcomes. While the empirical research on long-term child welfare outcomes is still emerging, the findings on interventions that belong to family of parent management training models seems promising. This study examined the intervention effects of PCIT on child welfare outcomes and thus fills a gap in the scholarly literature. The field would benefit from continued empirical investigations of PCIT intervention effects with large and varied child welfare samples. Studies of this nature may help to elucidate the relationship between PCIT and child welfare outcomes as the statistical analyses employed may have better power to detect effects, and greater variation in the sample may allow for the inclusion of expanded categorical covariates. Additionally, researchers should examine whether PCIT moderates the effects of prior placements and time spent in out-of-home care on placement and permanency outcomes, respectively, as previous research has found evidence of such relationships (Price et al., 2008). Spieker and colleagues (2014) also found that caregiver type moderated the effect of an intervention on permanence, suggesting that researchers should implement PCIT with foster parents and biological parents to examine group differences between samples, while also measuring and controlling for relevant covariates from various sources that may be related to child welfare outcomes. Furthermore, foster parent-foster child dyads were

recruited for the original study on group PCIT regardless of how long the target child had been placed with the foster parent. The intervention may have had greater effects among foster families with newly placed foster children, since it is plausible that the intervention would have strengthened the newly formed caregiver-child relationship and stabilized, or even prevented, child behavior problems. Thus, future studies should seek to enroll families in which a child has recently joined the foster family, as these efforts may help to ascertain whether there are preventative effects associated with group PCIT. Finally, the results of this study suggest that distal child welfare outcomes may be amenable to change when children are exposed to brief, evidence-based treatments. As such, the findings may have important implications for future cost-benefit analyses, which can be used by policy makers, funders, child welfare administrators and researchers to guide decision-making regarding the translation of parent training interventions into child welfare.

Unfortunately, given the negative effects of placement instability, a lack of legal permanence, and externalizing behavior problems on child well-being, foster children cannot wait for the empirical evidence to determine whether or not an intervention has significant positive effects. The study findings suggest, as do the findings in the extant literature, that children in the child welfare system have an undeniable need for interventions that reduce child behavior problems. Along the same lines, the foster parents caring for these children are in dire need of interventions that teach the parenting skills needed to manage child behavior problems. Because families who received group PCIT experienced significant reductions in child behavior problems and significant improvements in parenting skills (Mersky et al., 2016), the utility of the intervention for foster children and their caregivers cannot be overstated. As such, it is recommended that child welfare service providers continue referring children and their

caregivers to evidence-based interventions such as PCIT. Moreover, the findings from this study underscore the need for prompt mental health screenings and early intervention. The implications of failing to screen, detect and intervene on risk factors for children placed in-out-of –home care are severe. To that end, child welfare policies that direct funding towards mental health assessments and the implementation and dissemination of evidence-based interventions for children in the child welfare system are crucial.

It is well known that foster parents play a vital role in providing safe and stable homes to foster children. Due to the shortage of foster parents, it is surprising that there is a dearth of literature on interventions that address whether foster parents continue to maintain their licenses and foster more children. Clearly, more research on foster parent outcomes is warranted if the child welfare system hopes to retain high quality foster parents.

In summary, researchers, practitioners and policymakers must work together to find innovative ways of funding, implementing and investigating intervention effects on child welfare outcomes. In turn, these efforts may help to promote the dissemination of evidence-based interventions, should the empirical evidence suggest that interventions can help to promote the child welfare goals of safety, permanence and well-being. While the overall number of children affected in this study may have been small, each child has a right to a stable, permanent home. Thus, any effort to move the well-being needle in a positive direction, even a small amount, is worth exploring.

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Table 2.1: *Comparisons Between Control Group and Intervention Group on Baseline and Post-baseline Characteristics and Outcomes*

	Control Group	*Intervention Group*
Baseline		
Children's Time in Foster Care in Months	M=20.67 (SD=15.30)	M=19.81 (SD=13.30)
Children's Time in Current Placement in Months	M=8.81 (SD=10.96)	M=9.31 (SD=8.47)
Number of Placements	M=1.36 (SD=1.36)	M=1.05 (SD=.92)
Number of Months as a Foster Parent	M=59.88 (SD=66.18)	M=44.80 (SD=70.33)
Post-Baseline		
Number of Placements	M=.40 (SD=.66)	M=.48 (SD=1.44)
Placement Disrupted Within 12 Months Post-Baseline	N=13 (30.2%)	N=21 (26.3%)
Time to Placement Disruption in Months	MD=11.00 (SD=10.31)	MD=11.00 (SD=9.93)
Permanence Within 12 Months Post-Baseline	N=12 (27.9%)	N=37 (46.3%)
Time to Permanence in Months	MD=21.00 (SD=11.51)	MD=14.00 (SD=12.26)
Foster Parent Closed License	N=27 (81.8%)	N=58 (81.7%)

Note: M=mean, MD= median and SD= standard deviation.

Table 2.2: *Summary of Binary Logistic Regression Analyses for Placement Disruption Within 12 Months Post-Baseline*

Variable	*B*	*SE*	Sig.	*β*	C.I. Lower	C.I. Upper
Treatment Condition	-.418	.494	.397	.659	.250	1.733
Pre-Intervention Placements	.031	.218	.887	1.031	.673	1.581

Baseline CBCL-E	**.063**	**.028**	**.023***	**1.065**	**1.009**	**1.125**
Baseline PSI-SF	-.010	.007	.182	.990	.976	1.005
Child's Age	.196	.187	.295	1.217	.843	1.757
Child's Gender	-.575	.515	.264	.563	.205	1.543
Child's Race	.075	.522	.885	1.078	.388	2.999
Foster Parent's Age	.008	.023	.743	1.008	.963	1.054
Foster Parent's Race	-.146	.553	.791	.864	.292	2.555
Foster Parent's Education (Some College)	-.650	.668	.330	.522	.141	1.933
Foster Parent's Education (College Degree)	-.621	.691	.369	.537	.139	2.082
Constant	-3.860	2.219	.082	.021	.000	1.640

Note: *p<.05. B=estimate, SE=standard error, Sig=significance level, β=exponentiated estimate, C.I.=confidence interval. Reference categories are control group, female, African American and High School Degree/GED.

Table 2.3: *Summary of Binary Logistic Regression Analysis for Predicting Permanence Within 12 Months Post-Baseline*

Variable	*B*	*SE*	Sig.	*β*	C.I. Lower	C.I. Upper
Treatment Condition	**.968**	**.446**	**.030***	**2.632**	**1.098**	**6.310**
Time In Out-Of-Home	.026	.015	.078	1.026	.997	1.056

Care						
Baseline CBCL-E	**-.044**	**.022**	**.048***	**.957**	**.916**	**1.000**
Child's Age	-.093	.155	.546	.911	.673	1.233
Child's Gender	-.667	.414	.107	.513	.228	1.156
Child's Race	.385	.400	.336	1.470	.671	3.221
Constant	1.106	1.365	.418	3.022	.208	44.004

*Note: *p*<.05. B=estimate, SE=standard error, Sig=significance level, β=exponentiated estimate, C.I.=confidence interval. Reference categories are control group, female, and African American.

Table 2.4: *Summary of Logistic Regression Analyses for Foster Parents' License Status*

Variable	*B*	*SE*	Sig.	*β*	C.I. Lower	C.I. Upper
Treatment Condition	.277	.587	.637	1.319	.417	4.165
Baseline PSI-SF	.000	.004	.972	1.000	.992	1.008

Number of Years Fostering	.021	.021	.319	1.021	.980	1.065
Foster Parent's Age	-.002	.025	.930	.998	.950	1.048
Foster Parent's Race	-.964	.634	.128	.381	.110	1.320
Foster Parent's Education (Some College)	.730	.756	.334	2.076	.472	9.136
Foster Parent's Education (College Degree)	.761	.816	.351	2.140	.432	10.601
Constant	.998	1.576	.526	2.713	.124	59.563

Note: *p<.05. B=estimate, SE=standard error, Sig=significance level, β=exponentiated estimate, C.I.=confidence interval. Reference categories are control group, female, and African American.

Figure 2.1: Hazard Rate for Treatment Condition on Time to Placement Disruption

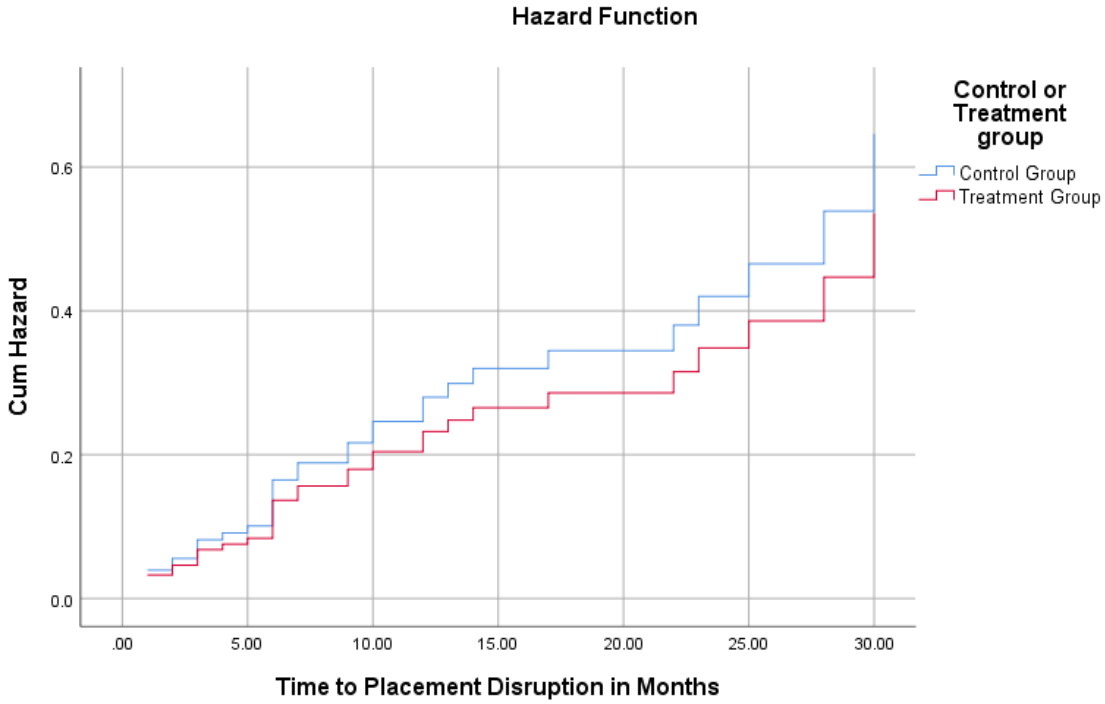
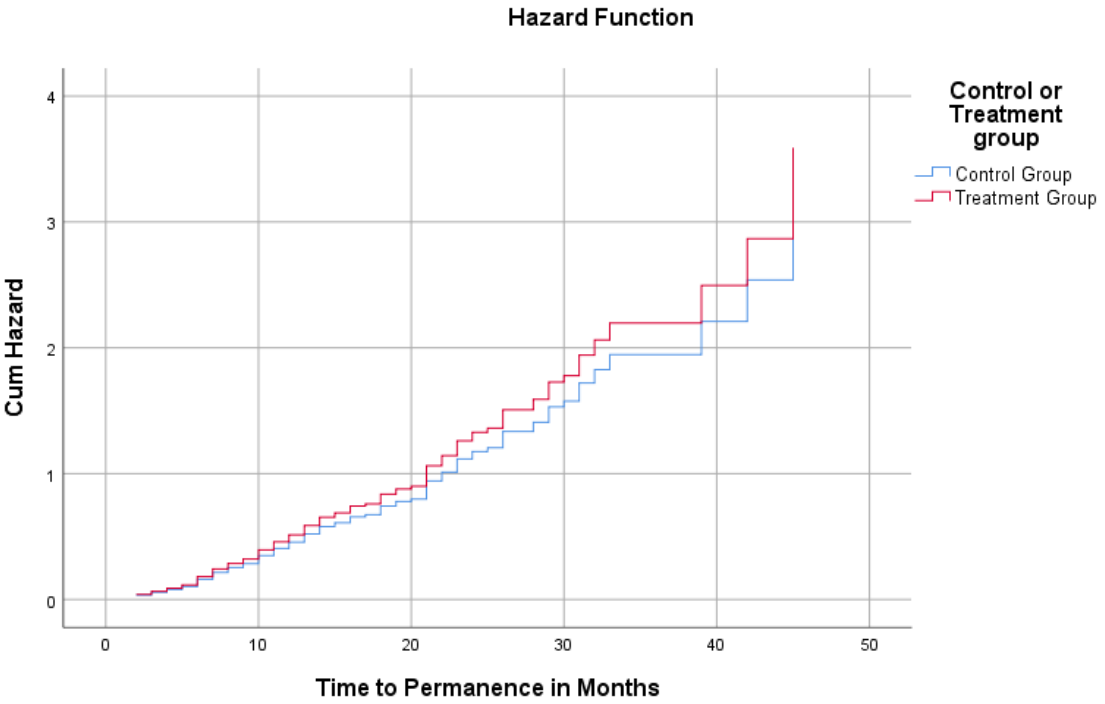


Figure 2.2: Hazard Rate for Treatment Condition on Time to Permanence



CHAPTER THREE

Parent-Child Interaction Therapy:
Findings from an Exploratory Qualitative Study with Practitioners and Foster Parents

Abstract

This exploratory study utilized a qualitative approach to examine practitioners' and foster parents' perceptions on the translation of Parent-Child Interaction Therapy (PCIT) in child welfare. Focus groups were completed with PCIT practitioners and foster parents. Thematic analysis was employed and four main themes were analyzed. First, practitioners and foster parents perceive there to be implementation barriers. For instance, foster parents perceived there to be stigma surrounding treatment. Second, practitioners and foster parents perceive there to be factors that facilitate implementation. While practitioners perceived benefits from on-going consultation, foster parents perceived benefits from treatment flexibility and a strong therapeutic alliance with practitioners. Third, practitioners and foster parents felt that the integration of trauma principles into PCIT helped to meet the needs of the child welfare population. For instance, practitioners added trauma psychoeducation into PCIT sessions. Finally, the translation of PCIT into child welfare may be facilitated by model adaptations, such as brief treatments, and the integration of PCIT into pre-service foster parent trainings. Findings are discussed within the context of the relevant literature and recommendations for future areas of study are proposed.

Children who are placed in out-of-home care (i.e., foster care) are often in need of intervention to mitigate the negative effects of maltreatment (Pecora, Jensen, Romanelli, Jackson & Ortiz, 2009). Additionally, high quality training to prepare foster parents to care for foster children is essential. Yet, the research on the effectiveness of foster parent training programs has been mixed (Rork & McNeil, 2011). Undoubtedly, families receiving services in child welfare would benefit from effective interventions that treat children's behavior problems and teach foster parents to care for children with behavior problems.

Parent-Child Interaction Therapy (PCIT) is an evidence-based, dyadic intervention for parents and their children ages 2-7 who exhibit behavior problems. The PCIT model consists of two mastery-based, sequential stages of treatment in which the parent-child dyad participates in conjoint sessions with a therapist who coaches the parent using a bug-in-the-ear device from behind a one-way mirror. The first stage, Child-Directed Interaction (CDI), aims to strengthen the parent-child relationship while the second stage, Parent-Directed Interaction (PDI), teaches parents how to address challenging child behavior (e.g., non-compliance) using positive discipline. In its original form, PCIT is delivered to the parent-child dyad over the course of 12-16 weeks of individual sessions (McNeil & Hembree-Kigin, 2010).

For over two decades, researchers and practitioners have worked to translate PCIT into child welfare for foster parent-child dyads. When used with this population, the emphasis of treatment is often to reduce children's externalizing behavior problems and to equip foster parents with the necessary skills to care for foster child with behavior problems. The majority of researchers and practitioners rely on quantitative methods, such as foster parents' reports of child behavior problems and caregiver stress, to assess the utility of PCIT. However, the adaptation and translation of PCIT into child welfare for foster parent-child dyads represents a context and

population for which PCIT was not originally developed and as such, more research on the implementation of PCIT in this context and with this population is needed. Furthermore, the extant literature on PCIT within child welfare is often assessment-focused and rarely do researchers ask practitioners or foster parents about their experiences delivering or participating in an intervention. As such, this exploratory study examines PCIT practitioners' and foster parents' perspectives on PCIT in child welfare for foster parent-child dyads to identify initial themes, which may help to guide future research.

