CHANGES IN PARENTS BEHAVIOR AS A RESULT OF PCIT

by

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A study of thirteen maltreating families receiving Parent Child Interaction Therapy. This thesis includes graphical analysis of individual behavior changes from Baseline to Week 4 of Child Directed Interaction. This study investigates the preliminary results, which indicate that positive behaviors increase as parents' progress through PCIT, and negative behaviors decrease.

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Introduction

While childhood is supposed to be a time of laughter, creativity, and unbound imagination, there are many children in the US that live in unhealthy home environments that affect their growth. According to a report from the nonprofit Children's Defense Fund, there are 1825 children in America being abused or neglected per day (Children's Defense Fund, 2014). Parents with a history of maltreatment may view their actions as disciplinary, not abusive. The four major types of maltreatment include neglect, physical abuse, sexual abuse, and psychological abuse (Leeb et al., 2007). The intention of the parent is to discipline their child, but they end up causing long lasting emotional, and physical trauma to children (Hakman, 2009). In 2008, the total national lifetime economic burden resulting from new cases of fatal and nonfatal child maltreatment was approximately $124 billion, including $32,648 in childhood health care costs; $10,530 in adult medical costs; $144,360 in productivity losses; $7,728 in child welfare costs; $6,747 in criminal justice costs; and $7,999 in special education costs (Fang et al., 2012). While lawmakers have adopted punitive measures to discourage child abuse, child welfare activities increasingly advocated for the benefits of prevention programs. The aim of prevention programs is to stop child maltreatment before it begins, thus improving children's lives and reducing the costs associated.

Parental background and a family's larger context can be useful in determining whether a child has a risk of being maltreated. Occurrence of child maltreatment can be determined by risk factors such as low family income, low education level, and young maternal age, and child disability (Dubowitz, 2011). Lack of education and low income

means less parenting resources for families. Protective factors are those that eliminate the risk of abuse, and when present, increase the health and well-being of children. Protective factors help parents find resources and develop coping strategies to allow them to parent better. Examples of protective factors in parents without history of maltreatment include nurturing parenting skills, household rules and monitoring, and role models outside of the home. A recent study on physical abuse showed that parents of maltreated children engage in more negative interactions with their children compared to non-abusive parents (Haskett, 2008). Another study explored parents discipline strategies, which were determined to be less effective and more physical compared to those of parents who do not maltreat (Urquiza et al., 1996).

Maltreated children often have multiple adverse childhood experiences (ACEs), which have long-term effects that persist into adulthood as negative physical or mental health outcomes (Felitti, 1998). Children with a greater number of ACEs have a higher risk of developing detrimental health conditions in adulthood, such as ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease (Felitti, 1998). By learning to build a positive relationship with their child, parents can reduce the risk factors of child maltreatment and the health side effects of ACEs (Child Welfare Information Gateway). Parent-Child Interaction Therapy (PCIT) emphasizes effective and safe disciplinary techniques that can then be used to help parents when encountering negative child behaviors (Urquiza et al., 1996).

To help reduce the reoccurrences of maltreatment, many welfare programs have encouraged participation in parental behavior training, such as PCIT, which is an effective evidence-based psychotherapy for reducing behavioral problems in young

children, (Beveridge 2015; Eyberg, 1994). PCIT is divided into two phases. The first phase, Child-Directed Interaction (CDI), is the focus of this study. In CDI, the emphasis is on building a positive parent-child relationship by teaching the parent to ignore minor child misbehavior, to follow their child's lead in a play interaction; to avoid criticism, sarcasm, or other negative behaviors; and to increase use of labeled praise, reflection, imitation, behavior description, and enthusiasm (Chaffin et al., 2004). Parents are instructed to practice "PRIDE" skills, which are the positive behavior skills that stands for **p**raise appropriate behavior, **r**eflect appropriate talk, **i**mitate appropriate play, **d**escribe appropriate behavior, and interact with **e**nthusiasm. As parent and child play together, parents are coached on the PRIDE skills through a one-way mirror by a trained therapist via "bug-in-the-ear" technology. Immediate feedback from the live coach ensures that parents are practicing the skills correctly and effectively (Eyberg, 1994; Chaffin et al., 2004). Research has shown that in as little as three sessions of CDI, increases in PRIDE skills occur, resulting in positive interactions between parent and child (Hakman et al., 2009). In CDI, parents are instructed to practice the skills in homework assigned by the therapist. Transferring the learned skills into the home environment and applying them with children away from a laboratory environment is beneficial to reducing reoccurrence of maltreatment (Chaffin et al., 2011).

