FIVE DAY ABBREVIATED INTENSIVE PARENT-CHILD INTERACTION THERAPY FOR FAMILIES WITH PRESCHOOL AGE CHILDREN WITH DISRUPTIVE BEHAVIOR PROBLEMS

By

COURTNEY A. LEWIS

A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA 2010
For my husband Jeremy and newborn son Connor. Thank you for giving me two wonderful reasons to complete what I started.
ACKNOWLEDGEMENTS

I thank Stephen Boggs, Ph.D., my chair, for his expertise and support during the design, study execution, and writing processes. I also thank Sheila Eyberg, Ph.D., Russell Bauer, Ph.D., David Janicke, Ph.D., and Tina Smith-Bonahue, Ph.D. for their willingness to serve on my supervisory committee and give of their time during the experience.

A special thank you to the undergraduate student members, graduate student members, and postdoctoral fellow in the Child Study Laboratory who all willingly gave of their DPICS coding skills, therapeutic expertise, and support during the execution of this study. Without their help this project would have been impossible to complete.

To my family, I will forever appreciate the love and patience you shared with me during this process. Thank you for your support and encouragement, especially when days grew hairy.
TABLE OF CONTENTS

ACKNOWLEDGEMENTS .............................................................................................................4

LIST OF TABLES ...........................................................................................................................7

LIST OF FIGURES .........................................................................................................................8

LIST OF ABBREVIATIONS ..........................................................................................................9

ABSTRACT ...................................................................................................................................10

CHAPTER

1 INTRODUCTION ..................................................................................................................12

Comparing Abbreviated Interventions to their Longer Counterparts.....................................14
Issues in Terminology and Research Design ..........................................................................17
Standard Parent-Child Interaction Therapy ............................................................................19
Adaptations of Parent-Child Interaction Therapy ...................................................................20
Current Study Aims and Hypotheses......................................................................................21

2 METHOD ...............................................................................................................................24

Participants .............................................................................................................................24
Parent-Child Dyads Inclusion Criteria ............................................................................24
Parent-Child Dyads Exclusion Criteria ...........................................................................24
Recruitment .....................................................................................................................24
Included Parent–Child Dyads ..........................................................................................25
Therapists and Assessors ........................................................................................................27
Therapists ........................................................................................................................27
Assessors .........................................................................................................................27
Measures .................................................................................................................................28
Experimental Design .............................................................................................................31
Study Procedures ....................................................................................................................32
Day 1 ...............................................................................................................................34
Day 2 ...............................................................................................................................34
Day 3 ...............................................................................................................................34
Day 4 ...............................................................................................................................34
Day 5 ...............................................................................................................................35

3 RESULTS ...............................................................................................................................38

Overview of Analytic Strategies .............................................................................................38
Results of the Visual Analyses and Time-Series Phase Effect Analyses of Parent
Observational Data: Daily Parent Observations of Noncompliance ..................................39
Results of the Analyses of Direct Observational Data: The Dyadic Parent Child Interaction Coding System .................................................................45
   Parents’ Skill Acquisition ........................................................................................................45
   Child Compliance ....................................................................................................................47
Results of Analyses of Parent-Rating Scale Data: Eyberg Child Behavior Inventory .......48
   Daily Hassles and Uplifts ......................................................................................................50

4 DISCUSSION ........................................................................................................................65

Eyberg Child Behavior Inventory: Measurement Challenges .................................................71
Daily Hassles and Uplifts ...........................................................................................................75
Limitations and Strengths ........................................................................................................75
Future Directions ......................................................................................................................79

APPENDIX

A FAMILY DEMOGRAPHIC QUESTIONNAIRE ................................................................82B

B DAILY PARENT OBSERVATIONS CHECKLIST ................................................................84

C TREATMENT PROTOCOL .................................................................................................85
   Day One ................................................................................................................................85
   Day Two ..............................................................................................................................92
   Day Three .........................................................................................................................101
   Explaining PDI to the Child ...............................................................................................104
   Day Four ...........................................................................................................................106
   Day Five ...........................................................................................................................109
   Child Directed Interaction Handout ..................................................................................118
   Suggested Toys for CDI ....................................................................................................123
   CDI Homework Sheet .......................................................................................................124
   CDI Homework Sheet .......................................................................................................125
   PDI Homework Sheet .......................................................................................................126

LIST OF REFERENCES ............................................................................................................129

BIOGRAPHICAL SKETCH .....................................................................................................135
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1 Intensive Parent-Child Interaction Therapy research protocol schedule</td>
<td>37</td>
</tr>
<tr>
<td>3-1 Mean frequency of noncompliance and standard deviations of the daily time-series phase data for Daily Parent Observations of noncompliance</td>
<td>53</td>
</tr>
<tr>
<td>3-2 Results of daily time-series phase effect analyses for Daily Parent Observations of noncompliance</td>
<td>54</td>
</tr>
<tr>
<td>3-3 Daily Hassles and Uplifts</td>
<td>56</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------</td>
</tr>
<tr>
<td>3-1</td>
<td>Daily Parent Observations of noncompliance</td>
</tr>
<tr>
<td>3-2</td>
<td>Percentage of total verbalizations that were Do Skills during child-led play, parent-led play, and clean-up.</td>
</tr>
<tr>
<td>3-3</td>
<td>Parent Acquisition of Do and Don’t Skills in child-led play. Black columns represent Don’t Skills, White Columns represent Do Skills.</td>
</tr>
<tr>
<td>3-4</td>
<td>Percentage alpha compliance during parent-led play and clean-up.</td>
</tr>
<tr>
<td>3-5</td>
<td>Eyberg Child Behavior Inventory (ECBI) scores during Baseline, Intensive Treatment, Maintenance Treatment, and Follow-up.</td>
</tr>
</tbody>
</table>
# LIST OF ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABB</td>
<td>Abbreviated Parent-Child Interaction Therapy</td>
</tr>
<tr>
<td>B</td>
<td>Baseline</td>
</tr>
<tr>
<td>CBT</td>
<td>Cognitive Behavioral Therapy</td>
</tr>
<tr>
<td>CDI</td>
<td>Child Directed Interaction</td>
</tr>
<tr>
<td>DPICS</td>
<td>Dyadic Parent-Child Interaction Coding System</td>
</tr>
<tr>
<td>DPO</td>
<td>Daily Parent Observations</td>
</tr>
<tr>
<td>ECBI</td>
<td>Eyberg Child Behavior Inventory</td>
</tr>
<tr>
<td>EMDR</td>
<td>Eye Movement Desensitization and Reprocessing</td>
</tr>
<tr>
<td>F</td>
<td>Follow-up</td>
</tr>
<tr>
<td>I</td>
<td>Intensive Treatment</td>
</tr>
<tr>
<td>M</td>
<td>Maintenance Treatment</td>
</tr>
<tr>
<td>OCD</td>
<td>Obsessive Compulsive Disorder</td>
</tr>
<tr>
<td>PCIT</td>
<td>Parent-Child Interaction Therapy</td>
</tr>
<tr>
<td>PDI</td>
<td>Parent Directed Interaction</td>
</tr>
<tr>
<td>PTSD</td>
<td>Post Traumatic Stress Disorder</td>
</tr>
<tr>
<td>SMA</td>
<td>Simulation Modeling Analysis</td>
</tr>
<tr>
<td>STD</td>
<td>Standard Parent-Child Interaction Therapy</td>
</tr>
<tr>
<td>Triple-P</td>
<td>Triple-P Positive Parenting Program</td>
</tr>
</tbody>
</table>
There is an increasing need to investigate brief interventions for childhood psychopathologies. The current study used single-case multiple baseline designs to examine the efficacy of an abbreviated intensive form of Parent-Child Interaction Therapy with six families. The study design included four phases: Baseline, Intensive Treatment, Maintenance Treatment, and Follow-up. The Intensive Treatment phase consisted of five two hour sessions across five consecutive days. The Maintenance Treatment phase consisted of three weekly 30 minute telephone calls and concluded with a one hour booster session in the clinic.

Treatment outcome was measured using a weekly parent-rating scale of child problem behaviors (Eyberg Child Behavior Inventory), objective observations of parent-child behaviors in standard laboratory situations (Dyadic Parent-Child Coding System), and daily parent observations of child noncompliance in the home environment (Daily Parent Observations of noncompliance). Although treatment gains varied between dyads, all displayed improvements on some measures. All parent ratings of child problem behaviors on the Eyberg Child Behavior Inventory improved across each dyad’s participation in the study. All dyads who completed at least Maintenance Treatment displayed higher mean alpha compliance, as measured by the
Dyadic Parent-Child Interaction Coding System, at post-treatment as compared to the mean of the three Baseline observations. Additionally, all parents’ total usage of skills, as measured by the Dyadic Parent-Child Interaction Coding System, were superior to Baseline levels when measured post-Intensive Treatment, post-Maintenance Treatment, and at Follow-up. Finally, five of the six participating parents reported a statistically significant decline in Daily Parent Observations of noncompliance from Baseline to Follow-up.

The literature would benefit from future studies examining longer-term evaluation of treatment gains as well as a randomized controlled trial comparing this abbreviated intensive format of Parent-Child Interaction Therapy to the traditional time-unlimited format.
CHAPTER 1
INTRODUCTION

There is a growing trend in the psychological literature describing implementation of brief interventions. Currently in child psychology, brief interventions are especially popular in the areas of primary care, prevention, and crisis intervention. There is a recognized need to study brief interventions because the perception by consumers that “treatment is excessively demanding” has been shown to interfere with therapeutic change (Chambless & Hollon, 1998; Ducharme & Popynick, 1993; Kazdin & Wassell, 1999; Lomonaco, Scheidlinger, & Aronson, 1998; Matyas & Greenwood, 1990), and most clinic-referred children drop out of treatment after an average of ten sessions (Weisz, Thurber, Sweeney, Proffitt, & LeGagnoux, 1997). Cost cutting efforts of the United States managed health care system provide more reason for researchers to test the efficacy of streamlined interventions (Sobel, Roberts, Rayfield, Barbard, & Rapoff, 2001).

Sobel et al. (2001) reported parent and therapist ratings of child psychopathology symptoms before and after brief (mode = 1 session) interventions in outpatient pediatric psychology clinics. As a group, parents indicated high satisfaction with treatment, and consultation data six weeks post-treatment revealed that parents and therapists reported significant decline in symptoms of child psychopathology (Sobel et al., 2001). Although these results shed some positive light on brief interventions, the lack of specificity regarding therapeutic technique and presenting problems does not allow for strong conclusions to be drawn regarding the efficacy of specific treatment techniques. Additional weaknesses include the lack of control comparison groups and outcome evaluations relying solely on parent-rating scales.

Some research groups have examined brief interventions within cohorts of children experiencing a specific psychopathology. For example, a sample of 32 children meeting clinical
criteria for Post Traumatic Stress Disorder (PTSD) three years post-hurricane exposure were treated with Eye Movement Desensitization and Reprocessing (EMDR) therapy in a randomized lagged group design. When compared to children in the waitlist group, children who completed three sessions of EMDR displayed significant reductions in reactivity and modest reductions in anxiety and depression (Chemtob, Nakashima, & Carlson, 2002). This sample had previously failed psychotherapy targeting PTSD symptoms, but symptom reductions following the brief EMDR intervention were maintained at a six month follow-up assessment (Chemtob et al., 2002). Although this study is limited by its small sample size, results are promising as children were able to experience symptom relief as compared to a waitlist control group, in a protocol with fewer therapist-patient contact hours than more commonly used interventions for children diagnosed with PTSD (e.g., Ahmad & Sundelin-Wahlsten, 2008; Giannopoulou, Dikaiakou, & Yule, 2006; Smith, Yule, Perrin, Tranah, Dalgleish, & Clark, 2007). These studies included eight weekly sessions (Ahmad & Sundelin-Wahlsten, 2008), 10 weekly sessions (Giannopoulou et al., 2006), and six weekly sessions (Smith et al., 2007).

Gallagher, Rabian, and McCloskey (2004) evaluated the efficacy of another abbreviated treatment for children. This protocol included three sessions of Cognitive Behavioral Therapy (CBT) for children between the ages of 8-11 diagnosed with social phobia. Data collected three weeks post-treatment indicated children who completed this abbreviated CBT protocol experienced a significant reduction in symptoms of social anxiety on a variety of self-report measures as compared to children in the waitlist control condition. This treatment was also unique in that individual sessions were three hours in length, which were three times longer than traditional CBT sessions (Gallagher et al., 2004).
Bradley, Jada, Brody, Landy, Tellett, and Watson (2003) implemented a treatment schedule similar to Gallagher et al. (2004) and described their protocol as “brief, intensive.” The intervention, designed for parents of preschoolers with behavior problems, was comprised of three weekly two hour group sessions and concluded with a single booster session one month later. This study compared Magic 1 2 3 (Phelan, 1990), a parenting intervention, to a waitlist control group. Magic 1 2 3 emphasizes effective discipline strategies and reduced parent-child conflict. Results indicated parents of children three and four years of age, in the intervention group, reported significantly more positive parenting practices and reductions in child behavior problems both immediately following treatment’s conclusion and one year post-treatment when compared to the waitlist control group (Bradley et al., 2003).

**Comparing Abbreviated Interventions to their Longer Counterparts**

Using exploratory analyses, Franklin, Kozak, and Chashman (1998) compared a standard 14 week CBT protocol for children diagnosed with Obsessive Compulsive Disorder (OCD) with a more intensive CBT protocol. The intensive protocol included a mean of eighteen 90 minute sessions during a one month period, but the standard protocol included a mean of sixteen weekly 60 minute sessions during a four month period. Treatment content was the same in both conditions, and across multiple outcome measures the intensive and standard conditions both proved efficacious immediately post-treatment and at nine month follow-up (Franklin et al., 1998). It should be noted that although the intensive treatment was completed in one month as compared to four, on average more therapist-patient contact hours were accrued. These results indicated support for two different formats of the same treatment, thus providing evidence for greater flexibility in meeting the varying logistical needs of children presenting with OCD.

Researchers at the University of Florida have also studied a modified version of CBT for children presenting with OCD. In comparison with the traditional CBT treatment for OCD
children and their families which averages 15 weekly sessions over a period of several months, these researchers’ most recent protocols have investigated an “intensive” treatment involving daily sessions conducted over a period of three weeks (Storch, Geffken, Merlo, Mann, Duke, Munson, 2007). Storch et al. (2007) found that intensive treatment had slight immediate advantages in reducing children’s functional impairment over weekly CBT treatment, but both modalities had similar outcomes at three month follow-up. The investigators described intensive treatment as advantageous because it removed access barriers by “allowing families to temporarily relocate to a site where they can receive treatment in a pediatric OCD specialty setting.” Storch et al. (2007) acknowledged that disadvantages of this format included children missing school, parents missing work, and the cost of temporarily relocating the family.

In the area of childhood externalizing disorders, Ducharme and Popynick (1993) studied errorless compliance training, a technique which slowly and gradually introduces increasingly demanding requests. Although the authors concluded that the treatment effectively increased child compliance and reduced a variety of maladaptive child behaviors, the protocol was deemed quite labor intensive and time burdensome (Ducharme, Pontes, Guger, & Crozier, 1994). In a follow-up study, Ducharme et al. (1994) used a single-subject multiple baseline across subjects design, n = 6, to examine an abbreviated errorless compliance training protocol including 30% fewer assessment sessions, 34% fewer treatment sessions, and 30% shorter treatment sessions; in total this modified protocol reduced therapist contact hours by 50% (from 34 hours to 17). Data demonstrated the abbreviated protocol to be comparable to the full procedure in terms of producing high rates of compliance and a reduction in maladaptive behaviors. Although both formats were efficacious, authors concluded the abbreviated protocol to be advantageous as it demanded less time from therapists and patients (Ducharme et al., 1994). It should be noted that
the standard and abbreviated formats of errorless compliance training have not been studied in a randomized controlled trial.

In contrast, a meta-analysis conducted by Thomas and Zimmer-Gembeck (2007) evaluated and analyzed two widely disseminated behavioral parenting interventions, Parent-Child Interaction Therapy (PCIT) and Triple P – Positive Parenting Program (Triple P). Categorical modeling was implemented to compare the effect sizes for the two treatments. The researchers found that outcomes varied by treatment length and format. PCIT, a treatment involving in vivo coaching of parent-child dyads, outperformed the media format of Triple P, thus suggesting that a longer treatment with more individualized attention yielded stronger results. Effect sizes were comparable when PCIT and Enhanced Triple P (modules included practice sessions to enhance parenting skills, mood management strategies, stress coping skills, and partner support skills) were contrasted (Thomas & Zimmer-Gembeck, 2007). The researchers concluded, “Although PCIT and Triple P have overlapping content, a further implication for clinical practice may be embedded in the differences in design and intensity of each intervention” (Thomas & Zimmer-Gembeck, 2007). This meta-analysis demonstrated that treatment efficacy is influenced not only by treatment content but also by the format in which it is delivered and how long the patient is engaged.

Muntz, Hutchings, Edwards, and Hounsome (2004) compared two different formats (standard v. intensive) of a behavioral intervention for 42 families with children between the ages of 2 – 10 with disruptive behavior disorders. Both formats taught parents the same behavioral principles and made suggestions for everyday application with the target child, but the intensive treatment included a practice component not found in the standard protocol. This practice component involved three to five hour sessions in which clinical psychologists reviewed
videotaped interactions of the parent interacting with their child and provided constructive feedback regarding parent use of the taught skills. Additionally, extended home visits allowed the opportunity for the psychologists to coach parents through difficult situations in vivo (Muntz, et al., 2004).

The intensive treatment averaged 25 contact hours per family, but the standard treatment averaged seven contact hours per family (Hutchings, Lane, & Kelly, 2004). Data revealed that the standard and intensive formats had comparable results six months following the end of treatment. Data collected four years post-treatment indicated that families in the intensive arm maintained reductions in child behavior problems while families in the standard format were no longer statistically distinguishable from baseline data (Muntz et al., 2004). Hutchings et al. (2004) argued the intensive treatment to have been more efficacious not merely because contact hours were tripled but because of the added treatment component in which parents were allowed the opportunity for behavioral rehearsal and constructive feedback of interactions with their child. This study highlights the importance of considering content and the employing therapeutic techniques in addition to total therapy contact hours.

**Issues in Terminology and Research Design**

Across the child treatment outcome literature, it is difficult to draw conclusions regarding the efficacy of brief treatments because investigators define terms such as intensive, abbreviated, brief, and time-limited in many different ways. Franklin et al. (1998) and Storch et al. (2007) use the term “intensive” to describe a treatment format in which the total contact hours of the original treatment are maintained, but treatment length is reduced by compressing sessions into shorter time periods. Contrastingly Muntz et al. (2004) utilizes the term “intensive” to describe an intervention in which new treatment components and contact hours were added. This difference in terminology provides only one example of the inconsistency in the usage of terms...
describing varying treatment formats. Lomonaco et al. (1998) also recognized this pattern in a review of time-limited group treatments for children. This work found time-limited protocols to include anywhere from 8 – 25 sessions, thus highlighting the variability in the application of the term “time-limited.” In the current study “abbreviated” will describe a treatment protocol which includes fewer therapist-patient contact hours than the standard treatment. The term “intensive” will denote a treatment in which longer sessions are conducted in closer proximity to one another, as compared to the evidence-based treatment from which the intensive protocol was derived.

In addition to confusing terminology, the interpretability of the abbreviated treatment outcomes in the child literature is muddled by incomplete research programs. Although the studies described above (Bradley et al., 2003; Chemtob et al., 2002; Gallagher et al., 2004; Sobel et al., 2001) provide initial evidence for the efficacy of brief interventions, they can be criticized for their failure to meet standards for a “well-controlled” (Chambless & Hollon, 1998) or “well-conducted” (Eyberg, Nelson, & Boggs, 2008) study. Additionally, these studies failed to compare the abbreviated treatments to their longer treatment counterparts that use similar principles and techniques. Even studies that did compare their abbreviated intervention to a longer counterpart can be attacked because the work stands alone rather than serving as a stepping stone in a well designed research program. For example Nixon, Sweeney, Erickson, and Touyz (2003) compared an abbreviated PCIT protocol to a “standard” PCIT protocol. Their standard comparison group followed a manual that did not adhere to the “time-unlimited” standard cited as a core feature of PCIT (Eyberg, 2005). As such, their design essentially compared two modified versions of PCIT rather than comparing the abbreviated protocol to the well studied PCIT format, now deemed an evidence-based treatment (Eyberg et al., 2008).
Are abbreviated treatment formats as efficacious as longer protocols? Answers to this question will best be derived when abbreviated protocols are first established as efficacious in their own rite and then compared to their longer (already established) counterparts in randomized controlled trials. The current study is intended to serve as the first step in a research program to work towards Chambless and Hollon’s (1998) criteria for a well-established treatment. If the abbreviated intensive protocol under investigation displays positive outcomes, a solid foundation will be established to compare the new protocol with the already evidence-based treatment, PCIT.

