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BEYOND THE CLINIC: MODIFIED INTERNET-DELIVERED PARENT-CHILD INTERACTION THERAPY

Terreca Cato

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by

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A Thesis
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ABSTRACT

Children who attend Head Start children are at increased risk for emotional and behavioral disorders. A variety of systemic factors contribute to their increased risk for problematic developmental outcomes. Parent-Child Interaction Therapy (PCIT) is an evidence-based intervention for improving positive parenting skills and children's outcomes. This study included a multiple baseline design across participants and tested the effects of Internet-Delivered Parent-Child Interaction Therapy (I-PCIT) on improving Head Start mothers' use of the Effective Commands that are part of the Parent Directed Interaction component of PCIT. Seven total mothers were recruited to participate in this study. Four mothers did not complete participation; therefore, data are presented for the three mothers that completed intake sessions, baseline, and treatment. The primary outcome variable was mothers' delivery of Effective Commands. Additionally, this study included measurement of children's behavior via mothers' ratings on the Eyberg Childhood Behavior Inventory (ECBI) and mothers' ratings of the social validity of I-PCIT. Results indicated that the three mothers that received intervention improved their use of Effective Commands. Two of the mothers completed a maintenance phase and improved delivery of Effective Commands maintained at levels greater than baseline. One mother failed to attend maintenance sessions. Mothers' ratings on the ECBI resulted in reductions in problem severity scores from pre-treatment to post-treatment. Additionally, the two mothers that completed social validity measures, rated I-PCIT as socially valid. Results are discussed in terms of future directions for research in I-PCIT.

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I'd like to express my deepest gratitude to my chair, Dr. Brad Dufrene, for his time, guidance, and collaboration throughout this project. I'd also like to express my sincerest appreciation to Dr. Crystal Taylor and Dr. d. Joe Olmi, for their time and guidance throughout this project as well. To the Head Start staff, as well as, all the parents and children who participated, I am forever grateful for your willingness to assist and participate in my project. Lastly, I'd like to recognize Chelsea Johnson and Merrick McEvoy for their time and willingness to assist with data collection for my project, I am very thankful for you both.

DEDICATION

I dedicate this project to my family, friends, and associates who have supported me on this journey. My deepest gratitude to my parents, Almore and Deborah Cato; my siblings, Erreca and Almore Cato; my significant other Ka-Ron Pitford; cousins, D'Amber Terrell, Delecia Morrow, and Tiara Sceau; my friends, Josalynn Coleman and Chelsea Johnson; and my School Psychology family for seeing me through another Master's degree. I am truly grateful for your continued love, encouragement, emotional support, and gracious financial assistance thus far. This is a small piece of the puzzle for a larger vision, I am full of gratitude.

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LIST OF ABBREVIATIONS

CO	Comply
DC	Direct Command
EC	Effective Commands
IC	Indirect Command
I-PCIT	Internet-Delivered Parent-Child Interaction Therapy
LP	Labeled Praise
NC	Nocomply
NOC	No Opportunity
PCIT	Parent-Child Interaction Therapy
UP	Unlabeled Praise
USM	The University of Southern Mississippi

CHAPTER I - INTRODUCTION

Approximately 30% of preschool children are at-risk for or experience an emotional or behavioral disorder such as an anxiety disorder, oppositional defiant disorder (ODD), or Attention Deficit/Hyperactivity Disorder (ADHD) (Bierman et al, 2015; CDC, 2021; Feeney-Kettler, et al., 2011; Park & Scott, 2009). Preschool children that experience poverty are especially at-risk for developing emotional and behavioral disorders during early childhood because of the myriad risk factors associated with poverty such as coercive parenting styles, barriers to accessing evidence-based behavioral health care, and parenting stress (Alizadeh et al., 2011; Berk, 2018; Duncombe et al., 2012; Farmer & Reupert, 2013; Karst & Hecke, 2012; Kasari et al., 2015; Steiner et al., 2012). Fortunately, there are evidence-based parenting programs that reduce preschool children's risk for developing emotional and behavioral disorders.

Positive parenting programs that include teaching parents to acknowledge their children's appropriate behaviors, deliver effective instructions, and set limits on children's disruptive behaviors are evidenced-based for preventing and treating preschool children's emotional and behavioral disorders (Chaffin, et al., 2009; McMahon, 2015). Across several decades of research, researchers have tested and demonstrated beneficial effects of several positive parenting programs such as Parent-Child Interaction Therapy (PCIT) (Herschell & McNeil, 2007; McMahon, 2015; PCIT, 2020), Triple P Parenting Program (McMahon, 2015; Sanders, 2007), The Incredible Years (McMahon, 2015; Webster-Stratton, 2007), and The Compliance Training for Children Model (Derieux, 2021; Griffin, 2007). Recent meta-analyses demonstrate the beneficial effects of these positive parenting programs for increasing children's appropriate behaviors, decreasing

disruptive behaviors, and reducing risk for emotional and behavioral disorders (Menting et al., 2013; Sanders et al., 2014; Thomas & Zimmer-Gembeck, 2007). Moreover, Piquero, et al. (2016) found that PCIT produced the largest effects relative to the *Triple P Parenting Program* and *The Incredible Years*, possibly due to PCIT including explicit live coaching for positive parenting practices.

Parent-Child Interaction Therapy

Parent-Child Interaction Therapy (PCIT) is an empirically supported parent focused training program that is commonly utilized for children with social, emotional, and behavioral concerns, including communication challenges, difficulties with attachment, and aggression. PCIT typically is held once per week for an average of 14 weeks. It encompasses two phases; Child Directed Interaction (CDI) and Parent Directed Interaction (PDI). CDI refers to the phase in which the child leads play activities, and the parent follows the child's lead, provides positive feedback for appropriate child behavior, and ignores inappropriate behavior. During CDI, a therapist teaches a parent to acknowledge their child's appropriate behaviors during play that is directed by the child. Parents are taught to use PRIDE skills. PRIDE skills refers to Praises, Reflections, Imitations, Descriptions, and Enjoyment. Traditionally, therapists taught parents to use PRIDE skills during face-to-face therapy sessions in which therapists describe PRIDE skills, model the use of PRIDE skills with the child, and then provided live coaching (i.e., feedback) via a one-way FM radio from behind a one-way glass or room with video monitoring. Once a parent demonstrated mastery of PRIDE skills, PDI is implemented. PDI refers to the phase in which the parent learns how to give Effective Commands (EC), praise for compliance, and utilize Time Out (TO) for noncompliance. ECs are

instructions that include specific components when parents deliver instructions to their children to facilitate positive interactions between the mother and child while increasing compliance. ECs are taught to parents with the BE DIRECT acronym, which is described later in procedures. PDI includes parents learning how to deliver direct instructions, set limits, and enforce limits via a time-out from positive reinforcement procedure (i.e., negative punishment). In addition to effective instructions and time-out, PDI also includes teaching parents to establish house rules and tips for setting limits at home. Therapists teach PDI in the same manner as they taught CDI; that is, the therapist uses instructions, modeling, and live coaching. Additionally, PCIT's successful outcomes may be due to how its training has imbedded immediate and direct coaching in which the therapist provides positive and corrective feedback upon behaviors (PCIT, 2020). Furthermore, both CDI and PDI include homework assignments in which parents can practice skills at home.

Low Socioeconomic Status and Social Emotional Challenges

Historically, families who participate in Head Start are from ethnically and racially minoritized backgrounds and are low socio-economic status (SES) members. SES refers to an individual's social and economic class or grouping and is typically measured by wealth, educational level, income, and occupational prestige (Diemer et al., 2013). As a federally funded national program in the United States (U.S.), Head Start promotes school readiness for children in low SES families through educational, nutritional, social, and types of services. In 2018-2019, Head Start served over 1 million children from birth to age 5 and pregnant mothers. The Head Start population is diverse where 44% identified as White, 30% as Black or African American, 10% as Biracial or

Multiracial, 10% Unspecified or Other, 4% American Indian/Alaska Native, 2% Asian, and 1% Native Hawaiian/Pacific Islander. Additionally, there were 63% of individuals who identified as Non-Hispanic/Non-Latino and 37% as Hispanic or Latino (ECLKC, 2021). Furthermore, this low SES population has been known to be susceptible to both social and emotional challenges. Some social and emotional challenges may include disruptive behaviors, noncompliance, and aggressive behaviors. Additionally, the early onset of emotional and behavioral difficulties is predictive of future maladjustment.

Social and emotional challenges, such as the latter, can be extremely problematic for the individuals exhibiting these challenges, as well as parents who attempt to address and combat these challenges on an ongoing basis. Children who come from low SES backgrounds are at high risk for both disruptive behaviors and Mental health disorders. High rates of depression, anxiety, conduct problems, and attention deficit hyperactivity disorder (ADHD) are prevalent among low SES children (Bierman et al., 2015). As reported by the Centers for Disease Control and Prevention (CDC), one in six children from ages two through eight in the U.S. have a Mental health, behavioral, or developmental disorder (CDC, 2021). Additionally, parental well-being is a factor that is associated with low SES. Factors such parental education and depression amongst other factors have an impact on parenting and parent-child interactions (Bierman et al., 2015).

Again, PCIT is evidence-based for preventing and treating emotional and behavioral disorders in preschool children (Herschell & McNeil, 2007; McMahon, 2015; PCIT, 2020). However, PCIT is not without limitations. In particular, PCIT was designed to be time unlimited; that is, CDI and PDI continue until parents reach specific mastery criteria. Research indicates that PCIT may include 10 to 16 sessions (Goldfine et

al., 2008). Relatedly, attrition in PCIT research varies widely and has been reported as high as 67% in some studies (Lieneman et al., 2019). Moreover, attrition may be particularly high for minority and low-SES families (Lieneman et al., 2019; Lyon & Budd, 2010; Werba et al., 2006). Finally, minority and low SES families have been underrepresented in the PCIT research literature and often report barriers to accessing evidence-based behavioral health care programs such as PCIT. One method for increasing low-SES and minority families' access to PCIT may be to leverage technology by using telehealth service delivery models.

Tele-Health Service Delivery of PCIT

Barriers to accessing evidence-based behavioral healthcare may include transportation, distance and commute time to therapists' offices, and inflexible work schedules (Harvey & Gumport, 2015; Karst & Hecke, 2012; Kasari et al., 2015; Steiner et al., 2012). Telehealth service delivery may not eliminate those barriers but may reduce the extent to which those barriers completely prevent families from accessing evidence-based behavioral healthcare. PCIT has already been tested in a telehealth format. A recent review by Ros-DeMarize et al., (2021) states that Internet-delivered PCIT (I-PCIT) existed prior to the COVID-19 pandemic, continues to grow in usage, and offers a promising mechanism for increasing access to evidence-based behavioral healthcare. Moreover, in perhaps the only randomized control trial testing the efficacy of I-PCIT, Comer et al. (2017) randomly assigned families to I-PCIT and traditional PCIT. Comer et al. found that, in terms of most child outcomes, both groups experienced significantly beneficial, comparable outcomes. However, I-PCIT was associated with significantly fewer parent-perceived barriers to accessing treatment. Unfortunately, similar to other

PCIT studies, the sample included fewer low SES and minority participants; and the study lacked direct measures of parents' demonstration of positive parenting practices (e.g., EC). More recently, Dufrene et al. (manuscript in progress) implemented the CDI portion of PCIT via online videoconferencing and found that mothers substantially increased use of PRIDE skills following live coaching via telehealth service delivery.

