# Correlates of Change in Quality of Parent-Child Relationships in PCIT

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## ABSTRACT

- The purpose of this study was to examine the relation between parenting skill acquisition in Parent-Child Interaction Therapy (PCIT), measured by changes in parent verbalizations, and change in parent and child emotional availability from pre- to post-treatment.
- The study sample consisted of 87 ethnically diverse mother-child dyads who completed PCIT. Children, aged 2 to 8 years, were referred to PCIT for treatment of disruptive behavior problems.
- Results showed significant improvements in parenting skills and in parent and child emotional availability. Results also showed connections between decreases in mothers' discouraged verbalizations (commands, questions, criticisms) and increased emotional availability. No significant relationship was observed between increased encouraged verbalizations and emotional availability.
- The implications of these findings support the strategy of changing parent verbalization patterns to change the quality of the parent-child relationship.

## INTRODUCTION

- When a child has behavior problems, the parent-child relationship can become strained and damaged. Patterson (1982) posits that the child's disruptive behavior is often reinforced by the parent's ineffective responses to the child such as anger, rigid limit setting, inattentiveness, and inconsistent punishment.
- Parent-Child Interaction Therapy (PCIT) strives to improve the quality of the parent-child relationship to ensure that the parent's attention and praise is reinforcing for the child, thus increasing the effectiveness of behavior-management skills (Bodiford-McNeil & Hembree-Kirgin, 2010).
- To help teach positive parenting practices, PCIT therapists coach parents to change the way they speak to their children. Parents are taught to describe, reflect, and praise the child's positive verbalizations and behaviors, as well as decrease critical statements, questions, and commands. This can help improve the warmth and communication between the parent and child. (Timmer, Urquiza, Zebell, & McGrath, 2005).
- The efficacy of PCIT in reducing children's disruptive behaviors has been well established (e.g., Hood & Eyberg, 2003), as well as its effectiveness in high risk populations (e.g., Timmer et al., 2010). However it has not been established that coaching parents to make these changes in their interactions with their children actually improves the quality of the parent-child relationship.

## PURPOSE

- The purpose of this study was to examine the relationship between parenting skill acquisition in Parent Child Interaction Therapy (PCIT), measured by changes in parent verbalizations, and change in parent and child emotional availability from pre- to post-treatment.

## HYPOTHESIS

- Parents' decreasing negative and directive verbalizations from pre- to post-treatment should predict improved emotional availability of the parent and child from pre- to post-treatment.
- Parents' increasing positive (encouraged) verbalizations from pre- to post- treatment should predict improved emotional availability of the parent and child from pre- to post-treatment.

## METHOD

**Participants**
- Participants were 87 mother-child dyads who were referred to Parent-Child Interaction Therapy (PCIT) because of the child's externalizing behavior problems.  This sample was ethnically diverse and had approx. 69% male children participating in treatment (See Table 1 and 2 for complete demographics).

**Procedure**
- Mother-child dyads were evaluated before entering treatment (PCIT). Parents and children were observed in three 5-minute parent-child interactions (child directed play, parent directed play, clean- up) designed to elicit varying amounts of parental control and the child's compliance. Interactions between mother and child during these 15-minute tapes were coded according to the the Dyadic-Parent-Child Interaction Coding System-II (DPICS-II; Eyberg, et al., 1994) and the Brief Emotional Ability Screener-Trianalog (BEAS-T; Timmer, Nelson, West, Culver, & Thompson, 2009).