**Standard Parent-Child Interaction Therapy**

PCIT is an evidence-based treatment for young children with behavior disorders (Eyberg et al., 2008). Therapists work with parents to increase warmth and positive attention with their children in the first phase of treatment, Child Directed Interaction (CDI). In the second phase of treatment, Parent Directed Interaction (PDI), parents are taught to use specific discipline procedures to manage their child effectively and address inappropriate behavior. Both phases begin with a didactic session in which therapists teach parents the basic CDI and PDI skills that will be used throughout therapy. Remaining sessions utilize bug-in-the-ear technology to allow therapists to coach parents in vivo while they play and interact with their children. PCIT therapists utilize performance based standards to determine when families are ready to advance to PDI and also when they are ready to graduate. As such, the treatment is time-unlimited and designed to continue until presenting problems dissipate and parents demonstrate mastery of the taught skills. Traditionally, this treatment is delivered in weekly one hour sessions and families’ average time in treatment ranges from 12 to 14 weeks.
Adaptations of Parent-Child Interaction Therapy

Many efforts have been made to tailor and adapt PCIT to meet the needs of a wide range of clinical populations. For example, studies have evaluated the treatment’s efficacy with children with Separation Anxiety Disorder (Pincus, Eyberg, & Choate, 2005), Mexican-American families (McCabe, Yeh, Garland, Lau, & Chavez, 2005), children with mental retardation (Bagner & Eyberg, 2007), and families in which child abuse has occurred (Chaffin, et al., 2004). Eyberg (2005) emphasizes the need for these tailored protocols to maintain the core features of PCIT.

PCIT includes four core features 1) active engagement of the parent and child together in treatment sessions to learn new and more positive ways of interacting with one another (e.g., coding and coaching), 2) teaching parents broad principles that they will be able to apply in a wide range of parenting situations, 3) conducting treatment in a performance-based and time-unlimited manner, and 4) utilizing clinical experience to deliver treatment effectively (Eyberg, 2005). A distinction is made between tailoring and adapting. Eyberg (2005) defines tailoring as “changes made in the focus or delivery style of essential elements in an established treatment, based on the unique features of the individual case.” Adapting on the other hand “refers to changes in the structure or content of the established treatment” (Eyberg, 2005).

In a randomized controlled trial of physically abused children and their offending parents, Chaffin et al. (2004) compared standard PCIT to an “enhanced” format in which families received extra individualized services (e.g., parent treatment for depression) in addition to the traditional parenting treatment. Interestingly, outcome data highlighted the standard PCIT group to have lower rates of child behavior problems and re-abuse rates among parents post-treatment compared to enhanced PCIT (Chaffin et al., 2004). Here, additional treatment components and patient-therapist contact hours actually led to poorer outcomes.
Several studies have made adaptations to streamline the PCIT protocol in attempts to address families with limited financial and/or time resources. McNeil, Hershell, Gurwitch, and Clemens-Mowrer (2005) conducted two day PCIT workshops for foster parents. These workshops included traditional PCIT didactic instruction and coaching but significantly adapted the treatment by removing the performance-based and time-unlimited standards. Pre-post analyses revealed rates of children’s disruptive behavior to improve from clinically significant to more non-clinical frequencies at one and five month follow-up (McNeil, Herschell, Gurwitch, & Clemens-Mowrer, 2005).

Nixon et al., (2003) compared standard PCIT (STD) to an abbreviated PCIT protocol (ABB) and a wait-list control group; neither condition maintained the time-unlimited core feature. All STD families received 12 sessions. ABB families viewed didactic components of the treatment via video and then participated in alternating five in-person and five telephone sessions (Nixon et al., 2003). ABB and STD groups had comparable effects and the investigators concluded, “PCIT could be streamlined without substantially limiting its positive impact on child conduct problems” (Nixon et al., 2003). Of note when a conservative method of determining clinical significance was employed, superior effects were found for the STD group immediately following treatment but by six month follow-up the STD and ABB outcomes were comparable (Nixon et al., 2003).

**Current Study Aims and Hypotheses**

The current study evaluated the efficacy of an abbreviated intensive PCIT protocol with a population of preschool aged children displaying mild to moderate levels of disruptive behavior. The Intensive Treatment included five two hour sessions across five consecutive days. This Intensive Treatment was followed by Maintenance Treatment which was comprised of three weekly 30 minute telephone calls and finished with a one hour booster session. Multiple
measurement strategies were used to evaluate the treatment’s efficacy. Child problem behavior was measured using three different strategies: weekly parent-rating scales of the frequency of common child behavior problems, parent daily observations of the frequency of child noncompliance, and objective observations of child compliance in a standardized laboratory situation. Parent skill acquisition was monitored through direct observation of parent-child interactions in a standardized laboratory situation.

Our first aim was to conduct an abbreviated intensive PCIT intervention to improve child problem behaviors in families with preschool-age children displaying mild to moderate levels of disruptive behavior. We hypothesized that parents would report improved child behavior as measured by the Eyberg Child Behavior Inventory (ECBI) immediately post-Intensive Treatment, during Maintenance Treatment, and during Follow-up. In addition we expected that parents would report their children to have improved behavior as measured by Daily Parent Observations of noncompliance (DPO) immediately post-Intensive Treatment, during Maintenance Treatment, and during Follow-up. Finally, we hypothesized that child compliance would increase during a standard laboratory assessment across four time points: Baseline, immediately post-Intensive Treatment, immediately post-Maintenance Treatment, and at the conclusion of Follow-up.

Our second aim was to examine the impact of the abbreviated intensive PCIT intervention on parent acquisition of a specific skill set taught over the course of treatment. We expected parents would display improvement in their use of Praises (Labeled and Unlabeled), Behavioral Descriptions, and Reflections during standard laboratory situations across four time points: Baseline, immediately post-Intensive Treatment, immediately post-Maintenance Treatment, and at the conclusion of Follow-up. We also expected parents would decrease their use of Questions,
Commands, and Negative Talk during a standard laboratory situation across four time points: Baseline, immediately post-Intensive Treatment, immediately post-Maintenance Treatment, and at the conclusion of Follow-up.

Our third aim was exploratory in nature and aimed to utilize the Daily Hassles and Uplifts (Lazarus & Folkman, 1989) measure, to provide some information regarding parent-reported daily hassles and uplifts, which may or may not be related each dyad’s participation in and response to treatment. Due to our limited sample size and the single-case multiple baseline design, conclusive statements could not be made; but general trends and patterns in the data were examined to identify variables that may be important to measure in future studies of this abbreviated intensive PCIT model.
CHAPTER 2
METHOD

Participants

Parent-Child Dyads Inclusion Criteria

Children eligible for this study met the following inclusion criteria: (1) between the ages of three and six, (2) currently living with participating parent, and (3) mild to moderate disruptive behavior as measured by the Eyberg Child Behavior Inventory Intensity Scale (ECBI score between 114 and 156). Parent inclusion criteria included: (1) female, (2) currently living in the same home as the identified child; (3) living within a 60 minute driving distance of Gainesville, Florida; (4) not planning on moving out of the area within the next three months; and (5) able to be contacted by telephone or access the internet on a daily basis.

Parent-Child Dyads Exclusion Criteria

Children and/or parents were excluded for any factor that might have negatively impacted their ability to successfully complete an abbreviated intensive PCIT protocol designed to improve child disruptive behavior. Exclusion criteria included the presence of: (1) parent or child diagnosed with a significant cognitive or developmental delay, (2) parent unable to communicate via telephone or access the internet on a daily basis, (3) parent or child diagnosed with a major psychiatric illness or medical condition that impairs judgment, or (4) parent current participation in another parenting program designed to improve child disruptive behavior.

Recruitment

A variety of strategies were used to recruit families with children with disruptive behavior problems. Selected preschools, elementary schools, daycares, and doctors’ offices were provided referral forms. Fliers with study contact information were posted in family friendly
public areas such as preschools, elementary schools, daycares, doctors’ offices, child play areas, and churches.

Twenty-three families called to learn more about the study and declined to participate. Seven families were disqualified because their child was outside of the designated age range. Eight families were disqualified because their ECBI scores were not in the designated range. Four families decided not to participate after reviewing the informed consent and completing a portion of the initial Baseline assessment. Six families enrolled in the study and completed the Intensive Treatment. Five families completed Maintenance Treatment. Four families completed Follow-up.

**Included Parent–Child Dyads**

**Dyad One.** Dyad 1 was referred by the child’s pediatrician. The child was a four-year-old Caucasian male. He had no siblings. The parent was the child’s biological grandmother, who legally adopted him and raised him since birth. The child had never been enrolled in day care or preschool and was currently staying home during the day with the parent. During the clinical interview, the parent identified the following behaviors to be most problematic during the day: noncompliance, interrupting, hitting parents, and dawdling when getting dressed. The parent was female, Caucasian, and married. She chose not to provide her age, education level, and yearly household income, as she was not comfortable sharing personal information.

**Dyad Two.** Dyad 2 was self-referred. The child was a five-year-old Caucasian male who was enrolled in Kindergarten. He had no siblings. The parent was the child’s biological mother. During the clinical interview the parent identified the following behaviors to be most problematic during the day: noncompliance, arguing about rules, hitting parent, and verbally abusing parent. This parent was a 45-year-old, Caucasian, divorced, and currently single.
female. The parent completed some college and reported the yearly household income to be less than $15,000.

**Dyad Three.** Dyad 3 was referred to the study by the child’s pediatrician. The child was a six-year-old Caucasian male who was enrolled in the first grade. He had no siblings. The parent was the child’s biological mother. During the clinical interview the parent identified the following behaviors to be most problematic during the day: noncompliance, interrupting, and not staying in his seat (during homework, dinner time, etc). This parent was a 35-year-old, Caucasian, married female. She completed high school and reported her yearly household income to be between $15,000 and $30,000.

**Dyad Four.** Dyad 4 was referred to the study by the child’s preschool teacher. The child was a five-year-old Caucasian female. She had one younger brother. The parent was the child’s biological mother. During the clinical interview the parent identified the following behaviors to be most problematic during the day: noncompliance, fighting with her brother, and talking back to her parents. The parent was a 36-year-old, Caucasian, married female. She graduated from college and reported the yearly household income to be between $80,000 and $90,000.

**Dyad Five.** Dyad 5 was self-referred. The child was a five-year-old Caucasian male, who was currently enrolled in preschool. He had one older brother. The parent was the child’s biological mother. During the clinical interview the parent identified the following behaviors to be most problematic during the day: noncompliance, whining, and fighting with his brother. The parent was a 34-year-old, Caucasian, married, female. She graduated from college and reported the yearly household income to be between $80,000 and $90,000.

**Dyad Six.** Dyad 6 was self-referred. This child was a four-year-old Caucasian male, who was enrolled in preschool. He did not have any siblings. The parent was the child’s biological
mother. During the clinical interview the parent identified the following behaviors to be most problematic during the day: noncompliance, talking back and profanity towards his mother, and whining. The parent was a 28-year-old Caucasian, divorced, and currently single female. She attended some college and reported the yearly household income to be between $15,000 and $30,000.

**Therapists and Assessors**

**Therapists**

Three graduate students (including the principal investigator) trained in PCIT served as therapists in this study. All student therapists received training in a summer long PCIT course and had served as a lead PCIT therapist for at least two years. Prior to treatment beginning, the investigator conducted a training to familiarize therapists with the abbreviated intensive PCIT protocol. Time was spent highlighting aspects of the treatment protocol that differed from the traditional PCIT protocol in which therapists were originally trained. Therapists consulted with the investigator each day of the week during Intensive Treatment and weekly during Maintenance Treatment. The investigator met with a licensed psychologist supervising the project as needed to discuss the progress of families.

**Assessors**

Three undergraduate research assistants and seven graduate students served as assessors in this study. Graduate students were trained to 80% reliability on the direct observation measure. Undergraduate assessors were trained to conduct treatment integrity observations. Additionally undergraduate assessors assisted with data collection and organization throughout the duration of the study. The investigator supervised all assessment activities and assisted with data collecting, coding, and maintenance tasks as necessary.
**Measures**

**Family Demographic Questionnaire.** A questionnaire created by the investigator was administered to collect socio-demographic information about the participating parent and child including age, ethnicity, parents’ highest education level, the child’s sex, and family yearly income. Parents were asked to complete this questionnaire during the pre-treatment assessment. A copy of this questionnaire is included in Appendix A.

**Eyberg Child Behavior Inventory.** (ECBI; Eyberg & Pincus, 1999). The ECBI is a 36-item parent-rating scale designed to measure disruptive behavior in children between 2 and 16 years of age. It measures disruptive behaviors in terms of their frequency (Intensity Scale) and the degree to which these behaviors are problematic for the parent (Problem Scale). Only the Intensity Scale was used in this study. On this 7-point scale, the total intensity score can range from 36 to 252, with a normative mean of 96.6 and a standard deviation of 35.2. Within a community sample, 12 week test-retest reliability of .80, and 10-month test-retest reliability of .75 have been reported for the Intensity Scale (Funderburk, Eyberg, Rich, & Behar, 2003).

A pre-treatment ECBI score between 114 and 156 was required to participate in this study. This range on the ECBI includes scores one-half standard deviation below and above the cut off for clinically significant problem behavior (131). Children with scores between 114 and 130 were categorized as children with mild disruptive behavior and children with scores between 131 and 156 were categorized as children with moderate disruptive behavior. Parents had the option of completing this measure by mail, on the internet, or over the phone. Once a parent-child dyad met all eligibility criteria and prior to the start of Intensive Treatment, the parent completed at least two additional ECBI rating scales to establish a baseline of child disruptive behavior. The ECBI was also completed with paper and pencil immediately prior to each Intensive Treatment session and weekly during Maintenance Treatment and Follow-up. Parents
had the option of completing the ECBI during Maintenance Treatment and Follow-up via telephone with an assessor or via a password secure website.

**Daily Parent Observations (DPO).** The DPO is a checklist created for the purpose of this study which helped participating parents identify three to four observable, problematic child behaviors that were occurring on a daily basis. Daily noncompliance was the only child problem behavior that all parents endorsed; consequently, this is the only DPO behavior that is analyzed in this study. Parents daily recorded the frequency of their child’s noncompliance during Baseline, Intensive Treatment, Maintenance Treatment, and Follow-up and reported their data each day via telephone or on the study’s password secure website. A copy of the DPO checklist is included Appendix B.

Each family was asked to identify another caregiver (e.g., spouse, grandparent, babysitter, or neighbor) to provide inter-rater reliability data. Due to single parent households, varying parent work schedules, and minimal time spent together as a family, participating parents found it extremely difficult to produce reliability data. Reliability data on this measure were sparse and consequently are not considered in this study.

**Dyadic Parent-Child Interaction Coding System (Third Edition).** (DPICS; Eyberg, Duke, McDiarmid, Boggs, & Robinson, 2004). The DPICS is a behavioral coding system that measures the quality of parent-child social interactions during three standard five minute situations (child-led play, parent-led play, and clean-up) that vary in the degree of parental control required. During child-led play parents were asked to follow along with their child in whatever game their child chose and during parent-led play parents were instructed to keep their child playing according to the parent’s rules. During the clean-up situation parents were asked to have their child clean up the playroom without any assistance from the parent. A strength of the
DPICS is the inclusion of parent behaviors targeted for change in PCIT, which permits parents’ skill acquisition to be monitored.

Graduate students served as primary coders. All coders completed the coder training workbook (Fernandez, Chase, & Eyberg, 2005). Before coding interactions in this study, all coders were required to reach 80% accuracy with a criterion tape coded by expert DPICS coders. All coders were uninformed of assessment time point and study hypotheses. One-third (33) of the total parent-child observations (99) were randomly assigned to be coded by two independent assessors. These data were used to calculate kappa inter-rater reliability coefficients. The following is a listing of the specific parent behaviors with kappa coefficients for this study included in parentheses: Information Question (.74), Descriptive Reflective Question (.65), Direct Command (.66), Indirect Command (.52), Labeled Praise (.79), Unlabeled Praise (.70), Behavioral Description (.64), Reflective Statement (.66), Negative Talk (.51), and Neutral Talk (.64). Following is a listing of the specific child behaviors with kappa coefficients for this study included in parentheses: Child Compliance (.62), Child Noncompliance (.51), and Child No Opportunity for Compliance (0.53).

In this study DPICS was used as a probe measure to provide another measure of parent and child progress in treatment. DPICS was conducted on three occasions during Baseline, immediately following Intensive Treatment and Maintenance Treatment, and at the conclusion of Follow-up.

**Hassles and Uplifts Scale.** (Lazarus & Folkman 1989). The Hassles and Uplifts Scale is a measure of everyday life stress. Participants are instructed to rate 53 items on a four point scale ranging from zero (none or not applicable) to three (a great deal) on the basis of the past week. Participants make a rating of each item on the degree to which it is a daily hassle, and they make
another rating of each item on the degree to which it is a daily uplift. Items are drawn from a wide variety of life domains (Lazurus & Folkman, 1989). Intensity and Frequency scores are derived for both the Hassles and Uplifts scales. The Intensity score represents all of each parent’s ratings added together and then divided by the total number of items. The Frequency score represents the total number of items that were given a rating of zero. Researchers have supported that the scale demonstrates adequate reliability and validity (DeLongis, 1985). The Hassles and Uplifts Scale was administered prior to the start of Intensive Treatment and at the conclusion of Follow-up.

**Experimental Design**

A multiple baseline, case-based time series analysis across families was used to investigate the efficacy of the abbreviated intensive PCIT protocol. The APA Task Force on Evidence-Based Practice endorses this research methodology as “contributing to effective psychological practice” and researchers have increasingly recognized the design as an effective strategy for identifying promising treatment approaches (e.g., Borckardt et al., 2008; Westen & Bradley, 2005). Chambless and Hollon (1998) presented the criteria for well-established and probably efficacious treatments. These investigators recognized single-case design to be an appropriate methodology to examine treatment efficacy.

Cased-based experimental designs involve the intensive study of individual subjects with the purpose of learning and measuring the effects of treatment on different individuals and therefore are well suited to small sample sizes (Barlow & Hersen, 1984). Treatment effects are identified if there are systematic changes seen each time that the intervention is introduced with a specific dyad (Harvey, May, & Kennedy, 2005).

This experimental design was comprised of six parent–child dyads. Treatment did not begin for each family until the baseline data was stable. An acceptable stable DPO baseline was
defined as at least three days in a row when the child was noncompliant at least three times; two of
the participating dyads did not meet this criterion. A stable ECBI baseline was originally
defined as at least three ECBI scores in the current study’s range (114 – 156) that did not display
a consistent downward trend. A “consistent downward trend” was defined as a decline of greater
than 5%.

Intensive Treatment consisted of five two hour sessions conducted across five consecutive
days. Intensive Treatment was immediately followed by Maintenance Treatment which
consisted of three weekly, 30-minute telephone calls and was concluded on the fourth week with
a one hour booster session in the clinic. The study design concluded with Follow-up during
which assessment data were collected but no intervention was administered. Table 2-1 depicts
each study phase and the assessment and treatment activity that occurred in each phase.

When conducting a single-case study multiple baseline design, all dyads should begin
baseline at the same time. When the first family achieves a stable baseline and completes
intervention then the second family begins intervention. This pattern should be followed
systematically until all dyads have completed treatment. In the current study the first three dyads
all had a Baseline assessment of 12 days, thus they did not serve as controls for one another.
Dyad 4’s Baseline assessment consisted of 17 days, therefore Dyad 4 served as a control for
Dyads 1, 2, and 3. Dyad 5’s Baseline period was 26 days, therefore Dyad 5 served as a control
for Dyads 1, 2, 3, and 4. Finally, Dyad 6’s Baseline assessment consisted of 40 days, therefore
Dyad 6 served as a control for Dyads 1 - 5.

**Study Procedures**

**Initial Screening.** Initial screening procedures required parent name, child birthday, and
information regarding the presence of diagnosed child learning problems or developmental
delays to be collected. Next parents completed the ECBI Intensity Scale and three days of Daily
Parent Observations (DPO). Data were reported either on the phone or on the password-secured study website. Parents who successfully completed three days of DPO and whose ECBI scores were in the appropriate study range were scheduled for an in person pre-treatment assessment.

**Assessment During Baseline.** Families who met the study eligibility criteria and continued to express interest in participating were required to provide University of Florida Institutional Review Board approved informed consent. The consent form was completed with the study principal investigator during the initial in person assessment. Parents also completed an ECBI and participated in a clinical interview with the principal investigator during this assessment. Finally the parent-child dyads were observed twice in three standard Dyadic Parent-Child Interaction Coding System (DPICS) situations: child-led play, parent-led play and clean-up. These observations occurred both before and after the clinical interview. Immediately prior to the first Intensive Treatment session, parent-child dyads were observed in the standard DPICS situations for a third time.

**Assessment Data Gathered During Intensive and Maintenance Treatment Phases.** Parents completed an ECBI prior to each of the five Intensive Treatment sessions and prior to each of the four Maintenance Treatment sessions. Therapists collected DPICS data several times during each Intensive Treatment session. These data were collected by the therapist and were used to provide objective information regarding each parent’s skill acquisition. This information helped the therapists tailor treatment to meet the specific needs of each family. Throughout Intensive Treatment and Maintenance Treatment parents continued to provide DPO data. Immediately following Maintenance Treatment a DPICS observation in three standard laboratory situations was conducted by an assessor.
Follow-Up Phase Assessment. Treatment was officially complete after parents attended their one month booster session at the conclusion of Maintenance Treatment. During a four week Follow-up period, parents continued to report daily DPO data and weekly ECBI data via telephone or the password-secure study website. At the end of Follow-up the dyad returned for their final assessment. During this final assessment parents completed an ECBI and were observed in three standard DPICS situations.