When children misbehave, parents often want to correct unruly behavior. However, parents may lack skills necessary to extinguish unwanted behavior in their child (Kennedy et al., 2014). Parents unintentionally reinforce negative behavior that is often the cause for the parents' frustration to begin with (Chaffin et al., 2004). CDI focuses on building a trusting, positive relationship between parent and child so that

effective disciplinary tools can be used in parent directed interaction (PDI) during later sessions (Eyberg, 2002). During the CDI phase, parents build the foundations for a positive relationship between themselves and the child. Mastery in CDI skills is necessary for the parent to later apply the disciplinary protocols during PDI (Eyberg, 1988; Hembree-Kigin & McNeil, 1995). The two phases of PCIT were founded on the principles of operant conditioning, believing that through play time and positive social reinforcement interactions, it would be possible to modify maladaptive parent-child interactions (Reitman & McMahon, 2012).

Skills gained in the CDI portion allow parents to better communicate with their children. PCIT is a therapy that involves both the parent and the child in the treatment. The therapist teaches parents skills in the clinic, and guides them through a dyadic interaction with their child. As follow-up to the clinical interaction, there is home practice and subsequent office visits to demonstrate skill retention. Parents continue to come for sessions with their child until they have gained mastery of the skills. The skills that the parent gains from PCIT help them reduce their negative behaviors towards their child because there is better parent-child interaction. Improvements from PCIT result in improved child behavior as well as decreased risk factors of abuse (Thomas, 2008).

PCIT teaches parents to reduce negative behaviors towards their children and increase positive behaviors. During CDI, parents practice PRIDE skills for about 30 minutes a session. Parents are encouraged not to participate in negative talk, ask questions, or give commands to children during the time they are practicing the PRIDE skills. When a parent asks a question, they are taking away from the child leading play time. The focus of PRIDE skills is to build a positive relationship between the parent

and the child, so that in the future when the parent begins disciplining the child, a positive relationship will have already been established.

PCIT is an effective method of reducing the reoccurrence of physical abuse in parents with a history of maltreatment of children (Chaffin et al., 2004; Kennedy, 2014). Looking in-depth at how the parents' behaviors are changing over time will have clinical application for therapists who are implementing PCIT with families. The goal of PCIT is to have parents who are at high risk of maltreatment improve the quality of their parenting and prevent new instances of abuse (Chaffin et al., 2004). The current study seeks to see how parents' behaviors change over time during PCIT. There are three research questions and two associated hypotheses.

RQ1: Do parents' PRIDE skills change over four sessions of PCIT?

RQ2: Do parents' negative behaviors decrease over four sessions of PCIT?

RQ3: Do parents' positive behaviors increase over four sessions of PCIT?

Hypothesis: It is hypothesized that the positive parenting (i.e., PRIDE) skills of behavior descriptions, labeled praises, and reflections will increase over the course of the first four CDI sessions of PCIT. It is also hypothesized that the negative parenting behaviors (i.e., questions, commands, and negative talk), will decrease over the same four sessions of CDI. .

Methods

Participants.

The sample consisted of 13 mothers with ages ranging from 21 to 36 years old (M = 31.54, SD = 4.35), with a documented history of child maltreatment recruited from the Department of Human Services. Parent-child dyads were included in the

program if the child was aged 3 to 7 years (M = 5.23, SD = 1.24), and if the parent had a documented case of physical abuse or neglect. Dyads were excluded if they had reports of sexual abuse. Of the 13 children, five were male, and eight were female. Mothers ranged in education from those who only completed junior high, to those who completed an associates degree (M = 5.08, SD = 1.12). A majority of families fell below the federal poverty threshold with 91.7%, making $2000 or less per month. Only one family was above the federal poverty threshold, making $5500 per month. Negative childhood experiences were measured with the ACEs survey, because previous studies have shown that adverse childhood experiences have been correlated with physical abuse (Felettie, 1998). Of the 13 families, 38.5% reported experiencing four or more child ACEs, and the remaining 61.5% reported at least one child ACE.

Measures.

Demographics

A questionnaire was developed to capture basic demographic information from mothers. Maternal and child age, ethnicity, marital status, education, and family income were ascertained through self-reports on the questionnaire.