Background and Rationale

Early research on PCIT generated positive results. For instance, families who received PCIT reported significant changes in child behavior compared to families in a wait-list control condition (Schuhmann, Foote, Eyberg, Boggs & Algina, 1998). Furthermore, treatment effects have been found to last up to six years, with parents reporting unchanged frequencies of externalizing behavior since post-treatment and continued confidence in their parenting skills related to shaping child behavior (Hood & Eyberg, 2003). Therefore, researchers recognized the potential importance of disseminating PCIT into community settings where the majority of children with challenging child behavior problems are treated, and called for more research on the effectiveness of PCIT in outpatient clinics (Herschell, Calzada, Eyberg and McNeil, 2003). Researchers were also interested in translating PCIT into child welfare for biological parents with a history of physical abuse and their children (Herschell & McNeil, 2005; Urquiza & McNeil, 1996). To date, three randomized controlled trials have examined the application of PCIT to biological parent-child dyads with a history of maltreatment (Chaffin et al., 2004; Thomas & Zimmer-Gembeck, 2011; 2012) and PCIT is considered an evidence-based treatment for children with maltreatment history (Thomas & Zimmer-Gembeck, 2012).

PCIT researchers have also been interested in translating PCIT into child welfare for foster parent-child dyads for some time. The utility of PCIT for training foster parents to care for foster children with externalizing behaviors has been examined in a number of non-experimental studies with promising results (e.g., Fricker-Elhai, Ruggiero & Smith, 2005; Timmer et al., 2006; Timmer, Urquiza & Zebell, 2006). Researchers have also adapted the original PCIT model (i.e., mastery-based, 12-16 weeks of individual sessions) to better fit the needs of the child welfare system and foster families served by condensing PCIT into a time-limited group format, which produced positive results on child and foster parent-level outcomes from baseline to post-baseline (McNeil, Herschell, Gurwitch and Clemens-Mowrer, 2005). More recently, researchers replicated and further adapted the group PCIT model and results from a randomized controlled trial demonstrated that foster parent-child dyads who received group PCIT had significant reductions in child externalizing behavior problems and parenting stress compared to dyads who received child welfare services-as-usual (Mersky, Topitzes, Janczewski & McNeil, 2015; Mersky, Topitzes, Grant-Savela, Brondino & McNeil, 2016).

Rightfully so, the vast majority of research to date on the translation of PCIT into child welfare for foster parent-child dyads has focused on examining the intervention's effectiveness in reducing children's behavior problems and foster parents' stress and improving foster parents' skills to manage challenging behavior. Yet, in order to continue moving towards widespread dissemination, more research one other phases of translation is needed. For instance, research should seek to understand questions such as where, when, why and for whom does PCIT work, and what strategies are needed to replicate or further adapt an intervention, if any (Testa et al., 2014). Topitzes, Mersky and McNeil (2015) provided a review of several pertinent barriers and facilitators of implementation they encountered when translating PCIT into child welfare for

foster parent-child dyads, which expanded the field's understanding of PCIT implementation from the researchers' point of view. However, few studies have examined practitioners' perceptions related to the implementation of PCIT in child welfare, despite the benefits of using two-way exchanges between researchers and practitioners to overcome dissemination barriers (King, Hawe & Wise, 1998). Moreover, a review of the literature revealed a dearth of studies that address implementation from foster parents' perspective, despite the invaluable feedback they could potentially provide to practitioners and researchers to guide implementation and dissemination efforts (Israel, Schulz, Parker & Becker, 1998; McDavitt et al., 2016; Reback, Cohen, Freese & Shoptaw, 2002).

The current study uses qualitative data collected from focus groups to bring PCIT practitioners, and foster parents who completed PCIT, into the conversation on implementation by asking: What are the experiences of these practitioners who deliver PCIT, and these foster parents who completed PCIT, within child welfare?

Methods

Design

This study used a qualitative approach guided by the realist theoretical perspective, which focuses on describing participants' experiences of reality (Braun & Clark, 2006) to understand the perceptions of practitioners who deliver PCIT and foster who participated in PCIT. This approach uniquely allowed for the study of how the child welfare context in which services were delivered and received shaped the events, actions and perceptions of participants (Maxwell, 2012). Rather than aiming to reach saturation, which implies that data collection and analysis end when additional data does not result aid in further developing categories (Glaser & Strauss, 1967), the analytic approach guiding this investigation focused on identifying initial themes that

may help to guide further research. As such, this exploratory, ground-up study emphasized open-ended, participant-driven conversation, which may help to uncover previously unidentified concepts that may have been difficult to detect with quantitative methods, and focused on a rich description of key stakeholders' experiences.

Procedures

PCIT practitioners were recruited from two child welfare agencies in southeast Wisconsin using purposive sampling. Prior to the study, I established collegial relationships with practitioners by attending in a practitioner learning collaborative that meets monthly to discuss the implementation of PCIT in child welfare. Then, using snowball sampling, practitioners from the learning collaborative were asked to identify any other practitioners who provide PCIT to foster parent-child dyads. Recruitment emails were sent to all practitioners in the learning collaborative and practitioners who were identified using snowball sampling (n=12) in January, 2017. Two focus groups, one group of four practitioners and one group of five practitioners, were conducted in March, 2017 after obtaining practitioners' informed consent. The focus groups lasted 64 minutes and 62 minutes, respectively. The focus group facilitator was the first author, a doctoral candidate. A MSW-level intern served as a research assistant to record non-verbal behavior and communication and to assist with de-briefing at the end of each focus group.

Foster parents from southeast Wisconsin who completed PCIT were recruited from January-July, 2017. Because of the importance of protecting the confidentiality of foster parents who had completed PCIT, snowball sampling methods were employed in which PCIT practitioners who participated in the study were given recruitment materials and asked to share them with foster parents. The recruitment materials instructed foster parents to contact me if

they were interested in learning more about the study. While the practitioners remained aware of whom they referred, this method of recruitment protected foster parents' confidentiality because practitioners remained unaware of which foster parents followed up with me. Ten foster parents expressed interest and were subsequently recruited to the study; four were non-attenders, resulting in a total of six foster parents who provided informed consent and completed the focus groups. Numerous attempts were made to re-schedule with the foster parents who did not attend the focus groups, however the follow-up attempts were unsuccessful. The most commonly cited reason for not participating in the study was a lack of time due to busy schedules. Two focus groups, with three participants each, were conducted in July, 2017. The first focus group lasted 73 minutes and the second focus group lasted 74 minutes. As with the practitioner focus groups, the first author conducted the focus groups, and a research assistant was present to record non-verbal behavior and communication and to assist with de-briefing at the end of each focus group.

Sample

The two practitioner focus groups were comprised of nine female clinicians in total, eight of whom identified as Caucasian. Practitioners were, on average, 30 years old with an average of 5.7 years of experience working in the child welfare system. All of the practitioners had graduate degrees in social work or a related field. The two foster parent focus groups were comprised of six female foster parents, four of whom identified as Caucasian and two who identified as African American. Foster parents ranged in age from 30 years to 52 years, with an average age of 39 years of age. All four focus groups were completed in a private room at a local child welfare agency and were audio recorded. All participants were provided with a meal and beverages, and foster parents were also provided with a $10 gift card as a token of appreciate for their time.

Data Analysis

The audio files from each focus group were transcribed and reviewed for accuracy. Thematic analysis was employed in four steps by the first author. While the four steps progressed in a somewhat sequential fashion, it is important to note that data analysis was recursive and at times it was necessary to move back and forth between the steps. The first step included conducting an inductive, initial (open) coding of each transcript to identify as many potential themes/patterns as possible using line-by-line coding.

In the second step, the list of previously generated codes was sorted into the broader themes. Memos were used to document the processes of sorting and combining codes into potential themes and to capture thoughts related to how the themes (or sub-themes) may be related to or different from one another. Given the exploratory nature of the study, all themes were coded regardless of their fit with my own questions.

Third, the initial themes were further refined to ensure that each theme had enough supporting data and was distinct from all other themes. Specifically, the coded excerpts for each theme were reviewed to ensure proper fit and the transcripts as whole were reviewed to ensure the themes accurately represented the data. For instance, reviewing the themes in relation to the entire dataset allowed for an identification of any themes that were previously missed during early coding iterations. Each code and theme was reviewed and refined until the thematic map fit the data.

Fourth, the themes were further defined and refined and the data for each theme were analyzed. For instance, this phase consisted of giving each theme a name, describing the scope and content of each theme, and organizing the data and narrative account for each theme and for the dataset as a whole. Additionally, sub-themes were further defined and refined to provide

structure for large and/or complex themes.

Finally, all themes were further analyzed and the results were written. This step included choosing quotes for each theme, combining them with the analytic narrative to describe the results and illustrate the potential implications of each theme, and discussing what the overall narrative reveals about the topic (Braun & Clarke, 2006).

Two associate professor-level researchers, one with experience in PCIT research and practice and the other with extensive experience in qualitative research, reviewed drafts of the results to help ensure the themes were well-developed and supported by the data. Furthermore, the first author engaged in member-checking by soliciting feedback from the participants on the themes. Each participant was emailed a draft of the results and asked to provide feedback on the accuracy of the themes via email or phone. Only three participants responded, however all feedback on the themes was positive, which suggests the themes represent these participants' perceptions.

Researcher Positionality and Rigor

I have three years of experience delivering PCIT in child welfare, though I no longer engaged in this type of clinical work at the time of the study. Additionally, I have five years of experience researching PCIT within child welfare. As a practitioner, I have witnessed first-hand the benefits families seem to accrue from receiving PCIT, along with the challenges to providing services to families situated within the child welfare. As a researcher, I have evaluated child and parent-level outcomes of PCIT in an effort to promote the widespread dissemination of evidence-based interventions into child welfare, though my research is grounded in my philosophy of science which aims to approximate the truth. In summary, I am interested in translating evidence-based interventions, such as PCIT, into child welfare but only if the intervention seems

to be beneficial for families.

My position as a researcher varied from insider to outsider status. Regarding my outsider status, I presented myself as a researcher to all of the participants, which meant I lacked membership in either the practitioner or foster parent groups. Still, my role as a researcher likely highlighted the unequal power differential between myself and the participants, which could have influenced the ways in which participants responded during the focus groups. During the practitioner focus groups, my outsider status could have introduced bias particularly around responding in socially desirable ways. For instance, practitioners may have felt ambivalent about discussing specific strategies and adaptations they used during PCIT, as it may have represented a deviation from the manualized PCIT protocol. However, my outsider status was likely more prominent during the foster parent focus groups. For instance, even though I presented myself as a researcher, foster parents may have regarded me as a PCIT practitioner or a child welfare professional, and therefore may have been hesitant to discuss the personal or professional challenges they have experienced as a foster parent.

Similarly, my insider status may have had implications for both focus groups. With regards to the practitioner focus groups, even though I was no longer a PCIT practitioner, my prior relationships with practitioners may have led them to assume I understood their meanings or intentions during the focus groups. Furthermore, my own understanding of PCIT could have led to conclusions about the data that stemmed from my own biases. In the foster parent focus groups, foster parents may have perceived me as a PCIT practitioner, which may have resulted in them believing that I understood what they meant when the described their experiences in PCIT. On the other hand, foster parents could have felt uncomfortable sharing any negative opinions of PCIT if they perceived me as a practitioner.

The design of the study and the methods of data collection and analysis attempted to document and mitigate my own subjectivity as a researcher in a number of ways. First, by acknowledging and documenting my positionality, I am being reflexive and bringing awareness to the fact that as a qualitative researcher I am inherently part of the research process and view the research from a specific lens (Creswell & Miller, 2000). Second, all of the focus groups were semi-structured, which allowed participants to direct the conversation towards topics they found to be significant, thereby shifting some of the power toward the participants (Rubin & Rubin, 2012). Third, during data analysis, each transcript was coded line-by-line (Charmaz, 2006). This method helped to ensure that my initial codes were grounded in the data and stuck close to participants' words. Fourth, I utilized reflective memoing during data analysis, which allowed me to ascertain if and how my personal reactions during the focus groups or biases during data analysis may have influenced study results (Corbin & Strauss, 2008). Specifically, reflective memoing allowed me to document and examine my thoughts surrounding the research and the implications of viewing the data from my own subjective lens. Fifth, all negative cases were coded and analyzed, thus limiting any biases that may have been introduced because of my previous role as a PCIT practitioner (Padgett, 2008). Sixth, I used peer debriefing and triangulation to increase trustworthiness. Specifically, at the end of each focus group, I accounted my perception of the conversation, my reactions, and potentially important themes to a research assistant, who then did the same to me. This process served as a form of corroboration of the research process and preliminary themes and allowed me to validate my initial understanding of the data, which increased trustworthiness (Creswell & Miller, 2000). Finally, I used member-checking to solicit feedback from the practitioners and foster parents to ensure they perceived my themes to be accurate (Creswell & Miller, 2000).

Results

Bringing practitioners and foster parents into the conversation to better understand their experiences with PCIT in child welfare illuminated four emergent themes. These emergent themes on practitioners' and foster parents' experiences with PCIT in child welfare may help to guide further research. The first theme illuminates the perceived implementation barriers experienced by practitioners and foster parents. The second theme illustrates practitioners' and foster parents' perceptions of facilitators of implementation. The third theme describes and analyzes practitioners' and foster parents' experiences of attending to children's trauma histories. The fourth theme represents practitioners' and foster parents' perceptions on the continued adaptation and translation of PCIT into child welfare.

Barriers to Implementing PCIT in Child Welfare

Nearly all practitioners experience barriers when implementing interventions in child welfare, such as recruiting and retaining clients. Likewise, foster parents often experience barriers to treatment participation, such as time constraints. However, the implementation of PCIT within the context of the child welfare results in a unique set of contextual barriers.

Practitioners: "Hey, we are here to help support you". When practitioners deliver PCIT to foster parent-child dyads, the emphasis of treatment is to help foster parents learn skills to manage to children's externalizing behavior problems. However, practitioners often face a barrier related to marketing PCIT to foster parents. Specifically, practitioners must carefully manage the implicit and explicit messages foster parents receive when being referred to or participating in PCIT. Practitioners must ensure that foster parents know that participating in PCIT is voluntary. Practitioners often worry that foster parents may feel obligated to participate in treatment when a referral is made on their behalf because they are worried that not

participating could jeopardize their foster parent license, or because the power differential between the child welfare case manager and foster parent may lead to foster parents feeling unable to disagree with the child welfare case manager.

> Lucy (practitioner): Because they [foster parents] are licensed with the state, they are trained prior to becoming foster parents. Sometimes they [foster parents] are a little more hesitant to ask for help because they feel fearful of the judgment like, "Hey you should be able to handle this child's behaviors or needs" when in fact it is the exact opposite, "Hey we are here to help support you". But sometimes there is that fear from the foster parents that it will affect their license or things like that if they are reporting that they are struggling with the child.

This sense of obligation that foster parents may feel creates a barrier for practitioners as it can inhibit their ability to engage with foster parents and establish the necessary rapport for effectively working together (Kemp, Marcenko, Hoagwood & Vesneski, 2009). As such, PCIT practitioners who work in child welfare must carefully explain the voluntary nature of PCIT to both foster parents and case managers who refer foster parents to PCIT, and work to overcome the perceptual barrier (i.e., that services are mandated and tied to foster parents' licenses) created by the child welfare context. While practitioners face other barriers, such as adequate clinic space, they seemed more frustrated by barriers that occur within the environment of child welfare services (i.e., working with families who may feel mandated to participate in PCIT). This may be due to the added layer of complexity the environment introduces and the lack of clear strategies needed to overcome such barriers.

Practitioners: Tracking child behavior problems. Practitioners feel that tracking child behavior problems over the course of PCIT can be a challenge because they perceive some foster parents as over-reporting child behavior problems on assessments. In Wisconsin, foster parents' compensation rates may be increased depending on foster parents' reports of child behavior problems (Wisconsin Department of Children and Families, 2017), which may motivate over

reporting. While the assessments completed during PCIT are completely separate from the assessments used to adjust foster parents' compensation rates, practitioners feel that this could potentially explain the responding bias among some foster parents. The potential exaggeration of child behavior problems is a challenge because it may affect intervention outcomes. Nicole, a practitioner, said: "We don't know how much it actually affects the data that we have". Furthermore, Lindsey, a practitioner, worried: "[The over reporting] essentially could impact funding that we have for our [PCIT] program".

One strategy that may help to overcome this barrier is to track and report a wider variety of indicators to document the success of PCIT. For instance, rather than relying solely on foster parents' reports of changes in child behavior problems throughout PCIT to document the impact of PCIT, child welfare programs should consider reporting changes in parenting skills and child compliance, both of which are measured using a standardized observational coding assessment, the Dyadic Parent-Child Interaction Coding System (DPICS) (Eyberg & Robinson, 1981), during PCIT (McNeil & Hembree-Kigin, 2010). Additionally, more research to illuminate clinical modifications to minimize biases in reporting, if they exist, may be warranted. Practitioners from both focus groups described the utility of using Motivational Interviewing (a client-centered, non-judgmental approach to counseling) techniques during the assessment of child behavior problems to develop discrepancy and more accurately capture foster parents' reports of child behavior problems.