Intensive Treatment. The treatment program offered parents and their children an abbreviated intensive PCIT format. During Intensive Treatment, two hour sessions were conducted for five consecutive days at the University of Florida. A session-by-session treatment protocol is included in Appendix C. Below is a brief description of the goals for each day of treatment is provided.

Day 1

- Therapist introduces Child Directed Interaction (CDI) to the parent.
- Therapist codes and coaches the parent-child dyad in CDI up to three times.
- Therapist and parent discuss homework assignment for the evening.

Day 2

- Therapist and parent review homework assignment from previous evening.
- Therapist codes and coaches the parent-child dyad in CDI up to two times.
- Therapist introduces Parent Directed Interaction (PDI) to the parent.
- Therapist and parent discuss homework assignment for the evening.

Day 3

- Therapist and parent review homework assignment from previous evening.
- Therapist codes and coaches parent in CDI situation one time.
- Therapist introduces the PDI procedure to the child.
- Therapist codes and coaches parent in PDI situation up to three times.
- Therapist and parent discuss homework assignment for the evening.

Day 4

- Therapist and parent review homework assignment from previous evening.
• Therapist codes and coaches parent in both the CDI and PDI situation, focusing on the situation in which parent displays the most room for improvement.
• Therapist presents public behavior discipline technique to parent.
• Therapist and parent discuss homework assignment for the evening.

**Day 5**
• Therapist and mother review homework assignment from previous evening.
• Therapist codes and coaches parent in both the CDI and PDI situations, focusing on the situation in which parent displays the most room for improvement.
• Therapist uses approximately 60 minutes to coach parent in the areas in which they are displaying the most room for improvement.
• Therapist presents House Rules technique to the parent.
• Congratulate parent and child on progress and present graduation certificate.

**Maintenance Treatment.** Following Intensive Treatment, therapists continued contact with parents through three weekly telephone conversations. There were two primary goals of the telephone calls: continue to motivate the parent to implement the skills in the home setting and answer parent questions and concerns as they used the skills at home. Below the basic content of each weekly phone call is summarized. A session outline for each of these phone calls is in Appendix C.

• Therapist and parent review homework assignment from previous week, specifically addressing parent concerns
• Discuss remaining problem behaviors and problem solve strategies using CDI and PDI skills
• Therapist and parent discuss homework assignment for upcoming week

One week following the third Maintenance Treatment phone call, each dyad returned to the clinic for their one month booster session. This session was scheduled for one hour and was designed to answer any remaining questions and concerns the parents had and also provided the therapist with an opportunity to assess the parents’ CDI and PDI skills and provide coaching. Session outline for this session is in Appendix C.

Immediately following the Maintenance Treatment booster session, Follow-up began. Follow-up consisted of four weeks in which parents continued to provide daily DPO data and
weekly ECBI data, but they did not have any contact from their therapist. At the end of this four week period, dyads returned to the clinic for the final study assessment.

To minimize attrition the following strategies were utilized: treatment was provided at no cost, flexible appointment times (including evenings) were offered for treatment sessions, parking passes were distributed to each family for assessment and treatment sessions, and DPO and weekly ECBI data were available for completion via telephone or using a password secure study website. Assessors were in daily contact with study participants to collect daily assessment data and thank them for their continued participation.

For this study half of the treatment sessions conducted in the clinic (Intensive Treatment sessions and the Maintenance Treatment booster session) were observed and coded for adherence to the abbreviated intensive PCIT protocol. Monitored protocol adherence for the treatment intervention was 94%. One-third of the observed treatment sessions that were coded for protocol adherence were also coded by a second observer to determine inter-rater reliability. The reliability between coders was 88.3%.
<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Intensive Treatment</th>
<th>Maintenance Treatment</th>
<th>Follow-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPO</td>
<td>- At least 3 days</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ x7 ✓ ✓ ✓ ✓ ✓ x7 ✓ ✓ ✓ ✓ ✓ x7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECBI</td>
<td>- Initial Phone Screen</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- In Person Assessment</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Before CDI Teach</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Before clinical interview</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- After clinical interview</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Before CDI Teach</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DPICS</td>
<td>- Before clinical interview</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Before CDI Teach</td>
<td>✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tx</td>
<td>S 1 2 hrs Mon</td>
<td>S2 2 hrs Tues</td>
<td>S3 2 hrs Wed</td>
<td>S4 2 hrs Thur</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. DPO = Daily Parent Observations of noncompliance. ECBI = Eyberg Child Behavior Inventory. DPICS = Dyadic Parent-Child Interaction Coding System. Tx = Treatment. S = Session. CDI = Child Directed Interaction. ✓ = Measure completed one time. ✓x7 = Measure completed on each of the seven days of the week.
Overview of Analytic Strategies

Graphical representation and visual inspection remain the predominant form of analyses in single-subject multiple baseline methodology (Fisher & Wells, 2008). As the goal of these designs is to detect “clear and observable” effects, graphical representations and visual inspection allow only such effects to be considered (Parsonson & Baer, 1992). Daily Parent Observations of noncompliance (DPO) were collected each day during Baseline, Intensive Treatment, Maintenance Treatment, and Follow-up. These data were plotted for each participating dyad to allow for visual analyses of trends including: variability within a phase, changes in levels between phases, variability between phases, change in trends across adjacent phases, overall pattern of the data in a design, and comparing across similar situations (Poling & Fuqua, 1986). Weekly Eyberg Child Behavior Inventory (ECBI) scores and Dyadic Parent-Child Interaction Coding System (DPICS) probes during Baseline, Intensive Treatment, Maintenance Treatment, and Follow-up were also collected, plotted, and analyzed for trends. Treatment efficacy was assessed by changes in the dependent variables “when and only when treatment is initiated for that behavior” (Poling & Fuqua, 1986).

Although visual data analyses provide valuable information regarding patterns in the collected data, these visual inspections may overestimate the effects of treatment even when conducted by experts (DeProspero & Cohen, 1979; Furlong & Wampold, 1982; Jones, Weinrott, & Vaught, 1978; Ottenbacher, 1993). In designs in which observations are not independent of one another autocorrelation between data points may occur; therefore, researchers must proceed with particular caution when inferring reliable change between phases. Visual inspection in
these situations has been found to produce Type I errors (false positives) anywhere from 16 – 84% of the time (Matyas & Greenwood, 1990).

The degree to which an observation at time K predicts the observation that comes immediately after it (Time K + 1) is referred to as Lag 1 autocorrelation (r (Lag1)), autocorrelation, or series dependence. Simulation Modeling Analysis (SMA) is a statistical approach used in single-subject designs which corrects for autocorrelation, thereby reducing the possibility of Type I errors (Borckardt et al., 2008). This methodology, which requires a minimum of 10 – 16 observations in the data stream, allows data that pass the test of visual inspection to then be tested for statistical significance. This statistical method allows for varying numbers of observations between phases but requires data points to be collected at similar intervals across the design (Borckardt et al., 2008). Due to the 10 – 16 data points standard for analyses, the SMA method was only applied to the DPO data; ECBI and DPCIS data analyses were limited to visual inspection analyses described above. A program developed to run SMA for Windows platforms, was utilized to conduct these analyses (Borckardt et al., 2008).

SMA produces a phase effect size (Pearson’s r) for each phase comparison. Next an empirical estimate of probability (p value) of the observed effect occurring by chance is produced by comparing the data stream from each phase to distributions of random data streams (Smith, Wolf, Handler, Nash, 2009). This analysis technique is more powerful than conventional statistics (e.g., hierarchical linear modeling and multilevel modeling) when shorter data streams (<30 data points per phase) are analyzed (Borckardt et al., 2008).

Results of the Visual Analyses and Time-Series Phase Effect Analyses of Parent Observational Data: Daily Parent Observations of Noncompliance

All parents were asked to identify, observe, and record their child’s acts of noncompliance each day. DPO of noncompliance was defined as each occasion the child failed to comply to
their parent’s command the first time the command was given. Although each parent was asked to provide daily frequency counts of their child’s acts of noncompliance, each parent had some days when no data were reported. Missing data for each dyad are reported below.

**Dyad 1.** Baseline contained 12 days (4 missing), Intensive Treatment contained 5 days (0 missing), Maintenance Treatment contained 27 days (6 missing), and Follow-up contained 37 days (8 missing). Across all four phases, Dyad 1 had 22% missing DPO data points.

**Dyad 2.** Baseline contained 12 days (1 missing) and Intensive Treatment contained 5 days (1 missing). Dyad 2 dropped out of the study after completing 6 days of Maintenance Treatment, which was scheduled to contain 38 days resulting in 32 missing data points. There were no data collected during the Follow-up phase. Across Baseline and Intensive Treatment, Dyad 2 had 11% missing DPO data points.

**Dyad 3.** Baseline contained 12 days (0 missing), Intensive Treatment contained 5 days (0 missing), Maintenance Treatment contained 27 days (5 missing), and Follow-up contained 34 days (4 missing). Across all four phases, Dyad 3 had 11% missing DPO data points.

**Dyad 4.** Baseline contained 17 days (0 missing), Intensive Treatment contained 5 days (0 missing), Maintenance Treatment contained 30 days (0 missing), and Follow-up contained 28 days (2 missing). Across all four phases, Dyad 4 had 3% missing data points.

**Dyad 5.** Baseline contained 26 days (6 missing), Intensive Treatment contained 5 days (0 missing), Maintenance Treatment contained 31 days (1 missing), and Follow-up contained 35 days (21 missing). Across all four phases, Dyad 4 had 29% missing DPO data points.

**Dyad 6.** Baseline contained 40 days (7 missing), Intensive Treatment contained 15 days (5 missing), and Maintenance Treatment contained 32 days (7 missing). Immediately following Maintenance Treatment Dyad 6 dropped out of the study; consequently, there were no Follow-up
data. Across Baseline, Intensive Treatment, and Maintenance Treatment, Dyad 6 had 22% missing data points.

In sum missing DPO data ranged from 11% (Dyad 2) to 29% (Dyad 5). The mean number of missing DPO data among the six dyads was 16%. To detect changes in DPO across the course of the study design, an eight phase-comparison analyses for each dyad was conducted. The following is a listing of the comparison analyses conducted.

1. Baseline (B) with Intensive Treatment (I).
2. B with Maintenance Treatment (M).
3. B with Follow-up (F).
5. I with M.
6. M with F.
7. B with I and M combined.
8. I and M combined with F.

Table 3-1 presents descriptive statistics (mean frequency of noncompliance, standard deviation, number of data points) for each of the analyzed phases (B, I, M, F), combinations of phases (I and M; I, M, and F), and the entire data stream (B, I, M, and F) for each dyad. It should be noted that the number of data points (n) listed in Table 3-1, does not include days in which mothers did not provide DPO data. In other words n is not necessarily equivalent to the number of total days included in each phase, but represents the number of days on which DPO data were reported.

Figure 3-1 displays the DPO data each parent provided for her child throughout the duration of the study. The mean DPO for each dyad was calculated for each phase and is displayed as a horizontal solid line within each corresponding phase. Additionally, the linear regression lines for Baseline data were calculated and plotted across the Baseline phase as a dotted line. These linear regression lines provide an estimate of each child’s future rate of DPO.
if treatment had not been implemented. Visual analyses of the data for each dyad were conducted based on Figure 3-1.

Visual inspection of the Baseline linear regression lines of DPO for each dyad revealed Dyads 4 and 6 to each have a positive slope, in other words prior to Intensive Treatment DPO was increasing/getting worse (at varying rates). The Baseline linear regression line of DPO for Dyads 1, 2, 3, and 5 each had a negative slope, suggesting that levels of DPO were beginning to improve (at varying rates) prior to the start of Intensive Treatment.

Following visual inspection of the data in Figure 3-1, SMA phase effect analyses were conducted on each dyad’s DPO data. Time-series phase effect analyses compared DPO observations between phases and determined whether DPO differed while accounting for the autocorrelation inherent in the time-series data streams (Smith, Wolf, Handler, and Nash, 2009). Table 3-2 contains the phase-effect statistics, which includes the effect size (Pearson’s $r$) for DPO for each dyad as well as the Lag 1 autocorrelation ($r$ (Lag 1)). The $r$(Lag 1) statistic represents the degree to which an observation at time K predicts the observation immediately after it (Time K + 1) (Borckardt et al., 2008).

**Dyad 1.** Although visual inspection of the data revealed no increase in DPO, there was little to no decrease in DPO across the four study phases. The mean DPO ratings for each phase were as follows: Baseline ($M = 3.4, SD = 1.6$), Intensive Treatment ($M = 2.6, SD = 2.4$), Maintenance Treatment ($M = 3.6, SD = 2.3$), and Follow-up ($M = 2.5, SD = 1.7$). Results of the SMA phase effect analyses confirmed that the slight changes between phases were not statistically significant.

**Dyad 2.** Although this dyad only completed the study protocol through the first quarter of Maintenance Treatment, visual inspection of the data revealed a step-wise decline in DPO
across Baseline ($M = 3.9, SD = 3.1$), Intensive Treatment ($M = 2.3, SD = 1.5$), and Maintenance Treatment ($M = 0.8, SD = 0.7$). Results of the SMA phase effect Analysis 2 (B with M) ($r = -.50, p = .03$) and Analysis 7 (B with I + M) ($r = .46, p = .02$) revealed the decline in DPO to be statistically significant.

**Dyad 3.** Visual inspection of the data revealed the mean DPO to be lower during Intensive Treatment ($M = 1.6, SD = 1.4$), Maintenance Treatment ($M = 2.2, SD = 2.3$), and Follow-up ($M = 0.9, SD = 1.4$) as compared to Baseline ($M = 6.2, SD = 4.0$). Although still below the Baseline mean, the mean DPO rating in Maintenance Treatment was higher than the mean ratings in Intensive Treatment and Follow-up. Results of the SMA phase effect Analysis 2 (B with M) ($r = -.54, p = .01$), Analysis 3 (B with F) ($r = -.70, p = .00$), Analysis 4 (B with I + M + F) ($r = -.59, p = .00$), and Analysis 7 (B v. I + M) ($r = -.55, p = .00$) were all statistically significant. The decline in DPO between Baseline and all other study phases was statistically significant. Of note, the slight increase in DPO from Intensive Treatment to Maintenance Treatment ($r = -.09, p = .68$) and decline again from Maintenance Treatment to Follow-up ($r = -.032, p = .10$) was not statistically significant.

**Dyad 4.** Visual inspection of the data revealed the mean DPO to decline from Baseline ($M = 7.5, SD = 3.8$) to Intensive Treatment ($M = 5.8, SD = 1.6$), decline again from the Intensive Treatment to Maintenance Treatment ($M = 4.6, SD = 1.8$), and then maintain improvement from the Maintenance Treatment to Follow-up ($M = 4.5, SD = 1.7$). Results of the SMA phase effect Analysis 2 (B with M) ($r = -.46, p = .00$), Analysis 3 (B with F) ($r = -.48, p = .01$), Analysis 4 (B with I + M + F) ($r = -.45, p = .00$), Analysis 5 (I with M) ($r = -.34, p = .05$), and Analysis 7 (B v I + M) ($r = -.44, p = .00$) revealed the improvements were all statistically significant.
**Dyad 5.** Visual inspection of the data revealed the mean DPO to have a large decline from Baseline ($M = 8.7, SD = 2.3$) to Intensive Treatment ($M = 5.0, SD = 1.4$), and then continued stepwise decline from the Intensive Treatment to Maintenance Treatment ($M = 3.9, SD = .9$), and Maintenance Treatment to Follow-up ($M = 3.1, SD = .9$). Results of the SMA phase effect Analysis 2 (B with M) ($r = -.83, p = .00$), Analysis 3 (B with F) ($r = -.83, p = .01$), Analysis 4 (B with I + M + F) ($r = -.82, p = .00$), Analysis 5 (I with M) ($r = -.36, p = .04$), Analysis 6 (M with F) ($r = -.39, p = .01$), Analysis 7 (B v I + M) ($r = -.80, p = .00$), and Analysis 8 (I + M with F) ($r = -.40, p = .02$) revealed the improvements were all statistically significant.

**Dyad 6.** Although this dyad did not participate in Follow-up, visual inspection of mean DPO revealed a stepwise decline from Baseline ($M = 6.3, SD = 2.6$) to Intensive Treatment ($M = 5.2, SD = 3.6$) and from Intensive Treatment to Maintenance Treatment ($M = 3.8, SD = 2.4$). Results of the SMA phase effect Analysis 2 (B with M) ($r = -.44, p = .03$) and Analysis 7 (B with I + M) ($r = .23, p = .03$) confirmed the decline between phases to be statistically significant.

In summary, visual inspection of the data suggested Dyad 1 did not experience a significant decline in DPO across the course of the study, but Dyads 2, 3, 4, 5, and 6 did display significant decreases in the rates of DPO when comparing Baseline and Follow-up data. SMA phase effect analyses confirmed that the small changes in Dyad 1’s DPO data were not statistically significant. Additionally SMA phase effect analyses provided evidence that those changes identified with visual inspection for Dyads 2, 3, 4, 5, and 6 were statistically significant. These DPO data provide support for our first hypothesis which predicted parents would report their children to display improved disruptive behavior immediately post-Intensive Treatment, during Maintenance Treatment, and during Follow-up.
It should be noted that although Dyads 2, 3, 4, 5, and 6 all displayed statistically significant improvements in DPO across participation in the study, Dyads 4 and 6 displayed the most striking improvements. The Baseline linear regression lines for Dyads 4 and 6 predicted without treatment, DPO would have continued to increase. Thus it can be more confidently assumed that participating in treatment resulted in the improved rates of DPO. On the other hand Dyads 2, 3, and 5’s Baseline linear regression lines predicted that some improvements may have occurred without intervention.

**Results of the Analyses of Direct Observational Data: The Dyadic Parent Child Interaction Coding System**

The Dyadic Parent-Child Interaction Coding System (DPICS) was utilized to code parent verbalizations and child compliance during three standardized laboratory situations: child-led play, parent-led play, and clean-up. Data from these observations are reflective of the participating parents’ acquisition of the skills taught during treatment as well as patterns of change in child compliance.

**Parents’ Skill Acquisition**

All parents were taught to use Unlabeled Praises, Labeled Praises, Reflections, and Behavioral Descriptions (Do Skills) while interacting with their children in three situations: child-led play, parent-led play, and clean-up. Figure 3-2 depicts the total percentage of Do Skills each parent used during child-led play, parent-led play, and clean-up. This percentage was calculated as the total number of each parent’s Do Skills divided by the number of each parent’s total verbalizations. As depicted in Figure 3-2, across each of the three Baseline observations, none of the parents displayed steady improvement in their use of the Do Skills, but all six parents’ use of the Do Skills increased at the post-Intensive Treatment assessment point. Dyad 5 displayed step-wise improvement in her total percentage of Do Skills across Intensive Treatment,
Maintenance Treatment, and Follow-up. Dyads 1, 3, 4, and 6 all had a decline in their Do Skill proficiency as they progressed from Intensive Treatment to Maintenance Treatment, and then Follow-up. Despite the decline in proficiency across post-treatment assessments, Dyads 1, 3, 4, and 6’s use of the Do Skills remained superior to Baseline levels.

During child-led play parents were coached to avoid using the Don’t Skills (Questions, Commands, and Criticisms) and increase their use of the Do Skills (Unlabeled Praises, Labeled Praises, Behavioral Descriptions, and Reflections). Figure 3-3 displays each dyad’s total use of both the Do and Don’t Skills during child-led play across the three Baseline assessments and the three post assessments following Intensive Treatment, Maintenance Treatment, and Follow-up.

A visual inspection of these data revealed Dyads 1, 2, 3, 4, and 6 did not have a strong pattern of change in their use of the Do or Don’t Skills across the three Baseline assessments. Dyad 5 displayed a progressive decline in her use of the Don’t skills across the three Baseline assessments.

Across the three post assessments there was evidence of significant skill acquisition of the Do and Don’t among the participating parents. Immediately following Intensive Treatment Dyads 2, 3, 5, and 6 displayed a large decline in their use of the Don’t Skills and a large increase in their use of the Do Skills. Dyads 3 and 6 displayed a stepwise decline in their use of the Do Skills across the post-assessments, despite this decline their use of the Do Skills remained above Baseline levels. Dyad 5 stood out as her use of the Do Skills actually continued to improve from post-Intensive Treatment to post-Maintenance Treatment and only slightly declined from post-Maintenance Treatment to Follow-up. Dyads 1 and 4 displayed less dramatic skill acquisition as compared to the other dyads immediately post-Intensive Treatment. The gains Dyads 1 and 4
made began to decline over the course of the post assessments. A comparison of Dyad 1 and 4’s performance between Baseline and Follow-up revealed little to no improvement.