Dyadic Parent–Child Interaction Coding System (DPICS-II).

The Dyadic Parent-Child Interaction Coding System (DPICS-II) is a widely-implemented system for coding parent–child interactions. The system codes for three separate five minute tasks: child-directed interaction, parent-directed interaction, and clean-up time (Eyberg, 1994; Robinson, 1981). The tasks are videotaped, then coded by two separate teams to insure accuracy. For this study, the DPICS-II was used to code for the verbal behaviors in the CDI portion.

The DPICS-II was used to code for labeled praise (LP), behavior description (BD), reflection (R), questions (Q), direct or indirect commands (DC/IC), and negative talk (NTA). Every verbalization from the parent was coded, unless it was not directed at the child. If the parent was singing or thinking out loud to themselves, the phrase did not get coded. A team transcribed the videos of the PCIT, then a DPICS coder went through and coded for the different behaviors. Studies have confirmed the validity and reliability of the DPICS coding system, (Robinson 1981; Eyeberg, 1994). The current study only looked at PCIT sessions from baseline to the fourth week, rather than looking at when the parent reached mastery level.

Procedure.

Families from the Eugene area were referred to the UO Prevention Science Institute lab either through the Department of Health and Human Services through their caseworkers. Families completed a baseline assessment to determine their interactions and behaviors with their children. A Parent Assessor (PA) facilitated tasks with the parent, while a Child Assessor (TCA) facilitated activities with the child for the duration of the assessment. Parent and child entered a room with toys where the parent received instructions through a headset. During CDI, the PA instructed parents to let children lead the time and choose what toys to play with. A trained team watched the recorded interactions and coded for parents use of reflections, praise, behavior descriptions, commands, questions, and negative talk for the first five minutes of each session. Parents achieved mastery when they gave 10 behavior descriptions, 10 reflections, 10 labeled praises, three or less questions, commands, or criticisms during a five-minute CDI session.

For the baseline of CDI, parent and child played together while a trained PA gave instructions through a headset. The baseline was where parent and child went through CDI, PDI, and clean-up portion without any assistance from the therapist. After going through the assessment, parents are given a sealed envelope that determined whether they would participate in PCIT or become the control group. If the family was randomly selected to participate in PCIT, they returned for sessions with a counselor and begin PCIT training. During PCIT sessions, the parents were guided by a therapist during the interactions with their child. If not selected, the family was asked to come back for a repeat assessment in six months, and then again in another six months. This study focused on mother-child dyads that participated in PCIT from baseline to four weeks. The aim of this study was to determine whether parents' progression through PCIT sessions show trajectories of increasing DPICS scores for positive behaviors and decreasing scores for negative behaviors.

Results

A total of N=13 families advanced through PCIT from baseline to the fourth session. Figure 1 shows an increase in parents' behavior descriptions from baseline to week 4. Figure 2 shows a similar increase for parent reflections from baseline to week 4. Figure 3 also illustrates an increase of parents labeled praises from baseline to week 4. Across each of the three key positive parenting behaviors, parents showed patterns of upward trending in the amount of reflections, labeled praises, and behavior descriptions spoken in a five-minute session with their child. It is important to note that all parents in this study are continuing in PCIT for the remainder of treatment -- longer than this study's focus—but in just four weeks, these results suggest that there were clear

indications that parents positive behaviors were increasing. Four parents achieved mastery level of using labeled praise, with one family using twice as many labeled praises as the 10 required for mastery level. Four parents also achieved mastery in behavior descriptions, two of which had more than twice the 10 required for mastery level. Only one family received mastery level at the fourth week for reflections, but at the third week four families were at mastery. Because families are practicing multiple skills at once, they may do well in one behavior for one week, and not so well in another. Overall in summary, the amount of positive behaviors was increasing as CDI sessions progressed.

There was also a downward trend observed in the amount of questions and commands parents communicated to their children during PCIT CDI sessions. Figure 4 displays a decrease in parent commands and Figure 5 displays a decrease in parent questions from baseline to week 4. To achieve mastery level at this stage of treatment, parents were required to show three or less instances of negative talk, direct commands, and questions during the 5 minute DPICS-III coding period. By the fourth week, all parents reached mastery and had three or less instances of negative talk. Eleven parents reached mastery for on commands (e.g., at n = 0), and seven parents reached mastery for asking questions (i.e., at no = 0). In just four weeks of PCIT, many parents were able to decrease their negative behaviors.