Foster parents: "I am afraid to admit to all those things because of how it may be perceived by others". The child welfare context creates a barrier for foster parents in that they are licensed to care for children, yet feel inadequately trained to manage children's behavior problems. As a result of being licensed and feeling as though they should be able to handle

children, foster parents have reservations in seeking out help for services related to parenting and the management of child behavior problems. Mel, a foster parent, explained, "A lot of us [foster parents] are in that spot where we are like, 'I am afraid to admit to all those things because of how it may be perceived by others'". This aligns with previous research, in which foster parents reported feelings of mistrust among themselves and agency workers, including having to censor their struggles from workers (MacGregor et al., 2006). Foster parents' perceived stigma around asking for help creates a significant challenge in that it may be difficult to recruit foster parents to participate in PCIT, or any intervention that targets parents' skills. Furthermore, it suggests that foster parents may be struggling for some time before engaging in services, which highlights the need for greater prevention efforts to ensure that both foster parents and foster children receive services sooner rather than later. A foster parent named Diane finally asked for help when she recognized that her feelings were likely normal: "I felt desperately alone and crazy and sad and stressed and worried like non-stop. And I thought all the time, '"If I feel this, other foster parents have to feel this"'. Moreover, Diane highlighted an important implication of foster parents feeling comfortable asking for help "More kids would probably have better success stories, too".

Although some foster parents reported other barriers, such as finding time to practice the PCIT skills as a single parent, the barrier described above seemed to be given the most attention and dominated the conversation across both foster parent focus groups. This is likely because it represents a circumstance in which foster parents feel they have very little control and perceive there to be few solutions to overcoming the barrier, especially in a timely manner. This finding underscores the importance of continued efforts to break down the stigma surrounding asking for help for all parents, but especially for foster parents who perceive there to be heightened risks

associated with asking for help. Overall, foster parents reported experiencing very few barriers related to the implementation of PCIT in child welfare, which is an important finding in itself and suggests that the translation of PCIT for foster parent-child dyads in child welfare is a promising effort.

Factors that Facilitate the Implementation of PCIT in Child Welfare

Despite the barriers that practitioners and foster parents perceived to be associated with the implementation of PCIT in child welfare, they also perceived there to be several factors that can support implementation. Each of these facilitators, or drivers, of implementation are analyzed in greater detail below.

Practitioners: "The greatest source of success has been our team". Practitioners must engage in on-going consultation for approximately twelve months to ensure that practitioners complete two cases from beginning to end, which counts towards their eligibility to become certified PCIT therapists (PCIT International, 2013). Although all of the practitioners in this study completed their PCIT training, they maintain their own on-going learning collaborative with each other that meets monthly. The notable features of the learning collaborative include its relatively small size, (approximately seven practitioners), which likely allows for individual attention despite the group format, and in-person format.

The learning collaborative serves two purposes. First, meeting monthly allows practitioners to discuss barriers, strategize solutions, and ensure model fidelity is maintained. Second, the on-going peer support is critical because it comes from practitioners who are also delivering PCIT in the child welfare context and therefore going through similar experiences.

> Lindsey (practitioner): I think that the greatest source of our success here¬¬ has been our team that we have started from the ground up together to develop this program [PCIT] and support each other constantly, keeping our fidelity to the model, adapting when needed. That support within each other has just been huge.

Thus, maintaining the learning collaborative allowed the practitioners to build a sense of community, which may be especially significant among PCIT practitioners working in child welfare since they are translating a manualized intervention into a new setting and with a new population. Furthermore, on-going consultation and training for PCIT practitioners in child welfare may have benefits beyond strengthening clinical skills, monitoring fidelity to the PCIT protocol and facilitating social support. For instance, Beveridge and colleagues (2015) found that continued consultation with an on-site trainer increased the adoption of PCIT into services. This finding underscores the need for further research regarding the format, length, and outcomes associated with PCIT supervision and consultation. Herschell and colleagues (2015) are currently examining the effects of three PCIT training models, which may help the field to further understand how to support practitioner retention.

Practitioners' perceptions on recruiting and engaging foster parents. Practitioners feel that differentiating their role as PCIT practitioners from other child welfare roles (e.g., case manager) can help to facilitate the recruitment and engagement of foster parents. Specifically, PCIT practitioners describe themselves as having roles separate from the foster parents' case manager or licensing worker, which may reduce the stigma foster parents may feel about asking for or receiving help with parenting or child behavior problems. This is reflected in a quote from a practitioner named Perry: "When I first meet them [foster parents] and I do the [PCIT] intake, I let them know that my role, my job, is separate from the family case manager and initial assessment worker [person who investigates reports or maltreatment]". This role differentiation may help practitioners to build rapport with foster parents because it lessens the power differential between the practitioner and the foster parent. Moreover, when the roles of various child welfare workers are differentiated, foster parents may not feel as threatened during

treatment because the PCIT practitioner has no influence over the foster parents' license or child placements.

Foster parents' perceptions on factors that support implementation. Foster parents perceive the therapeutic alliance between themselves and their practitioners to be a factor that promotes foster parents' treatment success and retention. For instance, a foster parent named Nancy described how her relationship with her practitioner was akin to someone "having her back". This finding aligns with previous research on PCIT with biological parents which suggested that the therapeutic alliance may increase retention among parents participating in PCIT (Harwood & Eyberg, 2004). Moreover, a strong therapeutic alliance between a practitioner and foster parent may indicate that PCIT is having beneficial foster parent outcomes beyond those typically assessed (e.g., parenting stress and parenting behavior), which has implications for measurement and possibly extending the research on PCIT's effects on foster parents. The quote below from a foster parent named Mel captures how she benefited from PCIT and highlights her perspective on the importance of translating PCIT into child welfare for foster parents:

> She [the PCIT practitioner] was not only my child's therapist but she was my therapist, so that is invaluable. So keeping that in mind, how much you're helping the [foster] parents. I am a strong believer that every foster parent could probably gain from this [PCIT] immensely.

Developing a Trauma-Informed Approach to PCIT

Children in the child welfare system have undoubtedly experienced at least one adverse childhood event (e.g., removal from their primary caregiver) and data from a nationally representative study of children reported for maltreatment suggests that over half of children have experienced four or more adverse childhood events (Stambaugh, Ringeisen, Casanueva, Tueller, Smith & Dolan, 2013). Unsurprisingly, foster parents in this study reported that foster

children experienced various adverse experiences, including neglect, pre-natal drug exposure, and four foster home placements in one year. Both practitioners and foster parents extensively discussed trauma in their focus groups and these sub-themes are discussed in more detail below.

Actions taken by practitioners to address children's trauma. Findings from this study suggest that practitioners extend and adapt the PCIT model to fit the needs of foster parent-child dyads in two ways. First, all practitioners provide foster parents with psychoeducation on trauma, including the definition of trauma and the effects of trauma on children's behavior. This is exemplified in the quote by a practitioner named Lindsey "We do a lot of work explaining the basics of trauma and adverse childhood experiences and how that impacts [children] in child welfare".

Second, practitioners addressed children's history of trauma by teaching physically based (e.g., muscle relaxation and breathing exercises) and cognitive based (e.g., meditation) relaxation strategies to foster parent-child dyads during Child-Directed Interaction (CDI). For instance, a practitioner named Macy described how she "let a child take his sensory blanket into the timeout chair", which she felt attended the unique needs of that foster child. Though adaptations such as these are not currently part of the PCIT protocol, they are utilized by some PCIT practitioners (i.e., UC-DAVIS developed an online training titled "PCIT for Traumatized Children in 2011) and in other interventions that serve children in the same age range as PCIT, such as Trauma-Focused Cognitive Behavioral Therapy (Cohen, Mannarino, Kliethermes & Murray, 2012).

The translation of PCIT into child welfare represents an extension of the original PCIT research. Because PCIT was not originally developed for child welfare, it is important that practitioners who deliver PCIT in child welfare adapt the intervention to meet the specific needs of the population to facilitate implementation (Testa et al., 2012). Specifically, when PCIT is

translated into child welfare, the intervention is being used to treatment children with a history of trauma. Yet, this study represents the first of its kind to examine the strategies used by practitioners to facilitate the translation of PCIT into child welfare. Such research is important for informing the implementation and dissemination of evidence-based practice into child welfare (Testa et al., 2012). Because these strategies to make PCIT more trauma-informed may have implications for the continued translation of PCIT into child welfare, continued research is warranted.

Foster parents' reactions to practitioners' actions. According to the foster parents in this study, practitioners' adaptations to make PCIT more trauma-informed had two important implications. First, it helped foster parents better understand and manage their foster children's challenging behavior problem. For instance, foster parents perceived the trauma psychoeducation as integral to helping them differentiate between normative child behavior problems and behaviors that may be trauma-related. Second, foster parents felt that brief exposure to relaxation strategies during PCIT seemed to help foster parents and children better regulate their behavior and emotions. For foster parents, this means being able to calm down and respond more appropriately to challenging child behaviors. By learning about the effects of trauma on children's behavior and practicing strategies to promote the regulation of behaviors and emotions, foster parents were able to view their relationship with their foster children from a trauma-informed lens, as illustrated in the quote from a foster parent named Mel:

> We didn't even know how smart he was because everything was anger. Once the anger subsided, you could see he was this intelligent little guy and we didn't even realize that all because that was all you've seen. I mean we loved him right away, but he was just in your mind this hard kid that you couldn't relate to predictably. I think once we learned how to respond, that's what I thought was great. We were able to give him what he needed.

Thus, the integration of trauma principles into the standard PCIT protocol seemed to strengthen

the caregiver-child relationship.

Actions taken by foster parents to address trauma. Foster parents indicated that participating in PCIT taught them to identify, anticipate and respond to events and experiences that could trigger negative reactions from their foster children. Foster parents caring for children with a history of physical abuse implemented hands-off discipline techniques because they perceived physical touch as a trigger that could escalate children's externalizing behaviors. For instance, a foster parent named Allison found that rather than placing her foster son back in the time-out chair if he got up before he was told to, which required physically touching him, a hands-off approach, which included adding consequences for non-compliance, was more helpful. This approach removed the trigger (touching her foster son when he was escalated) and replaced it with a trauma-informed, positive discipline technique. Removal of privileges has been suggested for older children participating in PCIT (McNeil & Hembree-Kigin, 2010), though it may also apply to children with a history of maltreatment (e.g., physical abuse). Foster parents caring for children with a history of neglect found that maintaining a closer proximity and using physical touch during PCIT were useful, trauma-informed strategies that helped them remain attuned to the needs of the child. For instance, a foster parent named Diane found that when her foster daughter was escalated, physical touch (i.e., rubbing her foster daughter's back) helped to promote her foster child's ability to self-regulate. Research suggests that physical touch can facilitate emotional well-being (Blackwell, 2000; Field, 2001) and promote co-regulation among caregivers and children (Booth & Jernberg, 2009), thus highlighting the importance of removing and reintroducing touch as soon as possible when working with children with a history of trauma.

While the behavioral underpinnings of PCIT may contraindicate giving a child attention

during discipline, perhaps enriching the program theory of PCIT with trauma-informed principles allows foster parents to choose an indicated approach to discipline that leads to the desired outcome (e.g., effective management of child behavior problems). Therefore, practitioners and foster parents may need to be flexible while still maintaining fidelity to the key ingredients of PCIT. Foster parents spoke highly of how practitioners helped them to identify creative, positive discipline strategies. Thus, if practitioners validate foster parents' choices, knowledge and skills, it could enhance foster parents' long-term use of the PCIT skills, satisfaction and retention.

Strategies to Facilitate the Translation of PCIT into Child Welfare

Prior research suggests that foster parents receive little training on managing challenging child behaviors, and the training they do receive has been found to be ineffective (Grimm, 2003; Puddy & Jackson, 2003). The translation of PCIT into child welfare for foster parent-child dyads could improve foster parent and child outcomes and increase foster parents' access to an effective treatment. This theme describes and analyzes practitioners' and foster parents' recommended strategies to facilitate implementation and dissemination efforts.

Foster parents' suggestions. Foster parents suggested that incorporating PCIT into the pre-service foster parent training curriculum, which all foster parents must complete to become licensed foster parents, may be one way to facilitate the translation of PCIT into child welfare. A foster parent named Diane described how much of the information from her initial training could have been read in a book rather than taught in a class, but in regards to PCIT being part of a training she said "[PCIT] is actually practical. This [PCIT] could save a family, keep them together. Even if you didn't teach them all the skills but made them aware…that there's therapy…that's very helpful". This finding aligns with the Price et al's (2008) suggestion of

integrating parent-mediated interventions into training curriculums to increase the quality of children's and families' overall mental health care. Moreover, foster parents are best positioned to provide feedback on training (Buehler et al., 2003), which further highlights the significance of this finding. Though more research is needed to understand the advantages and disadvantages of incorporating PCIT into a pre-service foster parent training, prior research on the effectiveness of PCIT as a foster parent training (Mersky et al., 2015; Mersky et al., 2016) and on the state-wide dissemination of PCIT into a system of care (Beveridge et al., 2015) suggests that this may be a viable avenue to support the translation of PCIT into child welfare services.

Foster parents also felt that a peer-to-peer recruitment model, in which foster parents who have completed PCIT help recruit new foster parents for PCIT, may help to engage new foster parents in treatment. Such a method could also encourage peer support (i.e., foster parents who have completed or are in the process of completing PCIT supporting each other), a factor found to be important for foster parent retention (MacGregor et al., 2006). Cooley and Petren (2011) reported that foster parents in their study requested greater interaction with experienced foster parents during trainings, which suggests that having foster parents speak about their experiences with PCIT during foster parent trainings may improve foster parents' satisfaction with trainings.

Practitioners' suggestions. The original PCIT model dictates that treatment should be delivered in the clinic with a practitioner coaching a dyad behind a one-way mirror using a bug-in-the-ear device (see McNeil & Hembree-Kigin, 2010). However, practitioners felt that the continued translation of PCIT into child welfare relies partly on treatment flexibility. Treatment flexibility may increase the number of families that practitioners can serve since it removes the requirement that a clinic be outfitted with a one-way mirror and bug-in-the-ear device. Though not specifically tested with foster parent-child dyads, research has demonstrated that PCIT can be

successfully delivered in the home (Ware et al., 2008). In addition to removing logistical barriers, flexibility in treatment delivery may also increase foster parent satisfaction, and therefore retention, an important consideration given that attrition diminishes the benefits of PCIT. A foster parent named Nancy said:

> The value of having someone enter my space and coach was just different than sitting in the therapist office, having it [PCIT] be in our home was invaluable, really made the difference because it is the place where it [child behavior problems] plays out usually.

This quote also suggests that flexible treatment may help foster parents to better generalize the skill taught during PCIT into everyday life. However, delivering PCIT in the home also increases the burden on practitioners, as traveling to foster parents' homes requires a greater amount of time and resources.

Adaptations, specifically treatment duration, session length, and format, may also facilitate the translation of PCIT into child welfare. With regards to treatment duration and session length, practitioners described how they sometimes deliver a time-limited, brief PCIT intervention consisting of 5-8 sessions, each lasting 90-120 minutes, rather than the typical 12-16 sessions, each lasting 45-60 minutes. However, the screening process to determine which families may benefit from longer or shorter sessions must be carefully considered. With regards to treatment duration, practitioners described how they sometimes deliver PCIT in a group format, which condenses treatment into two, eight hour days of training rather than 12-16 sessions. The foster parents in this study who received group PCIT reported positive experiences, especially in regards to the increased social support that the intervention built among foster parents. For instance, a foster parent named Allison reminisced:

> Everyone was just so amazing too, just to support me and encourage me as a mom. It was awesome to be able to have that experience and say 'I'm not alone and I can do this and there are people doing this and we can support each other and encourage each other'.

In summary, these strategies may aid in the implementation and dissemination of PCIT into child welfare for foster parent-child dyads. The benefits of these efforts may include increasing foster parents' access to PCIT while also reducing attrition, resources, and costs.

Discussion

Research on the translation of PCIT into child welfare for foster parent-child dyads is promising, yet practitioners' and foster parents' viewpoints have been largely unstudied. This study employed thematic analysis to explore themes that may help to guide future research. Bringing practitioners and foster parents into the conversation helped to identify their perspectives on 1) barriers to implementing PCIT in child welfare, 2) factors that facilitate the implementation of PCIT in child welfare, 3) developing a trauma-informed approach to PCIT, and 4) strategies to facilitate the translation of PCIT into child welfare. Overall, the findings from this study underscore that practitioners and foster parents perceive there to be benefits for foster parent-child dyads that receive PCIT and as such, continued translation of PCIT into child welfare should be pursued.