In sum these DPICS data provided support for our second hypothesis which predicted participating parents would display an increase in their use of the Do Skills and a decrease in their use of the Don’t Skills following participation in abbreviated intensive Parent-Child Interaction Therapy (PCIT). Four of the dyads showed impressive gains following Intensive Treatment and were able to maintain skill levels above Baseline performance at Follow-up. Poling and Fuqua (1986) indicate that treatment efficacy can only be assessed by changes in the dependent variables “when and only when treatment is initiated for that behavior.” There is strong evidence that parents’ participation in the Intensive Treatment was the catalyst for parents improved skill acquisition, as there were no improvements displayed during Baseline observations, but immediately following Intensive Treatment parents’ skill acquisition improved.

**Child Compliance**

Across the parent-led play and clean-up situations, each child’s level of compliance was assessed using observational data. Alpha compliance was calculated by dividing the total number of times a child complied with a parent’s command by the total number of commands the parent issued for which the child had an opportunity to obey. Figure 3-4 displays the alpha compliance percentages for each child across their participation in the current study. The mean alpha compliance percentages for all three Baseline assessments and for all three post assessments were calculated and plotted as a solid black horizontal line across the corresponding bar graphs.

Visual inspection of alpha compliance during Baseline revealed Dyads 2 and 4 both had increasing alpha compliance across the three Baseline assessments. Dyad 3 had decreasing alpha compliance across the three Baseline assessments. Dyads 1, 5, and 6 had relatively stable levels
of alpha compliance across all three Baseline assessments. All six children had higher mean alpha compliance percentages post-treatment (Intensive Treatment, Maintenance Treatment, and Follow-up) as compared to the mean alpha compliance of the three Baseline observations. Improvement in compliance varied greatly among the children. Dyad 1 displayed the least improvement in mean alpha compliance, with an increase of only 5% from Baseline to post-treatment. Dyad 6 achieved the greatest improvement in mean alpha compliance with an increase of 52% from Baseline to post-treatment. The remaining dyads’ exact change in mean alpha compliance from Baseline to post-treatment was as follows: Dyad 2, 16%; Dyad 3, 31%; Dyad 4, 12%; and Dyad 5, 12%.

Our first hypothesis predicted alpha compliance, as measured by DPICS, would improve across four time points: Baseline, immediately post-Intensive Treatment, immediately post-Maintenance Treatment, and at the conclusion of Follow-up. These data provide support for this hypothesis, as all of the participating children displayed improvements in their rates of alpha compliance during standard laboratory situations (Parent-led play and Clean-up).

**Results of Analyses of Parent-Rating Scale Data: Eyberg Child Behavior Inventory**

Each mother completed at least three ECBI rating scales prior to the Intensive Treatment week, one ECBI prior to each daily Intensive Treatment session, and one ECBI each week throughout Maintenance Treatment and Follow-up. Figure 3-5 displays the ECBI scores for each dyad across each of the four study phases. For each dyad, the mean ECBI score of each phase was calculated and is displayed as a solid horizontal line within each corresponding phase.

Interestingly all six dyads’ ECBI intensity scores declined during Baseline and prior to the initiation of Intensive Treatment. Among the six dyads, this decline during Baseline in parent ratings of child problem behaviors ranged from 12 – 52 points. Despite an initial decline in ECBI scores, Dyads 1, 2, 3, 4, and 6’s last three ECBI scores during Baseline stabilized. For
example, Dyad 4’s last three ECBI scores during Baseline were 134, 127, and 133 and Dyad 6’s last three ECBI scores during Baseline were 110, 104, and 113. Dyad 5 was the exception and had progressive ECBI score decline across the duration of Baseline.

All six dyads’ ECBI scores declined/improved when Intensive Treatment began. In fact, each dyad’s mean ECBI score during Intensive Treatment was lower than the mean ECBI score during Baseline. All five dyads (Dyads 1, 3, 4, 5, 6) that completed Maintenance Treatment sustained a mean Maintenance Treatment ECBI score below their mean Baseline ECBI score. All four of the dyads (Dyads 1, 3, 4, 5) that completed Follow-up, sustained a mean Follow-up ECBI score below their mean Baseline ECBI score.

Figure 3-5 also displays a black dotted line on each dyad’s ECBI graph that extends across all four phases. For each dyad, this dotted line is plotted one ECBI standard deviation (ECBI standard deviation in normative sample = 35.2) below their Baseline ECBI mean. All scores that fall below this dotted line are greater than one full ECBI standard deviation below the dyad’s Baseline average; thus suggestive of a clinically significant change. Of the five dyads that completed Maintenance Treatment, Dyads 1, 3, and 6 maintained ECBI scores that were greater than one ECBI standard deviation below their Baseline average. Unfortunately Dyad 6 dropped out of the study during Follow-up, but Dyads 1 and 3 continued to maintain ECBI scores greater than one ECBI standard deviation below their Baseline average during Follow-up. Although Dyad 4’s ECBI average was greater than one ECBI standard deviation below the Baseline mean during Intensive Treatment, this progress was not maintained during the Maintenance Treatment and Follow-phases.

Our first hypothesis predicted participating parents would report improved child problem behavior as measured by the ECBI immediately post-Intensive Treatment, during Maintenance
Treatment, and during Follow-up. Data provided support for this hypothesis as all dyads’ ECBI scores remained below their Baseline mean during post-treatment assessments. Two families demonstrated exceptional improvement, as their ECBI scores following Intensive Treatment, Maintenance Treatment, and at the conclusion of Follow-up were greater than one full standard deviation below their Baseline mean.

**Daily Hassles and Uplifts**

Table 3-3 presents the Daily Hassles and Uplifts data collected from participating dyads during Baseline and at the end of Follow-up. Intensity and Frequency scores were produced for the Hassel domain and for the Uplift domain at both collection time-points. The Intensity score represents the sum of each parent’s ratings divided by the total number of items, essentially the mean of the parent’s Intensity ratings. The Frequency score for each parent represents the total number of items that were given a rating above zero.

There are limited normative data available for the Combined Hassles and Uplifts scale. According to the Hassles and Uplifts technical manual (Lazarus & Folkman, 1989) there are two sets of normative data using the Combined Hassles and Uplifts Scale. These two normative groups include a sample of 150 elderly persons aged 65 – 74 (Folkman et al., 1987) and a sample of 75 married couples aged 35 – 44, with children living at home (DeLongis, Folkman, & Lazarus, 1988). Both of these studies only report the Hassles scale normative data. A current literature review produced one additional study with normative data for the Combined Hassles and Uplifts scale for a sample of employed and non-employed women during three different stages of their pregnancy (Thompson, Murphy, O’Hara, & Wallymahmed, 1997).

Pre- and post-treatment data from this current study were compared to the aforementioned studies. The mean Hassles Frequency score across all dyads pre-treatment was $M = 20.83$, $SD = 3.37$ and post- treatment was $M = 17.25$, $SD = 12.69$. The mean Hassles Frequency scores in the
current study were higher than the elderly sample \((M = 7.71, SD = 7.58)\) (Folkman et al., 1987) and the sample of married couples with children living at home \((M = 12.45, SD = 7.66)\) (DeLongis, et al., 1988). The current sample’s mean Hassles Frequency scores were more similar to the sample of employed pregnant women \((M = 25.6, SD = 26.88)\) and non-employed pregnant women \((M = 36.33, SD = 35.96)\) (Thompson et al., 1997).

The mean Hassles Intensity score across all dyads pre-treatment was \(M = .61, SD = .25\) and post-treatment was \(M = .48, SD = .36\). These mean Hassles Intensity scores were lower than the elderly sample \((M = 1.32, SD = .32)\) (Folkman et al., 1987) the sample of married couples with children living at home \((M = 1.34, SD = .26)\) (DeLongis, et al., 1988), the employed pregnant women \((M = 1.34, SD = .26)\), and the non-employed pregnant women \((M = 1.34, SD = .26)\) (Thompson et al., 1997).

The only normative data found for the Uplifts scale of the Combined Hassles and Uplifts measure was in the Thompson et al. (1997) study of employed and non-employed pregnant women. The pre-treatment mean Uplifts Frequency score across all dyads in the current sample was \(M = 25, SD = 8.17\) and post-treatment was \(M = 25, SD = 16.69\). These mean Uplifts Frequency scores were lower than the sample of employed pregnant women \((M = 43.96, SD = 22.47)\) and non-employed pregnant women \((M = 54.3, SD = 39.84)\) (Thompson et al., 1997). The mean pre-treatment Uplifts Intensity score across all dyads in the current sample was \(M = 1.01, SD = .58\) and post-treatment was \(M = 1.09, SD = 1.03\). These mean Uplifts Intensity Scores were lower than the sample of employed pregnant women \((M = 1.75, SD = .46)\) and non-employed pregnant women \((M = 1.85, SD = .48)\) (Thompson et al., 1997).

No patterns emerged related to treatment gains with these data. Of the four dyads who completed the study in its entirety, two of the dyads’ Hassles Frequency and Intensity scores
increased from Baseline to Follow-up and two of the dyads’ Hassles Frequency and Intensity scores declined from Baseline to Follow-up. Of the four dyads who completed the study in its entirety, three of their Uplifts Frequency and Intensity scores declined from Baseline to Follow-up and one dyad’s Uplifts Frequency and Intensity scores increased from Baseline to Follow-up. Dyads 2 and 6 did not have data at Follow-up because they dropped out of the study prior to Follow-up. Interestingly Dyad 6, a study dropout, had the highest Hassles Intensity and Frequency score of the sample during Baseline.
Table 3-1. Mean frequency of noncompliance and standard deviations of the daily time-series phase data for Daily Parent Observations of noncompliance.

<table>
<thead>
<tr>
<th>Dyad</th>
<th>B</th>
<th>I</th>
<th>M</th>
<th>F</th>
<th>I + M</th>
<th>I+M+F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 8</td>
<td>n =5</td>
<td>n =20</td>
<td>n =29</td>
<td>n =26</td>
<td>n =54</td>
<td>n =62</td>
</tr>
<tr>
<td>1</td>
<td>3.36(1.58)</td>
<td>2.6(2.42)</td>
<td>3.55(2.33)</td>
<td>2.52(1.67)</td>
<td>3.35(2.34)</td>
<td>2.91(2.08)</td>
<td>2.97(2.02)</td>
</tr>
<tr>
<td></td>
<td>n= 11</td>
<td>n =4</td>
<td>n =6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3.91(3.09)</td>
<td>2.25(1.48)</td>
<td>0.83(0.69)</td>
<td></td>
<td></td>
<td>1.4(1.28)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>n = 12</td>
<td>n =5</td>
<td>n =26</td>
<td>n =27</td>
<td>n =31</td>
<td>n =58</td>
<td>n =70</td>
</tr>
<tr>
<td>3</td>
<td>6.17(4.04)</td>
<td>1.6(1.36)</td>
<td>2.15(2.25)</td>
<td>0.89(1.40)</td>
<td>2.06(2.14)</td>
<td>1.52(1.92)</td>
<td>2.31(2.99)</td>
</tr>
<tr>
<td></td>
<td>n = 17</td>
<td>n =5</td>
<td>n =30</td>
<td>n =26</td>
<td>n =53</td>
<td>n =61</td>
<td>n =78</td>
</tr>
<tr>
<td>4</td>
<td>7.53(3.84)</td>
<td>5.8(1.6)</td>
<td>4.63(1.80)</td>
<td>4.46(1.71)</td>
<td>5.64(2.94)</td>
<td>4.21(1.78)</td>
<td>5.28(2.66)</td>
</tr>
<tr>
<td></td>
<td>n = 20</td>
<td>n =5</td>
<td>n =30</td>
<td>n =14</td>
<td>n=36</td>
<td>n =49</td>
<td>n =69</td>
</tr>
<tr>
<td>5</td>
<td>8.65(2.26)</td>
<td>5(1.41)</td>
<td>3.9(0.91)</td>
<td>3.07(0.88)</td>
<td>4.14(1.16)</td>
<td>3.78(1.11)</td>
<td>5.12(2.693)</td>
</tr>
<tr>
<td></td>
<td>n = 33</td>
<td>n =10</td>
<td>n =26</td>
<td></td>
<td>n=36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6.27(2.63)</td>
<td>5.2(3.63)</td>
<td>3.77(2.44)</td>
<td></td>
<td></td>
<td>4.17(2.89)</td>
<td></td>
</tr>
</tbody>
</table>

Note. B = Baseline; I = Intensive Treatment; M= Maintenance Treatment; F= Follow-up. The n values listed above do not include days in which parents did not provide DPO data. Blank cells reflect phases in which the parent did not provide data.
Table 3-2. Results of daily time-series phase effect analyses for Daily Parent Observations of noncompliance.

<table>
<thead>
<tr>
<th>Dyad</th>
<th>Analysis 1 B v. I</th>
<th>Analysis 2 B v. M</th>
<th>Analysis 3 B v. F</th>
<th>Analysis 4 B v. I + M + F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(r)</td>
<td>(r) (Lag1)</td>
<td>(r)</td>
<td>(r) (Lag1)</td>
</tr>
<tr>
<td>1</td>
<td>-.19</td>
<td>-.26</td>
<td>.04</td>
<td>.23</td>
</tr>
<tr>
<td>2</td>
<td>-.26</td>
<td>-.29</td>
<td>-.50*</td>
<td>.47</td>
</tr>
<tr>
<td>3</td>
<td>-.51</td>
<td>+.20</td>
<td>-.54**</td>
<td>.01</td>
</tr>
<tr>
<td>4</td>
<td>-.21</td>
<td>+.07</td>
<td>-.46**</td>
<td>.10</td>
</tr>
<tr>
<td>5</td>
<td>-.57</td>
<td>+.54</td>
<td>-.83**</td>
<td>.00</td>
</tr>
<tr>
<td>6</td>
<td>-.16</td>
<td>+.22</td>
<td>-.49*</td>
<td>.00</td>
</tr>
</tbody>
</table>

Note. B = Baseline; I = Intensive Treatment; M = Maintenance Treatment; F = Follow-up *\(p \leq .05\) **\(p \leq .01\). \(r\) = Pearson’s correlation. \(r\) (Lag1) = autocorrelation. Blank cells reflect analyses that could not be conducted due to participant drop out.
Table 3-2. Continued

<table>
<thead>
<tr>
<th>Dyad</th>
<th>Analysis 5 I v. M</th>
<th>Analysis 6 M v. F</th>
<th>Analysis 7 B v I + M</th>
<th>Analysis 8 I + M v F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>r</td>
<td>r(Lag1)</td>
<td>r</td>
<td>r(Lag1)</td>
</tr>
<tr>
<td>1</td>
<td>+.16</td>
<td>-.30</td>
<td>-.25</td>
<td>+.07</td>
</tr>
<tr>
<td>2</td>
<td>-.54</td>
<td>+.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>+.10</td>
<td>+.20</td>
<td>-.32</td>
<td>+.35</td>
</tr>
<tr>
<td>4</td>
<td>-.34*</td>
<td>-.14</td>
<td>-.05</td>
<td>-.01</td>
</tr>
<tr>
<td>5</td>
<td>-.36*</td>
<td>+.05</td>
<td>-.39**</td>
<td>-.01</td>
</tr>
<tr>
<td>6</td>
<td>-.22</td>
<td>+.08</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. B = Baseline; I = Intensive Treatment; M = Maintenance Treatment; F = Follow-up  
*p < .05  **p < .01. r = Pearson’s correlation. r(Lag1) = autocorrelation. Blank cells reflect analyses that could not be conducted due to participant drop out.
<table>
<thead>
<tr>
<th>Dyad</th>
<th>Hassles</th>
<th>Uplifts</th>
<th>Hassles</th>
<th>Uplifts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>F</td>
<td>I</td>
<td>F</td>
</tr>
<tr>
<td>1</td>
<td>.66</td>
<td>23</td>
<td>.74</td>
<td>23</td>
</tr>
<tr>
<td>2</td>
<td>.60</td>
<td>20</td>
<td>1.30</td>
<td>29</td>
</tr>
<tr>
<td>3</td>
<td>.38</td>
<td>17</td>
<td>.2</td>
<td>37</td>
</tr>
<tr>
<td>4</td>
<td>.40</td>
<td>17</td>
<td>.32</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>.58</td>
<td>23</td>
<td>.70</td>
<td>24</td>
</tr>
<tr>
<td>6</td>
<td>1.06</td>
<td>25</td>
<td>.98</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 3-3. Daily Hassles and Uplifts

Note. I = Intensity. F = Frequency. Intensity scores represent all the ratings added together and then divided by the total number of items. Frequency scores represent the total number of items that were given a rating above zero.
Figure 3-1. Daily Parent Observations of noncompliance (DPO). Dotted black lines are linear regression lines of Baseline data. Solid gray horizontal lines represent the mean DPO for each study phase.
Figure 3-2. Percentage of total verbalizations that were Do Skills during child-led play, parent-led play, and clean-up.
Figure 3-2. Continued
Figure 3-3. Parent Acquisition of Do and Don’t Skills in child-led play. Black columns represent Don’t Skills, White Columns represent Do Skills.
Figure 3-4. Percentage alpha compliance during parent-led play and clean-up. Black dotted horizontal lines represent the mean alpha percentage compliance combined across all three Baseline observations and the mean alpha percentage compliance combined across Intensive Treatment, Maintenance Treatment, and Follow-up.
Figure 3-5. Eyberg Child Behavior Inventory (ECBI) scores during Baseline, Intensive Treatment, Maintenance Treatment, and Follow-up. ECBI scores are represented by solid black lines. The solid gray horizontal lines represent the mean ECBI score of each phase. The dotted black lines are plotted one ECBI standard deviation below the dyad’s Baseline ECBI mean.
Figure 3 -5. Continued
CHAPTER 4
DISCUSSION

Although treatment gains varied between dyads, all dyads displayed improvements in some domains. Observational data of child compliance (DPICS) and parent-ratings of child problem behavior (ECBI) both reflected improved child behavior over time with all six participating dyads. Daily Parent Observations of noncompliance (DPO) reflected improvements for the majority of families. DPICS data revealed all parents made initial gains on their acquisition of skills taught during treatment, but maintenance of these gains during Follow-up varied among dyads.

Dyad 1 did not display statistically significant decline in DPO across the four study phases, but also did not display a statistically significant increase in rates of DPO. It should be noted that during Baseline, Dyad 1’s rate of DPO was already low and thus had little room for improvement. Five of the six participating parents (Dyads 2, 3, 4, 5, and 6) reported statistically significant declines in their children’s rates of daily noncompliance, as measured by DPO, from Baseline to Follow-up.

Interestingly, each of these dyads displayed varying patterns of statistically significant step-wise decline in rates of DPO across each of the study phases they completed. Figure 3-1 includes graphs which display these patterns. For example, Dyad 4 during Baseline had a mean DPO of 7.5, during Intensive Treatment had a mean DPO of 5.8, during Maintenance Treatment had a mean DPO of 4.6, and during Follow-up had a mean DPO of 4.5. Similarly, Dyad 5 during Baseline had a mean DPO of 8.7, during Intensive Treatment had a mean DPO of 5, during Maintenance Treatment had a mean DPO of 3.9, and during Follow-up had a mean DPO of 4.1. These results highlight that some children made improvements in their behavior during both Intensive and Maintenance Treatment. Additionally these data revealed that during Follow-up,
when intervention is complete, it was possible for rates of DPO to continue to improve. This suggests that as the parents continued to implement their new skills, a consolidation of the effects of treatment may have occurred so that treatment gains became more apparent during the latter phases of the study.

All dyads who completed Maintenance Treatment (Dyads 1, 3, 4, 5, and 6) displayed higher mean alpha compliance, as measured by DPICS, at post-treatment assessments (the post-treatment mean averages data collected post-Intensive Treatment, post-Maintenance Treatment, and at the conclusion of Follow-up) compared to the pre-treatment assessments (the mean of the three Baseline observations). Improvements in mean alpha compliance from Baseline to post-treatment varied widely, from 5 – 52 %, among the participating dyads. Visual analyses of these data revealed that Dyads 4, 5, and 6 displayed varying patterns of step-wise improvement across Intensive Treatment, Maintenance Treatment, and Follow-up. For example, Dyad 4’s mean alpha compliance during pre-treatment was 42%, post-Intensive Treatment was 33%, post-Maintenance Treatment was 56%, and at the conclusion of Follow-up was 72%. Dyad 5’s mean alpha compliance during pre-treatment was 81%, post-Intensive Treatment was 80%, post-Maintenance Treatment was 100%, and at the conclusion of Follow-up was 100%.

Interestingly, Dyads 4, 5, and 6 also displayed this step-wise improvement in rates of noncompliance, as measured by DPO, across Intensive Treatment, Maintenance Treatment, and Follow-up. Both measurement instruments of compliance, DPO and DPICS, produced similar results, demonstrating convergence between these two measures of treatment outcome.

Consistent treatment gains across dyads were also reflected in parent ratings of child problem behaviors on the ECBI. Across Intensive Treatment and Maintenance Treatment, each dyad’s mean ECBI score remained lower than their Baseline mean ECBI score. Of the dyads that
completed Follow-up (Dyads 1, 3, 4, and 5) each of their mean ECBI scores during this final phase remained lower than their respective mean Baseline ECBI scores. Dyads 1, 3, and 6 maintained greater than one full standard deviation improvement on the ECBI below their respective mean Baseline ECBI scores during Intensive Treatment and Maintenance Treatment. Dyad 6 dropped out following Maintenance Treatment, but during Follow-up Dyads 1 and 3 maintained this greater than one full ECBI standard deviation improvement.