Although early I-PCIT research is promising, more research is needed that includes direct measurement of parents' use of positive parenting practices. First, direct observation is the gold standard in behavioral assessment; therefore, when possible, researchers should provide direct measurement of important behaviors to increase the credibility of findings. Second, in order to elucidate the mechanisms of change involved with I-PCIT, researchers must demonstrate provide direct evidence of the behavior changes that cause, or are related to, changes in child behavior. For example, EC are known to result in increased child compliance (Derieux, 2021). ECs likely improve child compliance because ECs are delivered in a developmentally appropriate fashion and are followed by labeled praise, which may reinforce, or increase the future probability of, compliance. Moreover, as more ECs are delivered and children comply with more instructions and continue to contact reinforcement, parents EC us and children's compliance may be more likely to maintain over and generalization to novel ECs and across settings. Given the importance of ECs within a positive parenting framework, it is important for researchers to demonstrate that parents *actually* use ECs after they have been trained to do so. This is especially important for novel training methods such as I-PCIT. Unfortunately, the extant I-PCIT literature does not include direct observation of parents' use of positive parenting strategies such as ECs.

Purpose of Study

Limited research has been conducted in the area of implementing Parent-Child Interaction Therapy (PCIT) via telehealth (Comer, et al., 2017; Davis et al., 2018; Gurwitch et al., 2020; Ros-DeMarize et al., 2021). Many families, and low SES and minority families in particular, face barriers to accessing evidence-based behavioral health care. Telehealth service delivery may reduce barriers, but research demonstrating parents' positive parenting skill developing when PCIT is delivered via telehealth is limited. The primary purpose of the present study is to extend recent research by Dufrene et al. (manuscript in progress), by testing the effects of I-PCIT for increasing EC use by minoritized, low-SES Head Start mothers. Additionally, child outcomes regarding behavior change will be examined via parents' ratings of their child's behavior on the ECBI. The following research questions will be addressed:

Research Questions

1. Is there a functional relation between the I-PCIT PDI training for ECs and Head Start mothers' use of EC?
2. As mothers' use of ECs increases, does their children's behavior improve as evidenced by lower scores on the ECBI?
3. Do mothers rate I-PCIT as socially valid?

CHAPTER II - METHODS

Participants and Setting

Participants were recruited from a local Head Start agency. After the Institutional Review Board (IRB) approved this study, flyers were distributed to the Head Start agency administrative staff and individual Head Start centers. Some mothers contacted the researcher and other mothers were contacted by the researcher following referral from a Head Start center director. The following inclusion criteria were used to include mothers in the study: (a) the parent must be mother/female legal guardian of child, (b) the parent must have a child enrolled in Head Start Program, (c) the parent/legal guardian consents to participation in the study, (d) and the parent/legal guardian consents for child to participate in the study. Mothers could not participate based upon the following criteria: (a) if the parent or child had been diagnosed with a developmental disability, (b) previously had PCIT Training, and/or (c) inability to have access to internet connection. Fourteen total mothers contacted the researcher to participate in this study. Six mothers reached various stages of participation (described further in Results section), and three mothers ultimately completed enough study activities to be included in the data that are presented in multiple baseline format.

The three mothers that completed enough study activities to be included in the presentation of study findings were all Black females and their children were Black. Participant 1 was 41 years old, and her child was a 4-year-old female; Participant 2 was 24 years old and her child a 4-year-old male; Participant 3 was 24 years old, and her child was a 3-year-old male. All children attended a Head Start center in a rural southeastern

state; as a result, all families experienced low SES based on meeting Head Start enrollment criteria, which requires income at or below the federal poverty line.

This study was conducted completely online via the Zoom application. There was an initial online intake, I-PCIT sessions via smart devices (i.e., iPads), as well as a pre/post- treatment assessment that were delivered online. The researcher and other trained observers served as therapists and conducted sessions while seated in the office of a university behavioral health clinic, while Mothers joined I-PCIT sessions from their homes. I-PCIT session times were based upon parent's schedule and availability. Times and days varied for each participant.

Materials

Intake Interview. A semi-structured clinical interview was conducted with parents to determine the appropriateness of I-PCIT for their child. Information regarding prevalent concerns, family and social history, developmental information, school and daycare information, medical history, and discipline methods were gathered (*See Appendix A*). For all mothers that completed intake sessions, their child's behavior was deemed in need of I-PCIT, but not judged to be so severe that additional services above and beyond those provide via this study were needed.

Instruments

Eyberg Child Behavior Inventory (ECBI). The ECBI is a widely used self-report questionnaire to evaluate parental perceptions of child behavior and is commonly used in PCIT research. The ECBI has been used to demonstrate behavior changes from first to last session during PCIT (Lieneman et. al, 2019). The ECBI consists of an Intensity Scale and a Problem Scale. The Intensity Scale measures how frequently a child exhibits each

of 36 behavior problems on a scale ranging from 1 (*never*) to 7 (*always*). The Problem Scale evaluates whether the child's behavior is perceived by the parent as a problem on a binary scale of yes or no (*See Appendix B*). Children are considered to be within the clinical range with an Intensity Score of 132 or above (T scores ≥60) (Eyberg & Pincus, 1999). Scores are typically reported in raw score format because raw scores are more sensitive to change relative to T scores. The authors report high internal consistency for the ECBI, with an alpha coefficient > 0.90 (Abrahamse, et al., 2015).

Dyadic Parent-Child Interaction Coding System, Third Edition (DPICS-III). The DPICS-III (Eyberg & Funderburk, 2016) was utilized to code ECs during baseline, treatment, and maintenance. For this study, the categories for parent behavior included ECs. In traditional PCIT, the DPICS-III is used to code both parent and child behaviors in a 25-minute play session. The DPICS-III collects a frequency count on parent behaviors (e.g., direct commands, indirect commands, labeled praise, and unlabeled praise), as well as child behaviors (e.g., compliance, noncompliance, and no opportunity). For children aged 3 to 6, the DPICS-III has been standardized for both normative and disruptive behavior disorder populations. Previous research demonstrates that the DPICS-III has good inter-observer agreement, test-retest reliability, discriminative validity, and convergent validity (Thornberry, 2013; Travis, 2015). For this study, although the DPICS was used to code mothers' commands, a percentage score was used to represent the number of steps in EC that mothers used (*See Appendix C*). A list of parent behavior codes is included in *List of Abbreviations.*

Behavior Intervention Rating Scale (BIRS). Parent participants will evaluate the social validity of the intervention using the Behavior Intervention Rating Scale, pre- and

post-intervention (Elliott & Von Brock Treuting, 1991); *See Appendices E and F*). Using a six- point Likert scale with ratings ranging from Strongly Disagree (1) to Strongly Agree (6), the BIRS will allow the researcher to determine if the present intervention was perceived as socially valid. High ratings on the BIRS will indicate high levels of satisfaction with the intervention on the part of the parent participants. The BIRS consists of three factors: Acceptability, Effectiveness, and Time to effectiveness. The Acceptability factor is based on prior research using the IRP-15 and has an alpha of .97 (Elliott & Von Brock Treuting, 1991). The Effectiveness and Time to Effectiveness factors are not based on previous measurement evaluations, but rather logic. "Logic would dictate that the time requirement of an effect would have a salient place in the evaluation of any treatment" (Elliott & Von Brock Treuting, 1991). The Time to Effectiveness and Effectiveness factors have alphas of .87 and .92, respectively. The BIRS has been found to have high internal consistency with an overall alpha of .97 (Elliott & Von Brock Treuting, 1991).

Technology. Each participant was provided with their own smart device (i.e., iPad) and equipment package for treatment duration, including a wireless headset and tablet mounting bracket.

Apple iPad© The smart device provided was an Apple iPad (7th Generation) with 10.2" Retina display. Tablets were utilized to conduct I-PCIT sessions with participants.

JBL® The wireless headset provided was the JBL Tune 510BT Bluetooth Wireless Headphones. The headset was used so that the researcher could communicate and provide nonintrusive live feedback to the parent participant. The researcher used a laptop computer to conduct video coaching sessions.

Incentive. $20 gift cards were provided contingent upon completing meetings each week throughout the study. Mothers stated their preference of gift card type, and the researcher delivered gift cards to mothers following completion of 8 sessions. Mothers received a $20 gift card after the completion of the intake session, teach session, each coaching session, and also after the completion of each phase of the study (i.e., baseline, intervention, and maintenance) for a total of up to $160 for study completion.

Dependent Variables

Mothers' delivery of ECs served as the primary dependent variable. Researchers viewed video recordings of baseline, treatment, and maintenance sessions and coded the percentage of EC steps implemented correctly for each command delivered during the session. The researcher prompted mothers to deliver a command by saying, "give instructions like you normally do." The researcher prompted the mother to deliver a command once per minute during a 10-minute session. The following elements were included in an EC according to the PCIT Manual (*See Appendix G and H;* Eyberg & Funderburk, 2016):

a) Parent commands should be direct rather than indirect
b) Parent commands should be stated positively
c) Parent commands should be given for one thing at a time
d) Parent commands should be specific rather than vague
e) Parent commands should be developmentally appropriate
f) Parent commands should be given in normal tone of voice
g) Parent commands should be explained before they are given or after they are obeyed

h) Parent commands should be used only when necessary

i) Parent waits 5-seconds for child to respond to commands

j) Parent praises child for compliance

Some of the EC components included in the DPICS cannot be directly observed. For example, one cannot directly observe whether a parent gave a command only when necessary. As a result, for this study, each parent command was evaluated for three components: (1) Instruction delivered directly, (2) Instruction positively stated, and (3) Instruction followed by appropriate consequence (i.e., labeled praise if compliance, re-delivery of instruction after fives seconds in which child did not initiate compliance). Each command was scored for percentage of steps completed correctly; and, the datum for a single session was the average score across 10 commands delivered during that single session.

A secondary dependent variable was mothers' ratings of children's problem behaviors on the ECBI. Mothers completed the ECBI prior to baseline and then at the beginning of each treatment session. The raw score for each ECBI completed was recorded and is reported.

Data Collection

All sessions occurred via video conference through the Zoom platform. Parents completed rating scales during video conference sessions via Zoom as well. The researcher provided parents with paper copies of the rating scale before the video conference sessions. All sessions were audio and video recorded and stored on a secure server. Observers viewed sessions after the sessions had been completed and used a coding sheet to code ECs. Observers included doctoral students in school psychology.

All observers completed an online training module for the DPICS-III that is provided by an online PCIT resource website (PCIT for Traumatized Children Web Course, 2021).

During baseline and treatment sessions, participants completed I-PCIT sessions with the researcher. Prior to the first session, the researcher met with mothers during a Zoom meeting and assisted mothers with setting the room up for I-PCIT and securing the iPad to a piece of furniture so that it was secure and would likely not be contacted by the child. Additionally, the researcher assisted parents with setting up wireless ear buds and answered any technology questions that the mother may have had.

During baseline sessions, the researcher prompted the parent to, "tell your child to do something" once per minute for 10 minutes. This allowed parents to deliver 10 commands per session and this process was repeated during treatment and maintenance session. During baseline sessions, the researcher did not provide instructions for EC or provide live coaching or feedback to mothers during or after any command they delivered.

During the intervention phase, a PCIT PDI session that focused only on EC delivery was implemented (described more completely below). Immediately following the PCIT PDI session, there was a 10-minute assessment session in which the researcher prompted the mother to deliver one command every minute for 10 minutes. Commands were coded using the EC form (*See Appendix E)*.