Discussion

PCIT is an effective intervention for helping parents develop skills that reduce reoccurrence of child maltreatment (Chaffin et al., 2004; Hakman et al., 2009). This study was a snapshot of the effects of PCIT on parents' behaviors. The preliminary

results of these four weeks of PCIT were consistent with previous studies indicating that PCIT can help parents increase positive behaviors and decrease negative behaviors during parent-child interactions (Urquiza et al., 1996). Previous studies showed that PCIT resulted in reduced parenting stress, dysfunctional parenting practices, and child disruptive behavior (Bell et al., 2002; Chaffin et al., 2004; Hakman et al., 2009). The parents in this study will continue to receive PCIT until they have reached mastery in all six behaviors, but even at four weeks, many families already achieved mastery for some of the skills. The current study is going in the same direction as what previous studies have indicated should occur as a result of PCIT (Hakman et al., 2009).

The current study adds to the literature by demonstrating in yet another sample of high risk families, that PCIT can increase overall positive behaviors as early as four weeks into the study. By grouping labeled praise, reflections, and behavior descriptions together as positive behaviors, and questions, commands, and negative talk as negative behaviors, previous research has look at how PCIT can affect positive and negative behaviors generally (Hakman et al., 2009). This study adds to the literature by looking intensely at the changes for each individual behavior across 4 early sessions of PCIT. Similar to previous studies, the first four weeks of CDI show increasing trajectories of change in parents' positive behaviors, and decreasing trajectories of change for parents' negative behaviors, (Hakman et al., 2009). Looking at individual behaviors can clarify the specific types of negative behaviors that decrease over time, and which positive behaviors increase quickly over time.

While results of this study support previous research on PCIT, there are several limitations to consider. Causality of PCIT's effects on reducing negative behaviors and

increasing positive behaviors cannot be determined from this study. The length of treatment examined in this study was only four weeks long in what are ongoing courses of PCIT treatment which are not yet completed. Thus, while there was an upward trend for positive behavior, following the progress of families in the intervention for the full duration of treatment would yield more definitive results. This study only focused on the first four weeks of CDI, but PCIT lasts for much longer and CDI is only a portion of it. The increases of positive behaviors and decreases of negative behaviors are only estimates of what will happen overall after parents have completed PCIT. Despite these limitations, this study suggests that positive changes in parenting behaviors appear to be occurring early in PCIT with child welfare-involved families.

Further studies should further explore the efficacy of PCIT for families with children in different age groups. Are parents with younger children able to reach mastery quicker than those with older children? The study should categorize children by age and compare the slopes of the parent's behavior progress through PCIT sessions, looking for child age differences in rates of change. The more research can be done about age-related effectiveness of the therapy, the more it will benefit maltreating parents. In this study, more than half of the children participants were female, and all the parents were female. In the future, an even number of male and female children should be invited to participate so that gender stereotypes around obedience can be explored. Perhaps there are limitations in the way recruitment is done that discourages fathers from participating? Is there a difference between fathers and mothers in their approach to implementing PCIT with their children?

PCIT has been shown to be a beneficial therapy for helping reduce negative behaviors, and build better relationships between parents and their children (Chaffin et al., 2004). The current study suggests that PCIT can increase positive behaviors in as little as four weeks. In addition to reducing negative behaviors of children and improving the relationship between parents and children, PCIT can have a greater impact on the community by decreasing the number of children who are maltreated.

Table 1: *Descriptive statistics for child age, gender, parent age, gender, education, income, and ACEs*

	Child Gender	Child age	Parent Age	Education (years)	Income	ACE score
Mean	1.62	5.23	31.54	5.08	1584.75	4
Standard Deviation	0.51	1.24	4.35	1.12	1340.38	2
Minimum	1	3	21	3	500	1
Maximum	2	7	36	5	5500	7