Parent acquisition of the Do Skills was measured using observational data. Initial analyses revealed the total percentage of parent verbalizations that were Do Skills across child-led play, parent-led play, and clean-up. From Baseline to immediately post-Intensive Treatment, all parents increased the percentage of their verbalizations that were Do Skills. Only one parent (Dyad 5) continued to improve in her usage of the Do Skills across remaining study phases. All other parents’ (Dyads 1, 3, 4, and 6) total percentage of verbalizations that were Do Skills declined across Intensive Treatment, Maintenance Treatment, and Follow-up. For Dyads 1, 3, 4 and 6, each parent’s proficiency in using the Do Skills declined as the amount of coaching and therapist contact declined. Despite this decline, parents’ usage of the Do Skills at Follow-up remained superior to Baseline levels.

A second strategy in reviewing observational data of parent skill acquisition, was to compare raw totals of Do and Don’t skills during child-led play. Parents 1 and 4 displayed virtually no improvement in their usage of the Do and Don’t skills when comparing Baseline and Follow-up data during child-led play. Although parents 3, 5, and 6 did show some decline in their proficiency of their usage of the Do and Don’t skills across participation in the study, at Follow-up their usage of the skills was still superior to Baseline.
The outcomes suggested by parent skill acquisition data and data related to maintenance of these skills were less impressive in comparison to the changes noted in multiple measures of child disruptive behavior (ECBI, DPO, alpha compliance) which generally improved and maintained gains throughout Follow-up. Although definitive conclusions cannot be made from these data, this phenomenon could be related to the time-limited nature of the abbreviated intensive PCIT protocol. Unlike traditional PCIT, in which parents are coached and remain in treatment until they meet mastery criteria of the Do and Don’t Skills, parents in this protocol advanced from CDI to PDI and graduated treatment regardless of the level of their skill proficiency. As such, those parents who needed more assistance in mastering the skills were not able to receive additional coaching. Eyberg (2005) highlights the time-unlimited nature of PCIT as one of the treatment’s core features. Future research comparing traditional time-unlimited PCIT to this current time-limited PCIT protocol will help to further elucidate the impact this core feature of PCIT has on measures of treatment outcome such as levels of disruptive child behavior and parent skill acquisition.

Although some dyads responded to treatment better than others, cumulatively these data provide initial evidence for the utility of this abbreviated intensive PCIT protocol. For families with children displaying mild to moderate levels of disruptive behavior, this study provides evidence that this level of impairment may be addressed in a shorter total time frame, using less therapeutic resources than currently implemented in the traditional PCIT protocol (Eyberg & Funderburk, 2010). These data contribute to the small body of literature which demonstrates improvements in child disruptive behavior can be made when using abbreviated or adapted PCIT formats (Nixon et al., 2003; McNeil et al., 2005).
Although Nixon et al. (2003) and McNeil et al. (2005) both investigated abbreviated PCIT treatments, their protocols and study populations were quite different from this current study. Nixon et al. (2003) designed an abbreviated PCIT protocol in which 10 sessions were conducted, alternating sessions on the phone and in the clinic. Didactic information was presented to families via video rather than during a one-on-one session with a therapist. Nixon et al. (2003) included children between the ages of three and five who a) met DSM-IV criteria for Oppositional Defiant Disorder, b) scored in the clinical range on the ECBI, and c) whose presenting problem was disruptive behavior which was present for at least six months. McNeil et al. (2005) provided a two day workshop in which didactic information was presented on the first day and parents received approximately one and one-half hours of coaching on the second day. Investigators detailed that parents were coached behind a one way mirror using bug-in-the-ear technology. Parents also had the opportunity to observe other parents being coached while they were taking a break from working with their own child (McNeil et al., 2005). This study included only foster parent families. Children in the McNeil et al. (2005) study were between the ages of two and eight years old and on average these children presented with ECBI scores in the clinically significant range.

Keeping these differences in study design and the unique participating populations in mind, it is interesting to consider our current results in comparison to McNeil et al. (2005) and Nixon et al. (2003). The mean ECBI Intensity scale score reported in the population of foster care families was $M = 148.15$, $SD = 39.62$ at the pre-treatment assessment and $M = 119.52$, $SD = 34.78$ at the one month post-treatment assessment (McNeil et al., 2005). Within the group of parents that engaged in the abbreviated PCIT protocol, Nixon et al. (2003) reported pre-treatment ECBI Intensity scale scores of $M = 156.25$, $SD = 16.80$, immediate post-treatment ECBI scores
of $M = 126.60$, $SD = 18.39$, and six-month follow-up scores of $M = 126$, $SD = 18.03$. ECBI scores in the current study population also declined from pre-treatment to post-treatment. ECBI scores ranged from 116 – 156 at the first Baseline measurement point and ranged from 47-123 at the last Follow-up measurement point (one month following the conclusion of Maintenance Treatment). Notably, some of the parents who participated in this abbreviated intensive PCIT protocol reported ECBI scores much lower than the follow-up mean ECBI scores as reported by McNeil et al. (2005) and Nixon et al. (2003).

Nixon et al. (2003) also reported data from DPICS observations. Mean compliance was $M = .54$, $SD = .25$ at pre-treatment, $M = .67$, $SD = .24$ at post-treatment, and $M = .77$, $SD = .23$ at six-month follow-up. Children in the current study also displayed improved rates of compliance over the course of the study protocol. The mean rates of compliance ranged from .42 - .64 across the three Baseline assessment points and ranged from .54 - .95 across the three post-treatment measurement points. Nixon et al. (2003) also reported that parents’ utilization of Praises increased from pre-treatment to post-treatment, and then declined slightly from post-treatment to follow-up. Our current data also reflected this pattern, in which parents’ skill acquisition is superior immediately post-treatment and then declines, but remains above pre-treatment levels, at follow-up. Lastly, Nixon et al. (2003) reported that parents’ use of Negative Talk and Commands continually declined from pre-treatment to post-treatment and then from post-treatment to the six month follow-up. Parents in the current study also showed a decline in their use of Negative Talk and Commands from pre-treatment to post-treatment. Contrastingly, our parents’ usage of Negative Talk and Commands increased slightly from post-treatment to follow-up.
Notably, there is no existing study in the literature comparing traditional PCIT (Eyberg & Funderburk, 2010) to any of the abbreviated PCIT formats. Without these future studies, it will be impossible to determine if the treatment gains attained in abbreviated PCIT formats are as strong as those that can be achieved using traditionally formatted PCIT. Although no studies have been conducted comparing traditional PCIT to abbreviated PCIT formats, Chaffin et al. (2004) compared traditional PCIT to PCIT with added components. Interestingly, this study did not find that these added components produced enhanced treatment outcomes. In fact, Chaffin et al. (2004), reported lower rates of re-abuse and lower rates of child behavior problems immediately post-treatment and at follow-up with families who participated in the traditional model as opposed to the enhanced model.

These current results contribute additional evidence to the growing body of literature on the efficacy of short term therapies to address childhood psychopathologies (Bradley et al., 2003; Chemtob et al., 2002; Gallagher et al., 2004; Sobel et al., 2001). As Weisz et al. (1997) reported, most clinic referred children drop out of treatment after an average of 10 sessions, thus highlighting the importance of designing and investigating short-term treatments for childhood psychopathologies. This abbreviated intensive PCIT protocol requires parents to attend six treatment sessions in the clinic and engage in three treatment sessions on the telephone. Instead of having to find time each week to attend sessions, parents found time each day during only one week to complete Intensive Treatment. If future studies prove this abbreviated intensive PCIT model to be efficacious, parents could choose the format which best fits their family’s unique schedule and needs.

**Eyberg Child Behavior Inventory: Measurement Challenges**

A visual analysis of Figure 3-5 reveals that all ECBI scores declined dramatically when Intensive Treatment began. Some of the decline in the mean ECBI scores from Baseline to
Intensive Treatment may be accounted for by variability in measurement administration. The ECBI was administered daily during Intensive Treatment; consequently, parents completed the measure based on their child’s behavior during the previous 24 hours. In contrast, during Baseline, Maintenance Treatment, and Follow-up the ECBI was administered weekly and parents completed the measure based on their child’s behavior during the previous week.

For example, Dyad 1’s final Baseline ECBI score was 104 and their ECBI score following the first day of Intensive Treatment was 55. Although it is common to see a decline in the parent-rating ECBI scores following the first treatment session, it is quite unusual to see a decline of this magnitude. Despite the rarity of this event in the context of PCIT delivered in the traditional weekly format, Dyads 1, 2, 3, and 4 all displayed similar declines in ECBI scores moving from Baseline to Intensive Treatment. It is logical to assume that much of this decline can be accounted for in the differing time-frames over which parents provided the reports. Children simply have less time in one day, as compared to one full week, to engage in as many problem behaviors, thus producing lower ECBI scores. With this in mind, one might have predicted ECBI scores to again increase during Maintenance Treatment and Follow-up, simply due to each parent’s return to reporting their child’s behavior during one week periods instead of one day periods. Interestingly, even though all parents reported increased ECBI scores following Intensive Treatment, Dyads 1, 2, 3, and 6 continued to report very low scores, suggesting that changing the time frame of measurement did not markedly change reported outcomes.

The single-case multiple baseline design requires stable baseline data to be achieved before the implementing the intervention. The current study originally defined a stable ECBI baseline as at least three ECBI scores that did not display a consistent downward trend. The current protocol further defined a “consistent downward trend” as a decline of greater than 5%. Since each
dyad’s ECBI scores were declining during baseline at a rate greater than 5%, the criteria for a stable baseline on the ECBI was modified. The modified criteria defined stable baseline data to include three days in a row with less than a 20 point difference in ECBI scores.

French and Sutton (in press) highlighted the inaccurate assumption of many researchers that the process of participants completing questionnaires does not produce changed thoughts, feelings, or behavior. Thus it is quite often wrongly assumed that in the absence of any intervention, repeated administration of the same measure will produce similar scores. Although some dyads’ ECBI improvements during baseline were larger than others, it is important to consider the observed reactivity of the ECBI when repeatedly administered in this study. There is no existing research that specifically addresses the measurement reactivity of the ECBI across multiple assessments administered closely in time. Additionally we were not able to identify any studies in the literature which investigated similar repeated measurement reactivity of any parent-report measures of child externalizing behaviors. Although there is no published data of the ECBI administered closely in time, a 12 week test-retest reliability of .80, and a 10-month test-retest reliability of .75 have been reported for the Intensity Scale (Funderburk, Eyberg, Rich, & Behar, 2003).

In other fields this issue has received more attention. For example in the area of health psychology, van Sluijs et al. (2006) and Spence et al. (2009) found that when adults completed questionnaires about physical activity, over time they reported an increase in walking activity. Objective measures of walking by a pedometer did not reflect these self-reported increases. In sum, although participants’ answers on a self-report measure changed over time, these changes were not confirmed using objective measures. In the depression literature, undergraduate volunteers who completed the Beck Depression Inventory two weeks in a row, with no
additional intervention, produced a drop in scores of small to medium effect (Cohen’s $d = 0.28$) (Sharpe & Gilbert, 1998). Although these studies only provide two examples of repeated measurement reactivity, they do provide a helpful framework for our current results. Plausible hypotheses are that: a) each child’s behavior objectively improved during baseline, b) the act of completing the measure altered each parent’s perceptions of their child’s behavior, or c) the ECBI scores followed the statistical pattern of regressing towards the mean across time. Based on clinical interactions with the participating families, the second hypothesis seems more likely to account for the declining ECBI scores during baseline. It appeared that each time the parent filled out the questionnaire they became more sensitive to the different kinds of disruptive and oppositional behaviors their child could be engaging in and began to observe their child’s behavior more carefully over the course of the baseline period.

Even though parents reported DPO data daily, these data were much more stable than the ECBI data during baseline. Although Dyads 1, 4, 5, and 6 displayed declining ECBI scores during baseline, their DPO data remained stable or increased during baseline. Dyads 2 and 3’s DPO data during baseline were not as stable: parents’ observations of noncompliance displayed a downward linear trend. The declining levels of observed noncompliance with Dyads 2 and 3 parallels the declining parent ECBI ratings reported during baseline. DPO data required parents to report an exact count of the number of times their child was noncompliant each day. Each parent was told to keep a running written tally of their child’s acts of noncompliance each day and report their DPO data at the end of the day. Perhaps these tight parameters helped to make the DPO data more objective and less prone to repeated measurement reactivity as compared to the parents’ once weekly completion of the ECBI.
Daily Hassles and Uplifts

Data collected from the Daily Hassles and Uplifts measure did not reveal any patterns related to treatment success or treatment dropout with the participating dyads. Interestingly, Dyad 6, a study dropout, had the highest Hassles Intensity and Frequency score of the sample during Baseline. Research with a larger sample of parents would be able to test the hypothesis that families with higher Frequency and Intensity of daily hassles are more likely to drop out of treatment. Limited normative data were available for this measure. Compared to the available norms, our current sample’s Hassles Frequency scores were higher than a population of elderly individuals (Folkman et al., 1987) and married couples with children at home (DeLongis, et al., 1988). Our current sample’s Hassles Frequency scores were more similar to a population of employed and non-employed pregnant women (Thompson et al., 1997). Our current sample’s Hassles Intensity scores, Uplifts Frequency scores, and Uplifts Intensity Scores were all lower than all three available normative samples.

Limitations and Strengths

One limitation of this study is the instability of some Baseline data immediately prior to the initiation of treatment. As data collection began, it became extremely difficult to adhere to the criteria of achieving stable Baseline data before beginning treatment phases. Some of this difficulty related to practical and logistical matters such as the families’ and therapists’ schedules as well as the availability of clinic space. In order for most families to participate in the Intensive Treatment, they had to make major adjustments to their weekly work schedules or take off an entire week of work. In order for therapists to work with a family they also had to make significant adjustments to their weekly schedules. On several occasions the investigator was faced with making a decision of whether to delay the start of Intensive Treatment or continue forward in the face of Baseline data becoming slightly unstable on the scheduled start day or the
day prior to the scheduled start date. In these cases, the investigator made the decision to move forward, as the negative consequences of delaying the treatment seemed to outweigh the benefits of the delay. Delaying the treatment would have created many scheduling problems for the participating families; consequently increasing parents’ frustrations and risking dropout.

A second limitation in this study is the absence of reliability data for the Daily Parent Observations of noncompliance. Each family was asked to identify another adult (e.g., spouse, grandparent, babysitter, or neighbor) to provide inter-observer reliability DPO data. Due to single-parent households, varying parent work schedules, and generally minimal time in which two parents were present together with the target child, participating parents found it extremely difficult to produce reliability data. Reliability data were sparse; consequently, they are not included in this study. This substantially limits the interpretability of the DPO data provided by parents. Fortunately, DPO was not the only measure of noncompliance in this study. The DPICS assessed child compliance in standard laboratory situations. These DPICS data were collected by independent observers and also had the benefit of reliability observations. Both DPICS and DPO data demonstrated children to have decreased rates of noncompliance across their participation in the study. Multiple measurement of the same construct does increase the methodological rigor of the study and increases confidence in interpreting results (Gould & Schaffer, 1985, Kazdin, 2005; Mash & Hunsley, 2005).

When reviewing other case-based research studies in which observational data of targeted behaviors were included, most commonly researchers employed trained independent observers to collect data rather than a family member or other observer not employed by the study. Additionally, these observations were typically made in a laboratory rather than in the child’s naturalistic environment (e.g., Angelesa, M.M., Hoch, H., Taylor, B.A., 2008; Mudford, O.C. &
Turner, S.A., 2009; Roane, H.S. & Kelley, M.E., 2008; Rodriguez, N.M, Thompson, R.H., Baynham, T.Y., 2009; Ross, S.W. & Horner, R.H., 2009). The advantage of such designs is that researchers have greater control over the data and are able to provide a second observer for reliability data. The disadvantage to these designs is that assessors are not observing children’s behavior in their natural environment and observations are limited to a discrete period of time. Future studies should take great care to problem solve strategies to overcome practical and logistical barriers of collecting observational reliability data in the home setting.

A third limitation is that the pre-treatment assessment data did not allow for official clinical diagnoses (e.g., Oppositional Defiant Disorder) to be made. Assessment data identified children with mild to moderate levels of disruptive behavior, as determined by the ECBI; consequently, these results cannot be generalized to populations of children with clinical diagnoses of Oppositional Defiant Disorder or Conduct Disorder. Traditional PCIT typically targets children with clinically significant behavior disorders ranging from mild to severe in nature. The principal investigator did not to include children with ECBI scores the severe range, as the efficacy of the abbreviated intensive PCIT model was unknown. We had concerns that the therapist would be unable to provide parents with an adequate amount of therapeutic resources in our current time-limited design. There was particular concern that the dysfunctional relationship patterns between parent and child, which typically are more impaired in families with children with severe levels of disruptive behavior, would not adequately improve during Child Directed Interaction phase of PCIT, thus making Parent Direction Interaction more difficult to implement. Additionally, there was concern that parents of children who acted out more severely during the time-out procedure would not receive the coaching resources necessary to master the technique. As the evidence of efficacy for this abbreviated intensive PCIT model continues to grow,
researchers will be able to determine if this model is effective with more severely disordered children and their parents.

Finally, the ability to generalize our results may be limited to a small sub-set of the general population. All participating parents were female and five of the six participating children were male. Additionally, the sample was comprised of only Caucasian children and parents. The ability to generalize these findings to male primary caregivers and parents and children of varying ethnicities is unknown. The ability to generalize to female children is limited.

Despite these limitations, the current study had several strengths. First, although this was not a randomized, control group design, the utilized study design provided for a careful evaluation of the effect of treatment. Within each individual dyad, the baseline assessment period served as a control for the remainder of the dyad’s time participating in the study protocol. Additionally there were controls instituted between dyads in the context of the multiple baseline design. Specifically, Dyad 4 served as a control for Dyads 1, 2, and 3; Dyad 5 served as a control for Dyads 1 - 4, and Dyad 6 served as a control for Dyads 1 – 5. This design allowed for visual analyses to be conducted in such a way that treatment efficacy was assessed by changes in the dependent variable, “when and only when treatment is initiated for that behavior” (Poling & Fuqua, 1986). This methodology allowed for careful analysis of change within each participating dyad, thus revealing nuances of treatment response that would otherwise be lost in a larger randomized control trial design. A second strength of the current study was the rate of treatment completion. All six participating dyads completed Intensive Treatment. Only one family dropped out during Maintenance Treatment. Third, this study incorporated multiple measurement strategies of treatment outcome including daily parent
observations of child noncompliance, weekly parent-rating scales of the frequency of common child behavior problems, and objective observations of parent skill acquisition and child compliance.

**Future Directions**

To develop further the efficacy of this abbreviated intensive PCIT protocol, future studies should compare this current protocol with the traditional time-unlimited PCIT protocol (Eyberg & Funderburk, 2010). It is important for these future studies to maintain the integrity of the traditional time-unlimited PCIT model when comparing it to this abbreviated intensive PCIT protocol. Unfortunately the one study that compared an abbreviated PCIT protocol to what the authors described as “standard” PCIT, standard PCIT did not maintain the time-unlimited core feature of PCIT (Nixon et al., 2003). Thus we were unable to make conclusions regarding the efficacy of the abbreviated protocol in comparison to the traditional protocol. In the long term, to make strong conclusions regarding the comparative efficacy of this abbreviated intensive PCIT protocol, researchers must build upon past research rather than designing studies that stand alone and do not contribute to the larger and already established PCIT evidence base (Eyberg et al., 2008).

A longer term follow-up of dyads participating in this abbreviated intensive PCIT protocol would allow researchers to determine the maintenance of treatment gains beyond one month post-treatment. Generally, execution of long-term follow-up in treatment outcome studies of children with psychopathology is limited (Kazdin, 1993) and can be quite costly in terms of time, labor, and financial resources. Despite the challenges inherent in executing long-term follow-up, this will be important as there is evidence that gains in traditional PCIT are maintained long term: 10 – 13 months following initial intake (Boggs, Eyberg, Edwards, Rayfield, Jacobs, Bagner, and Hood, 2004), at a median follow-up of 850 days (Chaffin et al., 2004, ), 4 months
post-treatment (Schuhmann, Foote, Eyberg, & Boggs, 1998), and 3 – 6 years post-treatment (Hood and Eyberg, 2003). Future studies would also benefit from incorporating a measure to assess parents’ satisfaction with the abbreviated intensive PCIT protocol. This will be especially interesting to assess in comparison with traditional PCIT, to help tease apart what dimensions of the treatment protocols are most appealing to parents. Schuhmann et al. (1998) reported that parents who have participated in traditional PCIT indicate high levels of satisfaction with the content and process of the treatment.