Research Design and Data Analysis

A nonconcurrent Multiple Baseline (MB) design across subjects was used to assess the effects of telehealth delivered PCIT PDI on parents' use of EC skills. The nonconcurrent MB design included a baseline phase (A), a treatment phase (B), and a (C)

maintenance phase. Per What Works Clearinghouse (WWC, 2020) standards, there was a minimum of three demonstrations of treatment implementation with a minimum of five data points per phase (Kratochwill, et al., 2010). Additionally, there was a minimum of two data points stagger between participants.

The researcher used visual analysis as the primary means for data analysis. The researcher visually analyzed the data paths for level, trend, variability, immediacy of effect, overlap across phases, and consistency of effect (Horner, et al., 2005).

In addition to visual analysis, the researcher calculated an effect size appropriate for single subject research design data and the MB design. Baseline Corrected Tau (BCT) was as the effect size and was calculated for all A-B and A-C phase comparisons (Tarlow, 2017). BCT accounts for both overlap of data points between phases and any baseline trend present. BCT has an online calculator that indicates the presence or absence of baseline trend. If baseline trend is present, then the baseline correction is applied. If a baseline trend is not present, then the baseline correction is not applied. BCT was calculated using an online effect size calculator at the website: *https://jepusto.shinyapps.io/SCD-effect-sizes/* . When evaluating effect size, a BCT values less than 0.2 is considered a small effect, values between 0.2 and 0.6 are considered to have a moderate effect, and values between 0.6 and 0.8 are considered to have a large effect, and values greater than 0.8 are considered to have a very large effect (Vannest & Ninci, 2015).

Procedure

Intake

During intake, participants received an informed consent form describing the research purpose. Participants were told in the informed consent form that they may leave the study and stop participating at any time during the study without penalty. Intake sessions lasted approximately 60 minutes and included participants completing a series of questionnaires that included items regarding demographics, parenting styles, home routines and child compliance. Mothers also provided information about their child's problem behaviors so that the researcher could determine if their child was appropriate for I-PCIT. Finally, as the researcher had already delivered research materials to mothers, the researcher assisted mothers with setting up equipment and ensuring that mothers could use the equipment.

Baseline (Phase A)

During baseline, data were collected for ECs. During baseline, parent participants were encouraged to deliver commands in their typical fashion. The researcher provided a simple prompt that included telling the parent, "Give instructions like you normally do." The researcher prompted the parent to deliver a command once per minute over the course of 10 minutes, which resulted in 10 total commands during each session. The researcher did not provide any instructions for effective commands. Additionally, the researcher did not provide any coaching to parents or any feedback following any commands. This allowed for an evaluation of command delivery prior to I-PCIT PDI.

Treatment (Phase B)

During intervention, the researcher implemented the PDI portion of PCIT via Zoom meetings. However, the researcher only taught parents to use ECs. I-PCIT PDI was implemented in two parts; teach session and coach session according to the PCIT Manual (*See Appendices G and H*).

Teach Session

During the teaching session, the researcher completed seven steps: facilitated caregiver discussion, gave an overview of PDI ECs, taught EC and labeled praise for compliance, taught the 5-second rule that included parents waiting 5-seconds for the child to comply before re-issuing a command, re-issuing commands should a child not comply with a command, role playing EC delivery, and video examples of EC delivery.

Step 1- Facilitate caregiver discussion: Researcher discussed parent participant stressors, that were unrelated to the child participant's behavior (e.g., "Have you been experiencing any difficulties you would like to discuss?"). Researcher provided support and displayed concern through reflective and empathetic statements.

Step 2- Give overview of PDI: Researcher explained how the sessions would be conducted and gave parent participants an overview and rationale for PDI ECs. The researcher used the PCIT manual script (*See Appendix G*) and PCIT EC handout (*See Appendix H*) to give an overview of PDI and ECs in particular.

Step 3- Teach ECs and Praise: The researcher taught parent participants EC and praise for compliance. *BE DIRECT* acronym was utilized to teach parent participants how to appropriately give ECs. The *BE DIRECT* is derived from *The Eight Rules of Effective Commands in PDI (See Appendix H)*. *BE DIRECT* is an acronym for:

- **B**e specific with your commands
- **E**very command is positively stated
- **D**irect rather than indirect
- **I**ndividual rather than complex
- **R**easonable for child's age
- **E**ssential commands only
- **C**arefully timed explanations
- **T**one of voice is neutral and respectful

Step 4- Teach 5-second rule: The researcher explained and gave examples for the 5-second rule for dawdling to parent participants. Dawdling refers to uncertainty if a child will obey or disobey a command (PCIT, 2020). The researcher used the PCIT Manual script (*See Appendix G*) to teach the 5-second rule for dawdling. Specifically, when a parent delivered a command, they would silently count to five and if their child did not yet comply, they would re-issue the command. The researcher instructed parents not to re-issue a command until at least 5-seconds had elapsed.

Step 5- Give video examples: Researcher provided videos examples of PDI EC delivery. The parent participants were told to pay particular attention to ECs and labeled praise for compliance and to take notes so that those commands and labeled praise statements could be discussed. After each video, the researcher asked parent participants a series of questions from the PCIT Manual (*See Appendix G*), including "What commands did you see in this video?", "Were they direct or indirect?", "What instances of praise did you see in the video?", "What instances of praise did you see in the video?", and "Were they labeled or unlabeled?"

The teaching session lasted approximately an hour and a half. When observers later coded parent commands, they also completed a treatment integrity checklist to record and assess the extent to which the researcher delivered I-PCIT as intended (*See Appendix K*).

Coaching Sessions

Following the teaching sessions, the researcher met with mothers for coaching sessions. Each coaching session included review of EC core steps, parents practicing EC delivery with their child while the researcher provided coaching. Coaching included the researcher praising parents for accurate EC delivery and providing corrective feedback in the event of a command delivered that did not include all EC components. Coaching sessions lasted approximately 45 minutes. Immediately following a coaching session, a play session was conducted in which mothers played with their children using developmentally appropriate toys consistent with requirements of PCIT and the researcher prompted parents to issue one command per minute for 10 minutes as was done during baseline. Observers coded parents EC based on audio and video recordings of the session following completion of the session.

At the beginning of each coaching session, parents completed the ECBI, and the researcher graphed the ECBI score. The next session, the researcher shared the ECBI graph with the parent so the parent could review their child's progress. The ECBI graph includes all ECBI rasw scores that had been collected and were plotted on graph so that parents could observe changes in child behavior from pre-treatment to post-treatment. Additionally, following the first two coach sessions, the researcher provided a homework assignment to the parent in the form of additional practice. The homework assignments

were called play sessions and included the parent playing with their child three to five times during the week, prior to the next coaching session (*See Appendix S and T*). The play sessions encompassed a 10-minute Zoom session for parents to practice those skills, but no coaching, instructions, or feedback was given to the parents. After the session, observers used the DPICS-III to code the percentage of correct steps for ECs, these sessions were to determine if the parents retained the EC skills that were taught in the coaching sessions.

Procedural Integrity

Training for Coding

Doctoral students in a school psychology training program were trained to complete procedural and treatment integrity evaluations for intake, baseline, teaching, coaching, play, follow-up, and maintenance sessions.

Baseline Procedural Integrity

The observers completed a procedural integrity checklist for the baseline session to ensure that the baseline phase procedures were being implemented as intended. Twenty percent of baseline sessions were evaluated for procedural integrity. Procedural integrity for baseline procedures was 100%.

Treatment Integrity

Twenty percent of teaching, coaching, and play sessions were coded for treatment integrity for each phase for each mother. Treatment integrity was 100% for all sessions that were assessed.

Interobserver Agreement

Twenty percent of sessions by phase and mother in which EC was scored were evaluated for IOA (Kratochwill, et al., 2010). IOA was calculated by assessing the extent to which a secondary observer provided the same recordings for each step for each command delivered during the session. For each command delivered, there was an IOA score and then average IOA for that session was calculated. IOA for ECs was 96.67% (range, 93.33-100%).

CHAPTER III - RESULTS

Participants Who Did Not Complete the Study

This study included intensive recruitment from multiple agencies and sources. First, as per the original research plan, flyers were distributed to a local Head Start agency with the intention that interested mothers would contact the researcher, or Head Start center directors would refer mothers and their children that they perceived as needing parent training services. Several mothers contacted the researcher and expressed interest in participating in the study. One mother provided consent and then subsequently did not attend the scheduled intake session or additional rescheduled intake sessions. Additionally, one mother consented to participation and attended an intake session but did not attend the first scheduled baseline session or additional rescheduled appointments. Further, one mother provided consent for participation, completed the intake session and the baseline phase along with two coaching sessions, but did not attend any further sessions despite multiple attempts to follow-up with rescheduled appointments at varying times that the mother identified as more convenient. Finally, one more participant provided consent, completed the intake and baseline phase along with one coaching session, but did not attend any additional sessions despite numerous attempts to reschedule. Difficulties with getting participants to attend intakes, baseline sessions, and coaching sessions occurred despite numerous attempts at follow-up and financial incentives in the form of gift cards.

Results from Participants That Entered Treatment

During baseline, Participant 1 implemented ECs with a mean score of 51.00% (range, 43.33 -56.67%). When the intervention phase began, there was an increase in ECs

with minimum variability and minimum overlap with baseline. During the intervention phase, Participant 1 implemented ECs with a mean score of 79.00% (range, 46.67 – 90.00%). When the maintenance phase began, there was a gradual decrease in trend to moderate levels with minimum variability. During the maintenance phase, Participant 1 implemented ECs with a mean score of 71.00% (range, 63.34 – 80.00%) (See Figure 1). BCT calculations for the baseline and I-PCIT PDI phase yielded an effect size of 0.84 (SE = 0.16; 95% CI: [0.47, 0.97]) for EC statements, indicating a large treatment effect. Consequently, Participant 1's level of EC statements substantially increased once PDI coaching began. BCT calculations for baseline and the maintenance phase yielded an effect size of 1.00 (SE = 0.03; 95% CI: [1.00, 1.00]) for corrective statements, indicating a very large effect of treatment. Thus, Participant 1's level of EC statements substantially increased and maintained after the I-PCIT PDI intervention was implemented.