The inductive, qualitative nature of this study allowed for the voices of some PCIT practitioners and foster parents to be heard. As such, this raises a number of key clinical considerations. First, the benefits of developing rapport and a strong therapeutic alliance between practitioners and foster parents cannot be overstated as it may increase foster parent retention and satisfaction with treatment. While rapport and the therapeutic alliance are important factors in all settings, the child welfare setting may elevate the importance of these factors since there is a perceived stigma for foster parents surrounding asking for help with parenting and managing children's behavior problems.

Second, practitioners who deliver PCIT within the context of child welfare services may

benefit from on-going consultation with other child welfare PCIT practitioners. In addition to monitoring model fidelity, on-going consultation may cultivate peer support and therefore increase practitioner satisfaction. Additionally, given that research has demonstrated that practitioners' attitudes towards interventions may influence implementation (Nelson, Shanley, Funderburk & Bard, 2012), more research may illuminate strategies to better support practitioners who deliver PCIT in child welfare.

Third, practitioners may need to consider integrating trauma principles into PCIT. For instance, providing trauma psychoeducation to foster parents during the CDI teach session may help foster parents to differentiate between children's behaviors that are common for a particular developmental stage compared to those that may associated with their histories of trauma. Again, while integrating trauma principles into PCIT could be helpful in a number of populations, it is important to recognize the likelihood of a higher prevalence of exposure to adverse childhood experiences among children in foster care.

Fourth, foster parents who have completed PCIT may be important advocates for the intervention, especially in terms of the recruitment of new foster parents for PCIT and the embedding of PCIT into foster parent pre-service trainings. For instance, having a foster parent representative who completed PCIT speak to new foster parents during foster parent trainings may help to stimulate referrals to treatment. Moreover, in this example the referrals may be preventative in nature, thus helping to link foster parents to practitioners before a placement is at risk of disruption due to challenging child behaviors and/or ineffective parenting skills.

Finally, a flexible approach to treatment likely benefits practitioners and foster parents. For instance, in-home PCIT allows practitioners to become familiar with the types of challenges dyads face in the home setting. It also allows foster parents to practice PCIT in the setting they

are likely to encounter child non-compliance and the need to use positive discipline. Furthermore, recognizing and responding to the challenges foster parents face by subsequently adapting the PCIT model may better meet the needs of the family. To that end, brief PCIT models have been shown to be effective with this population (Mersky et al., 2015; Mersky et al., 2016) and may be appealing to the population of foster parents who are unable to commit to 12-16 weeks of treatment, especially if the child may be reunified with a biological parent in the near future.

Limitations and Future Directions

While this study fills a gap in the PCIT literature by utilizing a qualitative approach to further understand the barriers and facilitators of translating PCIT into child welfare services from multiple perspectives, several limitations must be noted. First, there were few focus groups and as such, a small sample size. Perhaps a larger sample and more focus groups would have resulted in varied perspectives and therefore different themes. Nevertheless, small sample sizes during focus groups may facilitate an intimate climate, reduce the power differential between the researcher and participants, and create a sense of safety that allows participants to openly share their experiences (Toner, 2009). Moreover, the analytic approach employed during the study aimed to identify emergent themes, rather than to reach saturation (Saunders et al., 2017). Second, all of the focus group participants were female and the majority identified as White; perhaps a diverse sample would have illuminated different themes. Third, the perspectives of children were not solicited, which limits our understanding of how children perceive PCIT. At the same time, children in PCIT are between the ages of 2-7 years and therefore research findings could be difficult to detect. Fourth, it is important to recognize that my own lens, having delivered PCIT in the child welfare setting and having known the practitioners in this

study beforehand, could have had implications for how I coded and interpreted the data. As such, perhaps having a second coder may have illuminated different themes. Nevertheless, appropriate pre-cautions were taken during the focus groups (e.g., explaining my role as a researcher and the purpose of the project), during data analysis (e.g., employing inductive, open coding to allow themes to reflect participants' experiences), and during the writing stage (e.g., multiple reviewers for each draft and member-checking) to increase trustworthiness and credibility.

The exploratory, qualitative nature of this study helped to raise a number of theoretical and empirical questions that should be considered during future research. First, more research is needed on the factors that support and inhibit foster parents' access to and participation in PCIT. For instance, foster parents who participate in group PCIT may experience greater levels of social support and thus treatment satisfaction. Second, future research should investigate strategies that facilitate the therapeutic alliance, and how the therapeutic alliance may affect treatment outcomes among foster parents. Third, research exploring the potential expansion of PCIT theory with elements of trauma theory is warranted. Studies of this nature will help to illuminate any clinical modifications that may be needed for families with a history of maltreatment. Fourth, the feasibility of integrating PCIT into pre-service foster parent trainings to support implementation and dissemination efforts should be examined. Fifth, studies that examine the effects of adaptations, such as brief treatments, should be further pursued. Finally, a greater emphasis should be placed on research that brings practitioners and foster parents into the conversation with other stakeholders (i.e., researchers and child welfare administrators) who are interested in translating PCIT into child welfare.

PCIT is a manualized intervention and maintaining model fidelity across settings and

with various populations undoubtedly contributes to the effectiveness of the intervention. At the same time, this study is an example of how collaborative conversations with a variety of stakeholders can illuminate practice and research considerations on a deeper, richer level. Thus, continued communication amongst researchers, practitioners and foster parents is necessary to ensure that dual emphasis is placed on fidelity to the PCIT model and responsiveness to foster parent and foster child needs.

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CHAPTER FOUR

The Early Childhood Measure of Resilience: Initial Validation Results from a Pilot Study with Foster Parents

Abstract

This article presents the development and validation of the Early Childhood Measure of Resilience (ECMR), an instrument that assesses resilience in children ages 2-7. The ECMR consists of 27 positively-queried items that assess for adaptive functioning via success in age-salient developmental tasks across four domains, including the Caregiver-Child Relationship Quality, Behavioral Functioning, Cognitive Functioning and Executive Functioning. The ECMR was administered to 174 foster parent-child dyads to analyze the psychometric properties of the instrument using traditional and conventional methods, including Rasch analysis. The results support the emerging validity and reliability of the ECMR and the findings provide insight into future instrument refinement. Research and practice implications are discussed and future recommendations are provided.

The definition of resilience has been debated throughout the years, although most experts now agree that it can be conceptually defined as adaptive functioning despite exposure to adversity (e.g., Zolkoski & Bullock, 2012). Contemporary researchers have also clarified that under this definition resilience is a malleable construct, rather than a stable trait, given that functioning can vary within risk contexts and by the presence or absence of risk and protective factors (Fleming & Ledogar, 2008; Egeland, Carlson & Sroufe, 1993). Moreover, the presence or absence of risk and protective factors are thought to contribute to resilience (Egeland, Carlson & Sroufe, 1993; Fleming & Ledogar, 2008; Masten, 2015). Now in its fifth decade of development, resilience research continues to draw increased interest from multiple sectors. For instance, the widespread adoption of a conceptual definition, coupled with recent advances in statistical analyses, have contributed to the feasibility of conducting experiments to promote resilience (Masten, 2007).

It is imperative that scholars conduct resilience research with young children since it has the potential to inform prevention and intervention efforts aimed at promoting adaptive functioning after exposure to adversity (Cichetti, 2013; Phillips & Shonkoff, 2000; Karoly, Kilburn & Cannon, 2006). Furthermore, interventions designed to bolster resilience may be particularly important as they could facilitate adaptive functioning before significant maladaptive behaviors begin. For instance, Fraser and Pakenham (2008) found that children who received a resilience-based psychosocial intervention had clinically significant improvements in psychological adjustment (e.g., reductions in depressive symptoms), compared to children in a wait-list control group. Unfortunately, the integration of the resilience framework into intervention research and practice has been slow and scholars continue to face a number of challenges in conducting intervention-based resilience research. Chief among these is the lack of

valid and reliable measures needed to assess for fluctuations in resilience (Windle, Bennett & Noyes, 2011). This barrier is particularly pronounced for early childhood researchers and practitioners focusing on children below the age of eight (Windle et al., 2011; Walsh, Dawson & Mattingly, 2010; Irwin, Siddiqi & Hertzman, 2007). While the challenges to conducting resilience research with young children are undoubtedly complex and extend beyond availability of relevant measures, having access to a well-validated measure of resilience may help scholars to better detect intervention effects, monitor client progress and compare empirical findings across studies and programs.

The development of psychometrically sound assessments of child resilience may help to support intervention research on resilience in three ways. First, researchers interested in testing the effects of an intervention on increasing resilience will have the ability to analyze changes in resilience over time. Additionally, studies such as these will help scholars to better understand, and bring attention to, the latent construct of resilience. Second, the development of valid and reliable measures of child resilience may increase the ability of scholars to compare empirical findings across studies and programs. Finally, improving access to well-validated measures of child resilience may increase the likelihood of scholars being able to document improvements in adaptive functioning which could stimulate future translational research. In summary, developing and disseminating assessments of child resilience may help to bridge the gap between research and practice, thereby promoting the implementation of a resilience framework across various fields of studies and systems that interact with families.

Literature Review

There a number of considerations that must be taken into account when attempting to measure resilience. First, one must determine what it means for a person to be functioning

adaptively after experiencing adversity. A popular method used by a number of experts is to examine a person's success in age-salient developmental tasks (Masten & Tellegan, 2012; Cicchetti & Rogosch, 1997); as such, this operational definition was used to guide the literature review and subsequent measurement development. Second, one must choose which developmental domains of functioning to assess. It is considered "best practice" to include tasks from a variety of domains of functioning (i.e., Luthar, Cicchetti & Becker, 2007; Cicchetti, 2013). In their review of resilience studies with maltreated children, Walsh and colleagues (2010) found that researchers often include tasks from the domains of behavioral, social, and/or emotional competence. Third, consideration must be given to the developmental stage of the population under study and the developmental imperatives at that stage and within that culture. For instance, developmental tasks surrounding employment would likely be reserved for adult assessments rather child assessments. Finally, researchers must distinguish between "normality" and dysfunction in order to assess resilience (Walsh, Dawson & Mattingly, 2010; Masten & Tellegan, 2012).

A review of the literature on early childhood (e.g., below the age of eight as defined by the World Health Organization in Irving et al., 2007) resulted in an inability to locate a single measure of child resilience. Unfortunately, this finding is somewhat unsurprising given the limited resilience research conducted with young children. For instance, Walsh et al. (2010) reviewed the resilience research on children who have been maltreated and found that only thirteen studies included children ages 5-12, with the majority of studies concentrated on the upper end of the age range. Even fewer research efforts have been directed towards children below school-age, possibly because researchers find it easier to gain access to school-aged children. Thus, there is a clear need for resilience measures, especially for scholars working in

early childhood. Given the dearth of early childhood measures examining success in age-salient developmental tasks, three noteworthy instruments will be reviewed because of the contributions to the field of resilience.

The Child and Youth Resilience Measure (CYRM) (Liebenberg, Ungar & Vijver, 2012) is a 26-item instrument that measures the individual, relational, communal and cultural resources an individual has available to them (Resilience Research Centre, 2016). The CYRM is an important addition to the field of resilience given that the assessment is well-validated, appropriate for diverse populations, and includes a version normed on children ages 5-9 (Liebenberg, Ungar & Vijver, 2012; Resilience Research Centre, 2016). The authors of the CYRM defined resilience as "the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity individually and collectively to negotiate for these resources to be provided in culturally meaningful ways" (Ungar, 2008, pg. 225). However, the CYRM may not fully capture changes in young children's adaptive functioning as young children often lack influence over their own resources and therefore rely more heavily on their caregivers to navigate circumstances in the early years of life.

The Devereux Early Childhood Assessment (DECA) (LeBuff & Naglieri, 1999) is a 38-item standardized, norm-referenced instrument designed to assess protective factors associated with social and emotional skills (e.g., Initiative, Self-Regulation and Attachment/Relationships), along with behavioral concerns (Fleming & LeBuffe, 2014; DCRC, 2013). The DECA has strength-based items, strong psychometric properties (Powell, Mackrain & LeBuffe, 2007; Lien & Carlson, 2009) and can be employed with children ranging in age from 1 month to 5 years (LeBuffe & Naglieri, 2012). Similarly, the Devereux Student Strengths Assessment (DESSA)

(LeBuffe, Shapiro & Naglieri, 2009), is a well-validated, strength-based assessment that measures emotional and social competence for children in kindergarten-8th grade (Devereux Foundation, 2017; Nickerson & Fishman, 2009). However, both the DECA and the DESSA are conceptualized as measures that capture protective factors thought to influence resilience. Given the historical definitional debates surrounding resilience, it is important to distinguish between the operationalization of assessments that capture protective factors that those that capture success in age-salient developmental tasks as manifestations of resilience.

In summary, while the CYRM, DECA and DESSA add value to the field of resilience, ultimately their focus is not to assess adaptive functioning via the completion of age-salient developmental tasks across multiple domains. To fill the gaps in the literature, a new measure of resilience for young children called the Early Childhood Measure of Resilience (ECMR) was developed and piloted with a sample of families involved with the child welfare system. The purpose of this study is to examine the psychometric properties of the ECMR by answering the following research questions:

Research Question 1: Does the ECMR demonstrate preliminary content, concurrent and divergent validity?

Research Question 2: Does the ECMR demonstrate preliminary internal consistency and test re-test reliability?

Research Question 3: What is the factor structure of the ECMR?

Research Question 4: Which Rasch measurement model should be used to analyze the ECMR, and do the item and person data fit the Rasch Model?

Research Question 5: Based on the results of the Rasch analyses, what revisions may need to be made to the ECMR?

Scale Development

The initial development of the ECMR was completed by the first author and consisted of three steps. First, because early childhood spans a large age range, parameters were required to ensure that the developmental domains and resulting developmental tasks would be applicable to the largest majority of children. The lower limit of the ECMR was set at two years of age and the upper limit was set at eight years of age. The age of two was chosen primarily because of the rapid developments in effortful control that begin around this age (see Eisenberg, Smith, Sadovsky & Spinrad, 2004 for a review) and the cut-off of eight years of age was chosen based on the definition of early childhood adopted by the World Health Organization (Irving et al., 2007). Then, a literature review was completed to gain an understanding of the phenomenon of resilience as it relates to young children and to search for any consistencies across studies that have assessed various domains of functioning. A number of salient domains thought to influence resilience were identified during the literature review (Centers for Disease Control and Prevention, 2017; Masten & Coatsworth, 1998; Walsh et al., 2010; Yates, Egeland & Sroufe, 2003) thus guiding the decision to include four developmental domains (e.g., subscales) on the ECMR: 1) caregiver/child relationship quality (e.g., a bi-directional relationship in which caregivers respond to their children and children respond to their caregivers), 2) behavioral functioning (e.g., the ability to perceive a situation and recognize behaviors that will lead to positive outcomes; successful and appropriate interactions with others), 3) cognitive functioning (e.g., problem-solving; decision-making; the perception of one's world; information processing; intelligence; reasoning; language development; memory), and 4) executive functioning (e.g., having control over one's feelings and emotions).

Second, a number of widely-used measures for young children were reviewed in order to gain familiarity with item content, language usage, sentence structure, and rating methods. Then, initial item generation began by writing positively-queried items designed to assess success in age-salient developmental tasks. Item generation continued until each domain had at least five developmental tasks associated with it since the a priori factor structure was conceptualized as having four factors and each factor should have at least three items for it to be considered stable (Costello & Osborne, 2005). Once the initial set of items were written they were read aloud to a research assistant in order to detect any problematic items (e.g., items with over-lapping content, double-barreled items, etc). The process of developing initial items and removing any problematic items resulted in a total of 31 items, all of which are parent-report (given the age of the target population) and have a 7-point likert-response ranging from 1 (never) to 7 (always), with higher ratings indicating greater success in completing a developmental tasks. The 7-point response scale was chosen for several reasons. First, it allows for flexibility in condensing categories of responses should the results of the Rasch analysis support fewer than seven categories. Second, it aligns well with the structure of the Eyberg Child Behavior Inventory (Eyberg & Pincus, 1999), an instrument that assesses challenging child behavior in children of the same age range as the ECMR.