These results contribute additional evidence to the growing body of literature which highlights the efficacy of a variety of brief therapies designed to treat a spectrum of childhood psychopathologies (e.g., Ahmad & Sundel-Wahlsten, 2008; Bradley et al., 2003; Chemtob et al., 2002; Giannopoulou, Dikaiakou, & Yule, 2006; Sobel et al., 2001, Smith et al., 2007). In sum, these data provide promising evidence for the efficacy of this abbreviated intensive PCIT protocol with young children with mild to moderate levels of disruptive behavior. All parents’ self-reports of child problem behaviors on the ECBI improved across their participation in the study. All dyads who completed at least Maintenance Treatment displayed higher mean alpha compliance, as measured by the DPICS, at post-treatment as compared to the mean of the three Baseline observations. All parents’ total usage of skills, as measured by the DPICS, were superior to Baseline levels when measured post-Intensive Treatment, post Maintenance Treatment, and at the conclusion of Follow-up. Finally, five of the six participating parents reported a statistically significant decline in DPO from Baseline to Follow-up. Participating parents and children all received some benefit by engaging in this abbreviated intensive Parent-Child Interaction Therapy protocol. The results provide a solid foundation for future research to continue to investigate the efficacy of this new protocol. This study should serve as the first step
in a research program designed to work towards Chambless and Hollon’s (1998) criteria for a well-established treatment
APPENDIX A
FAMILY DEMOGRAPHIC QUESTIONNAIRE

Parent Information

Last Name: ________________ First Name: ________________

Date of Birth (Month, Day, Year): ________________ Current Age: _______

Ethnicity ________________

Marital Status (circle one) Single Divorced Widowed Married

How many years of schooling have you had? (check one)

_____ less than 7 years
_____ junior high school (grades 7 – 9)
_____ some high school (grades 10 – 11)
_____ high school graduate
_____ some college or technical school
_____ college graduate
_____ graduate school (masters or beyond)

Current Occupation: ___________________________

Family Information

Please list other children living in the household

<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
<th>Relationship to Child in Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please list other adults living in the household

<table>
<thead>
<tr>
<th>Age</th>
<th>Gender</th>
<th>Relationship to Child in Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Yearly Household Income: (check one)

______ Less than $15,000
______ $15,000 - $30,000
______ $30,000 - $60,000
______ $60,000 - $90,000
______ More than $90,000
Child Information

Name: ____________________  First Name: ____________________

Date of Birth (Month,Day,Year): ________________  Current Age: _______

Sex (circle one)  Male  Female

Ethnicity (circle one) ________________

Is child currently in school? (circle one)
                   No  Daycare  Preschool  K-5  1st grade

Does your child have?

1. Long Standing Illness (circle one)  Yes  No
   If Yes please describe ________________

2. Learning/developmental problems (circle one)  Yes  No
   If Yes please describe ________________

3. Current Medication for behavior or emotional problems (circle one)  Yes  No
   If Yes please describe ________________

Parent Contact Information

Home Phone  (_______)___________________

Work Phone  (_______)___________________

Cell Phone  (_______)___________________

Email  ____________@______________

Mailing Address  __________________________
                   _______________FL__________
APPENDIX B
DAILY PARENT OBSERVATIONS CHECKLIST

Step One: Circle five behaviors your child displays on a daily basis.

Step Two: Rank order circled behaviors 1 – 5
1 = behavior that occurs the most frequently each day
5 = the behavior that occurs the least frequently each day

_______ Dawdles
_______ Poor Table Manners
_______ Refuses to eat food presented
_______ Refuses to do chores when asked
_______ Refuses to obey until threatened with punishment
_______ Acts defiant when told do something
_______ Argues with parents about rules
_______ Gets angry when doesn’t get own way
_______ Talks Back / Sasses
_______ Has temper tantrums
_______ Cries easily
_______ Whines
_______ Yells or Screams
_______ Hits parents
_______ Destroys toys and other objects
_______ Lies
_______ Teases or provokes other children
_______ Verbally fights with siblings or friends own age
_______ Physically fights with siblings or friends own age
_______ Constantly seeks attention
_______ Interrupts
_______ Runs away from parent in public
_______ Other _____________________________
APPENDIX C
TREATMENT PROTOCOL

Day One

Before This Session
1. Carefully review all assessment information so that you are familiar with the family’s primary concerns, strengths, and deficits. During teaching, you can emphasize the family’s strengths and the skills that may be most difficult for the family to learn.
2. Set up age-appropriate treatment toys.
3. Give parent the ECBI Intensity Scale
4. Materials needed: ECBI, Suggested Toys for CDI, CDI Handout, CDI Homework Sheet, Progress Note, Integrity Checklist, Treatment Folder, ECBI Graph (Change Over Course of Treatment), CDI Summary Sheet

Goals of this Session
1. Continue building rapport with the family
2. Teach parents the CDI skills
3. Provide the rationale for each skill in a way that the parents understand why the individual skill and CDI as a whole are important for their child.
4. Code and Coach parent in CDI skills

General Note
Please provide parent and child with one or two small five minute breaks during session if needed. Therapist should use clinical judgment to incorporate these breaks.

Hour One: Child Directed Interaction (CDI) Teach

1. Explain why CDI phase is taught first
   “Once [child’s name] becomes calmer and starts to enjoy having special CDI time with you, it will be easier for him/her to accept limits and discipline.

   “Many of the CDI skills you will learn are necessary for PDI to work, and we want them to become automatic habits so you won't have quite so many new things to remember all at once when we begin to focus on the most difficult behavior problems.”

2. Give overview of CDI
   ♦ Teaches you the kinds of skills that play therapists use with children to build a good relationship with them and help them feel safe and calm
   ♦ Teaches you how to communicate with preschoolers with limited attention spans
   ♦ Teaches ways to teach your child without frustration for either of you
   ♦ Improves your child’s self-esteem
   ♦ Improves your child’s social skills, like sharing, which children need to get along with other children and have friends
   ♦ Results a secure, warm relationship between you and your child (which often gets strained with oppositional children).
3. Explain the Basic Rule of CDI

♦ The basic rule of CDI is to follow your child’s lead, like play therapists do
♦ The specific rules of CDI apply to the short play therapy sessions (“special time”) that we ask to have with your child each day at home
♦ Some of the rules are good general parenting rules, but CDI is a special therapeutic time, and some of the rules apply only when you have these sessions with your child. At home there are many times when you have to direct your child’s activity.

“Next, we’ll talk about the specific rules of CDI.”
“We’ll start with the things you need to avoid saying during this special time”:

[For each rule, give parent the definition, examples, rationale. When teaching CDI, it’s good to sit around a table so that you can demonstrate with toys on the table as you talk, and so you don’t have to move when you demonstrate and role-play CDI with the parents]

4. Avoid Commands [“The first rule is to avoid commands”]

♦ Commands try to direct the play by suggesting what the child should do
♦ There are two kinds of commands
  • Direct: “Sit down.” “Please hand me the car.”
  • Indirect: “Would you like to sit down?” “Let’s put the cars away.”
♦ Commands take over the lead of the play
♦ If the child doesn’t obey, the play could stop being fun – CDI is a time when the child is to learn that it’s fun to get along and play together nicely.

5. Avoid Questions

♦ A question asks for an answer from the child
♦ There are different kinds of questions
  • Questions that ask for information – who, what, where, when, how
  • Unintentional questions – voice goes up at end of sentence; question tags
  • Questions that are really hidden commands – “Would you like to clean up?”
♦ Questions take over the lead of the conversation
♦ Questions sometimes suggest disapproval
♦ Questions often suggest you aren’t really listening to your child

6. Avoid Criticism

♦ Criticism is a negative or contradictory statement about the child or his/her actions – “You’re not nice,” or “That doesn’t go that way.”
♦ Criticism points out mistakes rather than providing correction
  • To correct without criticizing, could say, “It goes this way”
♦ Criticism tells the child what NOT to do (“Stop that,” “Don’t do that!” “Quit it.”)
♦ Criticism lowers a child’s self-esteem
♦ Criticism creates a negative interaction
7. Engage parents in recalling the three things to avoid during CDI

"Next we'll talk about what to DO --the special skills to use during the CDI play sessions. We call these rules the PRIDE skills to help you remember the" [point to the pride words on the wall or give them handout with list of PRIDE skills]

8. Praise your child's appropriate behavior

- Praise compliments a child about his or her behavior
- There are two kinds of praise
  - Labeled praise is specific praise; “You choose such pretty colors!” “You're being so careful with that the pen!”, “I like it when you build quietly!”
  - Unlabeled praise is nonspecific: “Good!”, “That's great!”, “Nice job”, “I like that.”
- Labeled praise is more effective because it lets child know exactly what you like.
- Praise Increases the behavior that it follows
- Praise Increases child's self-esteem
- Praise adds warmth to the interaction
- Praise makes both parent and child feel good!

9. Reflect appropriate talk

- Reflection is repeating/paraphrasing what your child says: “Yes, that’s a blue crayon.”
- Allows child to lead the conversation
- Shows child you're really listening
- Actually helps you learn to listen!
- Shows you accept/understand what child is saying
- Improves and increases child's speech and language
- May feel awkward at first, but becomes natural pretty quickly

10. Imitate appropriate play

- Imitation means doing the same thing your child is doing, such as drawing a tree if your child is drawing a tree
- Helps you keep your attention/comments focused on what your child is doing
- Helps you play right at your child’s developmental level
- Lets child lead the play
- Makes the play fun for your child
- Shows your approval of your child's activity
- Teaches child how to play well with others (for example, taking turns).

11. Describe appropriate behavior

- State exactly what your child is doing. “You're drawing a sun”
- Like a sports announcer, a running commentary
- Lets your child lead
- Lets your child know you're interested and paying attention to him/her
♦ Let’s child know you approve of what he or she is doing
♦ Models speech and teaches vocabulary and concepts
♦ Holds your child’s attention to the task and teaches child how to hold his/her own attention to a task

12. Be Enthusiastic!
♦ Let your voice show excitement about your child’s appropriate behavior. For example, “You are being SO nice to share with me!”
♦ Lets your child know that you are enjoying the time you are spending together
♦ Increases the warmth of your play

13. Engage parents in recalling the PRIDE skills

14. Discuss what parents should do when child misbehaves during CDI
“Children usually like CDI a lot and show good behavior, but what should you do if your child's behavior is not okay and you can’t give commands, questions, or criticisms?!

15. Ignore inappropriate behavior
♦ Serves to decrease ONLY attention-seeking behaviors (yelling, sassing, whining, crying for no real reason); not for hitting, stealing, running, etc.
♦ Any attention, positive or negative, can increase attention-seeking behaviors
♦ Avoid any verbal or nonverbal reaction to inappropriate behavior (e.g., looking at the child, smiling, frowning, etc.)
♦ Once you begin ignoring, you must continue until the behavior stops (explain consequences of stopping ignoring too soon and increasing the negative behavior)
♦ Continue ignoring until your child is doing something appropriate
♦ Praise your child immediately for appropriate behavior.
♦ Helps your child to notice the difference between your responses to good and bad behavior
♦ Ignored behavior gets worse before it gets better, so only ignore if you can continue to ignore when it gets worse
♦ Consistent ignoring eventually decreases many behaviors when combined with attention for positive behaviors

16. Describe how to combine ignoring with the PRIDE skills
♦ While ignoring the negative behaviors, look for any positive behaviors occurring at the same time, and comment on them
♦ If a negative behavior stops, look at the child with a friendly look and comment on what the child is doing that is the opposite of negative behavior: “I’m glad that you said that quietly.”
♦ Any time you see behavior that is opposite to the negative behaviors you have to ignore, give the child BIG labeled praises for the positive opposite.
17. Explain that if a negative behavior cannot be ignored, the parent must stop the play and deal with it
   - Behaviors that cannot be ignored include
     - Aggressive behaviors (e.g., hitting, biting)
     - Destructive behaviors (e.g., breaking crayons in half)
   - Stopping the play teaches your child that good behavior is required during special time
   - It shows your child that you are learning to set limits
   - Tell the child, “Special time is stopping because you hit me. Maybe next time you will be able to play nicely during special time.”
   - Try to initiate CDI again later in the day, if possible.

18. Model CDI for parents
   Therapist models what CDI looks like using all the PRIDE skills and ignoring negative behavior (Dos, Don’ts, and Ignoring). Parent can pretend to be the child if they are comfortable.

19. Describe the kinds of toys that are best to use for CDI at home, and why
   - Quiet toys that don’t have rules are best, so that parents can let the child lead the play without worrying about the child breaking rules
   - Construction toys, such as Legos, blocks, tinker toys
   - Play sets, such as farms, houses, towns
   - Creative toys, such as crayons and paper
   - Many objects around the house can be excellent creative toys, like pots and pans.
   - Avoid board games. Structured rules prevent free play.
   - Avoid pretend-talk toys such as puppets, toy telephones -- you want to communicate directly with your child
   - Avoid toys that encourage rough play (balls), aggressive play (super-hero figures), or messy play (finger paints). These increase the chance of behavior problems, and you want the special time to be a positive interaction.

20. Ask parents specifically what toys they will use this evening

21. Explain how to set up the CDI play session at home
   - Minimize distractions (siblings, telephone, TV, etc.)
   - Place two or three appropriate toys in CDI area before starting the session
   - Let the child choose from your selection once CDI begins

22. Explain the importance of practicing CDI every day for 5 minutes
   - Long enough to provide therapeutic effect for the child
   - Long enough for parents to be able to learn the skills
   - Short enough not to be too time consuming
   - Short enough that parents will not become frustrated with the concentration required at first to learn the skills
♦ Special time is not a reward — it should not be withdrawn for misbehavior

☐ 23. Ask parents to decide what time of day and what room in their house they will use for their daily practice — problem-solve with them if necessary to help them commit to a particular time and place

☐ 24. Give parents CDI handout and Suggested Toys for CDI

Hour Two: CDI Coding and Coaching

☐ 25. Orient child to CDI

“You and your parents are coming here to help your family learn some new ways to get along better. I’m going to give this little earpiece to your parent to wear so that when I’m in the other room I can talk to them. Sometimes I will tell them things to say while they play with you.”

☐ 26a. Code parent and child in CDI for 5 minutes (on CDI Coding Sheet for Therapists)

Over the bug, explain the coding directions:

“I’m going to watch quietly for the next 5 minutes. Use all the CDI skills you’ve been practicing while you follow along with [child’s name] in his/her game according to his/her rules.”

26b. Complete CDI Summary Sheet

26c. Prioritize coaching needs for the next 20 minutes (put a check mark beside one or two skills that will be the primary focus of today’s coaching session)

- Reduce Questions
- Reduce Commands/Criticism
- Increase Behavioral Descriptions
- Increase Reflections
- Increase Labeled Praise
- Increase Imitation
- Improve timing of attention and ignoring
- Increase enthusiasm, warmth and/or naturalness
- Improve focus of PRIDE skills toward more relevant positive opposites (e.g., “Nice playing gently” instead of “Nice putting the block on the tower”)
- Other __________________________

☐ 27. Provide parent with feedback from coding

☐ 28. Coach the parent with child for about 20 minutes

♦ Try to give only positive feedback during this first 20 minutes, ignoring parent mistakes — goal is to build parent confidence and reduce anxiety

☐ 29a. Code parent and child in CDI for 5 minutes (on CDI Coding Sheet for Therapists)

Over the bug, explain the coding directions:
“I’m going to watch quietly for the next 5 minutes. Use all the CDI skills you've been practicing while you follow along with [child's name] in his/her game according to his/her rules.”

29b. Complete CDI Summary Sheet

29c. Prioritize coaching needs for the next 20 minutes (put a check mark beside one or two skills that will be the primary focus of today’s coaching session)

- Reduce Questions
- Reduce Commands/Criticism
- Increase Behavioral Descriptions
- Increase Reflections
- Increase Labeled Praise
- Increase Imitation
- Improve timing of attention and ignoring
- Increase enthusiasm, warmth and/or naturalness
- Improve focus of PRIDE skills toward more relevant positive opposites (e.g., ‘Nice playing gently” instead of “Nice putting the block on the tower”)
- Other __________________________

☐ 30. Provide parent with feedback from coding

☐ 31. Coach the parent with child for about 20 minutes

☐ 32. Code parent and child in CDI for 5 minutes (on CDI Coding Sheet for Therapists)

Over the bug, explain the coding directions:

“I’m going to watch quietly for the next 5 minutes. Use all the CDI skills you've been practicing while you follow along with [child's name] in his/her game according to his/her rules.”

☐ 33. Review CDI Summary Sheet with Mother

☐ 34. Give homework sheets to parents to record CDI session

Use Summary Sheet data to help determine skill focus for homework

☐ 35. Confirm date and time of next session
Day Two

Before This Session

1. Set up age-appropriate treatment toys to occupy the child on the floor if the child comes.

Goals of this Session
1. Provide opportunity for parent to practice CDI skills
2. Teach parent the PDI procedure

General Note
Please provide parent and child with one or two small five minute breaks during session if needed. Therapist should use clinical judgment to incorporate these breaks.

Hour One: CDI Coding and Coaching

1. Review Homework with Mother
2. Introduce CDI Mastery Criteria to Mother
   During the 5 minute coding interval, parent must give 10 behavioral descriptions, 10 reflective statements, 10 labeled praises, and no more than 3 questions, commands, plus criticisms. Parents must also ignore non-harmful inappropriate behavior.

3a. Code parent and child in CDI for 5 minutes (on CDI Coding Sheet for Therapists)
   Over the bug, explain the coding directions:
   “I’m going to watch quietly for the next 5 minutes. Use all the CDI skills you’ve been practicing while you follow along with [child’s name] in his/her game according to his/her rules.”

3b. Complete CDI Summary Sheet
3c. Prioritize coaching needs for next 20 minutes (put a check mark beside one or two skills that will be the primary focus of today’s coaching session)
   ■ Reduce Questions
   ■ Reduce Commands/Criticism
   ■ Increase Behavioral Descriptions
   ■ Increase Reflections
   ■ Increase Labeled Praise
   ■ Increase Imitation
   ■ Improve timing of attention and ignoring
   ■ Increase enthusiasm, warmth and/or naturalness
   ■ Improve focus of PRIDE skills toward more relevant positive opposites (e.g., “Nice playing gently” instead of “Nice putting the block on the tower”)
4. Provide Parent Feedback regarding Coding

5. Coach the parent with child for about 20 minutes

6a. Code parent and child in CDI for 5 minutes (on CDI Coding Sheet for Therapists)

   Over the bug, explain the coding directions:
   “I’m going to watch quietly for the next 5 minutes. Use all the CDI skills you’ve been practicing while you follow along with [child’s name] in his/her game according to his/her rules.”

6b. Complete CDI Summary Sheet

6c. Prioritize coaching needs for next 20 minutes (put a check mark beside one or two skills that will be the primary focus of today’s coaching session)

   _____ Reduce Questions
   _____ Reduce Commands/Criticism
   _____ Increase Behavioral Descriptions
   _____ Increase Reflections
   _____ Increase Labeled Praise
   _____ Increase Imitation
   _____ Improve timing of attention and ignoring
   _____ Increase enthusiasm, warmth and/or naturalness
   _____ Improve focus of PRIDE skills toward more relevant positive opposites (e.g., ‘Nice playing gently” instead of “Nice putting the block on the tower”)
   _____ Other __________________________

7. Provide Parent Feedback regarding coding

8. Coach the parent with child for about 20 minutes

9. Take child back to childcare room

10. Review CDI Summary Sheet with Mother

11. Give homework sheets to parents to record CDI homework at home

   Use Summary Sheet data to help determine Skill Focus
Hour Two: Parent Directed Interaction Teach

12. Explain how PDI will be taught
- We will teach and role-play the steps of PDI in today’s session
- We will give you a handout that outlines all of the PDI steps at the end of this session
- It is important that the PDI steps be followed exactly the first time, so we will coach you and your child through the procedure in our next session

13. You will continue to use the CDI skills every day. With the CDI skills that you’ve mastered you can manage your child’s behavior in many situations. They are the foundation for the new discipline skills that you will be learning.

14. PDI will be initially taught in brief play sessions, but unlike Special Time, once you and your child master the PDI skills, you will use them only when it is important that your child obey a specific direction

GIVING EFFECTIVE COMMANDS

PDI starts with a command, so first we are going to talk about the kinds of directions that children are most likely to obey. We call these effective commands.

15. Commands should be direct rather than indirect
- A direct command makes it absolutely clear that the child is being told, not asked, to do something. It is not a choice.
  - Example: “Please sit down,” instead of “Would you like to sit down?” or “Sit down, okay?”
- 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” or “We’re going to put the puzzle away.”

16. 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

17. Commands should be given for one task at a time
- Multipart commands (“Put the cars in the box and close it and put the box on the shelf”) are hard for children to remember
- Inclusive commands (“Clean up the playroom”) are unclear because the individual tasks are not specified
• If a child has obeyed only part of an inclusive or multipart command, it is hard for the parent to know if the child simply forgot or deliberately disobeyed

♦ Each task should be stated as a separate command ("Put the cars in the box")

**18. Commands should be specific**

♦ Nonspecific commands ("Behave," "Settle down," "Watch out") doesn’t let the child know exactly what the parent expects

♦ Specific commands tell the child exactly what to do ("Hand me the gum. Use your quiet voice.")

**19. Commands should be developmentally appropriate**

♦ A child must be able to understand the command and be able to do it easily.
  • Instead of “Put the azure BMW in the container, say “Put the blue car in this box.”
  • With a 3-year-old, instead of “Write your name,” say “Try to make a ‘J’ here.”