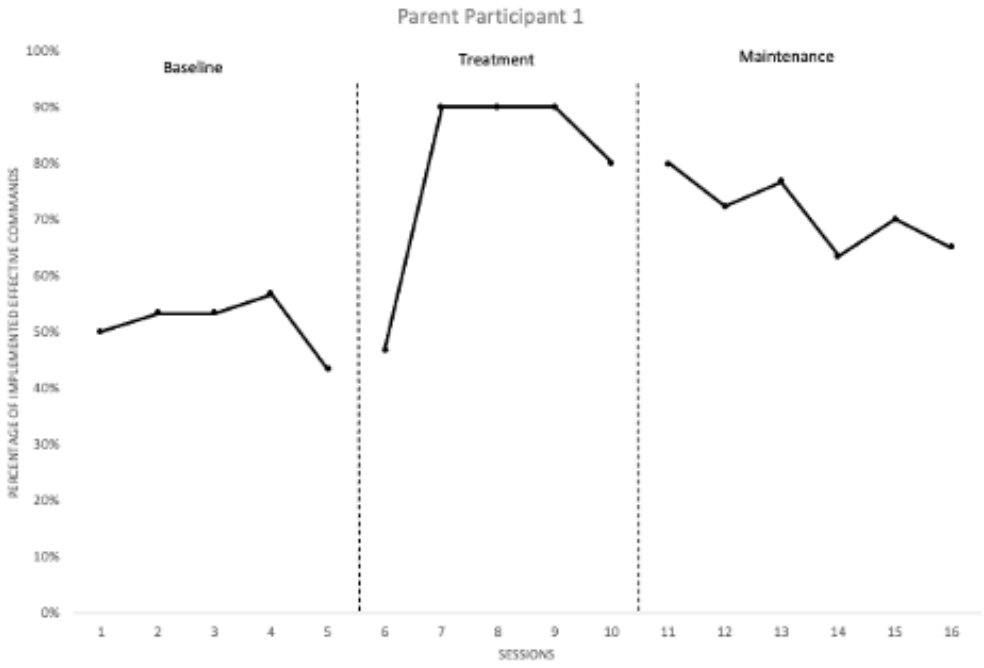

Figure 1. Percentage of Correct Steps for Effective Commands of Participant 1.

During baseline, Participant 2 implemented ECs with a mean score of 61.43% (range, 56.67 -66.67%). When the intervention phase began, there was an increase in ECs with high variability, but minimum overlap with baseline. During the intervention phase, Participant 2 implemented ECs with a mean score of 82.67% (range, 66.67 – 100.00%). When the maintenance phase began, there was a gradual decrease in trend; however, percentage of steps of ECs maintained at high levels with little variability. During the maintenance phase, Participant 2 implemented ECs with a mean score of 90.67% (range, 80.00 – 96.67%) (*See Figure 2*). BCT calculations for the baseline and I-PCIT PDI phase yielded an effect size of 0.99 (*SE* = 0.02; 95% CI: [0.66, 1.00]) for EC statements, indicating a very large treatment effect. Consequently, Participant 2's level of EC statements substantially increased once PDI coaching began. BCT calculations for baseline and the maintenance phase yielded an effect size of 1.00 (*SE* = 0.02; 95% CI: [1.00, 1.00]) for corrective statements, indicating a very large effect of treatment. Thus, Participant 1's level of EC statements substantially increased and maintained after the I-PCIT PDI intervention was implemented.

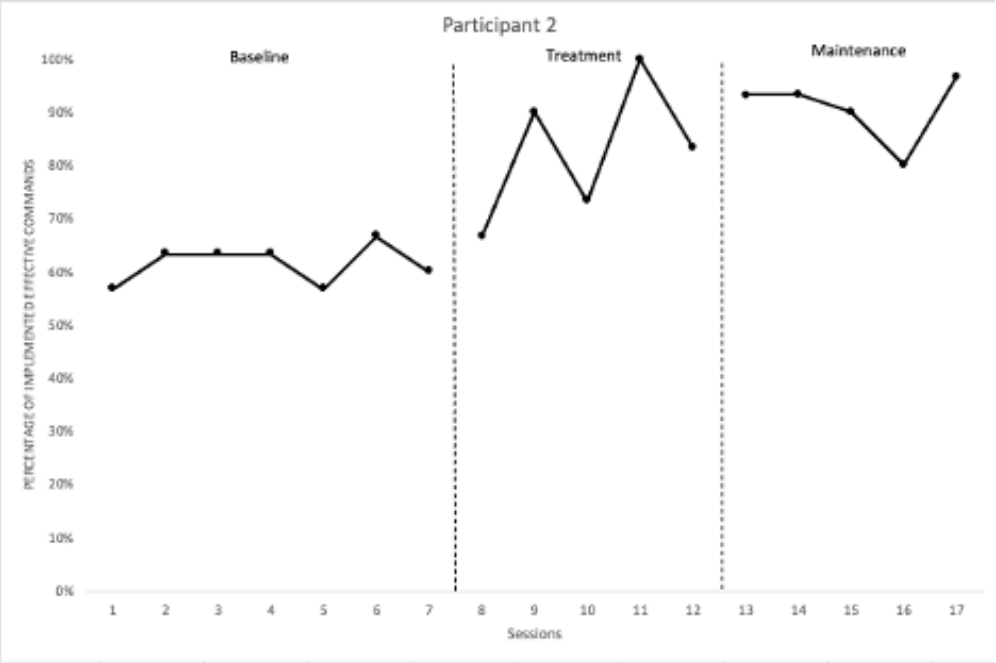

Figure 2. Percentage of Correct Steps for Effective Commands of Participant 2.

During baseline, Participant 3 implemented ECs with a mean score of 64.63% (range, 51.67 -75.00%). When the intervention phase began, there was an increase in ECs with high variability and minimum overlap with baseline. During the intervention phase, Participant 3 implemented ECs with a mean score of 81.67% (range, 73.33 – 93.33%) (*See Figure 3*). BCT calculations for the baseline and I-PCIT PDI phase yielded an effect size of 0.93 (*SE* = 0.06; 95% CI: [0.58, 0.99]) for ECs statements, indicating a very large treatment effect. Consequently, Participant 3's level of EC's statements substantially increased once PDI coaching began. During the intervention phase, Participant 3 cancelled six sessions and failed to attend additional intervention sessions despite repeated attempts to reschedule by the researcher and the availability of financial incentive. As a result, Participant 3 did not enter the maintenance phase.

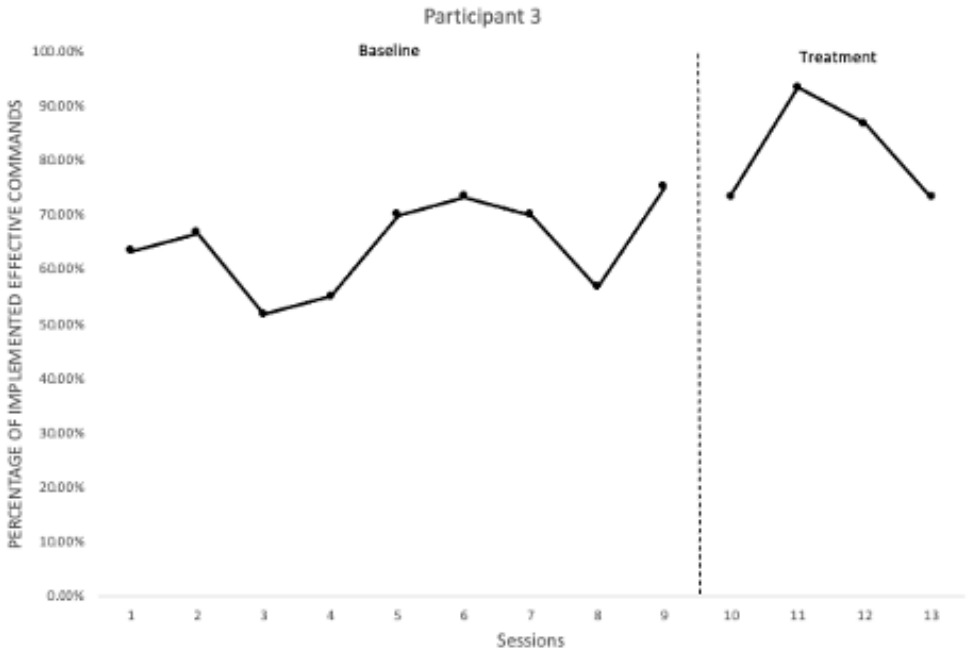

Figure 3. Percentage of Correct Steps for Effective Commands of Participant 3.

ECBI Findings

Participants completed the ECBI prior to receiving instruction or training for ECs. Then, participants completed the ECBI during each treatment session. Participants also completed the ECBI at the conclusion of the treatment. The researcher scored the ECBI upon receiving it from participants and then shared scores with participants each session. ECBI Intensity raw scores ranged from 40 to 198 across participants.

For Participant 1, the pre-treatment ECBI resulted in an intensity raw score of 168. During treatment, Participant 1's ECBI ratings resulted in the following scores; 176, 187, and 198. Post-treatment, participant 1's rating resulted in an intensity raw score of 116.

For Participant 2, the pre-treatment ECBI resulted in an intensity raw score of 53. During treatment, Participant 2's ECBI ratings resulted in the following scores; 43, 43, 40. Post-treatment, participant 2's rating resulted in an intensity raw score of 46 (*See Appendix*.

For Participant 3, the pre-treatment ECBI resulted in an intensity score of 179. During treatment, Participant 3's ECBI ratings resulted in the following scores; 171, 139, and 102. Post-treatment ECBI ratings were not collected due to Participant 3 not completing treatment.

Overall, the ECBI results indicate that at pre-treatment parent Participants 1 and 3 rated their child's frequency of behaviors to be at clinically significant levels (≥ 131). At post-treatment, Participant 1 rated their child's frequency of behaviors to be at subclinical significant levels (≤ 130). Participant 3's post-treatment ECBI ratings were not collected. Additionally, although parent participant 2's ECBI results were initially subclinical at pre-treatment (i.e., 53), there was a decrease in Participant 2's rating of their child's frequency of behaviors (i.e., 46). All parent participants' ECBI ratings of their child's frequency of behaviors decreased from pre-treatment to post-treatment (*See Table 1*).

Table 1

ECBI Results

	PRE-TREATMENT	**COACH SESSION 1**	**COACH SESSION 2**	**COACH SESSION 3**	**POST-TREATMENT**

Table 1 Continued

PARTICIPANT 1	**168**	**176**	**187**	**198**	**116**
PARTICIPANT 2	53	43	43	40	46
PARTICIPANT 3	179	171	139	102	N/A

Social Validity

Prior to and at the conclusion of the I-PCIT intervention, participants 1 and 2 completed the BIRS to rate the social validity of the intervention. Participant 1's rating resulted in mean item scores of 5.50 pre-intervention and 4.99 post intervention for the acceptability factor, 5.29 pre-intervention and 5.71 post intervention for the effectiveness factor, and 6.00 pre-intervention and 6.00 post intervention for the time to effectiveness factor. Participant 2's rating resulted in mean item scores of 5.46 pre-intervention and 4.96 post intervention for the acceptability factor, 5.57 pre-intervention and 4.43 post intervention for the effectiveness factor, and 5.50 pre-intervention and 5.50 post intervention for the time to effectiveness factor. Participant 3 did not complete the BIRS, due to not completing the intervention. Overall, total mean scores were 5.50 pre-intervention and 4.96 post-intervention for participant 1. Total mean scores were 5.46 pre-intervention and 4.96 post-intervention for participant 2. All participants rated the I-PCIT intervention as moderate to highly socially valid, indicating that they were overall satisfied with the intervention (*See Table 2*).

Table 2

BIRS Pre- and Post-Treatment Results

Table 2 Continued

	PRE-TREATMENT ACCEPTABILITY FACTOR	POST-TREATMENT ACCEPTABILITY FACTOR	PRE-TREATMENT EFFECTIVENESS FACTOR	POST-TREATMENT EFFECTIVENESS FACTOR	PRE-TREATMENT TIME TO EFFECTIVENESS FACTOR	POST-TREATMENT TIME TO EFFECTIVENESS FACTOR
PARTICIPANT 1	5.50	4.99	5.29	5.71	6.00	6.00
PARTICIPANT 2	5.46	4.96	5.57	4.43	5.50	5.50
PARTICIPANT 3	N/A	N/A	N/A	N/A	N/A	N/A

CHAPTER IV - DISCUSSION

The purpose of this study was to extend recent research by Dufrene et al. (manuscript in progress), by examining the effects of I-PCIT on the extent to which mothers' implemented ECs component of PDI. Dufrene et al. (manuscript in progress) tested the effects of I-PCIT on the PRIDE skills of mothers. Results from Dufrene et al. Indicated that when I-PCIT was implemented, direct observations of mothers' use of PRIDE skills increased substantially and maintained at follow-up.