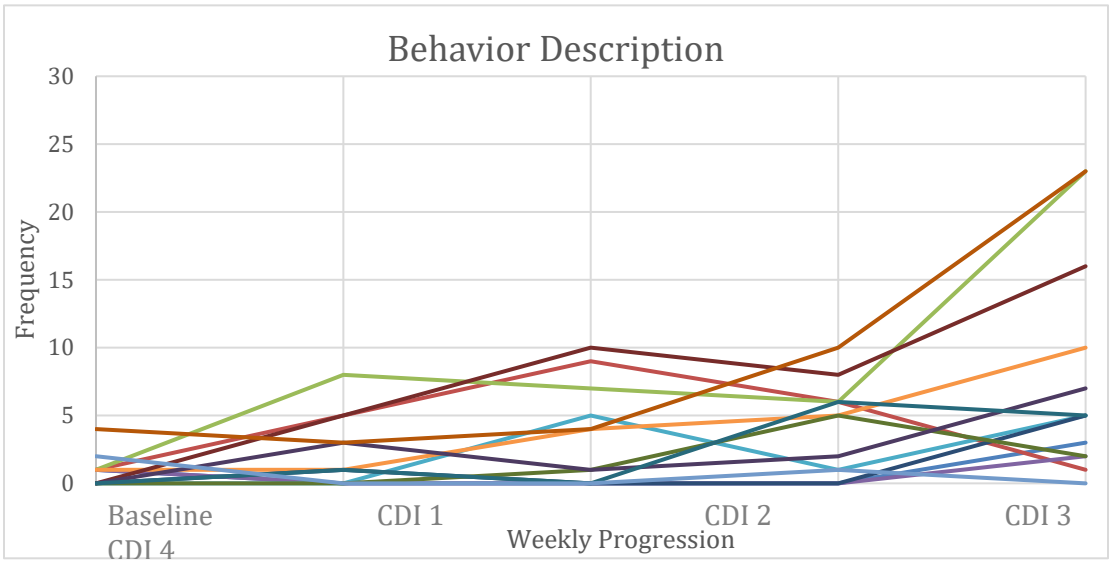

Figure 1: Frequency of Behavior Descriptions During 5' DPICS Coding: Baseline to Week 4 PCIT Sessions.

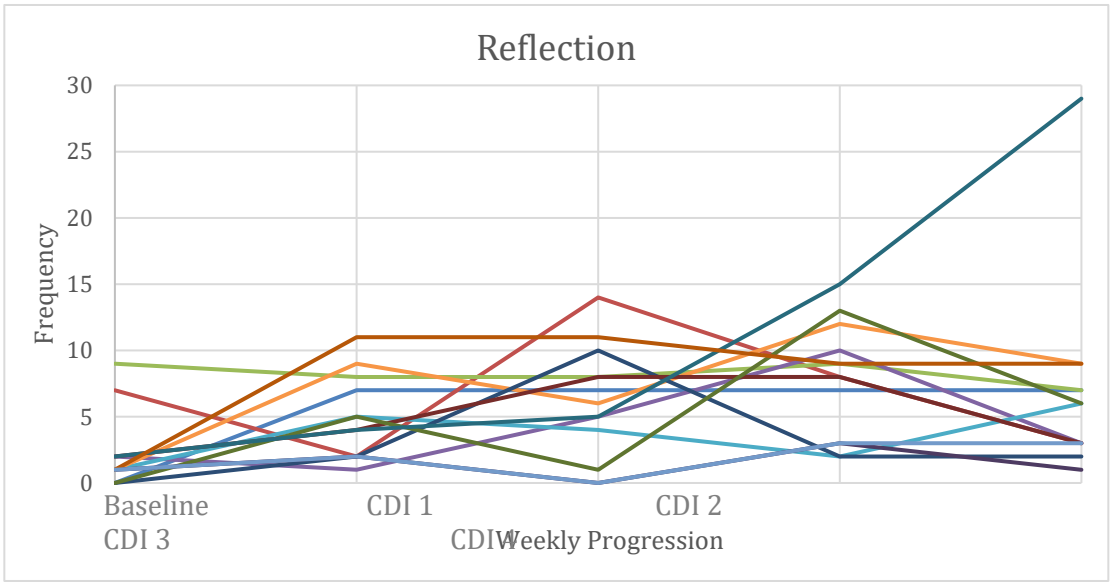

Figure 2: Frequency of Reflections During 5' DPICS Coding: Baseline to Week 4 PCIT Sessions