**20. Commands should be given in a normal tone of voice**

♦ Commands stated in a tentative tone can suggest that compliance is optional

♦ Raising your voice can make interactions unpleasant

♦ You don’t want to teach your child to ignore polite commands and wait for an angry tone to signal that you expect them to obey

♦ Calmly stated commands will prepare your child to obey teachers’ directions at school

**21. Explanations used before a command is given or after the child has obeyed make PDI more effective**

♦ Giving a reason before a command may increase compliance
  • If you say, “We have to meet Dad now. Please put the cars away,” this command may be more effective than saying abruptly, “Please put the cars away,”

♦ Giving a reason along with praise after a child has obeyed a command add genuineness to the praise and is an ideal time to teach the child
  • If your child obeys command to pick up crayon from floor, and you say, “Thank you for picking up the crayon. Now we won’t accidentally step on it and ruin the carpet,” you are attending to good behavior and teaching prosocial behavior.

♦ Giving a reason after a command and before the child obeys can increase noncompliance
  • If children show negative behavior (e.g., whining, “why”) to avoid obeying a command, a reason right then may encourage arguing or dawdling rather than obeying
  • A reason given right after a command can distract the child from the task
22. Commands should be used only when necessary

- Too many commands will frustrate your child and make it hard for you to be consistent.
- In PDI, when you give a correctly stated direct command, you MUST follow through in order to teach your child to mind. If a task is not important enough to follow through, it should not be given as a direct command.
- Many things we tell children to do may not be really important – and we can let them have choices. (Do you want to come here and listen to a story?)

23. Explain that PDI is introduced with practice commands in a play situation

“To learn PDI, we use effectively stated commands, beginning with very simple practice commands, in a play situation. We will use commands like “Put the firefighter in the truck.” What your child is learning is not to put firefighters into trucks, but to obey you when you give a direct command. We begin with easy tasks like firefighters in trucks. Once the child learns the PDI routine, we gradually move to real-life situations like getting ready for bed and sharing toys.”

24. Ask the parents what they think their child will do after they give a direct command.

Briefly reflect the parents’ responses in terms of compliance or noncompliance.

25. Explain the five-second rule for dawdling

- Sometimes your child will immediately obey or disobey your command, but sometimes it is not obvious if they are going to obey or disobey. Examples of dawdling:
  - Child says okay but doesn’t move to comply
  - Child continues playing as if didn’t hear you
  - Child whines, “Do I have to?”
- If your child is dawdling, remain silent for 5 seconds.
  - If your child has not started to obey by the end of the 5 seconds, your child has disobeyed
  - If your child begins the task within the 5 seconds, your child is obeying, so you will watch quietly until your child finishes the task.

26. Ask the parents what they would do if their child obeyed

- When the parents say they would give a labeled praise (if they need help coming to that solution, guide them to it), enthusiastically agree!
- Emphasize praise for compliance, such as, "Great minding” or "Good listening!” rather than “Great handing me the crayon.”
CHAIR WARNING

“When your child disobeys, we’re going to use a special kind of timeout procedure that is different in some important ways from the timeout that you’ve tried in the past”.

27. Instruct the parent to give the chair warning if the child disobeys:

"If you don't ['hand me the crayon'] you'll have to sit on the timeout chair."

28. Explain why parents need to use these exact words every time

*It is important to use these exact words each time you give the warning. These words give your child a second chance in case they didn’t listen to your original command. The warning keeps you from having to repeat your command, because it’s in the warning. The warning gives your child a chance to avoid timeout by obeying. Timeout is never an unfair surprise. It becomes easy for you to remain calm because you don’t have to think about what you will say.*

29. Use the 5-second dawdling rule again after the warning, if needed

PRAISE

30. Tell parents to give a labeled praise for compliance if the child obeys the warning

THE TIME-OUT CHAIR

[Therapist walks through each step of the timeout procedure demonstrating with an imaginary child while explaining each step.]

31. Tell parents to stand up and take child to the timeout chair if child disobeys the warning, while saying:

“**You didn't do what I told you to do so you have to sit on the timeout chair.**"

* These words explain the reason and the consequence to the child in the fewest possible words in order to minimize attention for noncompliance

32. Demonstrate how to take the child quickly, calmly, and safely to the timeout chair

* Quickly means the parent stands up and moves as they are stating the consequence
* Calmly means the parent uses a neutral tone of voice and no extra words
* Safely means that if the child resists, the parent either lifts the child from behind under the child’s arms or around the child’s chest (depending on the size of the child) to take the child to the chair

33. Describe the type and placement of TO chair

* Sturdy, adult-sized chair that child cannot damage
* Placed in a safe space away from walls or objects that child could reach from chair
* Placed away from entertainment such as television
34. Explain that after placing child on the time-out chair, the parent should step back from child and say:

"Stay on the chair until I say you can get off."

- Timeout is effective only if the parent (not the child, or a timer) determines when timeout ends

35. Emphasize that anything the child does on the chair must be ignored

- The child will probably do everything he can think of to get your attention. Some of these things may be emotionally hard to handle. (Saying “I hate you” or “I love you;” crying or swearing; or saying, “I have to go to the bathroom,” etc.)

36. The child must stay on the chair for 3 minutes, plus 5 seconds of quiet

- Three minutes is long enough to be effective for children ages 2 to 7
- Waiting for the final 5 seconds of silence is important so that the child learns that timeout ends when the child is quiet and not because of anything the child says

37. After the silence, the parent should approach the child and say:

“You are sitting quietly in the chair. Are you ready to come back and [hand me the crayon]?”

- The child does not have to answer with words
- If child hops right off the chair and goes toward the task, that probably means "yes"
- If child argues or refuses to respond, that probably means "no"

38. If the child’s answer is "No," say,

"Stay here until I say you can get off."

- Start timing over for a 3 minute timeout followed by 5 seconds of silence

39. If the child’s answer is "yes," lead the child back to the table, point to the task, and say nothing until the child has obeyed or disobeyed.

- The child will very likely obey at this point

40a. If the child doesn’t obey, take the child back to the timeout chair and calmly say:

“You didn’t do what I told you to do, so you have to sit in the chair.”

- Start timing over for a 3 minute timeout followed by 5 seconds of silence

40b. If the child does obey, simply acknowledge and give another simple command

“Fine. Now [hand me the red one.”]

- The child does not receive praise after having to go to timeout

41. When the child obeys the new command (which most children do), give enthusiastic labeled praise for quick compliance and return to CDI skills

“Thank you for minding so quickly! When you listen so well, we get to play and have a good time.”
TIME-OUT ROOM

42. Explain the purpose of the time-out room backup procedure
   ♦ The time-out chair is not an effective discipline procedure if your child can get off the chair whenever he wants.
   ♦ We use the timeout room as a backup procedure to teach your child to stay on the time-out chair.
   ♦ When used consistently, children learn very quickly to stay on the chair and then the backup is seldom needed.

43. Define “off the chair” as more than 50% of the child’s body weight off the chair
   ♦ Acrobatics don’t matter as long as the child stays on the chair

44. The first time the child gets off the chair, place the child back on the chair while giving the time-out room warning:
   "You got off the chair before I said you could. If you get off the chair again, you will go to the time-out room. Stay here until I say you can get off."
   ♦ This time-out room warning is given only once (ever). Any time later, if the child gets off the chair, the child will go immediately to the time-out room

45. If the child gets off the chair again (ever), take the child to the time-out room quickly while calmly saying,
   "You got off the chair before I said you could, so you have to go to the time-out room."

46. Place the child in the time-out room and close the door
   ♦ The child stays in the time-out room for 1 minute plus 5 seconds of quiet
   ♦ Parent must remain just outside the door during the room timeout

47. When the time is up, take the child back to the time-out chair, step back out of reach, and say:
   "Stay here until I say you can get off."
   ♦ Start timing over for a 3 minute timeout followed by 5 seconds of silence
   ♦ The PDI procedure continues as described above for the chair time out

48. Remind parents NOT to begin using PDI at home tonight
   ♦ It is important that it go perfectly the first time
   ♦ We will coach you through it the first time in our session here tomorrow

49. Give parents the Effective Command Rules handout and PDI Diagram handout
   ♦ 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
☐ 50. Describe the first PDI coach session to parents
   ♦ Session will not end until the child has obeyed which may take longer than an hour
   ♦ Let parents know that you will explain the PDI procedure to their child at the beginning of the next session

☐ 51. Confirm date and time of next session
Day Three

Before This Session
1. Set up age-appropriate treatment toys to occupy the child on the floor if the child comes.
2. Materials needed: ECBI, CDI Homework Sheet, PDI Homework Sheet, Progress Note, Integrity Checklist, Treatment Folder

Goals of this Session
1. Provide opportunity for parent to practice CDI skills
2. Introduce child to PDI procedure
3. Support parent through first implementation of PDI with their child

General Note
Please provide parent and child with one or two small five minute breaks during session if needed. Therapist should use clinical judgment to incorporate these breaks.

1. Review Homework with Mother
2a. Code parent and child in CDI for 5 minutes (on CDI Coding Sheet for Therapists)
   Over the bug, explain the coding directions:
   “I’m going to watch quietly for the next 5 minutes. Use all the CDI skills you’ve been practicing while you follow along with [child’s name] in his/her game according to his/her rules.”
2b. Complete CDI Summary Sheet
2c. Prioritize coaching needs for next 20 minutes (put a check mark beside one or two skills that will be the primary focus of this 20 minute coaching session)
   - Reduce Questions
   - Reduce Commands/Criticism
   - Increase Behavioral Descriptions
   - Increase Reflections
   - Increase Labeled Praise
   - Increase Imitation
   - Improve timing of attention and ignoring
   - Increase enthusiasm, warmth and/or naturalness
   - Improve focus of PRIDE skills toward more relevant positive opposites (e.g., “Nice playing gently” instead of “Nice putting the block on the tower”)
   - Other __________________________

3. Provide Parent Feedback regarding Coding
4. Coach the parent with child in CDI for about 20 minutes
5. Explain the time-out procedure to the child (adapt the sample script at the end of this session to the specific child), emphasizing the expectation that he or she must be very quiet while on the chair and must not get off the chair (can demonstrate procedure with Mr. Bear if it seems it would be helpful)

6. Coach Parent in PDI for about 20 minutes

7a. If parent is not in the middle of the time out procedure after 20 minutes code parent in the PDI procedure for 5 minutes (on PDI Coding Sheet for Therapists)

7b. Complete PDI Summary Sheet

7c. Prioritize coaching needs for next 20 minutes
   _____ Making Commands Direct
   _____ Making Commands Specific
   _____ Repeating Commands
   _____ Following compliance with a labeled praise
   _____ Order of the PDI procedure
   _____ Integrating PDI and CDI skills

9. Coach parent in PDI for about 20 minutes

10a. If parent is not in the middle of the time out procedure after 20 minutes code parent in the PDI procedure for 5 minutes (on PDI Coding Sheet for Therapists)

   “We are now going to code PDI. You can tell [child’s name] that now it’s your turn to choose the game. Then begin with a simple command. Okay, we’re starting to code PDI now.

10b. Complete PDI Summary Sheet

10c. Prioritize coaching needs for next 20 minutes
   _____ Making Commands Direct
   _____ Making Commands Specific
   _____ Repeating Commands
   _____ Following compliance with a labeled praise
   _____ Order of the PDI procedure
   _____ Integrating PDI and CDI skills
   _____ Other __________________________

11. Coach parent in PDI for about 20 minutes

12. Review CDI and PDI Summary Sheet with Mother

13. Give homework sheets to parent to record CDI and PDI practice at home
   Use CDI and PDI Summary Sheets data to help determine skill focus for homework
   Review what parents will use at home for time out chair and room
Assign PDI practice at home during play immediately following special time

14. Confirm date and time of next session
Explaining PDI to the Child

The script below is a sample that presents the ideas that you will convey to the child in the first PDI Coaching Session. Young children typically act as if they are not listening when you explain PDI: they may not look at you when you talk, and that’s okay. They may say something to you that is totally unrelated to what you are explaining. That is okay too. You can ask the child questions about what you are telling him or her (e.g., Do you remember what happens if you don’t mind your mom or dad?), but they may not answer your question. You should not insist that the child “pay attention,” or answer you. Typically children do hear what you are saying, but do not know how to respond. You want to explain the procedure to them so that the parents will feel more comfortable following through with PDI and so that the child has the opportunity to know that their parents will follow through. However, most children need to test this new consistency for themselves. They will learn that their parents mean what they say through experience.

Some therapists like to give the child a clear cognitive understanding of the step-by-step PDI procedure before the child experiences it. Using role-play, therapists go through the PDI procedure several times with Mr. Bear, (a child-sized teddy bear who plays the child’s role. Mr. Bear obeys and does not obey a series of commands to provide a demonstration of the consequences to Mr. Bear of obeying and not obeying. An outline of the procedure with Mr. Bear is included in the Appendix. This procedure is interesting to the child, and the child’s reactions to what happens to Mr. Bear will usually allow you know when the child understands the consequences for Mr. Bear.

For parents who may have some difficulty remembering the steps of PDI themselves, another advantage of using Mr. Bear is that it help to teach the PDI procedure to the parents in a situation that may be less stressful for them. Some therapists have used Mr. Bear with the parents alone for this purpose; either initially in the PDI teach session or later in PDI if it becomes evident that they need extra training in the use of the PDI procedure. It can be introduced as standard procedure for one parent to practice with Mr. Bear and the co-therapist, while the other parent is being coached by the lead therapist.

When using Mr. Bear with a child, therapists must take care that the child does not come to view time-out as a game, which then can make early practice sessions difficult for the parent. It is also important to assess the parents’ reaction to use of Mr. Bear in a role-play situation. Parents may be more comfortable with a clear, straightforward explanation to the child of the procedure.
SAMPLE SCRIPT

“You and your mom and dad are coming here so we can help you all to get along better. Now, along with your special time, we have a new game. This game is to help you learn to mind your parents. In this new game, your mom or dad will tell you some things to do. It is very important that you do what they tell you. Then you can keep playing and the game will be fun. But if you don't mind your parents, they have to stop playing and put you on the time-out chair [pointing]. After you sit on the chair quietly, they will give you another chance to mind. If you have to sit on the chair, it's very important that you are very quiet and that you don't get off the chair before they say you can. If you get off the chair before they let you, you will have to go to the time-out room (show). So it's important not to get off the chair. But if you mind them, you will get to keep playing the game and have fun.”
Day Four

Before This Session
1. Set up age-appropriate treatment toys
2. Materials needed: CDI Homework Sheet, PDI Homework Sheet, Progress Note, Integrity Checklist, Treatment folder

Goal of this Session
1. Provide the opportunity for parent to practice CDI and PDI skills as needed
2. Introduce public behavior procedure

General Note
Please provide parent and child with one or two small five minute breaks during session if needed. Therapist should use clinical judgment to incorporate these breaks.

☐ 1. Review Homework with Mother

☐ 2. Review CDI Mastery Criteria and CDI summary sheet
   Introduce PDI Mastery Criteria and review PDI summary sheet

☐ 3a. Code parent and child in CDI for 5 minutes (on CDI Coding Sheet for Therapists)
   Over the bug, explain the coding directions:
   “I’m going to watch quietly for the next 5 minutes. Use all the CDI skills you've been practicing while you follow along with [child's name] in his/her game according to his/her rules.”

3b. Complete CDI Summary Sheet

3c. Prioritize coaching needs for next 20 minutes (put a check mark beside one or two skills that will be the primary focus of today’s coaching session)
   _____ Reduce Questions
   _____ Reduce Commands/Criticism
   _____ Increase Behavioral Descriptions
   _____ Increase Reflections
   _____ Increase Labeled Praise
   _____ Increase Imitation
   _____ Improve timing of attention and ignoring
   _____ Increase enthusiasm, warmth and/or naturalness
   _____ Improve focus of PRIDE skills toward more relevant positive opposites (e.g., ‘Nice playing gently” instead of “Nice putting the block on the tower”)
   _____ Other __________________________

☐ 4. Provide parent feedback regarding CDI coding
5. Coach parent in CDI for about 20 minutes

*** If parents have mastered CDI criteria skip step 5 and proceed to step 6 ***

6a. If parent demonstrated CDI mastery then code parent and child in PDI for 5 minutes (on PDI coding Sheet for Therapists)

“We are now going to code PDI. You can tell [child’s name] that now it’s your turn to choose the game. Then begin with a simple command. Okay, we’re starting to code PDI now.

6b. Complete PDI Summary Sheet

6c. Prioritize coaching needs for next 20 minutes

____ Making Commands Direct
____ Making Commands Specific
____ Repeating Commands
____ Following compliance with a labeled praise
____ Order of the PDI procedure
____ Integrating PDI and CDI skills
____ Other __________________________

7. Provide Parent Feedback regarding PDI Coding

8. Coach the parent with child for in PDI situation for about 20 minutes. If 20 minutes elapse and parent is in the middle of PDI procedure wait until sequence is over and then code CDI.

9a. If parent is not in the middle of the time out procedure after 20 minutes code parent in the CDI for 5 minutes

Over the bug, explain the coding directions:

“I’m going to watch quietly for the next 5 minutes. Use all the CDI skills you’ve been practicing while you follow along with [child’s name] in his/her game according to his/her rules.”

9b. Code parent in a clean-up situation for 5 minutes

"So, instead of telling [child’s name] that now it’s your turn to choose the game, tell him/her that now it’s time to put the toys away. Remember to use all the PDI skills you have been practicing, like giving simple commands for one thing at a time.

9c. Complete CDI and PDI Summary Sheet

9d. Prioritize CDI or PDI coaching needs for next 20 minutes

Therapists should use their clinical judgment, CDI and PDI summary data, and CDI and PDI mastery criteria to determine which situation should be coached.
<table>
<thead>
<tr>
<th>CDI</th>
<th>PDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce Questions</td>
<td>Making Commands Direct</td>
</tr>
<tr>
<td>Reduce Commands/Criticism</td>
<td>Making Commands Specific</td>
</tr>
<tr>
<td>Increase Behavioral Descriptions</td>
<td>Repeating Commands</td>
</tr>
<tr>
<td>Increase Reflections</td>
<td>Following compliance with a labeled praise</td>
</tr>
<tr>
<td>Increase Labeled Praise</td>
<td>Order of the PDI procedure</td>
</tr>
<tr>
<td>Increase Imitation</td>
<td>Integrating PDI and CDI skills</td>
</tr>
<tr>
<td>Improve timing of attention and ignoring</td>
<td>Other</td>
</tr>
<tr>
<td>Increase enthusiasm, warmth and/or naturalness</td>
<td></td>
</tr>
<tr>
<td>Improve focus of PRIDE skills toward more relevant positive opposites (e.g., ‘Nice playing gently” instead of “Nice putting the block on the tower”)</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

10. Coach parent in CDI or PDI for about 20 minutes

11. Review CDI and PDI Summary Sheet with Mother

12. Give homework sheets to parents to record CDI and PDI practice at home
   Use Summary Sheets data to help determine Skill Focus
   Review what parents will use at home for timeout room and chair
   Assign PDI practice at home during play immediately following special time, clean up after special time, and one problem area during the day

13. Confirm date and time of next session
Day Five

Before This Session

3. Set up age-appropriate treatment toys to occupy the child on the floor if the child comes.
4. Give parent the ECBI Intensity Scale
5. Materials needed: ECBI, CDI Homework Sheet, PDI Homework Sheet, Progress Note, Integrity Checklist, Treatment Folder, Graduation Certificate

Goals of this Session
1. Provide opportunity for parent to practice CDI and PDI skills as needed

General Note
Please provide parent and child with one or two small five minute breaks during session if needed. Therapist should use clinical judgment to incorporate these breaks.

☐ 1. Review Homework with Mother

☐ 2. Review CDI Mastery Criteria and CDI summary sheet
   Introduce PDI Mastery Criteria and review PDI summary sheet

☐ 3a. Code parent and child in CDI for 5 minutes (on CDI Coding Sheet for Therapists)
   Over the bug, explain the coding directions:
   “I’m going to watch quietly for the next 5 minutes. Use all the CDI skills you’ve been practicing while you follow along with [child’s name] in his/her game according to his/her rules.”

3b. Complete CDI Summary Sheet

3c. Prioritize coaching needs for next 20 minutes (put a check mark beside one or two skills that will be the primary focus of today’s coaching session)
   _____ Reduce Questions
   _____ Reduce Commands/Criticism
   _____ Increase Behavioral Descriptions
   _____ Increase Reflections
   _____ Increase Labeled Praise
   _____ Increase Imitation
   _____ Improve timing of attention and ignoring
   _____ Increase enthusiasm, warmth and/or naturalness
   _____ Improve focus of PRIDE skills toward more relevant positive opposites (e.g., ‘Nice playing gently” instead of “Nice putting the block on the tower”)
   _____ Other __________________________
4. Provide parent feedback regarding CDI coding

5. Coach parent in CDI for about 20 minutes

*** If parents have mastered CDI criteria skip step 5 and proceed to step 6 ***

6a. If parent demonstrated CDI mastery then code parent and child in PDI for 5 minutes (on PDI coding Sheet for Therapists)

“We are now going to code PDI. You can tell [child’s name] that now it’s your turn to choose the game. Then begin with a simple command. Okay, we’re starting to code PDI now.