For this study, the first research question asked whether mothers' use of ECs increased after receiving I-PCIT targeting mother's delivery of ECs. Although there was substantial participant attrition, for mothers that completed baseline and intervention phases, I-PCIT caused substantial increases in mothers' delivery of ECs. Additionally, for the two mothers that completed the maintenance phase, their EC delivery maintained at levels greater than observed during baseline. As a result, findings from this study are consistent with Dufrene et al. (manuscript tin progress) in that I-PCIT can result in mothers increasing their use of positive parenting strategies. Previous studies that employed I-PCIT did not include direct observation of parent's use of PRIDE skills or ECs; rather, those studies simply included indirect data such as data obtained from rating scales.

The second research question asked whether children's behavior improved following an increase in their mothers' use of ECs. Results from this study indicate that as mothers increased their use of EC, their children's behavior improved as evidenced by decreased scores on parent completed ECBIs. For two of the participants, pre-treatment ECBIs resulted in clinically significant problem behaviors; and, at post-treatment scores

decreased to subclinical levels. For the other participant, pre-treatment ratings on the ECBI resulted in a subclinical score, but there was a reduction in the score at post-treatment. Results from this study are consistent with previous I-CPIT studies that have included the ECBI as the primary measure of children's behavior. That is, in those studies, I-PCIT was associated with reductions in parent ratings of their children's problem behaviors.

The third research question asked whether mothers would rate I-PCIT as socially valid. Due to attrition, only two of the three mothers completed pre- and post-treatment BIRS. For those two mothers, their ratings indicated that they perceived IPICT as socially valid. These findings are consistent with findings from Dufrene et al. (manuscript in progress), which also included the BIRS as a measure of social validity. Overall, pre- and post- ratings were not significantly different from each other. Ratings of 5 and above indicate high social validity. All participants in this study rated the I-PCIT intervention as moderate to highly socially valid, indicating that they were overall satisfied with the intervention.

Limitations

Findings from this study are encouraging because these findings indicate that I-PCIT may produce substantial improvements in mothers' use of ECs based on direct observation data, which had not been included in previous I-PCIT studies. Direct observation is the gold standard for behavioral assessment and these data provide important support for further testing of I-PCIT. However, this study is not without limitations. First, this study did not include direct observation of children's compliance before and after their mothers increased use of EC. Although this study does include

ECBI ratings indicating children's behavior improved, there are no direct observation data to substantiate ECBI ratings. Future research should include direct observation data for child compliance. Second, due to substantial attrition, this study only includes limited data demonstrating mothers' maintenance of EC delivery. As a result, readers must withhold judgement on the extent to which I-PCIT produces maintained gains in EC delivery. Future research across multiple studies is needed to provide greater confidence in the extent to which I-PCIT results in maintained use of ECs.

Third, this study includes a limited range of participants in terms of demographic characteristics. As a result, readers must use caution when generalizing results of this study to other participant populations. Future research should include a greater range of participant demographic characteristics in order to increase external validity. For example, future research may include fathers, in addition to mothers, as well as parents from additional racial, ethnic, and SES groups. Finally, although the social validity ratings from the two participants that completed the BIRS indicate that I-PCIT is socially valid, the substantial attrition, which is consistent with previous PCIT research, would indicate that social validity is of concern. Substantial attrition occurred despite intensive follow-up from the researcher and financial incentives for participation. Two parent participants dropped out of the study due to obligations of a new job, thus, their availability changed. One parent participant missed every scheduled appointment and continuously rescheduled meetings in lieu of having open availability and reporting that she was a stay-at-home mom. Another parent participant experienced a loss of job, so there were interruptions in continuous participation in the study.

This study did not include qualitative research in the form of focus groups or follow-up meetings with mothers to obtain their perceptions of how the intervention may be modified to best meet their needs and increase participation. However, anecdotally, some parent participants reported that they wanted additional behavior management strategies and quicker time to intervention instead of extended time through baseline. Future research may include focus groups with a large number of representative parents so that an iterative intervention development process may occur that results in a version of I-PCIT that results in less attrition.

APPENDIX A – Clinical Interview

Clinical Interview

- **Primary Concerns**
    - Reason that family seeking help now
    - What caregivers want from this evaluation
- **Family/Social History**
    - All adults and children living in the home
    - Child's relationship(s) with all caregivers
    - Child's relationship(s) with siblings (and ages of siblings)
    - Family changes, moves custody/visitation arrangements
    - Caregiver support systems: childcare; family activities
- **Developmental Information**
    - Pregnancy and birth (weight, complications, substance exposure, medications)
    - Developmental milestones
        - 0-6 months (sleep, feeding problems, colic)
        - 6-12 months (locomotion)
        - 1-2 years (2-word sentences)
        - 2-3 years (toilet training)
- **School/Daycare**
    - Placement history
    - Behavior, learning, peer problems, special services
    - Current placement (name of school/daycare, teacher)

- **Medical History**
    - Significant accidents, illnesses, allergies
    - Seizures, tics, unusual staring spells
    - Medications (current and past) dosage, effectiveness, problems
    - Treatments/evaluations (developmental testing, counseling, PT, OT, speech)
    - Mental health history of caregivers
    - Difficult family problems (domestic violence, substance use, child welfare contact)
- **Discipline**
    - Methods of discipline used (for each, how often, how effective)
    - Spanking (If caregivers don't mention spanking, ask how often they "have to" spank)

APPENDIX B – ECBI Form

ECBI

Below are a series of phrases that describe children's behaviors. Please (1) circle the number describing *how often* the behavior currently occurs with your child with 1 meaning that it never occurs and 7 meaning it always occurs, and (2) circle "yes" or "no" to indicate whether the behavior is *currently a problem* for you.

		How often does it occur? Never Always							Is this behavior a problem for you?	
1.	Dawdles in getting dressed	1	2	3	4	5	6	7	Yes	No
2.	Dawdles or lingers at mealtime	1	2	3	4	5	6	7	Yes	No
3.	Has poor table manners	1	2	3	4	5	6	7	Yes	No
4.	Refuses to eat food presented	1	2	3	4	5	6	7	Yes	No
5.	Refuses to do chores when asked	1	2	3	4	5	6	7	Yes	No
6.	Slow in getting ready for bed	1	2	3	4	5	6	7	Yes	No
7.	Refuse to go to bed on time	1	2	3	4	5	6	7	Yes	No
8.	Does not obey house rules on his own	1	2	3	4	5	6	7	Yes	No
9.	Refuses to obey until threatened with punishment	1	2	3	4	5	6	7	Yes	No
10.	Acts defiant when told to do something	1	2	3	4	5	6	7	Yes	No
11.	Argues with parents about rules	1	2	3	4	5	6	7	Yes	No
12.	Gets angry when doesn't get his/her way	1	2	3	4	5	6	7	Yes	No
13.	Has temper tantrums	1	2	3	4	5	6	7	Yes	No
14.	Sasses adults	1	2	3	4	5	6	7	Yes	No
15.	Whines	1	2	3	4	5	6	7	Yes	No
16.	Cries easily	1	2	3	4	5	6	7	Yes	No
17.	Yells or screams	1	2	3	4	5	6	7	Yes	No
18.	Hits parents	1	2	3	4	5	6	7	Yes	No
19.	Destroys toys and other objects	1	2	3	4	5	6	7	Yes	No
20.	Is careless with toys and other objects	1	2	3	4	5	6	7	Yes	No
21.	Steals	1	2	3	4	5	6	7	Yes	No
22.	Lies	1	2	3	4	5	6	7	Yes	No
23.	Teases or provokes other children	1	2	3	4	5	6	7	Yes	No
24.	Verbally fights with friend his/her own age	1	2	3	4	5	6	7	Yes	No
25.	Verbally fights with sisters and brothers	1	2	3	4	5	6	7	Yes	No
26.	Physically fights with friends his/her own age	1	2	3	4	5	6	7	Yes	No
27.	Physically fights with brothers and sisters	1	2	3	4	5	6	7	Yes	No
28.	Constantly seeks attention	1	2	3	4	5	6	7	Yes	No
29.	Interrupts	1	2	3	4	5	6	7	Yes	No
30.	Is easily distracted	1	2	3	4	5	6	7	Yes	No
31.	Has short attention span	1	2	3	4	5	6	7	Yes	No
32.	Fails to finish tasks or projects	1	2	3	4	5	6	7	Yes	No
33.	Has difficulty entertaining him/herself	1	2	3	4	5	6	7	Yes	No

APPENDIX C – DPICS Coding Sheet

The DPICS Coding Sheet

Subject #: _____ Date:_____ Observer:_____

Child's Name: _____ Parent: ❑ Mother ❑ Father ❑ Other: _____

Situation: ❑ CLP ❑ PLP ❑ CU Observation ID#: _____

PARENT BEHAVIOR	TALLY	CHILD BEHAVIOR	TALLY
Direct Commands (DC) followed by:		Negative Talk (NTA)	
		Prosocial Talk (PRO)	
Compliance (CO)			
Noncompliance (NC)		Question (QU)	
No Opportunity (NOC)		Command (CM)	
Indirect Commands (IC) followed by:			
		Whine (WH)	
Compliance (CO)		Yell (YE)	
Noncompliance (NC)			
No Opportunity (NOC)		Positive Touch (PTO)	
Information Questions (IQ) followed by:		Negative Touch (NTO)	
		Other (specify)	
Answer (AN)			
No Answer (NA)			
No Opportunity (NOA)			
Descriptive/Reflective Questions (DQ)		Notes:	
Behavioral Descriptions (BD)			
Reflections (RF)			
Labeled Praise (LP)			
Unlabeled Praise (UP)			
Neutral Talk (TA)			
Negative Talk (NTA)			
Positive Touch (PTO)			
Negative Touch (NTO)			

Video Coding					
Trial	Commands	Statements	Child Compliance	Praise	Parent Percentage
	Direct (D) or Indirect (I)	*Negatively (N) or Positively (P)*	*Yes (Y) or No (N)*	*No (X), Unlabeled (U), Labeled (L), No Opportunity (NO)*	$x/3$
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
Totals		Child:		Parent:	
Percentage		Child Percentage $x/10$		Parent Percentage $x/10$	

APPENDIX D – DPICS Codes

DPICS-III Codes

Direct Command	**DC**
Indirect Command	**IC**
No Opportunity	**NOC**
Comply	**CO**
Noncomply	**NC**
Labeled Praise	**LP**
Unlabeled Praise	**UP**

APPENDIX E – BIRS (Pre-Treatment)

Behavior Intervention Rating Scale (BIRS; Elliot and Von Brock Treuting, 1991)
1=Strongly Disagree 2=Disagree 3=Slightly Disagree 4=Slightly Agree 5=Agree 6=Strongly Agree