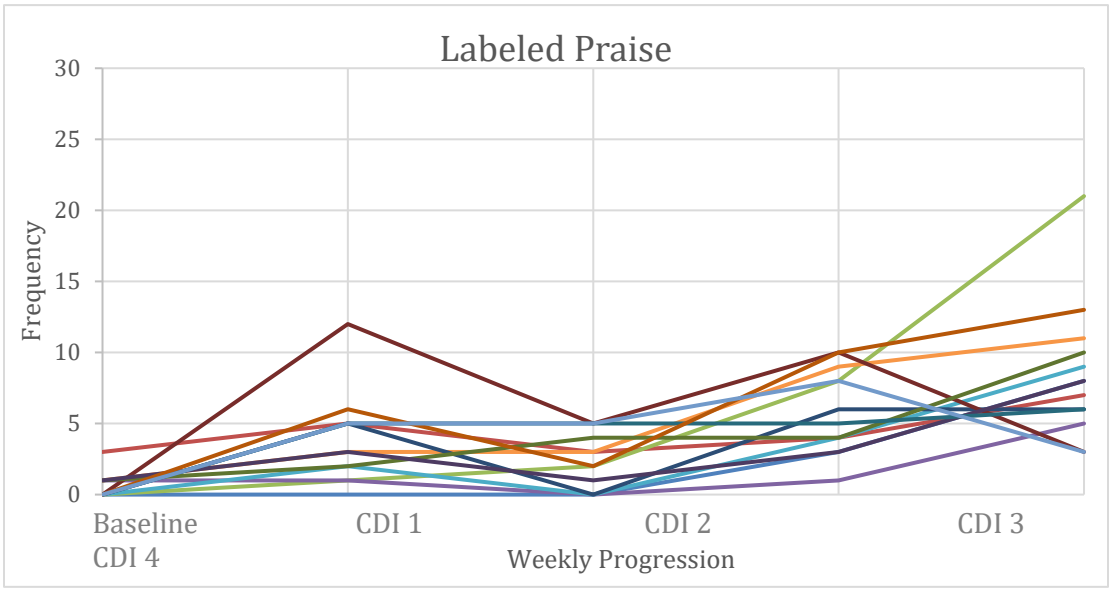

Figure 3: Frequency of Labeled Praise During 5' DPICS Coding: Baseline to Week 4 PCIT Session

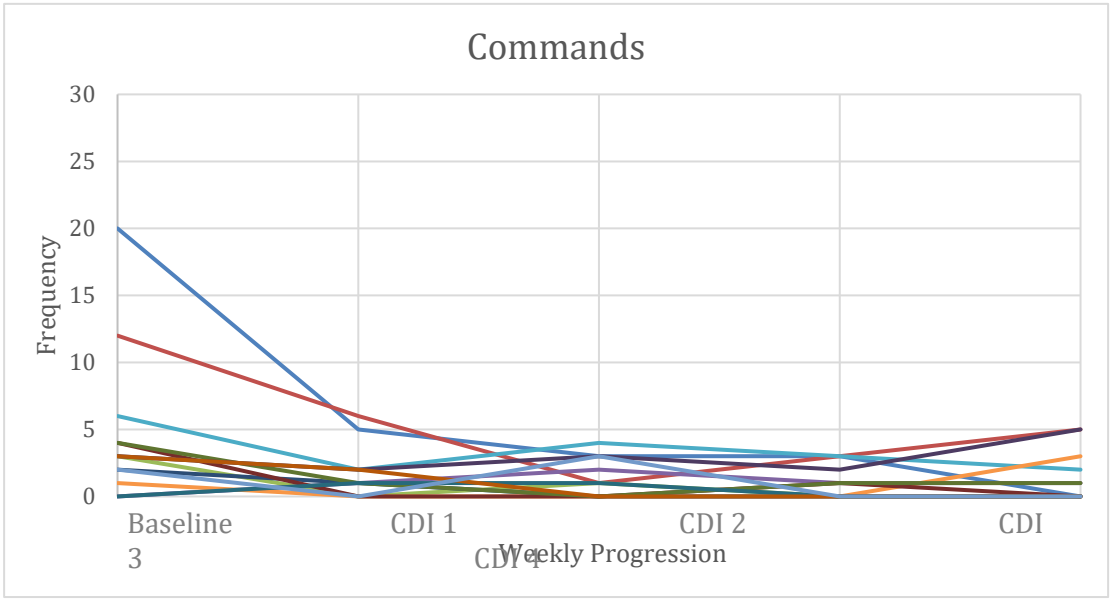

Figure 4: Frequency of Commands During 5' DPICS Coding: Baseline to Week 4 PCIT Session