Third, seven practitioners were recruited from a child welfare agency to aid in the scale development and to develop content validity. Practitioners were recruited if they 1) held a master's degrees in social work or related fields; 2) implemented evidence-based psychosocial treatments designed to promote well-being among children receiving child welfare services; and 3) were trained to provide clinical recommendations for families involved in child welfare based on the results of psychometrically-sound measures. In order to demonstrate preliminary content

validity, the practitioners were asked to review the initial set of items on a variety of indicators including item comprehension and suitability. Then, they were asked to rate each item on a 3-point scale for each of the four domains. For example, practitioners were instructed to rate whether an item matched each domain by assigning the match a +1 if the item measured the domain, a -1 if the item did not measure the domain, and a 0 if they were unsure. The results from this procedure were used to calculate the index of item-objective congruence for each item, which assumes that each item matches only one domain and therefore has an ideal value of 1 (Crocker & Algina, 2006, pg. 221). In practice, a value of .75 suggests that three out of four people agreed that an item demonstrated content validity (Crocker & Algina, 2006; Turner & Carlson, 2003). Thus, the item-objective congruence was calculated and reviewed for each item and as a result, six items were re-worded for clarity and four items were dropped. These findings were used to further refine the instrument and to demonstrate content validity before the ECMR was piloted with a sample of foster parent-child dyads to further investigate the psychometric properties of the ECMR.

Methods

Participants and Data

Foster parents and parents who adopted children from the child welfare system were recruited using convenience sampling from several child welfare agencies and/or foster/adoptive parent support groups to participate in the study by completing an online survey (N=174). For instance, local child welfare agencies advertised the study to foster/adoptive parents via email, in-person trainings and/or online support groups. Participants were eligible for the study if they were currently caring for, or recently cared for (e.g., within the past few weeks), a foster/adopted child between the ages of 2-7. The majority of foster/adoptive parent participants were female

(91.38%) and the average age was 40.7 years old (*SD*=10.48). On average, target children were female (53.91%) and 4.76 years old (*SD*=1.70). Missing data prohibited adequate analysis of race/ethnicity for the sample as fewer than 50% of participants chose to provide this information voluntarily (i.e., this question on the survey did not have a forced response). All foster/adoptive parent participants were also invited to complete the online survey again approximately three weeks after the first administration in order to provide an opportunity to examine test re-test reliability and 74 caregivers responded. Foster parents were given a $10 gift card as a token of appreciation for their time.

Measures

Foster parents were asked to complete two measures for their foster children, the Early Childhood Measure of Resilience (ECMR) and the Devereux Early Childhood Assessment for Preschoolers, Second Edition (DECA-P2). The DECA-P2 was included in the study as it most closely aligns with the definition of resilience employed in this study and with the target age range the ECMR was developed for, thus allowing for the examination of validity and reliability.

ECMR. The ECMR consists of 27 positively-queried items assessing resilience via child success in age-salient developmental tasks in the domains of 1) caregiver/child relationship quality, 2) behavioral functioning, 3) cognitive functioning, and 4) executive functioning. Participants were instructed to rate their child on a scale of (1) never to (7) always, with higher ratings indicating greater achievement of age-salient developmental tasks and therefore greater resilience. The lowest possible composite score is 27 and the highest possible composite score is 189.

DECA-P2. The DECA-P2 (LeBuffe & Naglieri, 2012) is a measure of parent-report within-child protective factors for children ages 3-5. The DECA-P2 evaluates child strengths (27

items; Total Protective Factors scale) and behavioral concerns (11 items; Behavioral Concerns Scale) using a 5-point scale ranging from never (1) to very frequently (5). The internal reliability coefficients for the Protective Factors scale and Behavioral Concerns scale were found to be .92 and .80, respectively (DCRC, 2013). The median DECA-P2 scale reliabilities were reported to be .88 and .80 for the Total Protective Factors and Behavioral Concerns scales, respectively (LeBuffe & Naglieri, 2012). LeBuffe and Naglieri (2012) reported the DECA-P2 demonstrated high content validity, however statistical values were not provided. The DECA-P2 Total Protective Factors scale demonstrated convergent validity with the Preschool Emotional and Behavioral Rating Scale (corrected $r = .65$, $p < .01$), which assesses social and emotional strengths in young children (LeBuffe & Naglieri, 2012). The Total Protective Factors scale correlated negatively with the Conners Global Index (corrected $r = -.42$, $p < .01$), which assesses social, emotional and behavior concerns in children (LeBuffe & Naglieri, 2012).

The authors purchased DECA-P2 assessment forms from the Devereaux Child Resilience Center and with permission, uploaded an electronic copy of the DECA-P2 into Qualtrics, an online survey platform. This allowed participants to complete the DECA-P2 and the ECMR using the same online survey, thus reducing participant burden. Participants were compensated for their time and efforts with a $10 gift card.

Data Analysis

Several procedures were employed to examine the concurrent and divergent validity and internal consistency and test re-test reliability of the ECMR. First, concurrent validity was examined by correlating the scores on the ECMR and the Protective Factors Scale on the DECA-P2 (Murphy & Davidshofer, 1998). Second, divergent validity was assessed by correlating the scores on the ECMR and the Behavioral Concerns Scale on the DECA-P2. Third, internal

consistency was assessed using Cronbach's alpha for the total score and item-scores (Cronbach, 1951). Finally, a test re-test reliability coefficient was produced by correlating the scores from the first survey administration of the ECMR with the scores from the second survey administration of the ECMR for those participants who completed surveys at both time points. Experts are hesitant to provide an acceptable range of values for test re-test reliability (Crocker & Algina, 2006); however, scholars have found that studies often cite .70 or above as an acceptable value (i.e., Charter, 2003; Watson, 2004).

Following the examination of the validity and reliability of the ECMR, results from a parallel analysis (Velicer & Jackson, 1990) and scree test were used to inform subsequent exploratory factor analyses. The factor structure of the ECMR was examined using various types of rotations and with a number of factors retained. Ultimately, an exploratory factor analysis can aid in any future revisions needed to the ECMR as it aids in identifying items with the highest factor loadings, items with problematic loadings, and items that may need to be revised and re-tested in future studies (Fabrigar & Wegener, 2011). All analyses were completed in SPSS version 25.

Finally, Rasch analysis was employed to define the measurement model of the ECMR, to further examine the psychometric properties of the ECMR, and to guide instrument refinement (Fischer & Molenaar, 2012). When Rasch analysis is employed, data is constructed to fit the measurement model which can be parameterized using the Partial Credit Model (PCM; Masters, 1982) or the Rating Scale Model (RSM; Andrich, 1978) (Wright, 1998). The PCM assumes that each item has its own rating scale structure (i.e., item 1 may have a 3-point response format whereas item 5 may have a 5-point response format) (Linacre, 2000), while the RSM assumes that all items have the same rating scale structure (i.e., each item has a 5-point response format)

(Linacre, 2000). Statistical tests, such as the chi-square fit statistic, can be examined for each model to guide decision-making regarding which measurement model to employ. The null hypothesis states that the data fit the model. In other words, researchers aim to accept the null hypothesis (i.e., fail to reject the null hypothesis) and if the fit statistic is found to be non-significant the interpretation is that the data do not deviate from the Rasch model expectations (Linacre, 2000). Furthermore, researchers also give consideration to the conceptualization of an instrument when employing a measurement model. For instance, all items on the ECMR carry a 7-point Likert scale, thus conceptual evidence suggests the RSM may be more appropriate since each item is intended to have the same response structure (Linacre, 2000). Additionally, compared to the PCM, the RSM is favorable because it simplifies communication (e.g., the researcher does not have to specify the structure for each individual item) and is more robust if the data are imperfect (Linacre, 2000). This study relied on both empirical and conceptual evidence to guide the parameterization of the measurement model.

Once the measurement model had been chosen, fit statistics were examined to assess whether the data fit the model and to identify problematic persons and items that may need to be removed and/or revised (Linacre, 2017). Specifically, mean-square residual statistics for outfit and infit, which quantify fit departure, were assessed for model fit statistics and individual item and person fit statistics. Mean-square statistics are analogous to the Pearson Chi-square fit statistic divided by the degrees of freedom (Wright et al., 1994) and range from 0 to infinity and have an expected value of 1.0 with values greater than 1.0 indicating underfit and values less than 1.0 indicating overfit (Linacre, 2017). As a rule of thumb, acceptable values range from .6-1.4 (Wright & Linacre, 1994), with values above 2.0 indicating measurement degradation (Linacre, 2017). Following the recommendation of scholars, outfit was examined before infit

and underfit values were given attention before overfit values (Linacre, 2012, 2017; Boone, Staver & Yale, 2014). Additionally, person and item reliabilities were examined. Person reliability is equivalent to Cronbach's alpha for test reliability and generally speaking, values above .80 are acceptable (Linacre, 2012a). Item reliability is unique to Rasch analysis and it "reports how reproducible is the item difficulty order for this set of items for this sample persons" (Linacre, 2012a) and values of .80 or higher are considered acceptable (Linacre, 2012a). Finally, Wright Maps for each subscale were examined to visualize the hierarchy of persons and items with lower scores and easier items located at the base of the map and higher scores and more difficult items at the top. The evaluation of Wright Maps helps to inform instrument revisions by identifying items that overlap (e.g., measure the same "cut" of a construct) and gaps in the latent construct where items may need to be added (Boone, Staver & Yale, 2014). All Rasch analyses were completed in Winsteps software version 3.92.1.

Results

Descriptive Statistics

The mean score on the ECMR was found to be 139.99 (*SD*=21.99) with an average rating of 5.18 across all items. There were no floor or ceiling effects observed (Terwee et al., 2007). The mean score on the Caregiver-Child Relationship subscale was 56.27 (*SD*=6.62) with an average rating of 6.25 across all nine items. The mean score on the Behavioral Functioning subscale was 38.39 (*SD*=7.82) with an average rating of 4.80 across all eight items. The mean score on the Cognitive Functioning subscale was 25.34 (*SD*=6.25) with an average rating of 5.07 across all five items. The mean score on the Executive Functioning skills subscale was 21.34 (*SD*=5.44) with an average rating of 4.27 across all five items. The ECMR was found to have a readability level of 67.8 on the Flesch Reading Ease test (Flesch, 1948), which is equivalent to a

grade level 6 reading ability, and scored 5.6 on the Flesch-Kincaid Grade Level test (Kincaid, Fishburne, Rogers & Chissom, 1975), suggesting that people with approximately a 5th grade reading level can understand the items.

Research Questions 1 and 2: Validity and Reliability

The validity of the ECMR was assessed in a number of ways. First, the composite ECMR demonstrated good internal consistency, α=.94. Each subscale on the ECMR also demonstrated acceptable internal consistency (caregiver-child relationship quality α=.90; behavioral functioning α=.89; cognitive functioning α=.86; executive functioning α=.91). Second, the ECMR was positively correlated with the Total Protective Factors scale on the DECA-P2, (r=.37, p<.001), which suggests the ECMR has concurrent validity. Finally, the ECMR was negatively correlated with the Behavioral Concerns scale on the DECA-P2, (r=-.55, p<.001) which suggests the ECMR has divergent validity.

Reliability was assessed using test re-test reliability and Rasch analysis. First, participants who completed the ECMR at time 1 and time 2 were matched by foster/adoptive parent name and birth date and child name and birth date (n=74). The average score on the ECMR at time 1 was 141.36 and 139.73 at time 2 and the scores were positively correlated (r=.75, p<.05), suggesting the ECMR has acceptable test re-test reliability.

Research Question 3: Factor Structure

A parallel analysis was completed to identify the potential number of factors underlying the ECMR. The scree plot and eigenvalues were examined and a 3-factor solution was suggested. An exploratory factor analysis (EFA) using principal axis extraction with a varimax rotation was conducted for a 6-factor solution, a 5-factor solution, a 4-factor solution and a 3-factor solution. The same procedures were repeated using oblimin rotations since it was

hypothesized that the subscales may be related to one another. For both rotational methods, the results of the 6-factor solution and 5-factor solution produced unstable factors with fewer than three items. The results of the 3-factor solutions produced a large number of cross-factor loadings, suggesting the presence of a fourth factor. A 4-factor solution with a varimax rotation was compared to a 4-factor solution with an oblimin rotation and the results suggested that the 4-factor solution using a varimax rotation provided the best empirical (e.g., few cross-factor loadings and positive correlations between items and factors) and conceptual fit (see Table 4.1).

Research Questions 4 and 5: Rasch Analysis and Instrument Refinement

Two Rasch analyses were completed, first using the RSM and then using the PSM. The item thresholds and response patterns were reviewed for each model and the results suggested the RSM was an appropriate measurement model for the data. Additionally, the likelihood ratio test for the RSM model was not significant (p=.53), suggesting the RSM measurement model would be appropriate. Given the conceptualization of the scale for the ECMR and the empirical evidence, the RSM model was employed for all subsequent analyses.

A Rasch analysis was completed on each subscale to determine whether the data fit the model. For each subscale, the model person, item and reliability statistics were examined and found to acceptable (e.g., MNSQ values within the range of .6-1.4 and reliability statistics $\geq$ .80) with the exception of the person reliability coefficient for the Caregiver-Child Relationship Quality Subscale (see Table 4.2). Next, the Wright Maps were reviewed for each subscale (see figures 4.1-4.4, respectively). The results suggested that items on the Caregiver-Child Relationship Quality subscale may be too easy or miscalibrated, as evidenced by the fairly large degree of separation between the mean person ability and the mean item difficulty. Furthermore, items 7, 16, 19 and 25 may need to be removed or revised since it appears they have overlapping

content with similar items. Finally, the results suggested that items may need to be added to each subscale to ensure all aspects of each domain are being measured. For instance, there is gap between items 13 and 15 on the Behavioral Functioning subscale, indicating the need for a new item to ensure adequate assessment of the domain. Additionally, gaps were found to exist between items 3 and 6, 17 and 12, 14 and 10, 21 and 22, 18 and 21, 20 and 18, 26 and 23, and 26 and 27. To further aid in instrument refinement, individual item and person fit statistics were reviewed for each subscale and the misfitting people were removed from the data to improve fit, while items 8, 15 and 27 were flagged to be revised in the future version of the ECMR (see Appendix).

Discussion

The purposes of this study were to develop a measure of child resilience and to examine the psychometric properties of the new instrument called the ECMR. The results of the scale development and pilot study provide support for the emerging content, concurrent and divergent validity, internal consistency and test re-test reliability of the ECMR. Additionally, the findings suggest that the ECMR has four underlying factors, which supports the conceptual underpinning of the instrument given that it was designed to assess functioning across several developmental domains (Klika & Herrenkohl, 2013; Jaffee & Gallop, 2007; Walsh et al., 2010). While the scree test produced by the parallel analysis suggested a 3-factor solution, the 4-factor solution with a varimax rotation produced the most interpretable results (i.e., four subscales assessing four developmental domains, including the Caregiver-Child Relationship Quality, Behavioral Functioning, Cognitive Functioning and Executive Functioning), which is an important outcome when conducting exploratory analyses (Costello & Osborne, 2005).

The findings from the Rasch analyses support the use of the RSM measurement model and suggest that each subscale demonstrated acceptable model person and item fit, though three items may need to be re-worded to improve fit while maintaining content validity; indeed, item 15 was flagged in the Rasch analysis and it was the only item that had an unexpected loading pattern during the exploratory factor analysis, therefore further supporting the importance of revising this item in the future version of the instrument (see Appendix for proposed revisions to item wording to be used on the next version of the ECMR). Additionally, reviewing the Wright Maps for each subscale suggested that the future version of the ECMR include more items for each subscale and more challenging items on the Caregiver-Child Relationship Quality subscale to improve the measurement of child resilience.

Given the promising results of this investigation, it may contribute to the scholarly literature in several ways. The ECMR appears to be the only instrument designed to assess child resilience (i.e., adaptive functioning) via success in age-salient developmental tasks in various domains during early childhood, an important developmental period. Though other notable and well-validated measures exist, they assess protective factors (e.g., LeBuffe & Naglieri, 2012) and/or available resources (e.g., Liebenberg et al., 2012; 2013) which are related to, but distinct from, the definition of resilience employed in this study. For instance, the ECMR assesses adaptive functioning in four domains, whereas the DECA-P2 assesses only three protective factors. Moreover, the items on the ECMR assess age-salient developmental tasks across a broad age range (i.e., 2-7), whereas the items on the DECA-P2 are targeted towards smaller developmental windows, thus requiring different assessments across age ranges. Furthermore, the psychometric properties of the ECMR were examined using traditional and contemporary methods, specifically Rasch modeling, which aided in documenting the measurement properties

in greater detail (Boone, 2016). The results suggest that the ECMR may be appropriate for assessing treatment outcomes, especially during studies of interventions designed to facilitate resilience.