1.	This would be an acceptable intervention for my child.	1	2	3	4	5	6
2.	Most parents would find this intervention appropriate for behavior problems in addition to the one described.	1	2	3	4	5	6
3.	The intervention should prove effective in changing my child's behavior.	1	2	3	4	5	6
4.	I would suggest the use of this intervention to other parents.	1	2	3	4	5	6
5.	My child's behavior is in need of this intervention.	1	2	3	4	5	6
6.	Most parents would find this intervention suitable for their child's behavior.	1	2	3	4	5	6
7.	I would be willing to use this in my home.	1	2	3	4	5	6
8.	The intervention would *not* result in negative side-effects for my child.	1	2	3	4	5	6
9.	The intervention would be an appropriate intervention for a variety of children.	1	2	3	4	5	6
10.	These parenting techniques are consistent with those I have used I have used in before the program.	1	2	3	4	5	6
11.	The intervention is a fair way to handle my child's behavior.	1	2	3	4	5	6
12.	This intervention is reasonable for the my child's behavior.	1	2	3	4	5	6
13.	I like the procedures used in this intervention.	1	2	3	4	5	6
14.	This intervention is a good way to handle my child's behavior.	1	2	3	4	5	6
15.	Overall, this intervention would be beneficial for my child.	1	2	3	4	5	6

Behavior Intervention Rating Scale (BIRS; Elliot and Von Brock Treuting, 1991)
1=Strongly Disagree 2=Disagree 3=Slightly Disagree 4=Slightly Agree 5=Agree 6=Strongly Agree

16.	This intervention would quickly improve my child's behavior.	1	2	3	4	5	6
17.	This intervention would produce a lasting improvement in my child's behavior.	1	2	3	4	5	6
18.	This intervention would improve my child's behavior to the point that their behavior would not noticeably differ from other children's behavior.	1	2	3	4	5	6
19.	Soon after using this intervention, others would notice a positive change in my child's behavior.	1	2	3	4	5	6
20.	My child's behavior will remain at an improved level even after this intervention is discontinued.	1	2	3	4	5	6
21.	Using the intervention should not only improve my child's behavior at home, but also in other settings (e.g., grocery store, park).	1	2	3	4	5	6
22.	When comparing my child with a well-behaved peer before and after the use of this intervention, my child's and the peer's behavior would be more alike after using this intervention.	1	2	3	4	5	6
23.	This intervention should produce enough improvement in my child's behavior so their behavior no longer is a problem at home.	1	2	3	4	5	6
24.	Other behaviors related to my child's problem behaviors also are likely to be improved by this intervention.	1	2	3	4	5	6

APPENDIX F – BIRS (Post-Treatment)

Behavior Intervention Rating Scale (BIRS; Elliot and Von Brock Treuting, 1991)
1=Strongly Disagree 2=Disagree 3=Slightly Disagree 4=Slightly Agree 5=Agree 6=Strongly Agree

1.	This was he an acceptable intervention for my child.	1	2	3	4	5	6
2.	Most parents would find this intervention appropriate for behavior problems in addition to the one described.	1	2	3	4	5	6
3.	The intervention proved to be effective in changing my child's behavior.	1	2	3	4	5	6
4.	I would suggest the use of this intervention to other parents.	1	2	3	4	5	6
5.	My child's behavior was in need of this intervention.	1	2	3	4	5	6
6.	Most parents would find this intervention suitable for their child's behavior.	1	2	3	4	5	6
7.	I am willing to use this in my home.	1	2	3	4	5	6
8.	The intervention did *not* result in negative side-effects for my child.	1	2	3	4	5	6
9.	The intervention would be an appropriate intervention for a variety of children.	1	2	3	4	5	6
10.	These parenting techniques were consistent with those I had used before the program.	1	2	3	4	5	6
11.	The intervention was a fair way to handle my child's behavior.	1	2	3	4	5	6
12.	This intervention was reasonable for my child's behavior.	1	2	3	4	5	6
13.	I liked the procedures used in this intervention.	1	2	3	4	5	6
14.	This intervention was a good way to handle my child's behavior.	1	2	3	4	5	6
15.	Overall, this intervention was beneficial for my child.	1	2	3	4	5	6

Behavior Intervention Rating Scale (BIRS; Elliot and Von Brock Treuting, 1991)

1=Strongly Disagree 2=Disagree 3=Slightly Disagree 4=Slightly Agree 5=Agree 6=Strongly Agree

16.	This intervention quickly improved my child's behavior.	1	2	3	4	5	6
17.	This intervention produced a lasting improvement in my child's behavior.	1	2	3	4	5	6
18.	This intervention improved my child's behavior to the point that their behavior did not noticeably differ from other children's behavior.	1	2	3	4	5	6
19.	Soon after using this intervention, others noticed a positive change in my child's behavior.	1	2	3	4	5	6
20.	My child's behavior has remained at an improved level even after this intervention was discontinued.	1	2	3	4	5	6
21.	Using the intervention not only improved my child's behavior at home, but also in other settings (e.g., grocery store, park).	1	2	3	4	5	6
22.	When comparing my child with a well-behaved peer before and after the use of this intervention, my child's and the peer's behavior were more alike after using this intervention.	1	2	3	4	5	6
23.	This intervention produced enough improvement in my child's behavior so their behavior is no longer a problem at home.	1	2	3	4	5	6
24.	Other behaviors related to my child's problem behaviors were improved by this intervention.	1	2	3	4	5	6

PARENT-DIRECTED INTERACTION
PDI TEACHING SESSION
Expanded Outline

Before Session

1. When scheduling, tell parent that the child does not need to attend this session.
2. Carefully review again all data from the original assessment session, especially the interview, so that you recall the original presenting problems and the parents' DPICS skills and discipline methods for use in tailoring training examples to the family.
3. Have parents complete the ECBI in the waiting room.
4. Materials needed: ECBI, **Time Out Diagram, "Eight Rules of Effective Commands in PDI" handout, "Using a Time-Out Room in your Home" Handout,** CDI Homework Sheets, Progress Note, Integrity Checklist, ECBI Change Over Course of Treatment

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Goals of this Session

- Teach the parent(s) all of the steps of the PDI and the rationale for each step
- Provide them with a clear understanding of differences in the initial PDI practice sessions and its application after the parents and child have learned it.

Note. In each session, be alert for parent expressions of personal distress. These may occur during the initial homework discussion, or during discussion at the end of the session. In each session, it is important to spend a small amount of time (< 5 min) attending to parent personal stressors. Use facilitative listening skills to express concern.
For integrity check:

❑ Discussed or **inquired about issue unrelated to child behavior**

TREATMENT SESSION OUTLINE

❑ **1. Review homework** from previous week briefly.

❑ **2. Explain how PDI will be taught**

Today the important steps of the PDI will be explained and demonstrated, and we will role-play the steps.

At the end of the session we will give you a handout that outlines all of the steps, so you can read them over throughout the week.

You will not actually use the PDI procedure with your child until next week in session when we can coach you through it so it will go exactly right the first time you use it with [child's name]

❑ **3. Present overview of Parent Directed Interaction (PDI)**

- Unlike CDI, which is 5 minutes a day, you will eventually use PDI only when you need to have your child to do what you say. The PDI will begin with a command and will end when you praise your child for minding.
- PDI includes a step-by-step discipline method that emphasizes ***consistency, predictability, and following through.***

GIVING A COMMAND

❑ **4. PDI starts with a command**, so we are going to talk first about the kinds of commands that are most effective with children.

❑ **5. Commands should be direct rather than indirect**

- A direct command should make it absolutely clear to the child that s/he is being told to do something
  - It should not be stated as a question, which could suggest that the child has a choice about obeying it
    - ⇒ Example: "Please sit down," instead of "Would you like to sit down?"
- A direct command should make it clear that the child is the one expected to do the task, not the parent or both parent and child.
  - ⇒ Example: "Put the puzzle away" instead of "Let's put the puzzle away."

❑ **6. Commands should be stated positively**

- The command should tell the child what to do instead of what not to do
- It is often possible to stop a negative behavior by telling a child to do a positive opposite
  - ⇒ Example: Instead of "Stop running around," say, "Please sit beside me."
- Telling a child not to do something is a criticism of his or her behavior

❑ **7. Commands should be given one at a time**

- Break tasks down into one thing at a time
  - ⇒ Example: Instead of "Put the cars in the box and close it and put the box on the shelf," say "Put the red car in the box."
- It is hard for young children to remember more than one command at a time
- Big commands like "Clean up the playroom"; also contain a string of commands that are hidden – it could mean, "Pick up the crayons from the floor, put the crayons in their box, and put the box on the shelf.
- Children must be praised after every command they obey. If commands are strung together, especially if they are hidden, it is hard to know when a command has been obeyed and when to praise.
- Avoid using the child's name before a command (e.g., "Sam, put this here."). That is really adding an extra, indirect command at the beginning of the direct command that means "Look at me" or "Pay attention and listen to what I am going to say." If the child doesn't obey this extra command, parents find themselves getting tense.

❑ **8. Commands should be specific**

- Commands should tell the child exactly what you want him or her to do.
  - ⇒ Examples: "Get down off the table. Please hand me the gum. Use your quiet voice."
- Vague commands, like "Be careful," "Settle down," or "Watch out," are so nonspecific that a child does not know exactly what you want him or her to do.
- It isn't fair to tell a child to do something he or she may not understand.

❑ **9. Commands should be age-appropriate**

- A child must be able to understand the command and be able to do it.
  - Commands should use simple words
  - Commands should require behavior the child is physically able to do
    - ⇒ Example: Instead of "Put the azure BMW in the container, say "Put the blue car in this box."
    - ⇒ Example: (with a 2-year-old) Stay inside the lines when you color that house.
- If children are unable to do a task, they sometimes pretend they don't want to obey.
- If children are unable to obey, they may be unfairly punished for disobeying.
- To be fair in disciplining, you must be sure your child can understand what you tell him or her to do.

❑ **10. Commands should be given politely and respectfully.**

- Commands should be given in a normal tone of voice
  - A friendly but matter-of-fact tone increases the chance that your child will listen.
  - One good way to start a command is with the word, "Please."
- Commands should not be yelled or harsh or sarcastic
- Respectful commands prevent your child learning to obey only if yelled at.
  - Teaching children to obey polite commands prepares them for obeying the teachers' directions at school

❑ **11. Commands should be explained before they are stated, or after they are obeyed**

- It is important to give children the reason they need to do what you have told them to do – children learn social behavior by being told why they should do certain things.
- **The timing of reason is critical**
  - The reason should not be given between the command and the obey
  - Children are usually not paying attention to reasons at this time, especially if they do not want to obey
  - A reason at this time also interferes with compliance because the child may be distracted and forget what the command was
  - If children show negative behavior (e.g., whining, "why") to avoid obeying a command, a reason right then will give attention to the problem behavior (disobeying) rather than obeying

- **Setting up a command with a reason increases the chance it will be obeyed**
  - Example: If you are playing cars with your child and suddenly say, Please put the cars away," that command may be less effective than saying while playing, "I just realized that we have to meet Dad for dinner now. Please put the cars away."
- **Children listen to reasons given with praise for obeying**
  - Children like to hear reasons for why their behavior is good
  - Children believe reasons for why their behavior is good
  - Reasons give children extra attention for obeying
  - Reasons combine easily with praise and add genuineness to praise
  - Example: (child obeys command to pick up crayon from floor). "Thank you for picking up the crayon. Now we won't accidentally step on it and break it.