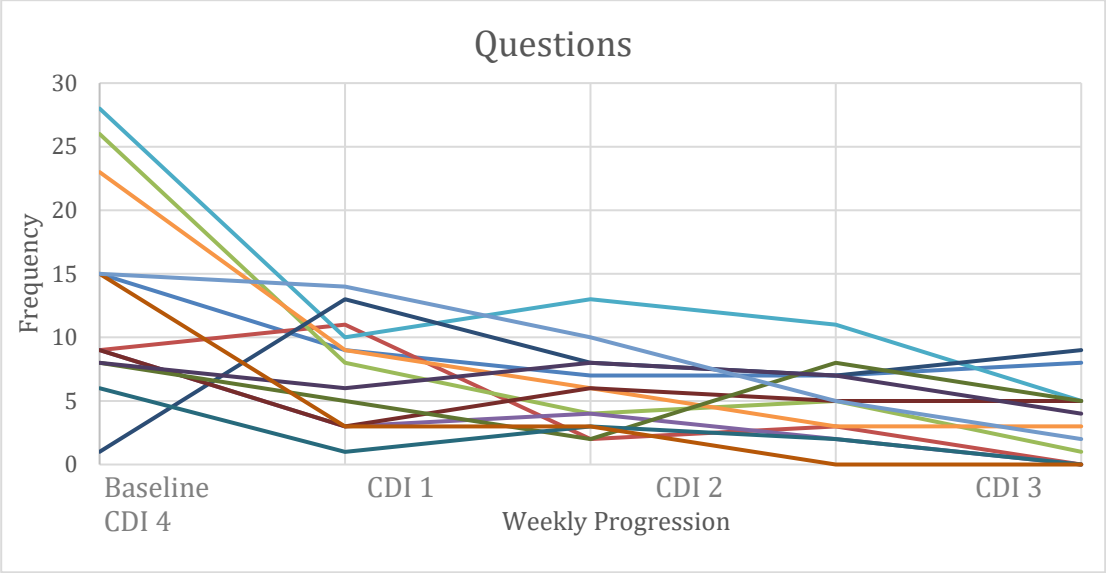

Figure 5: Frequency of Questions During 5' DPICS Coding: Baseline to week 4.

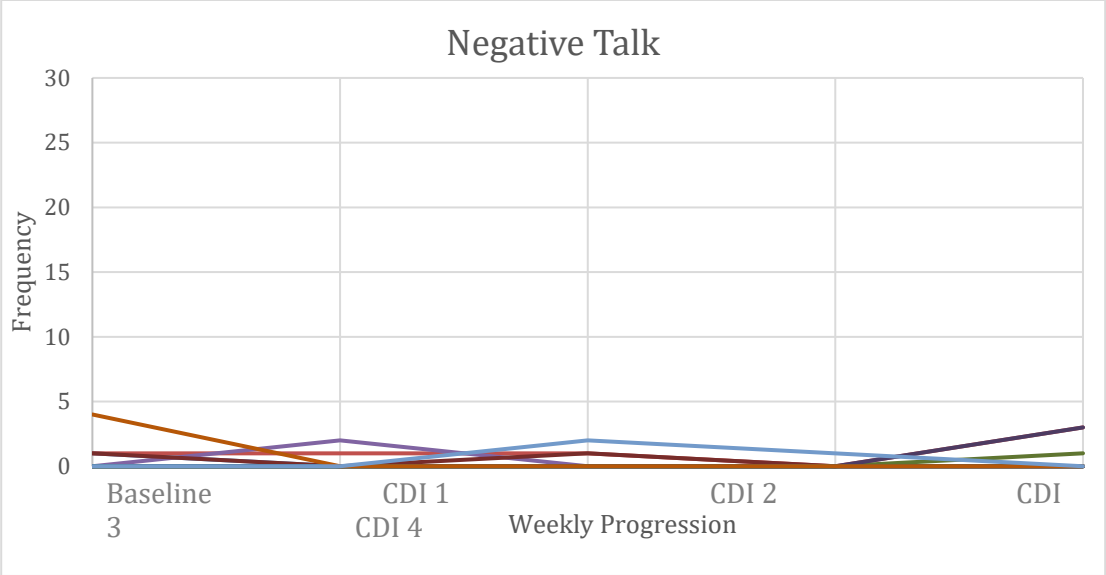

Figure 6: Frequency of Negative Talk During 5' DPICS Coding: Baseline to week 4.

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