Given the translational nature of resilience science, several practice implications can also be drawn from the results of this study. The completely strength-based items on the ECMR permit practitioners to capture and report adaptive functioning. As such, rather than relying solely on the absence of maladjustment as an outcome, practitioners will be able to monitor client progress to signify positive adjustment. Furthermore, by measuring functioning across four domains, the ECMR may help to inform treatment and service planning by identifying areas of concern and channeling targeted resources those areas. For instance, should the results of the ECMR suggest that a child has infrequent adaptive cognitive functioning, a referral could be made for further assessment. Additionally, the use of a resilience measure may help to improve therapeutic rapport between practitioner and clients by emphasizing positive adjustment (Masten, 2015), rather than only maladaptive adjustment or a combination of positive and maladaptive adjustment. Finally, the study results suggest that the instrument performed well with a clinical sample, whereas the majority of measures are normed on the general population. Thus, the ECMR may be applicable in a number of fields that serve high-risk families, such as the child welfare and trauma fields.

Strengths and Limitations

Although the initial results are promising, several study limitations must be noted. First, the study used data collected from a small, non-random sample. This may have reduced the response variance and therefore biased the results. Furthermore, generalizability to other samples may be limited, as this study used a population of foster children and their foster caregivers.

Second, because foster parents were asked to assess their foster children's resilience, social desirability may have biased the responses. For instance, the high degree of mismatch between the person abilities and item ratings on the caregiver-child relationship subscale may indicate that foster parents were hesitant to rate items related to attachment (a bi-directional process and thus influenced, in part, by the foster parent) as occurring infrequently. Third, data on race and socioeconomic status were missing for the majority of the sample, which precluded the proper estimation of descriptive statistics. Fourth, there was a low response rate for the follow-up survey, which reduced the sample size for the test re-test reliability analyses. Together, these limitations prohibited more advanced statistical analyses, such as examining differential item functioning by covariates (Boone, 2016). Fifth, as evidenced by the Wright Maps, some items may need to be removed, added, and/or revised and as such, the measure is not yet ready for use and will require more research. Finally, the ECMR does not assess for exposure to adversity. Although a clinical sample was specifically selected for this study to overcome this limitation, future studies may need to include a separate assessment of risk exposure before implementing the ECMR to draw conclusions regarding resilience.

Developing an instrument to aid in the study of resilience is an important first step in promoting measurement consistency across the field of resilience. An important second step is developing an instrument that has the potential to become widely used because it reduces researcher, practitioner and participant burden. The ECMR is relatively short in length and spans a broad age range, which could promote widespread use and ultimately enhance scholars' ability to draw cross-study comparisons from findings. Furthermore, the strength-based items on the ECMR permit researchers and practitioners to capture and report adaptive functioning rather than relying on the absence of maladjustment to signify positive adjustment. The implications of this

include supporting the important paradigm shift that resilience research attempts to promote (Luthar, Cicchetti & Becker, 2000; Rutter, 2013) and potentially improving therapeutic rapport by emphasizing positive adjustment (Masten, 2015). Additionally, the demonstrated test re-test reliability of the ECMR suggests that the instrument could be used to assess for changes in adaptive functioning over time, thus filling an important gap in resilience-informed intervention science by allowing scholars to draw conclusions about how an intervention may be improving positive outcomes. Relatedly, the ECMR measures functioning across four domains which could help to inform treatment and service planning by identifying areas of concern and channeling targeted resources those areas. For instance, should the results of the ECMR suggest that a child has infrequent adaptive cognitive functioning, a referral could be made to further assess the child's reading level. Finally, the study results suggest that the instrument performed well with a clinical sample and thus it may also be applicable in fields that serve high-risk families, such as the child welfare and trauma fields.

Future Directions

These limitations notwithstanding, results from this study suggest that the ECMR is a promising new measure of resilience in young children. At the same time, the field would benefit from several lines of future research. The first author is currently revising several of the ECMR items to test in a follow-up study with larger, more diverse population (e.g., adding more questions to the caregiver-child relationship subscale to better capture the range of person abilities). Future studies should also collect data on adaptive and maladaptive functioning from multiple sources, such as parents and teachers, as this would allow for the comparison of ratings across multiple sources and help to document risk exposure, a required component of resilience. Following revisions and further pilot testing of the ECMR, future research employing person-

focused models could be used to develop significant clinical cutoffs for the ECMR, which can aid in the identification of those in need of intervention (Masten, 2015). Finally, variable-focused analyses of the ECMR could be employed to ascertain which items, if any, seem to account for differences in functioning across domains (Masten, 2015).

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Table 4.1: *Summary of EFA Using Principal Axis Factoring and Varimax Rotation (N = 174)*

	Caregiver-Child Relationship	Behavioral Functioning	Cognitive Functioning	Executive Functioning
Item 2: My child enjoys spending time with me	**.814**	.054	.097	.114
Item 4: My child and I have a loving relationship	**.814**	.160	.022	.051
Item 6: My child enjoys my attention	**.798**	.084	.058	.155
Item 5: My child and I have a nurturing relationship	**.794**	.191	.079	.108
Item 7: My child enjoys my praise	**.723**	.187	.106	.090
Item 3: My child and I have a safe relationship	**.664**	.195	-.005	.073
Item 1: My child enjoys playing with me	**.662**	.083	.188	.258
Item 9: My child seems happier and more relaxed when I am around	**.661**	.131	.030	.035
Item 8: My child feels comfortable exploring the environment when I am nearby	**.512**	.195	.061	.050
Item 13: My child obeys rules	.116	**.806**	.071	.243
Item 12: My child is compliant	.188	**.784**	.205	.289
Item 14: My child's positive behavior can be increased by using positive attention	.269	**.718**	.035	.197
Item 16: My child is cooperative	.195	**.676**	.205	.401
Item 17: My child shares well for his/her age	.222	**.604**	.143	.369
Item 10: My child has appropriate behavior towards adults	.333	**.577**	.154	.303
Item 11: My child has appropriate behavior towards other children (peers, etc)	.273	**.552**	.148	.320
Item 18: My child has a good vocabulary for her/his age	.021	.076	**.910**	.134
Item 19: My child speaks well for his/her age	.050	.091	**.904**	.125
Item 21: My child has good problem-solving skills for his/her age	.145	.282	**.571**	.332
Item 22: My child stays focused on tasks for his/her age	.158	.292	**.518**	.387
Item 20: My child enjoys learning new things	.285	.148	**.456**	.339
Item 24: My child can regulate her/his emotions	.131	.305	.145	**.851**
Item 23: My child can calm herself/himself down	.086	.203	.132	**.799**
Item 26: My child self-soothes appropriately	.082	.312	.211	**.704**
Item 25: My child can regulate her/his behavior	.048	.439	.247	**.682**
Item 27: My child recovers quickly after I use positive discipline	.233	.297	.183	**.615**
Item 15: My child's negative behavior can be reduced by removing attention*	.124	.263	.116	**.364**

Note: EFA= exploratory factor analysis. Items marked with an * indicate unexpected loading pattern

Table 4.2: *Summary of Initial and Revised Person and Item Fit Statistics*

Item	Caregiver-Child Relationship	Behavioral Functioning	Cognitive Functioning	Executive Functioning
Initial Person Fit				
MNSQ Infit	1.07	.99	1.00	1.00
MNSQ Outfit	.99	.97	.98	.99
Reliability	.71*	.87	.80	.90
Revised Person Fit				
MNSQ Infit	1.06	.99	1.01	.98
MNSQ Outfit	.98	.97	1.00	.97
Reliability	.76	.91	.87	.94
Initial Item Fit				
MNSQ Infit	1.01	1.00	1.02	.99
MNSQ Outfit	.99	.97	.98	.99
Reliability	.95	.97	.98	.98
Revised Item Fit				
MNSQ Infit	1.01	1.00	1.01	.98
MNSQ Outfit	.98	.97	1.00	.97
Reliability	.95	.98	.98	.99

Note: * indicates the parameter failed to meet acceptable fit values

Figure 4.1: *Wright Map for the Caregiver-Child Relationship subscale*

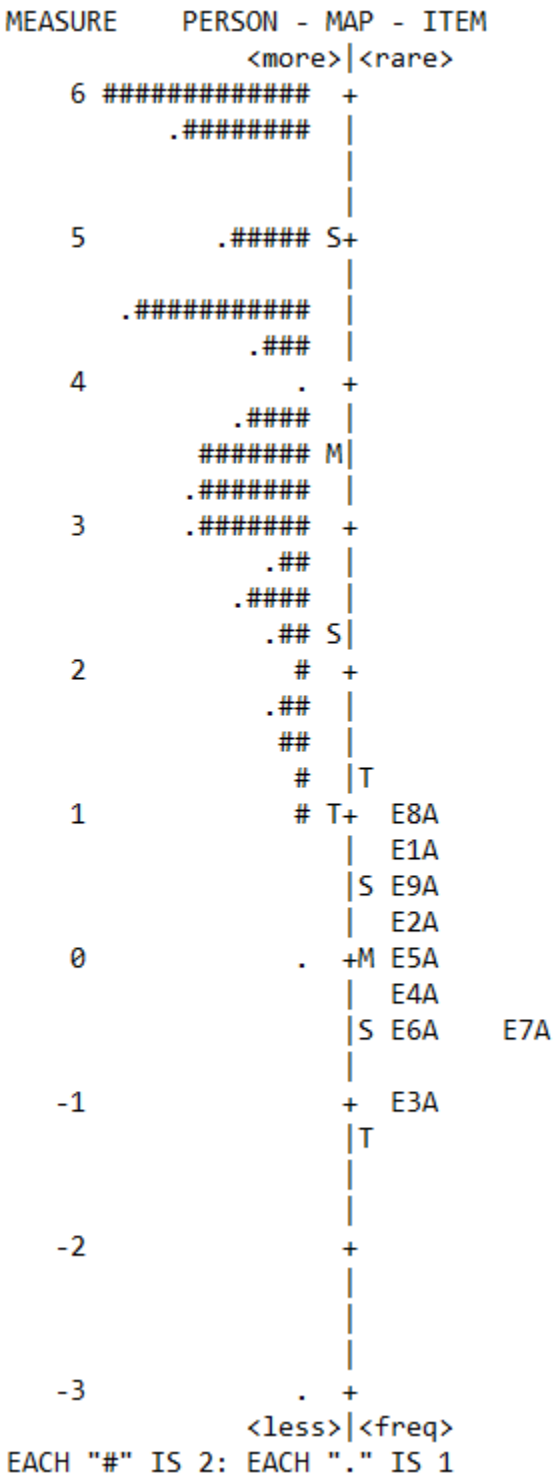


Figure 4.2: *Wright Map for the Behavioral Functioning Subscale*

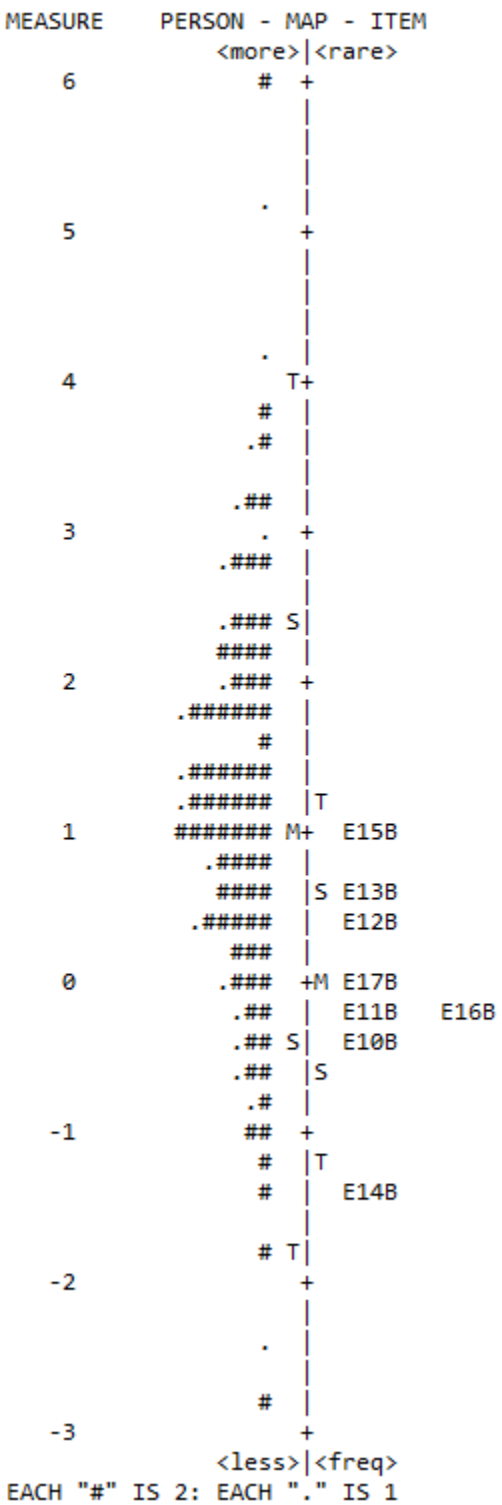


Figure 4.3: *Wright Map for the Cognitive Functioning Subscale*

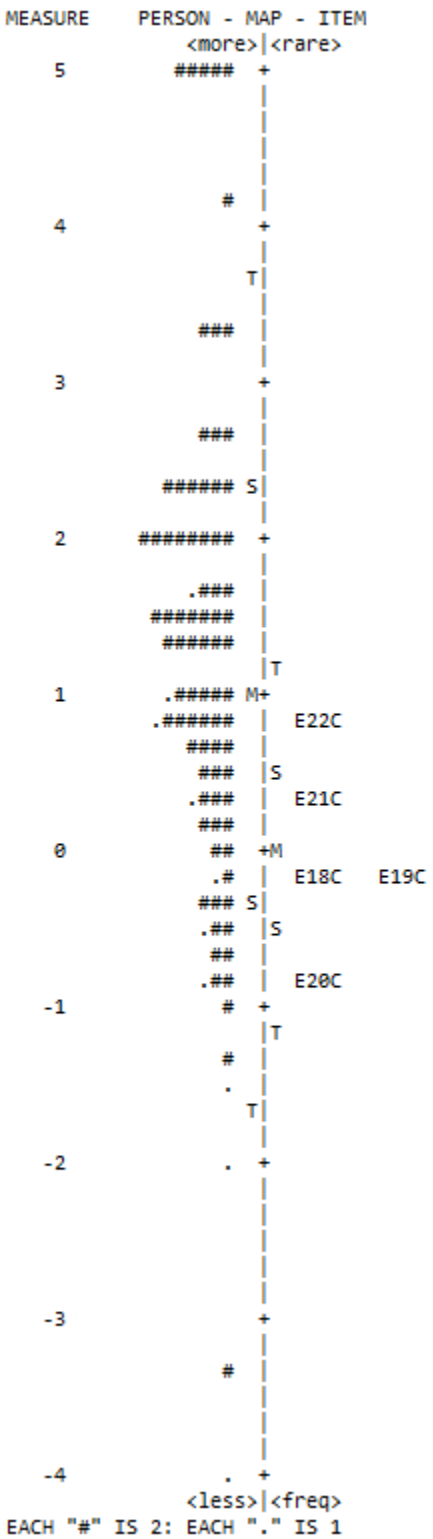
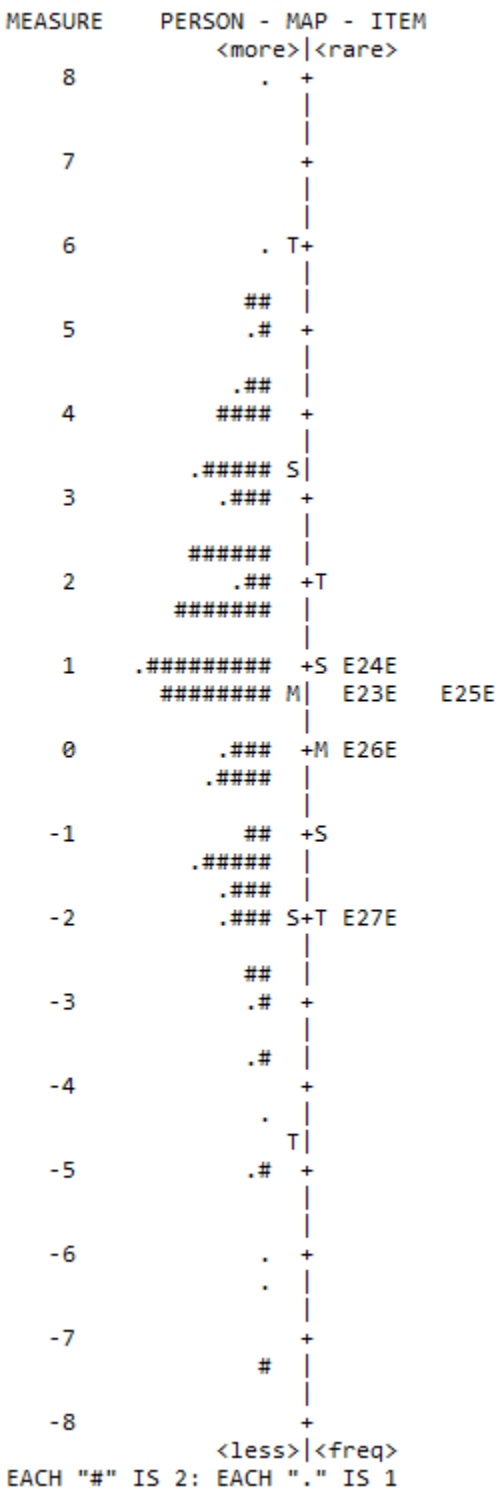


Figure 4.4: *Wright Map for the Executive Functioning Subscale*



CHAPTER FIVE

Conclusion

Discussion

This dissertation contributed to research on the translation of evidence-based practice into child welfare by: (1) expanding formative and translative research on Parent-Child Interaction Therapy (PCIT) with foster parent-child dyads, and (2) expanding explorative and formative research on resilience in early childhood. The purpose of this chapter is to summarize the findings, qualify findings with a review of the limitations, and review overall implications and future directions of findings.