❑ **12. Commands should be used only when necessary**

- At first, when you are teaching your child to listen and mind you, the commands in the practice session are necessary so that you both can practice with easy commands
  - What is important now is <u>not</u> that he put the fireman in the truck, but that he listens and obeys you when you tell him to do something.
- Too many commands will frustrate a child and create negative feelings.
- When you give a direct command, you MUST follow through in order to teach your child to obey you.
- Many things we ask children to do may not be too important – and we can let them have choices. (Do you want to come here and listen to a story?)
- If a command is not important enough to follow through, it should not be given as a command.
- If a command is important, stating it as a direct command will help the child to know that it is important.

AFTER A COMMAND

❑ **13. Ask the parents to think of all the possible ways their child could respond to a command,** and reinterpret these to the parent in terms of either compliance or noncompliance.

❑ **14.** Give an example of dawdling and ask the parent how they could decide whether the child is obeying or not.

- **Explain the five-second rule for dawdling**

  "When your child is dawdling, you must decide if s/he is making a move toward obeying (If the child immediately obeys or disobeys, this rule doesn't apply – the consequence is clear). While you are trying to decide, say nothing to the child, and silently count to 5 in your head – if the child still hasn't obviously started obeying by the end of the 5 seconds, that is a disobey."

  - Explain that the parent **must not repeat the command** and **must not say anything** until the child either obeys or disobeys

PRAISE

❑ **15. Ask the parents what they would do if their child obeyed right away.**

As soon as the parents say they would give a labeled praise (if they need help coming to that solution, guide them to it), enthusiastically agree!

Give examples that emphasize praise for **compliance**, such as, "Great job of minding so quickly" and "I like it when you do what I tell you" and "Good listening!"

WARNING

❑ **16.** Instruct the parent to give **the chair warning** if the child disobeys

"If you don't (INSERT COMMAND) you're going to have to sit on the chair."

- Explain why parents need to use these **exact words** every time.
- Use the **5-second dawdling rule** again after the warning, as needed.
- Explain that the parent **must not repeat the warning** and **must not say anything** until the child either obeys or disobeys the warning

PRAISE

❑ **17. Ask parents what they would do if the child obeyed the warning**

- If parents do not say to give labeled praise, spend some time talking about why labeled praise is important after the child obeys, even if the warning-reminder was needed.

❑ **36. Role-play with each parent** (lead therapist coaches parent, parent goes through procedure with co-therapist playing the child role: If only one therapist, the therapist both coaches and plays the child role at the same time}

- Child obeys right away
- Child requires a warning
- Child disobeys the warning
- Child agrees after three minutes
- Child on chair refuses to comply after 3 minutes is up
- Child gets off chair before parent gives permission

❑ **37.** Tell parent that when practicing PDI, the parent must always **switch back to CDI for at least 20 seconds after the child obeys a command** before starting a new command.

❑ **39. Remind parents NOT to begin using PDI at home during the next week**

- It is important that it go perfectly the first time
- We will coach you through it the first time in the lab here next week

❑ **38. Give parents PDI Diagram, Effective Command Rules, and Using a Time-out Room in your Home handouts for review only**

- Briefly describe handouts to parents
- Encourage parents to read over the handouts during the week in preparation for the first PDI coach session
- Suggest that parents think about where in their house they will place their time-out chair and what room they will use for the time-out room

❑ **40. Ask parents to try to learn PDI Diagram by heart to help them feel more confident,** but assure them that we will coach them before every step, so they won't even have a chance to show us how well they know it

❑ **41. Prepare parents to schedule extra time for the next session**

- The session will probably end on time, but it will not end until the child has obeyed the last command given
- Occasionally it has taken as long as two hours for a child to decide to obey
- Consistency is not convenient at first, but that is when it is most critical

❑ **42. Let parents know that you will explain the PDI procedure to their child** at the beginning of the next session -- or that they can explain it if they'd prefer.

❑ **43. Give CDI homework sheet to each parent**

- Emphasize the importance of daily CDI, especially this week just before starting PDI
- With sophisticated parents, you can explain that "Time out from positive reinforcement" is only effective if the interaction IS positive reinforcement for the child.

APPENDIX H – Eight Rules of Effective Commands in PDI

Eight Rules of Effective Commands in PDI

RULE	REASON	EXAMPLES
1. *Commands should be direct rather than indirect.*	• Leaves no question that the child is being told to do something. • Does not imply a choice, nor suggest that the parent might do the task for the child. • *Reduces confusion for the young children.*	• Please hand me the block. • Put the train in the box. • Draw a circle. ***Instead of*** o Will you hand me the block? o Let's put the train in the box. o Would you like to draw a circle?
2. *Commands should be positively stated.*	• Tells child what to do rather than what not to do. • Avoids criticism of the child's behavior • Provides a clear statement of what the child can or should do.	• Come sit beside me. ***Instead of*** o Don't run around the room! • Put your hands in your pocket. ***Instead of*** o Stop touching the crystal.
3. *Commands should be given one at a time.*	• Helps child to remember the whole command. • *Helps parent to determine if child completed entire command.*	• Put your shoes in the closet. ***Instead of*** o Put your shoes in the closet, take a bath, and brush your teeth. • Put your shirt in the hamper. ***Instead of*** o Clean your room.
4. *Commands should be specific rather than vague.*	• Permits children to know exactly what they're supposed to do.	• Get down off the chair ***Instead of*** o Be careful. • Talk in a quiet voice. ***Instead of*** o Behave!

EFFECTIVE COMMANDS (continued)

RULE	*REASON*	*EXAMPLES*
5. *Commands should be age-appropriate.*	• Makes it possible for children to understand the command and be able to do what they are told to do.	• Put the blue Lego in the box. ***Instead of*** o Change the location of the azure plastic block from the floor to its container. • Draw a square. ***Instead of*** o Draw a hexagon.
6. *Commands should be given politely and respectfully*	• Increases the likelihood that the child will listen better. • Teaches children to obey polite and respectful commands. • Avoids child learning to obey only if yelled at. • Prepares child for school.	• Child: (banging block on table). Parent: (in a normal tone of voice) Please hand me the block. ***Instead of*** o Parent: (said loudly) Hand me that block this instant!
7. *Commands should be explained before they are given or after they are obeyed.*	• Avoids encouraging child to ask "why" after a command as a delay tactic. • Avoids giving child attention for not obeying.	o Parent: Go wash your hands. Child: Why? Parent: (ignores, or uses time-out warning if child disobeys). ***Instead of*** ▪ Child: (obeys). Parent: Now your hands look so clean! It is good to be clean when you go to school.
8. *Commands should be used only when necessary.*	• Decreases the child's frustration (and the amount of time spent in the time-out chair).	(Child is running around) • Please sit in this chair. (Good time to use command) ***Instead of*** o Please hand me my glass from the counter. (Not a good time to use a *direct command)*

APPENDIX I – Intake Procedural Integrity

Procedural Integrity Checklist for Intake Session

Parent Participant: _____ Child Participant: _____

Session: _____ Date: _____ (e.g., 1) **Observer 1: _____**
Observer 2: _____ Observer 3: _____

As you view the session, place a checkmark or an "x" under the appropriate column. List these totals in the appropriate blanks below the table.

Task	Completed	N/A	Did not complete
Researcher gave overview and format of research project to parent participant			
Researcher administered intake questionnaire to			
Researcher obtained parent participant demographic information			
Researcher administered BIRS questionnaire to parent participant			
Researcher sent parent participant BESS questionnaire electronically or mailed			
Totals	**/5 =**		

APPENDIX J – Baseline Procedural Integrity

Procedural Integrity Checklist for Baseline Sessions

Parent Participant: _____ Child Participant: _____

Session: _____ Date: _____ (e.g., 1) **Observer 1: _____**
Observer 2: _____ Observer 3: _____

As you view the tape, place a checkmark or an "x" under the appropriate column. List these totals in the appropriate blanks below the table.

Task	Completed	N/A	Did not complete
Unobstructed view of participants			
Ensure that the room is set up with toys/activity			
Ensure microphone and headphones have audio			
5 minutes of continuous play			
Refrain from implementing treatment procedures			
Totals	**/5 =**		

APPENDIX K – Teach Session Treatment Integrity

Treatment Integrity Checklist for PDI Teach Session

Parent Participant: _____ Child Participant: _____

Session: _____ Date: _____ (e.g., 1) **Observer 1: _____**
Observer 2: _____ Observer 3: _____

As you view the session, place a checkmark or an "x" under the appropriate column. List these totals in the appropriate blanks below the table.

Task	Completed	N/A	Did not complete
Researcher held discussion about stressors unrelated to child participant's behavior with Parent participant			
Researcher gave overview and format of PDI teach session			
Researcher taught parent participant effective commands and praise for compliance			
Researcher taught parent participant 5-second rule for dawdling			
Researcher gave parent participant video examples and held discussion			
Researcher gave parent participant handouts			
Totals	**/6 =**		

APPENDIX L – Coach Session 1 Treatment Integrity

Treatment Integrity Checklist for PDI Coach Session 1

Parent Participant: _____ Child Participant: _____

Session: _____ (e.g., 1) **Date: _____ Observer 1: _____**
Observer 2: _____ Observer 3: _____

As you view the session, place a checkmark or an "x" under the appropriate column. List these totals in the appropriate blanks below the table.

Task	Completed	N/A	Did not complete
Researcher gave overview of session			
Researcher gave corrective feedback to parent participant for incorrect administration of Effective Command (ex., parent providing indirect commands)			
Researcher taught parent participant to introduce PDI to the child participant			
Researcher gave corrective feedback to parent participant for omitted praise when child participant complies with command			
Researcher reviewed ECBI graph			
Researcher provided homework			
Totals	**/6 =**		

APPENDIX M – Coach Session 2 Treatment Integrity

Treatment Integrity Checklist for PDI Coach Session 2

Parent Participant: _____ Child Participant: _____

Session: _____ (e.g., 1) **Date: _____ Observer 1: _____**
Observer 2: _____ Observer 3: _____

As you view the session, place a checkmark or an "x" under the appropriate column. List these totals in the appropriate blanks below the table.

Task	Completed	N/A	Did not complete
Researcher gave overview of session			
Researcher reviewed homework			
Researcher discussed labeled praise with parent participant			
Researcher gave corrective feedback to parent participant for incorrect administration of Effective Command (ex., parent providing indirect commands)			
Researcher gave corrective feedback to parent participant for omitted praise when child participant complies with command			
Researcher reviewed ECBI graph			
Researcher provided homework			
Totals	**/7 =**		

APPENDIX N – Coaching Session 3 Treatment Integrity

Treatment Integrity Checklist for PDI Coach Session 3

Parent Participant: _____ Child Participant: _____

Session: _____ (e.g., 1) **Date: _____ Observer 1: _____**
Observer 2: _____ Observer 3: _____

As you view the session, place a checkmark or an "x" under the appropriate column. List these totals in the appropriate blanks below the table.

Task	Completed	N/A	Did not complete
Researcher gave overview of session			
Researcher reviewed homework			
Researcher gave corrective feedback to parent participant for incorrect administration of Effective Command (ex., parent providing indirect commands)			
Researcher gave corrective feedback to parent participant for omitted praise when child participant complies with command			
Researcher reviewed ECBI graph			
Researcher discussed generalization and provided resources			
Researcher gave overview of next session			
Totals	**/7 =**		

APPENDIX O – Play Session Treatment Integrity

Treatment Integrity Checklist for PDI Play Sessions

Parent Participant: _____ Child Participant: _____

Session: _____ (e.g., 1) **Date: _____ Observer 1: _____**
Observer 2: _____ Observer 3: _____

As you view the session, place a checkmark or an "x" under the appropriate column. List these totals in the appropriate blanks below the tablet.