6b. Complete PDI Summary Sheet

6c. Prioritize coaching needs for next 20 minutes

_____ Making Commands Direct
_____ Making Commands Specific
_____ Repeating Commands
_____ Following compliance with a labeled praise
_____ Order of the PDI procedure
_____ Integrating PDI and CDI skills
_____ Other __________________________

7. Provide Parent Feedback regarding PDI Coding

8. Coach the parent with child for in PDI situation for about 20 minutes. If 20 minutes elapse and parent is in the middle of PDI procedure wait until sequence is over and then code CDI.

9a. If parent is not in the middle of the time out procedure after 20 minutes code parent in CDI for 5 minutes

If parent met CDI mastery criteria at the beginning of the session skip to step 9b

Over the bug, explain the coding directions:

“I’m going to watch quietly for the next 5 minutes. Use all the CDI skills you’ve been practicing while you follow along with [child’s name] in his/her game according to his/her rules.”

9b. Code parent in a clean-up situation for 5 minutes

"So, instead of telling [child’s name] that now it’s your turn to choose the game, tell him/her that now it’s time to put the toys away. Remember to use all the PDI skills you have been practicing, like giving simple commands for one thing at a time.

9c. Complete CDI and PDI Summary Sheet

9d. Prioritize CDI or PDI coaching needs for next 20 minutes
Therapists should use their clinical judgment, CDI and PDI summary data, and CDI and PDI mastery criteria to determine which situation should be coached

<table>
<thead>
<tr>
<th>CDI</th>
<th>PDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>___ Reduce Questions</td>
<td>___ Making Commands Direct</td>
</tr>
<tr>
<td>___ Reduce Commands/Criticism</td>
<td>___ Making Commands Specific</td>
</tr>
<tr>
<td>___ Increase Behavioral Descriptions</td>
<td>___ Repeating Commands</td>
</tr>
<tr>
<td>___ Increase Reflections</td>
<td>___ Following compliance with a labeled praise</td>
</tr>
<tr>
<td>___ Increase Labeled Praise</td>
<td>___ Order of the PDI procedure</td>
</tr>
<tr>
<td>___ Increase Imitation</td>
<td>___ Integrating PDI and CDI skills</td>
</tr>
<tr>
<td>___ Improve timing of attention and ignoring</td>
<td>___ Other _______________________________________________</td>
</tr>
<tr>
<td>___ Increase enthusiasm, warmth and/or naturalness</td>
<td></td>
</tr>
<tr>
<td>___ Improve focus of PRIDE skills toward more relevant positive opposites (e.g., ‘Nice playing gently’ instead of “Nice putting the block on the tower”)</td>
<td></td>
</tr>
<tr>
<td>___ Other _______________________________________________</td>
<td></td>
</tr>
</tbody>
</table>

\[10. \text{Coach parent in CDI or PDI for about 20 minutes}\]

\[11. \text{Review CDI and PDI Summary Sheet with Mother}\]

\[12. \text{Give homework sheets} \text{to parents to record CDI and PDI practice at home}\]

Use Summary Sheets data to help determine Skill Focus

Review what parents will use at home for timeout room and chair

Assign PDI practice at home during play immediately following special time, clean up after special time, and one problem area during the day

\[13. \text{Confirm date and time of first follow-up phone call}\]

\[14. \text{Present child and parent with graduation certificate}\]
Follow-up Phone Call One, Two, and Three  
(each call is aprx 30 min)

Prior to phone session  
Ensure recent ECBI and DPO data is in your patient’s file. If not please contact Courtney.

☐ 1. Discuss homework from the past week

a. 5 minutes of Special Time _______ of _____ Days
b. 5 minutes of PDI during play _______ of _____ Days
c. Using CDI skills throughout the day _______ yes _______ no
d. Using PDI commands during the day _______ yes _______ no
e. Using TO chair warnings during the day _______ yes _______ no
f. Using TO chair during the day _______ yes _______ no
g. Using TO room during the day _______ yes _______ no
h. Problem solve difficulties completing homework during the day

☐ 2. Review Daily Parent Observations (DPO) of problem behaviors  
Discuss possible strategies to continue to address these problem behaviors

☐ 3. Review Weekly ECBI score  
Praise parent for progress  
Discuss strategies for continuing to decrease score

☐ 4. Address any parent concerns regarding child behavior or implementation of CDI and PDI skills

☐ 5. Agree on homework assignment for the next week

☐ 6. Confirm date and time of next follow-up phone call  
** during the third phone call confirm date and time of booster session/ please ask the parent to schedule 2 hours
One Month Booster Session
One Hour

Before This Session
1. Ensure recent ECBI and DPO data is in your patient’s file. If not please contact Courtney.
2. Set up age-appropriate treatment toys
3. Materials needed: CDI Homework Sheet, PDI Homework Sheet, Progress Note, Integrity Checklist, Treatment folder

Goal of this Session
1. Provide the opportunity for parent to practice CDI and PDI skills as needed
2. Emphasize parent success and encourage parents to continue using skills on their own
3. Make Referrals as necessary

☐ 1. Discuss homework from the past week
   a. 5 minutes of Special Time _______ of _____ Days
   b. 5 minutes of PDI during play _______ of _____ Days
   c. Using CDI skills throughout the day _______ yes _______ no
   d. Using PDI commands during the day _______ yes _______ no
   e. Using TO chair warnings during the day _______ yes _______ no
   f. Using TO chair during the day _______ yes _______ no
   g. Using TO room during the day _______ yes _______ no
   h. Problem solve difficulties completing homework during the day

☐ 2. Review Daily Parent Observations (DPO) of problem behaviors
   Discuss possible strategies to continue to address these problem behaviors

☐ 3. Review Weekly ECBI score
   Praise parent for progress
   Discuss strategies for continuing to decrease score

☐ 4a. Code parent and child in CDI for 5 minutes (on CDI Coding Sheet for Therapists)
   Over the bug, explain the coding directions:
“I’m going to watch quietly for the next 5 minutes. Use all the CDI skills you’ve been practicing while you follow along with [child’s name] in his/her game according to his/her rules.”

4b. Complete CDI Summary Sheet

☐ 5a. **Code parent and child in PDI for 5 minutes** (on PDI coding Sheet for Therapists)

“We are now going to code PDI. You can tell [child’s name] that now it’s your turn to choose the game. Then begin with a simple command. Okay, we’re starting to code PDI now.

6. Prioritize coaching needs for next 20 minutes (put a check mark beside one or two skills that will be the primary focus of today’s coaching session)

**CDI**

- [ ] Reduce Questions
- [ ] Reduce Commands/Criticism
- [ ] Increase Behavioral Descriptions
- [ ] Increase Reflections
- [ ] Increase Labeled Praise
- [ ] Increase Imitation
- [ ] Improve timing of attention and ignoring
- [ ] Increase enthusiasm, warmth and/or naturalness
- [ ] Improve focus of PRIDE skills toward more relevant positive opposites (e.g., ‘Nice playing gently” instead of “Nice putting the block on the tower”)
- [ ] Other __________________________

**PDI**

- [ ] Making Commands Direct
- [ ] Making Commands Specific
- [ ] Repeating Commands
- [ ] Following compliance with a labeled praise
- [ ] Order of the PDI procedure
- [ ] Integrating PDI and CDI skills
- [ ] Other __________________________

☐ 7. Provide parent feedback regarding CDI and PDI coding

☐ 8. Coach parent in CDI and PDI for about 20 minutes

☐ 9. Review CDI and PDI Summary Sheet with Mother

☐ 10. Discuss post treatment plan with parents

- Emphasize continued CDI and PDI practice at home
- Provide discipline techniques after PCIT handouts
- Discuss referral options with parents if necessary
- Remind parents they will continue completing Daily Parent Observations and weekly ECBIs via telephone or password secure study website

11. Congratulate parent on progress and thank for participation
Intensive PCIT Progress Note
(In Person Session)

IDENTIFYING INFORMATION

Date of Session:

Child’s Name: Therapists Present:

Subject #: Supervisor Signature:

TREATMENT SESSION (CHECK ONE)

<table>
<thead>
<tr>
<th>O Day One</th>
<th>O Day Two</th>
<th>O Day Three</th>
<th>O Day Four</th>
<th>O Day Five</th>
</tr>
</thead>
</table>

Number of Minutes Mother Coached ______

HOMEWORK

Completed ______ Yes ______ No

Description of Tonight’s Assignment

Positive Progress Made:

Problems During Session:

Next Session Scheduled for _________ date __________ time
Intensive PCIT Progress Note  
(Follow-up Telephone Sessions)

IDENTIFYING INFORMATION

Date of Session:

Child’s Name: Therapists Present:

Subject #: Supervisor Signature:

Treatment Session

<table>
<thead>
<tr>
<th>O Phone One</th>
<th>O Phone Two</th>
<th>O Phone Three</th>
<th>O Phone Four</th>
</tr>
</thead>
</table>

Length of Telephone Call _______ minutes

Home Report

5 minutes of Special Time _______ of _____ Days

5 minutes of Structured PDI _______ of _____ Days

Using CDI skills throughout the day _______ yes _______ no

Using PDI commands during the day _______ yes _______ no

Using TO chair warnings during the day _______ yes _______ no

Using TO chair during the day _______ yes _______ no

Using TO room during the day _______ yes _______ no

Description of upcoming Week’s Homework Assignment

Positive progress made:

Problems during session:

Next Telephone Call Scheduled for _______ date _______ time
## Child Directed Interaction Handout

### The “Do” Skills

<table>
<thead>
<tr>
<th>SKILL</th>
<th>REASON</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Behavioral Description</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Describe what your child is doing</td>
<td>🔹 Lets child lead the play</td>
<td>• You're making a tower</td>
</tr>
<tr>
<td></td>
<td>🔹 Shows interest</td>
<td>• You drew a square</td>
</tr>
<tr>
<td></td>
<td>🔹 Teaches concepts</td>
<td>• You are dressing Mr. Potato Head</td>
</tr>
<tr>
<td></td>
<td>🔹 Models good speech and vocabulary</td>
<td>• You put the girl inside the fire truck</td>
</tr>
<tr>
<td></td>
<td>🔹 Holds child's attention on the task</td>
<td></td>
</tr>
<tr>
<td></td>
<td>🔹 Organizes child's thoughts about the activity</td>
<td></td>
</tr>
<tr>
<td><strong>Reflection</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Repeat or paraphrase what your child says</td>
<td>🔹 Lets child lead the conversation</td>
<td>• Child: I drew a tree</td>
</tr>
<tr>
<td></td>
<td>🔹 Shows interest</td>
<td>• Parent: Yes, you made a tree</td>
</tr>
<tr>
<td></td>
<td>🔹 Demonstrates acceptance and understanding</td>
<td>• Child: The doggy has a black nose</td>
</tr>
<tr>
<td></td>
<td>🔹 Improves child's speech</td>
<td>• Parent: The dog's nose is black</td>
</tr>
<tr>
<td></td>
<td>🔹 Increases verbal communication</td>
<td>• Child: I like to play with the blocks</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Parent: You’re having fun with the blocks</td>
</tr>
<tr>
<td><strong>Labeled Praise</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Say specifically what you like about what your child is doing or saying</td>
<td>🔹 Causes child's good behavior to increase</td>
<td>• Good job with that tower</td>
</tr>
<tr>
<td></td>
<td>🔹 Shows approval</td>
<td>• You drew a beautiful tree</td>
</tr>
<tr>
<td></td>
<td>🔹 Increases child's self-esteem</td>
<td>• Nice drawing</td>
</tr>
<tr>
<td></td>
<td>🔹 Makes child feel good</td>
<td>• Thank you for sharing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I like how gently you’re putting the crayons away</td>
</tr>
<tr>
<td>SKILL</td>
<td>REASON</td>
<td>EXAMPLES</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Avoid <strong>Commands</strong></td>
<td>• Commands take the lead away from your child</td>
<td><strong>Indirect Commands</strong></td>
</tr>
<tr>
<td></td>
<td>• Commands can lead to negative interactions</td>
<td>• Let's play with the farm next.</td>
</tr>
<tr>
<td></td>
<td>• Let's play with the farm next.</td>
<td>• Will you sit down in your chair.</td>
</tr>
<tr>
<td></td>
<td>• Could you tell me what animal this is?</td>
<td>• Could you tell me what animal this is?</td>
</tr>
<tr>
<td></td>
<td><strong>Direct Commands</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Give me the pigs.</td>
<td>• Give me the pigs.</td>
</tr>
<tr>
<td></td>
<td>• Please sit down next to me.</td>
<td>• Please sit down next to me.</td>
</tr>
<tr>
<td></td>
<td>• Tell me what this letter is.</td>
<td>• Tell me what this letter is.</td>
</tr>
<tr>
<td>Avoid <strong>Questions</strong></td>
<td>• Questions lead the conversation</td>
<td><strong>We're building a tall tower, aren't we?</strong></td>
</tr>
<tr>
<td></td>
<td>• Many questions are commands and require an answer</td>
<td>• What sound does the cow make?</td>
</tr>
<tr>
<td></td>
<td>• Questions may suggest to your child that you aren't really listening or that you disagree</td>
<td>• What are you building?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Do you want to play with the train?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• You're putting the girl in the red car?</td>
</tr>
<tr>
<td>Avoid <strong>Critical Statements and Sarcasm</strong></td>
<td>• Critical statements often increase the criticized behavior</td>
<td><strong>That wasn't nice.</strong></td>
</tr>
<tr>
<td></td>
<td>• Criticism lowers your child's self-esteem</td>
<td>• I don't like it when you climb on the table.</td>
</tr>
<tr>
<td></td>
<td>• Criticism creates an unpleasant interaction.</td>
<td>• Do not play like that.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No, sweetie, you shouldn't do that.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• That’s not the right color for hair.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• That piece doesn't go there.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• I’m disappointed in you today.</td>
</tr>
</tbody>
</table>
### Dealing with Misbehavior in CDI

<table>
<thead>
<tr>
<th>SKILL</th>
<th>REASON</th>
<th>EXAMPLES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IGNORE</strong> negative behavior (unless it is dangerous or destructive)</td>
<td>• Helps your child to notice the difference between your responses to good and bad behavior</td>
<td>• Child: (sasses parent and picks up toy). Parent: (ignores sass; praises picking up).</td>
</tr>
<tr>
<td>a. Avoid looking at your child, smiling, frowning, etc.</td>
<td>• Although the ignored behavior may get worse at first, consistent ignoring improves many behaviors</td>
<td></td>
</tr>
<tr>
<td>b. Be silent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Ignore every time</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Expect the ignored behavior to get worse at first</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Continue ignoring until your child is doing something appropriate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Praise your child immediately for appropriate behavior</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Behaviors to ignore include
- Crying for no reason
- Whining
- Sassing
STOP THE PLAY for aggressive and destructive behavior

• Teaches your child that good behavior is required during special time
• Shows your child that you are beginning to set limits

Aggressive and destructive behaviors include
• Hitting
• Biting

• Child: (hits parent).

Parent: (CDI STOPS. This can't be ignored.) Special time is stopping because you hit me.
Child: Oh, oh, oh Mom. I'm sorry. Please, I'll be good.

Parent: Special time is over now. Maybe next time you will be able to play nicely during special time.
SPECIAL TIME

★ Praise
★ Reflect
★ Imitate
★ Describe
★ Enthusiasm
Suggested Toys for CDI

Creative, constructive toys, like:

- Building Blocks
- Legos
- Tinker Toys
- Magnetic Blocks
- Lincoln Logs
- Constructo-Straws
- Mr. Potato Head
- Crayons and Paper
- Chalkboard and Colored Chalk
- Erector Set

Toys to Avoid During CDI

- Ones that encourage rough play, like:
  - bats, balls, boxing gloves, punching bag

- Ones that lead to aggressive play, like:
  - toy guns, toy swords, toy cowboys and indians, super-hero figures

- Ones that could get out of hand and require limit setting, like:
  - paints, markers, bubbles, scissors, play dough, hammer

- Ones that have pre-set rules, like:
  - board games, card games

- Ones that discourage conversation, like:
  - books, video games

- Ones that lead to parent or child imagining they are someone else, like:
  - puppets, costumes
# CDI Homework Sheet
Intensive Treatment Phase

Child's First Name ____________________

<table>
<thead>
<tr>
<th>Date</th>
<th>Did you spend 5 minutes in Special Time today?</th>
<th>Activity</th>
<th>Problems or questions in Special Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Yes / No</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Skill Focus :

Monday

______________

Skill Focus :

Tuesday

______________

Skill Focus :

Wednesday

______________

Skill Focus :

Thursday

______________

Skill Focus :

Friday

______________
# CDI Homework Sheet
## Maintenance Treatment Phase

Child's First Name ____________________

Skill to Focus on ________________

<table>
<thead>
<tr>
<th>Date</th>
<th>Did you spend 5 minutes in Special Time today?</th>
<th>Activity</th>
<th>Problems or questions in Special Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Monday</td>
<td>______________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td>______________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td>______________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td>______________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td>______________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td>______________________________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td>______________________________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PDI Homework Sheet  
(Follow-Up Treatment Phase)

Please place a Tally Mark in column each time you give your child a command, time-out chair warning, put your child in the time-out chair, or put your child in the time-out room.

<table>
<thead>
<tr>
<th>Date</th>
<th>Command</th>
<th>Warning</th>
<th>Chair</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thursday</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friday</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saturday</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DPICS Coding Sheet for Therapist

Date __________

Child’s name __________________

TREATMENT SESSION (CHECK ONE)

<table>
<thead>
<tr>
<th>O Day One</th>
<th>O Day Two</th>
<th>O Day Three</th>
<th>O Day Four</th>
<th>O Day Five</th>
</tr>
</thead>
</table>

Session Segment

<table>
<thead>
<tr>
<th>O 1st 20 mins</th>
<th>O 2nd 20 mins</th>
<th>O 3rd 20 mins</th>
<th>O 4th 20 mins</th>
<th>O 5th 20 min</th>
</tr>
</thead>
</table>

CODING CDI IN SESSION

<table>
<thead>
<tr>
<th>POSITIVE</th>
<th>TALLY CODES</th>
<th>TOTAL</th>
<th>MASTERY</th>
</tr>
</thead>
<tbody>
<tr>
<td>TALK (TA) (ID + AK)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BEHAVIOR DESCRIPTION (BD)</td>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>REFLECTION (RF)</td>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>LABELED PRAISE (LP)</td>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>UNLABELED PRAISE (UP)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AVOID</th>
<th>TALLY CODES</th>
<th>TOTAL</th>
<th>MASTERY</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUESTION (QU)</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>COMMANDS (DC + IC)</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>NEGATIVE TALK (NTA) (CR + ST)</td>
<td></td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
# Coding PDI in Session

**Date __________**

**Child’s name ________________**

## TREATMENT SESSION (CHECK ONE)

<table>
<thead>
<tr>
<th>O Day One</th>
<th>O Day Two</th>
<th>O Day Three</th>
<th>O Day Four</th>
<th>O Day Five</th>
</tr>
</thead>
</table>

## Session Segment

<table>
<thead>
<tr>
<th>O 1\textsuperscript{st} 20 mins</th>
<th>O 2\textsuperscript{nd} 20 mins</th>
<th>O 3\textsuperscript{rd} 20 mins</th>
<th>O 4\textsuperscript{th} 20 mins</th>
<th>O 5\textsuperscript{th} 20 min</th>
</tr>
</thead>
</table>

## O Parent-led play       O Clean-up

<table>
<thead>
<tr>
<th>Command DC or IC?</th>
<th>No Opp</th>
<th>Obey</th>
<th>Dis-obey</th>
<th>Praise LP or UP?</th>
<th>Chair Warn</th>
<th>Obey</th>
<th>Dis-obey</th>
<th>Praise LP or UP?</th>
<th>Time-out Chair</th>
<th>Time-out Room</th>
</tr>
</thead>
</table>


BIOGRAPHICAL SKETCH

Courtney Ann Lewis was born in Yokosuka, Japan in 1982. At the time of her birth her father was enrolled in the United States Naval Services. The oldest of three children, she was raised primarily in Montgomery, Alabama and graduated from Saint James High School in 2000. She earned her B.A. in experimental psychology from the University of South Carolina Honors College in 2004.

Upon college graduation, Courtney worked as a research assistant in the psychology laboratory of Ronald Prinz Ph.D. at the University of South Carolina. In August of 2005, she enrolled in a Doctorate of Philosophy program at the University of Florida’s Department of Clinical and Health Psychology. Courtney worked as a research assistant in the Child Study Laboratory under the mentorship of Sheila Eyberg, Ph.D., and Stephen Boggs, Ph.D for four years. She completed her Master of Science in psychology in May 2007. Sheila Eyberg, Ph.D. served as the chair of Courtney’s master’s thesis entitled, “Are Parental Depression and Child Disruptive Behavior Related?”

Courtney is currently completing her clinical internship at the Louisiana State University, Health Science Center in the Department of Psychiatry. Stephen Boggs, Ph.D. is serving as the chair of Courtney’s dissertation committee. Courtney is scheduled to receive her Doctorate of Philosophy in psychology in August 2010. Following graduation Courtney is planning to complete a post-doctoral fellowship in pediatric psychology at the Children’s Hospital of New Orleans.