Children placed in out-of-home care, along with their foster caregivers, can benefit from evidence-based interventions that address child level (e.g., maladaptive and adaptive functioning) and foster parent level (e.g., parenting skills) outcomes. Moreover, when translated into child welfare, it is paramount that interventions contribute to the goals of child welfare, e.g., distal outcomes of permanency (chapter two). At times, it may be necessary to solicit stakeholders' feedback to help adapt interventions to the needs of the child welfare system and the families it serves (chapter three). Child welfare research and practice may further benefit from the application of the resilience framework, specifically the assessment of intervention-related changes in children's resilience using psychometrically-sound measures (chapter four). In turn, interventions that 1) address child and foster parent outcomes, 2) contribute to the goals of the child welfare system, 3) match the needs of the child welfare system and families served, and 4) facilitate children's resilience, may be more likely to be implemented and disseminated widely such that foster parent-child dyads' access to evidence-based interventions becomes the rule rather than the exception.

PCIT is one example of an evidence-based intervention that has been translated into child welfare for foster parent-child dyads. Previous studies have documented that foster-

parent child dyads participating in a group PCIT intervention program, when compared to dyads who received foster care services-as-usual, showed significant reductions in child externalizing behavior and parenting stress along with significant improvements in positive parenting skills (Mersky et al, 2015; Mersky et al., 2016). Given that child externalizing behavior is a known risk factor for poor placement and permanency outcomes (e.g., Oosterman et al., 2007), and that foster parents' skills may be associated with reductions in child behavior problems (e.g., Greco, Sorrell & McNeil, 2001), it was hypothesized that group PCIT would reduce placement disruption and improve timely permanence for dyads in the intervention compared to dyads in the control group (chapter two).

The findings from chapter two demonstrated that children in the treatment group were 2.632 times more likely to achieve legal permanence within 12 months compared to children in the control group. This finding suggests that group PCIT had a positive effect on permanence, which aligns with the findings from Spieker, Oxford and Fleming's (2014) study on intervention effects of permanence. The null findings on placement disruption were somewhat consistent with the broader literature as some studies reported significant intervention effects (e.g., Chamberlain, Moreland & Reid, 1992) and others reported null effects (e.g., Spieker et al., 2014). It was also hypothesized that providing training to teach foster parents skills to strengthen their relationships with their children and how to manage their children's behavior problems would reduce the likelihood that foster parents closed their licenses, given that Triseliotis, Borland and Hill (1998) found that inadequate foster parent training was associated with attrition. However, the findings from chapter two were null. Finally, child externalizing behavior was a robust predictor of placement disruption and poor permanency outcomes, which is consistent with previous research suggesting that child

behavior problems is a risk factor for placement stability and permanence (e.g., Oosterman et al., 2007). Given the practical significance of PCIT, investing in foster parent trainings to facilitate positive child welfare outcomes may be worthwhile.

The findings from chapter three illuminate the unique perspectives on PCIT from two groups of practitioners and two groups of foster parents in southeast Wisconsin and help to expand the field's understanding of translating PCIT into child welfare for foster parent-child dyads. Specifically, practitioners and foster parents discussed their perceptions of implementation barriers, facilitators, strategies for addressing the needs of families involved in child welfare and adaptations that may help to facilitate the implementation and dissemination of PCIT in child welfare. These emergent themes may help to guide future research. As an example, foster parents' suggested translating PCIT into a foster parent pre-service training to increase access to the intervention. Researchers could test whether this adaptation helps to enhance the effects of PCIT on the child welfare outcomes from chapter two. Furthermore, foster parents perceive there to be benefits to early intervention in regards to PCIT because it helps foster parents better understand how to parent children with histories of trauma and externalizing behavior problems. The findings from chapter three help to contextualize the findings chapter two by reinforcing the idea that PCIT may be an appropriate preventative intervention for foster parents with new placements or foster parents who are going through the process of becoming licensed. Finally, the raw data presented in the quotes throughout chapter three highlighted how foster parents perceived PCIT to be "invaluable" and "practical" because it could "save a family". Thus, the findings suggest that foster parents perceive there to be benefits to the continued implementation and dissemination of PCIT in child welfare for foster parent-child dyads. This finding aligns with extant research on the benefits of

integrating parent-mediated interventions training curriculums to increase the quality of children's and families' overall mental health care (Price et al., 2006).

The findings from chapter four suggest that the Early Childhood Measure of Resilience (ECMR) is a promising measure of parent-report child resilience for children ages 2-7, which is the same age range of children served by PCIT (chapters two and three). The ECMR was found to have a four-factor structure representing four subscales and to have adequate validity (i.e., convergent and divergent validity) and reliability (i.e., internal consistency and test re-test reliability). Therefore, the findings from chapter four suggest that the ECMR measures what it was intended to measure, i.e., children's resilience, operationalized as adaptive functioning in age-salient developmental tasks, across four domains of developmental functioning. Moreover, the ECMR was designed to have a 7-point likert response scale and results suggest that the rating scale measurement model chosen for the Rasch analyses fit the data. As such, the underlying structure of the ECMR (i.e., parent report of functioning for children ages 2-7 using a 7-point rating scale ranging from never to always) is similar to that of the child behavior assessment often utilized during PCIT research and practice (chapters two and three) called the Eyberg Child Behavior Inventory (ECBI, Eyberg & Pincus, 1999). Given that the ECBI is a widely used assessment of children's maladaptive behavioral functioning in PCIT, the ECMR, which is similar in structure to the ECBI, may be an appropriate additional measure to assess children's positive adaptive functioning.

Limitations

In addition to the study-specific limitations discussed in chapters two, three and four, findings must be considered in relation to three overarching limitations throughout the dissertation. First, research was only conducted with foster parents who were part of a foster

parent-child dyad. As such, the quantitative findings are not generalizable to biological parent-child dyads or other types of caregiver-child dyads (e.g., non-licensed kin caregivers) within child welfare, or to families outside of child welfare who receive PCIT and the qualitative findings are not transferable to other foster parents. Furthermore, the psychometric properties of the ECMR were developed using data from a sample of foster or adoptive-parent child dyads and therefore results are not generalize to parent or caregiver-child dyads outside of child welfare. Relatedly, research was only conducted with PCIT practitioners within child welfare and thus findings are not transferable to other practitioners or those who deliver PCIT outside of child welfare.

Second, while recruitment methods for male and female foster parents were equal, the majority of participants who consented to the studies were female foster parents. Therefore, the quantitative findings are not generalizable and the qualitative findings are not transferable to male foster parents within or outside of child welfare who participate in PCIT or provide parent-report of children's resilience. Likewise, while there appears to only be one male PCIT practitioner in Wisconsin (according to the "search for provider" function on the PCIT International website), only female practitioners were recruited and consented to participate in the study and therefore results are not transferable to male PCIT practitioners within or outside of child welfare.

Finally, throughout the dissertation references were made to study children's histories of adversity, though none of the studies formally measured maltreatment type. Instead, children were considered to have experienced some type of adversity simply by way of being separated from their primary caregivers when placed in out-of-home care. This lack of systemic investigation of children's histories of maltreatment, and examination of maltreatment

types on outcomes, represents an overarching limitation of the dissertation.

Implications and Future Directions

The primary aim of this dissertation was to add to the scholarly literature on the translation of evidence-based practice into child welfare. The overarching results of the dissertation add support for the continued translation of PCIT for foster parent-child dyads into child welfare. Additionally, the results demonstrate that an early measure of childhood resilience may be appropriate for researchers' and practitioners' use within child welfare. The findings may help to inform current and future research and practice.

Beginning with current research and practice, there are three broad implications that stem from this dissertation. First, PCIT may be a useful intervention (i.e., treatment or foster parent training) for foster parent-child dyads, and perhaps PCIT would best be delivered when a child joins a new foster family. For instance, children may benefit from early intervention like PCIT, as it may help to mitigate externalizing behavior problems so common among foster children. Improvement in behavior may translate into placement stability. Foster parents may also benefit, as enhancements in the parents' child management skills, along with the concomitant improvements children's behavior problems, may reduce foster parents' stress. Furthermore, when considered within a prevention context, foster parents may have access to PCIT before challenges associated with a new child joining the foster home arise. Collectively, improvements in child behavior, the foster parent-child relationship, and parenting skills may help to stabilize children's out-of-home care placements and facilitate timely permanence, therefore contributing to the system-level outcomes and goals of child welfare.

Second, when PCIT is delivered within the context of child welfare to foster parent-

child dyads, treatment should be flexible, and adapted when necessary, to meet the needs of the child welfare system and the families it serves. For instance, expanding the intervention theory underlying PCIT to include elements of trauma theory may be a worthwhile area of research and practice. Brief, trauma-informed treatment models that can be delivered in multiple settings with fidelity may confer certain benefits to foster children and foster parents, such as increased access to the intervention, increased satisfaction with treatment, and better treatment retention. It is also recommended that when child welfare administrators, researchers, or practitioners consider adapting and/or further disseminating the treatment model, multiple perspectives be solicited because bringing a variety of stakeholders into such conversations may aid in the overall success of translating PCIT into child welfare for foster parent-child dyads.

Finally, the vast majority of PCIT researchers and practitioners measure changes in children's behavior problems over time using the Eyberg Child Behavior Inventory (ECBI). The ECMR has promising psychometric properties, and a follow-up study may help to further validate the measure (during which new items are tested with a larger, more diverse population). Thus, researchers and practitioners may have access to a well-validated measure of child resilience which spans the same age range as the children served by PCIT. It may therefore be possible to detect intervention effects on resilience in early childhood. Furthermore, having researchers and practitioners ask foster parents to assess changes in their children's resilience may further facilitate the therapeutic alliance and foster parents' satisfaction with treatment.

Turning to future research, there are two broad implications that stem from this dissertation. First, regarding the translation of PCIT into child welfare for foster parent-child

dyads, continued research in the formative, summative, translative and confirmative phases (Testa et al., 2014) is needed. Within the formative phase, more research may better elucidate the effects of PCIT on system-level outcomes, specifically placement, permanency and well-being outcomes. Studies along these lines may help to expand the purpose of translating PCIT into child welfare by demonstrating that in addition to improving child and foster parent outcomes, PCIT is beneficial because it advances the goals of the child welfare system. Within the summative phase, meta-analyses that ascertain the effects of PCIT on child level and foster parent level outcomes are needed. Moreover, given that treatment modifications are common for this setting and populations, future research should compare the effects of modified versus unmodified PCIT with foster parent-child dyads (Thomas, Abell, Webb, Avdagic & Zimmer-Gembeck, 2017). Within the translative phase, research with larger, more diverse samples of practitioners, foster parents, and other stakeholders on adapting PCIT for foster parent-child dyads and the child welfare context will aid in the efforts to generalize PCIT into child welfare services. Finally, within the confirmative phase, continued research on broad scale implementations of PCIT within child welfare, particularly for foster parent-foster child dyads, is needed. Research currently underway in this phase includes two large-scale dissemination projects led by researchers Herschell and Timmer, which may help to illuminate important implications for training PCIT practitioners in child welfare contexts.

Second, regarding the translation of resilience-informed practice (i.e., interventions) into child welfare, continued research is needed in the formative phase, which may then suggest further research in the remaining phases (Testa et al., 2014). Specifically, future research in the formative phase must include testing whether interventions translated into child welfare can facilitate positive child outcomes. As such, researchers and practitioners must

have access to, and utilize, valid and reliable measures that capture changes in children's resilience over time. As an example, future research could examine whether PCIT facilitates children's adaptive functioning in multiple developmental domains by measuring the changes in children's resilience before and after PCIT. Studies of this nature may help to close the gap between resilience research and practice by aligning the goals of the resilience framework with the child welfare system's goal of improving children's well-being.

In summary, this dissertation contributes to the important shift in child welfare research and practice that aims to translate evidence-based practice into usual child welfare services. This work, while focused primarily on PCIT, represents only a piece of the work currently being done to ensure that foster parents and children placed in out-of-home care are able to easily access and utilize evidence-based interventions. However, with continued research and practice, we can help to ensure that the implementation and dissemination of programs that honor the needs and requirements of the child welfare system and the families it serves is the rule, rather than the exception.

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Appendix

Chapter Two

Table 1: *Chi-Square Sensitivity Analyses for Treatment Condition*

Outcomes	Chi-Square	df
Placement Disruption Within 12 Months Post-Baseline	.222	1
Permanence Within 12 Months Post-Baseline	3.926*	1
Foster Parents' License Status	.182	1

Note: *p< .05. df= degrees of freedom.

Table 2: *Summary of Proportional Hazard Assumption Tests for Cox Regression Analyses*

	Time to Placement Disruption			Time to Permanence		
Variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Time*Baseline CBCL-E	.001	.001	1.001	.001	.001	1.001
Time*Baseline PSI-SF	.000	.000	1.000	.000	.000	1.000
Time*Child's Age	.016	.017	1.016	.016	.017	1.016
Time*Foster Parent's Age	.001	.001	1.001	.001	.001	1.001
Time*Pre-Baseline Placements	-.059	.056	.943			
Time*Pre-Baseline Time in Out-Of-Home Care				-.002	.003	.998

Note: *p<.05. B=estimate, SE=standard error, β=exponentiated estimate.

Table 3: *Summary of Binary Logistic Regression Analyses for Placement Disruption Within 12 Months Post-Baseline*

	Original Estimates			Imputed Estimates		
Variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Treatment Condition	-.459	.517	.632	-.418	.494	.659
Pre-Intervention Placements	.066	.226	1.068	.031	.218	1.031
Baseline CBCL-E	.060	.027	*1.062	.063	.028	*1.065
Baseline PSI-SF	-.008	.007	.992	-.010	.007	.990
Child's Age	.177	.196	1.194	.196	.187	1.217
Child's Gender	-.397	.529	.672	-.575	.515	.563
Child's Race	.126	.546	1.134	.075	.522	1.078
Foster Parent's Age	.014	.024	1.014	.008	.023	1.008
Foster Parent's Race	-.021	.595	.979	-.146	.553	.864
Foster Parent's Education (Some College)	-.664	.683	.515	-.650	.668	.522
Foster Parent's Education (College Degree)	-.758	.719	.469	-.621	.691	.537
Constant	-4.144	2.295	.016	-3.860	2.219	.021

Note: *p<.05. B=estimate, SE=standard error, β=exponentiated estimate. Reference categories are control group, female, African American and High School Degree/GED

Table 4: *Summary of Cox Regression Analyses for Time to Placement Disruption*

Variable	*B*	*SE*	*β*	C.I. Lower	C.I. Upper
Treatment Condition	-.168	.371	.846	.409	1.750
Baseline CBCL-E	.041	.019	*****1.042	1.003	1.082
Baseline PSI-SF	-.001	.003	.999	.994	1.005
Child's Age	.193	.137	1.213	.927	1.586
Child's Gender	-.293	.386	.746	.350	1.590
Child's Race	.136	.374	1.146	.550	2.386
Foster Parent's Age	.022	.017	1.022	.989	1.056
Foster Parent's Race	-.103	.414	.902	.401	2.029
Foster Parent's Education (Some College)	-.384	.489	.681	.261	1.775
Foster Parent's Education (College Degree)	-.319	.523	.727	.260	2.028
Pre-Intervention Placements	.020	.170	1.020	.731	1.424

Note: *p<.05. B=estimate, SE=standard error, β=hazard rate, C.I.=confidence interval. Reference categories are control group, female, African American and High School Degree/GED

Table 5: *Summary of Binary Logistic Regression Analysis for Predicting Permanence Within 12 Months Post-Baseline*