Task	Completed	N/A	Did not complete
Unobstructed view of participants			
Set up room with toys/activity			
5 minutes of continuous play			
Parent participant delivered EC			
Parent participant delivered labeled praise when appropriate			
Totals	**/5 =**		

APPENDIX P – Follow-Up Session Procedural Integrity

Procedural Integrity Checklist for Follow-Up Session

Parent Participant: _____ Child Participant: _____

Session: _____ Date: _____ (e.g., 1) **Observer 1: _____**
Observer 2: _____ Observer 3: _____

As you view the session, place a checkmark or an "x" under the appropriate column. List these totals in the appropriate blanks below the table.

Task	Completed	N/A	Did not complete
Researcher gave overview of session			
Researcher held discussion			
Researcher asked parent participant to complete ECBI questionnaire			
Researcher reviewed homework			
Researcher reviewed PDI			
Researcher reviewed ECBI graph			
Researcher provided or arranged for providing resources to parent participant			
Researcher gave overview of next session			
Totals	**/8 =**		

APPENDIX Q – Maintenance Session Procedural Integrity

Procedural Integrity Checklist for Maintenance Sessions

Parent Participant: _____ Child Participant: _____

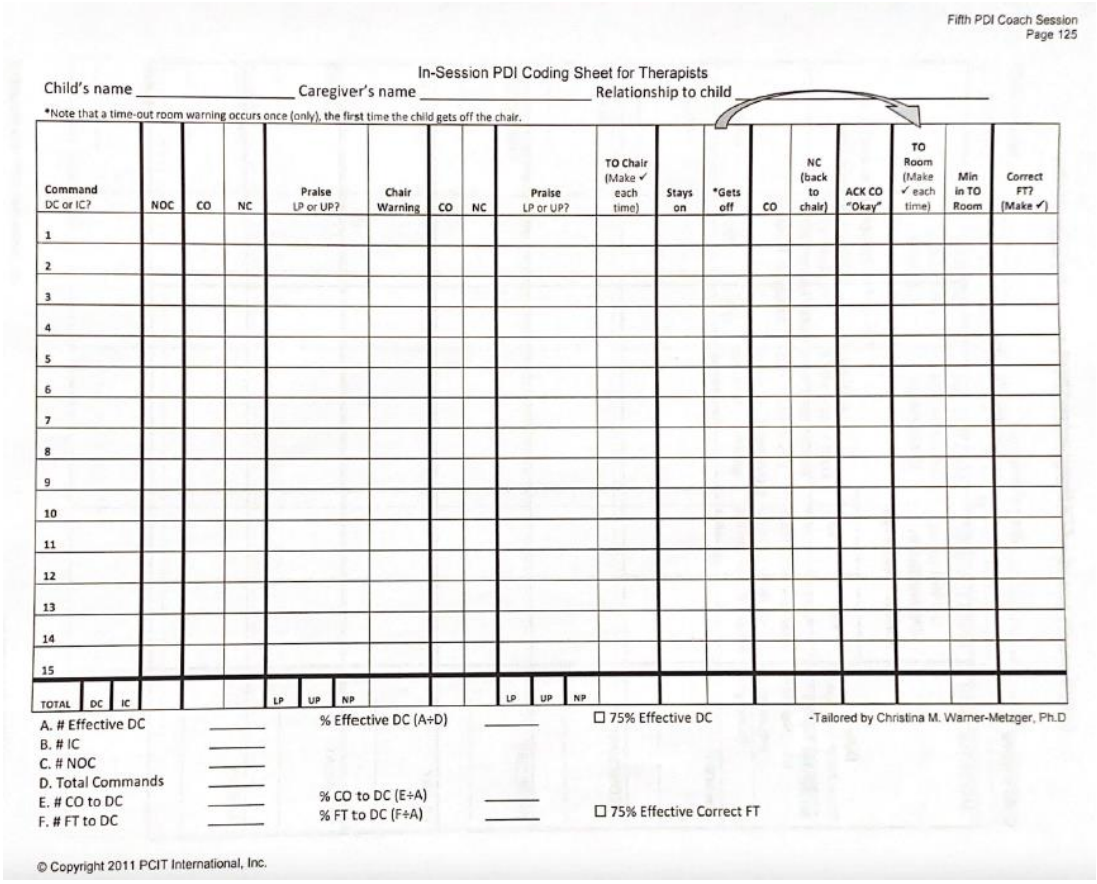
Session: _____ Date: _____ (e.g., 1) **Observer 1: _____**
Observer 2: _____ Observer 3: _____

As you view the tape, place a checkmark or an "x" under the appropriate column. List these totals in the appropriate blanks below the table.

Task	Completed	N/A	Did not complete
Unobstructed view of participants			
Ensure that the room is set up with toys/activity			
Ensure microphone and headphones have audio			
5 minutes of continuous play			
Refrain from implementing treatment procedures			
Totals	**/5 =**		

APPENDIX R – In-Session PDI Coding Sheet *

**Chair Warning, TO Chair, and TO Room omitted for purposes of this study*



Fifth PDI Coach Session
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In-Session PDI Coding Sheet for Therapists

Child's name _____ Caregiver's name _____ Relationship to child _____

*Note that a time-out room warning occurs once (only), the first time the child gets off the chair.

Command DC or IC?	NOC	CO	NC	Praise LP or UP?	Chair Warning	CO	NC	Praise LP or UP?	TO Chair (Make ✓ each time)	Stays on	*Gets off	CO	NC (back to chair)	ACK CO "Okay"	TO Room (Make ✓ each time)	Min in TO Room	Correct FT? (Make ✓)
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	
TOTAL DC IC				LP UP NP				LP UP NP									

A. # Effective DC _____ % Effective DC (A÷D) _____ ☐ 75% Effective DC

B. # IC _____

C. # NOC _____

D. Total Commands _____

E. # CO to DC _____ % CO to DC (E÷A) _____

F. # FT to DC _____ % FT to DC (F÷A) _____ ☐ 75% Effective Correct FT

-Tailored by Christina M. Warner-Metzger, Ph.D

Parent Directed Interaction
First PDI Homework Assignment

Directions

Begin this practice session right at the end of your 5-minute CDI practice (**as long as you have time to follow-through if you need to**). These PDI practice sessions should last 10 minutes, unless your child has to go to time-out.

If your child has to go to time-out, you must follow-through with the last command you gave. As soon as the time-out is over and you have praised your child for obeying the last command, switch back to CDI for two minutes before ending the practice session.

Here is how you can introduce your child to PDI practice at home the first few times you practice

"Our special time was fun! Now we are going to practice listening and minding. I'm going to tell you lots of little things to do like "hand me a block" or "draw with the red crayon." It is very important for you to listen and mind quick-like-a-rabbit. If you mind quick-like-a-rabbit, I will be very proud of you, and we can keep playing. If you don't mind, you will have to go to time out.

"If you go to time-out, you will have to sit there until I say you can get off. You will need to sit quiet-like-a-mouse. If you are not quiet-like-a-mouse, you will have to stay there longer.

"You have to stay on the time-out chair until I say you can get off, and you will have to mind. If you get off the time-out chair before I say you can, then you will have to go to the time-out room."

"I think that you will listen and mind. Remember, if you mind quick-like-a-rabbit, we can keep playing together. . If not, you will have to go to time-out and sit quiet-like-a-mouse. You will still have to listen and mind after time-out. I think that you will be a great listener. Now we can play with any of these toys."

APPENDIX T – PDI Practice Log

PDI Practice Log Sheet

Child's name _____ Caregiver's name _____

Date	Did you practice PDI for 5 minutes in a play session? Place a check mark (√)	Comments
Example: Tuesday 12/06/22	*√*	*Practice went well at first, but Terreca didn't listen when I asked her to clean up.*
Sunday _____		
Monday _____		
Tuesday _____		
Wednesday _____		
Thursday _____		
Friday _____		
Saturday _____		

Setting Up House Rules

What kinds of behaviors may need a house rule?

- Behaviors that are aggressive
  Your son hits you when you don't give him what he wants
- Behaviors that are destructive
  Your daughter throws toys when she's angry
- Negative behaviors that happen "all of a sudden," before you have a chance to give a command for a "positive opposite" behavior
  Your daughter yells at her baby brother and frightens him when he gets in her way
- "Sneaky" behaviors that you don't discover until after they have happened
  Your son repeatedly eats the desserts in the refrigerator prepared for dinner guests

How to set up a house rule

1. Decide what behavior you want your child to stop
   Example: Saying mean things to her sister, like "I hate you," or "You're ugly"
2. Choose a word for the behavior that your child understands
   Example: "Picking on your sister"
3. If you're not sure your child knows what you mean, label the behavior for 2 or 3 days before you start giving time outs for it
   Example: "When you say things like that, that's picking on your sister."

4. Explain the new house rule to your child
   "You've been nice to your sister this morning, and I like that. But sometimes you forget. I am starting a new house rule to help you remember. It goes like this, "Any time you pick on your sister, you'll have to go to the timeout chair. But if you remember to be nice to your sister, like this morning, you won't have to go to the chair."

How to use the house rule

- Your child does **not** get a warning if he breaks a house rule - If he does the problem behavior, take him immediately to the timeout chair for 3 minutes plus 5 seconds of quiet
- Take your child to the chair **every time** he does the behavior.
- On the way to the chair, say nothing except, "You [picked on your sister], so you have to sit on the timeout chair." When you leave, say only "Stay on the chair until I say that you can get off."
- If your child gets off the chair, take him to the timeout room for 1 minute plus five seconds of quiet.
- After your child's time in the room is up, take him back to the timeout chair for 3 minutes plus 5 seconds of quiet. When you leave, say only "Stay on the chair until I say that you can get off."
- After your child's time on the chair is up, say, "You can get off of the chair now." Do not give a command or discuss the bad behavior.
- As soon as possible, praise the "good opposite."
  "You're being so nice to your sister. She thinks you are the best big brother in the world."

To begin another house rule

- You may begin a new house rule after your child is going to time out less than twice a day for the first rule. When this happens, that first rule is no longer an "active" house rule. It is still a house rule, though, and your child should still go to timeout when he breaks it.

- Your child should have not more than two "active" house rules at a time.

APPENDIX V - IRB Approval Letter

Office *of*
Research Integrity

THE UNIVERSITY OF SOUTHERN MISSISSIPPI

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NOTICE OF INSTITUTIONAL REVIEW BOARD ACTION

The project below has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services regulations (45 CFR Part 46), and University Policy to ensure:

- The risks to subjects are minimized and reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered involving risks to subjects must be reported immediately. Problems should be reported to ORI via the Incident submission on InfoEd IRB.
- The period of approval is twelve months. An application for renewal must be submitted for projects exceeding twelve months.

PROTOCOL NUMBER:	22-1290
PROJECT TITLE:	Parent Training via Tele-health
SCHOOL/PROGRAM	Psychology
RESEARCHERS:	PI: Brad Dufrene Investigators: Dufrene, Brad~
IRB COMMITTEE ACTION:	Approved
CATEGORY:	Expedited Category
PERIOD OF APPROVAL:	30-Aug-2022 to 29-Aug-2023

Donald Sacco Jr.

Donald Sacco, Ph.D.
Institutional Review Board Chairperson

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