	Original Data			Imputed Data		
Variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Treatment Condition	1.089	.468	*2.970	.968	.446	*2.632
Time In Out-Of-Home Care	.033*	.015	1.034	.026	.015	1.026
Baseline CBCL-E	-.047	.022	*.954	-.044	.022	*.957
Child's Age	-.131	.161	.878	-.093	.155	.911
Child's Gender	-.551	.435	.576	-.667	.414	.513
Child's Race	.440	.415	1.552	.385	.400	1.470
Constant	1.074	1.372	2.927	1.106	1.365	3.022

*Note: *p*<.05. B=estimate, SE=standard error, β=exponentiated estimate. Reference categories are control group, female, and African American

Table 6: *Summary of Cox Regression Analyses for Time to Permanence*

Variable	*B*	*SE*	*β*	C.I. Lower	C.I. Upper
Treatment Condition	.129	.207	1.137	.758	1.706
Baseline CBCL-E	-.023	.010	*.977	.958	.996
Child's Age	-.123	.074	.884	.765	1.023
Child's Gender	-.024	.203	.976	.656	1.453
Child's Race	.039	.197	1.039	.707	1.529
Time in Out-of-Home Care	.023	.007	*1.023	1.009	1.038

Note: *p<.05. B=estimate, SE=standard error, β=hazard rate, C.I.=confidence interval. Reference categories are control group, female, and African American

Table 7: *Summary of Logistic Regression Analyses for Foster Parents' License Status*

	Original Estimates			Imputed Estimates		
Variable	*B*	*SE*	*β*	*B*	*SE*	*β*
Treatment Condition	.079	.615	1.083	.277	.587	1.319
Baseline PSI-SF	.000	.004	1.000	.000	.004	1.000
Number of Years Fostering	.020	.022	1.021	.021	.021	1.021
Foster Parent's Age	-.006	.026	.994	-.002	.025	.998
Foster Parent's Race	-.919	.657	.399	-.964	.634	.381
Foster Parent's Education (Some College)	.440	.788	1.553	.730	.756	2.076
Foster Parent's Education (College Degree)	.452	.856	1.571	.761	.816	2.140
Constant	1.480	1.668	4.392	.998	1.576	2.713

Note: *p<.05.B=estimate, SE=standard error, β=exponentiated estimate. Reference categories are control group, female, African American and High School Degree/GED

Table 8: *Summary of Binary Logistical Regression Analyses with Three Conditions using Imputed Data*

	Placement Disruption			Permanence			Foster Parents' License		
Variable	*B*	*SE*	*β*	*B*	*SE*	*β*	*B*	*SE*	*β*
Brief Condition	-.116	.531	.890	1.305	.489	*3.686	-.077	.634	.926
Extended Condition	-1.032	.702	.356	.437	.543	1.548	.895	.801	2.448
Pre-treatment Placements	.039	.221	1.040						
Time in Care Before Intervention				.024	.015	1.024			
Time Spent Fostering							.022	.021	1.022
Baseline CBCL-E	.064	.028	*1.066	-.047	.023	*.954			
Baseline PSI-SF	-.011	.008	.989				.001	.004	1.001
Child's Age	.188	.192	1.207	-.121	.159	.886			
Child's Gender	-.538	.522	.584	-.632	.419	.531			
Child's Race	.067	.532	1.069	.440	.407	1.553			
Foster Parent's Age	.009	.024	1.009				-.009	.027	.991
Foster Parent's Race	-.128	.565	.880				-1.053	.646	.349
Foster Parent's Education (Some College)	-.798	.688	.450				.777	.772	2.176
Foster Parent's Education (College Degree)	-.785	.710	.456				.819	.830	2.268
Constant	-3.680	2.263	.025	1.402	1.395	4.062	1.224	1.688	3.402

Note: Reference categories are control group, female, African American and High School Degree/GED

Table 9: *Summary of Cox Regression Analyses with Three Treatment Conditions using Imputed Data*

	Placement Disruption					Permanence				
Variable	*B*	*SE*	*β*	C.I. Lower	C.I. Upper	*B*	*SE*	*β*	C.I. Lower	C.I. Upper
Brief Condition	-.030	.417	.970	.429	2.195	.453	.230	*1.573	1.003	2.469
Extended Condition	-.346	.465	.707	.284	1.758	-.254	.260	.776	.466	1.291
Pre-Treatment Placements	.027	.170	1.027	.735	1.435					
Time in Care Before Intervention						.023	.007	*1.024	1.009	1.038
Baseline CBCL-E	.041	.019	*1.042	1.003	1.083	-.024	.010	*.976	.956	.996
Baseline PSI-SF	-.001	.003	.999	.993	1.004					
Child's Age	.187	.138	1.205	.919	1.581	-.167	.076	*.846	.729	.982
Child's Gender	-.253	.387	.776	.364	1.657	.018	.201	1.018	.687	1.509
Child's Race	.136	.376	1.146	.548	2.394	.099	.198	1.104	.749	1.627
Foster Parent's Age	.023	.017	1.023	.990	1.058					
Foster Parent’s Race	-.087	.419	.916	.403	2.085					
Foster Parent’s Education (Some College)	-.433	.492	.648	.247	1.701					
Foster Parent’s Education (College Degree)	-.351	.520	.704	.254	1.949					

Note: *p<.05. Reference categories are control group, female, African American and High School Degree/GED

Chapter Four

Table 1: Item Descriptive Statistics

Item	Mean	Standard Deviation
Item 2: My child enjoys spending time with me	6.20	.943
Item 4: My child and I have a loving relationship	6.42	.896
Item 6: My child enjoys my attention	6.48	.848
Item 5: My child and I have a nurturing relationship	6.32	.939
Item 7: My child enjoys my praise	6.48	.893
Item 3: My child and I have a safe relationship	6.60	.803
Item 1: My child enjoys playing with me	6.02	1.072
Item 9: My child seems happier and more relaxed when I am around	6.16	.957
Item 8: My child feels comfortable exploring the environment when I am nearby	5.90	1.244
Item 13: My child obeys rules	4.53	1.158
Item 12: My child is compliant	4.56	1.117
Item 14: My child's positive behavior can be increased by using positive attention	5.59	1.166
Item 16: My child is cooperative	4.89	1.085
Item 17: My child shares well for his/her age	4.81	1.410
Item 10: My child has appropriate behavior towards adults	5.13	1.210
Item 11: My child has appropriate behavior towards other children (peers, etc)	4.95	1.224
Item 18: My child has a good vocabulary for her/his age	5.23	1.654
Item 19: My child speaks well for his/her age	5.11	1.700
Item 21: My child has good problem-solving skills for his/her age	4.70	1.661
Item 22: My child stays focused on tasks for his/her age	4.41	1.586
Item 20: My child enjoys learning new things	5.75	1.327
Item 24: My child can regulate her/his emotions	3.96	1.162
Item 23: My child can calm herself/himself down	4.06	1.260
Item 26: My child self-soothes appropriately	4.32	1.284
Item 25: My child can regulate her/his behavior	4.06	1.298
Item 27: My child recovers quickly after I use positive discipline	5.11	1.257
Item 15: My child's negative behavior can be reduced by removing attention*	4.25	1.374

Note: Items marked with an * indicate unexpected loading pattern

Table 2: Original and Revised Items on the ECMR

Original Items	Revisions Based on Expert Feedback and Item-Objective Congruence	Recommended Revision Based on Study Results
My child enjoys playing with me		
My child enjoys spending time with me		
My child and I have a safe relationship		
My child and I have a loving relationship		
My child and I have a nurturing relationship		
My child enjoys my attention		
My child enjoys my praise		
My child feels comfortable exploring the environment when I am nearby		My child comfortably explores his/her surroundings when I am nearby
My child seems happier and more relaxed when I am around		
My child has appropriate behavior towards adults		
My child has appropriate behavior towards other children		
My child complies with my direct commands	My child is compliant	
My child obeys rules		
My child's behavior is positively impacted by using praise	My child's positive behavior can be increased using positive attention	
My child's behavior is positively impacted by using strategic ignoring	My child's negative behavior can be reduced by removing attention	My child stops using attention-seeking behaviors (e.g., whining) when I ignore him/her
My child is cooperative		
My child shares well		

My child has good vocabulary My child speaks well		
My child enjoys learning new things My child has good problem-solving stays focused on tasks		
My child can calm himself/herself down My child can control his/her emotions My child can control his/her behavior	My child can regulate his/her emotions My child can regulate his/her behavior	
My child self-soothes appropriately My child recovers quickly from a time-out	My child recovers quickly after I use positive discipline	My child responds well to positive discipline (e.g., time-outs)
My child and I have a strong relationship* My child takes turns*		
My Child stays on the time-out chair* My child responds well to positive discipline*		

Note: Items marked with an * were removed from the ECMR

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PEER REVIEWED JOURNAL PUBLICATIONS

Mersky, J., Topitzes, J., & **Blair K.** (2017). Translating evidence-based treatments into child welfare services through community-university partnerships: A case example of parent-child interaction therapy. *Children and Youth Services Review, 82,* 427-433.

PEER REVIEWED JOURNAL PUBLICATIONS UNDER REVIEW

Blair K., Topitzes, J., & Mersky, J. Do Parents' Adverse Childhood Experiences Influence Treatment Responses to Parent-Child Interaction Therapy? An Exploratory Study with a Child Welfare Sample. *Child & Behavior Therapy*

Blair, K., Zhang, L.,Voith, L., & Yoon, S. Resilience Among Men in Batterer Intervention Programs. *Qualitative Social Work.*

Berger, L., **Blair, K.,** & Hein, C. Basic Computer Skills and Computer Preferences of Inner-City Hospitalized Medical Patients: Implications for Web-based Alcohol Screening and Brief Intervention. *Social Work in Health Care.*

PEER REVIEWED JOURNAL PUBLICATIONS IN PREPARATION

Blair K., Topitzes, J., & Mersky, J. Parent-Child Interaction Therapy: Predictors of Attrition and Treatment Non-Response. *Journal of Early Intervention.*

Blair K., Topitzes, J., Brondino, M., & Mersky, J. The Early Childhood Measure of Resilience: Results from a Pilot Study with Foster Parents. *Child and Family Social Work.*

Blair K., Topitzes, J., & Mersky, J. The Effect of Parent-Child Interaction Therapy on Placement

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Blair K., Topitzes, J., Winkler, E., McNeil, C., & Mersky, J. Parent-Child Interaction Therapy: Findings from an Exploratory Qualitative Study with Practitioners and Foster Parents. *Qualitative Social Work.*

Topitzes, J., & **Blair K.** Adverse Childhood Experiences and Criminal Offending. *Developmental Criminology.*

McMurtry, S., & **Blair, K.** Trends in Social Work Doctoral Education: Comparisons with Nursing, Psychology, and Public Health. *Journal of Social Work Education.*

FELLOWSHIPS

Advanced Opportunity Program (AOP) Fellowship 2015
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PEER REVIEWED PRESENTATIONS

Blair, K., Bennett, K., Mersky, J., & Topitzes, J. (2017, September). Brief Parent-Child Interaction Therapy. Interactive Poster Presented at PCIT International Annual Conference, Traverse City, MI.

Blair, K., & Mersky, J. (2017, April). The Early Childhood Measure of Resilience: Results from a Pilot Study. Interactive Poster Presented at ResilienceCon Annual Conference, Nashville, TN.

Blair, K., Bennett, K., Mersky, J., & Topitzes, J. (2017, March). Implementing Parent-Child Interaction Therapy Within Child Welfare. Oral Paper Presentation at Child Welfare League of America Annual Conference, Washington D.C..

Blair, K., Bennett, K., Mersky, J., & Topitzes, J. (2016, September).Caring for the Community: Implementing PCIT Adaptations to Improve Access and Retention. Oral Paper Presented at 16th Annual PCIT Conference, Los Angeles, CA.

Blair, K. & Bennett, K. (2016, September). The Use of PCIT with Post-Adoptive Families. Oral Paper Presented at Changing Faces of Adoption Conference Annual Conference, Wisconsin Dells, WI.

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INVITED TALKS AND PRESENTATIONS

Blair, K. (2015, May). *Parent-Child Interaction Therapy for Maltreated Children*. Helen Bader School of Social Welfare, University of Wisconsin-Milwaukee. Guest Lecture.

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REPORTS

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Research Assistant 2014 – 2017
Institute for Child and Family Well-Being and University of Wisconsin-Milwaukee.
Funded by Children's Hospital of Wisconsin and University of Wisconsin-Milwaukee
Supervisors: James Topitzes, Ph.D. and Joshua Mersky, Ph.D.
Responsible for Data Analyses and Manuscript Preparation

Ronald E. McNair Post Baccalaureate Achievement Program 2012-2013
Central Michigan University
Supervisor: Gary Miller, Ph.D. Principal Investigator
Responsible for conceptualization, participant recruitment, data collection, data analysis, and report writing for study on young adults' use of Health Insurance

TEACHING EXPERIENCE

Co-Course Developer and Teaching Assistant
SW 820: Seminar in Social Work Practice: Interventions for Substance Misuse– Masters Summer, 2017
Helen Bader School of Social Welfare, University of Wisconsin-Milwaukee

Instructor
SW 774: Trauma Theory – Masters Spring, 2017
Helen Bader School of Social Welfare, University of Wisconsin-Milwaukee

Teaching Assistant
SW 774: Trauma Theory – Masters Fall, 2015
Helen Bader School of Social Welfare, University of Wisconsin-Milwaukee

PROFESSIONAL EXPERIENCE

Senior Researcher
JBS, International 2018-Present

Child Welfare team

Parent-Child Interaction Therapy Practitioner (Post-MSW) 2015 – 2017
Children's Hospital of Wisconsin Community Services
Provide Parent-Child Interaction Therapy and Trauma-Focused Cognitive Behavioral Therapy services to child welfare-involved families

Parent-Child Interaction Therapy Practitioner (Post-MSW) 2014 – 2015
University of Wisconsin-Milwaukee
Provide Parent-Child Interaction Therapy services to families in the community

Program Evaluator (Post-MSW) 2014 – 2015
New Leaf Therapies
Assisted with conceptualization of trauma-informed care training, tasked with developing measures for agency readiness, staff training, implementation in program services, and evaluation of agency and staff to be trauma-informed, and tasked with collecting and analyzing data from incident reports, staff and client assessments

Masters of Social Work Internship 2013 – 2014
Mobile Urgent Treatment Team (MUTT)
Supervisor: Mike Maletis, LCSW
Assisted in providing brief, therapeutic assistance to juveniles experiencing mental health crises in a variety of settings in the home or in the community and worked with families and children to co-develop crisis plans

Bachelors of Social Work Internship 2012 – 2013
Listening Ear Foster Care
Supervisor: Carol Banks, BSW
Conducted home visits with youth with developmental disabilities and/or behavioral challenges and their foster parents, supervised parent-child visits and documented parent-child interactions, created individual treatment plans, planned and hosted monthly events for children in foster care and their families, and organized and filed confidential client documents using SWSS

CONTINUING EDUCATION & TRAINING

Screening, Brief Intervention, and Referral to Treatment Wisconsin State Certification
University of Wisconsin-Milwaukee, 2017

Trauma-Focused Cognitive Behavioral Therapy Certification Training
Institute for Child and Family Well-Being, 2016

Wisconsin IEP Laws
Milwaukee Child Welfare Partnership, 2016

Verbal Defense
Children's Hospital of Wisconsin Community Services, 2016

Parent-Child Interaction Therapy Certification Training
University of Wisconsin-Milwaukee, 2015

Car Seat Training

Children's Hospital of Wisconsin Community Services, 2015

Responsible Conduct of Research
University of Wisconsin-Milwaukee Science and Research Integrity Professional Development Series, Milwaukee, Wisconsin, 2013

Psychological First-Aid Certification
Central Michigan University, 2013

Proficient in SPSS, SAS, LISREL, NVIVO and Dedoose

SERVICE

Professional Service

Student Reviewer

Perspectives on Social Work 2014 – 2016

This committee is responsible for reviewing student manuscripts for publication

University Service

University of Wisconsin-Milwaukee Institutional Review Board for the Protection of Human Subjects

Member, Student Representative 2013 - Present

The IRB is responsible for reviewing research involving human subjects at UWM and ensuring all research is responsible, ethical and limits any potential risks to participants

School Service

Doctoral Program Committee

Member, Student Representative 2016 – 2017

This committee is responsible for developing and implementing program strategies to retain students in the joint MSW/PhD or PhD program

Doctoral Program Recruitment Committee

Member, Student Representative 2014 – 2015

This committee is responsible for developing and implementing recruitment strategies to enroll new students in the joint MSW/PhD or PhD program

Community Service

Health Heelers

Therapy Dog Handler 2017 – Present

Volunteer at local agencies with Millie, an Australian Shepherd, by providing therapeutic interactions to clients

PROFESSIONAL AFFILIATIONS

National Association of Social Workers

Student Member 2012-2013