**Measures**
- DPICS-II was used to code selected parent verbalizations: questions, reflections, acknowledgements, descriptions, praises, commands, and critical statements. For the purpose of this study, verbalizations were further categorized into directive statements (commands, questions, critical statements) and encouraged verbalizations (praises, descriptions, reflections).
- The BEAS-T consists of seven scales (4 parent scales and 3 child scales). Each overall scale is comprised of three subscales, which are coded from 1 - 3 (1 = non-optimal; 3 = optimal), with a total score for each scale ranging from 3 - 9. Higher scores are indicative of more optimal emotional availability in each scale.
  - Parent Scales [and Subscales]
    -Parent Sensitivity [Affect, Response Quality, Engagement]
    -Parent Hostility [Covert, Overt, Physical Overt Hostility]
    -Control [Verbal Control, Physical Control, Control/Directiveness]
    -Passivity [Play, Verbal, Authority]
  - Child Scales [and Subscales]
    -Positive Responsiveness [Affect, Balance in Interaction, Responsiveness]
    -Engagement [Engagement, Balance of Attention, Behavior]
    -Controlling Behavior [Parentified/Caregiving Role ReversalPunitive Role Reversal, General Bossiness]
- For the purposes of this study, scales were summed across play situations to form summary EA scores for the child and parent.
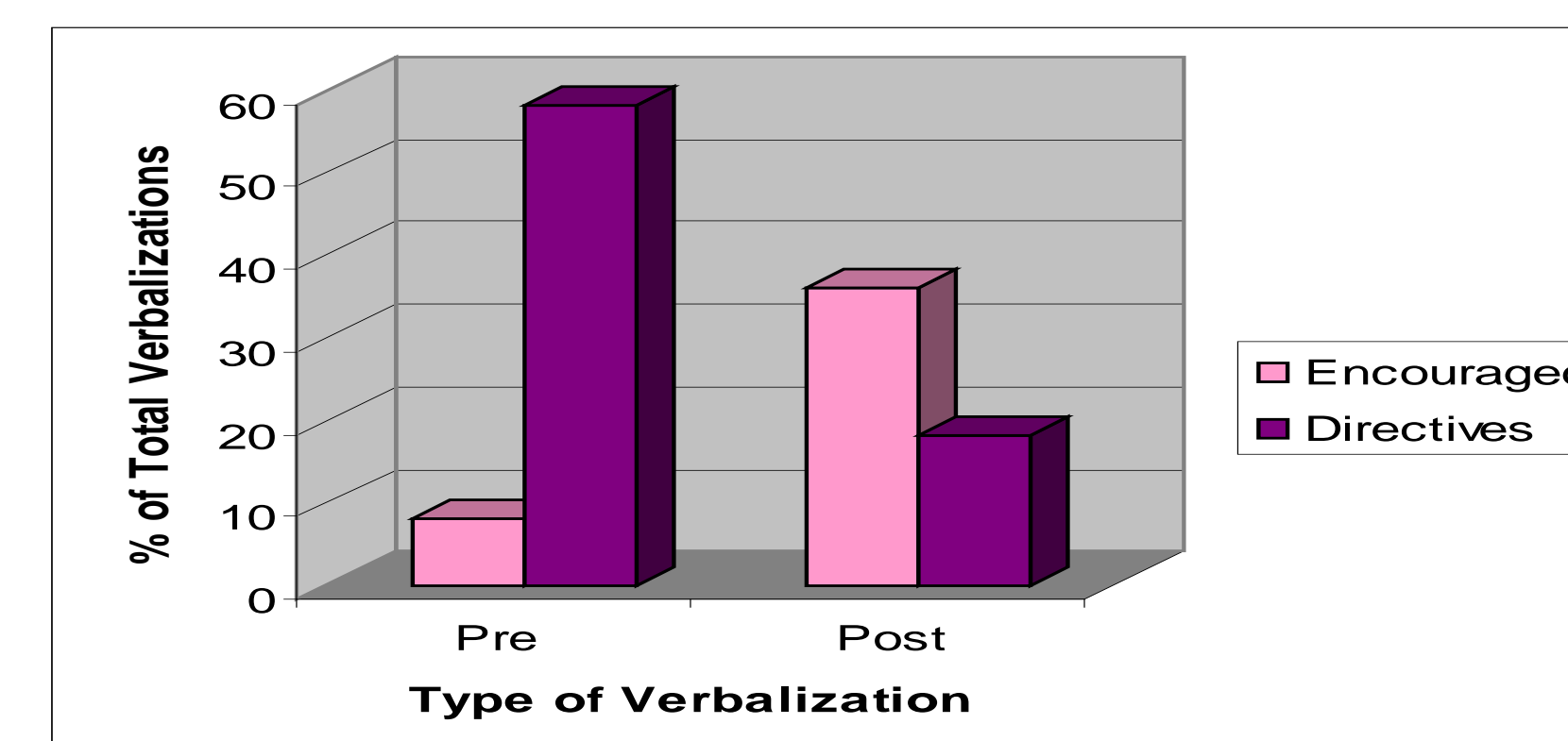
## RESULTS

### Table 1: Descriptive Statistics of Mother

| Demographics | Mother |
|---|---|
| Mean age in years (SD) | 28.9 (6.0) |
| Ethnicity | |
| % Caucasian | 59.6 |
| % African American | 13.5 |
| % Latino | 18.0 |
| % Other | 9.0 |
| Marital Status | |
| % Married/ Cohabitating | 40.4 |
| Education | |
| % High School or less | 72.4 |
| Criminal History (%) | 30.0 |
| Mental Health Diagnosis (%) | 21.0 |
| In process of reunifying (%) | 31.0 |

### Table 2: Descriptive Statistics of Child

| Demographics | Child |
|---|---|
| Mean age in years (SD) | 4.45 (1.35) |
| Ethnicity | |
| % Caucasian | 62.9 |
| % African American | 16.9 |
| % Latino | 15.7 |
| % Other | 4.4 |
| Prenatal Exposure | |
| % to AOD | 50.0 |
| Suspected or Documented History of | |
| % Physical Abuse | 37.1 |
| % Neglect | 52.8 |
| % Domestic Violence | 48.3 |
| % CPS Referred | 74.0 |
| % Court Mandated | 48.0 |

### Verbalizations from Pre to Post treatment



Results of a 2 X 2 repeated-measures MANCOVA, with assessment point and subject (parent vs. child) as within-subjects measures, covarying initial levels of skills and change in skills from pre- to post-treatment showed significant change in parents' verbalizations from pre- to post-treatment, $F(1, 85) = 6.648$, $p < .05$.

### EA Scores from Pre to Post and % Directive Statements
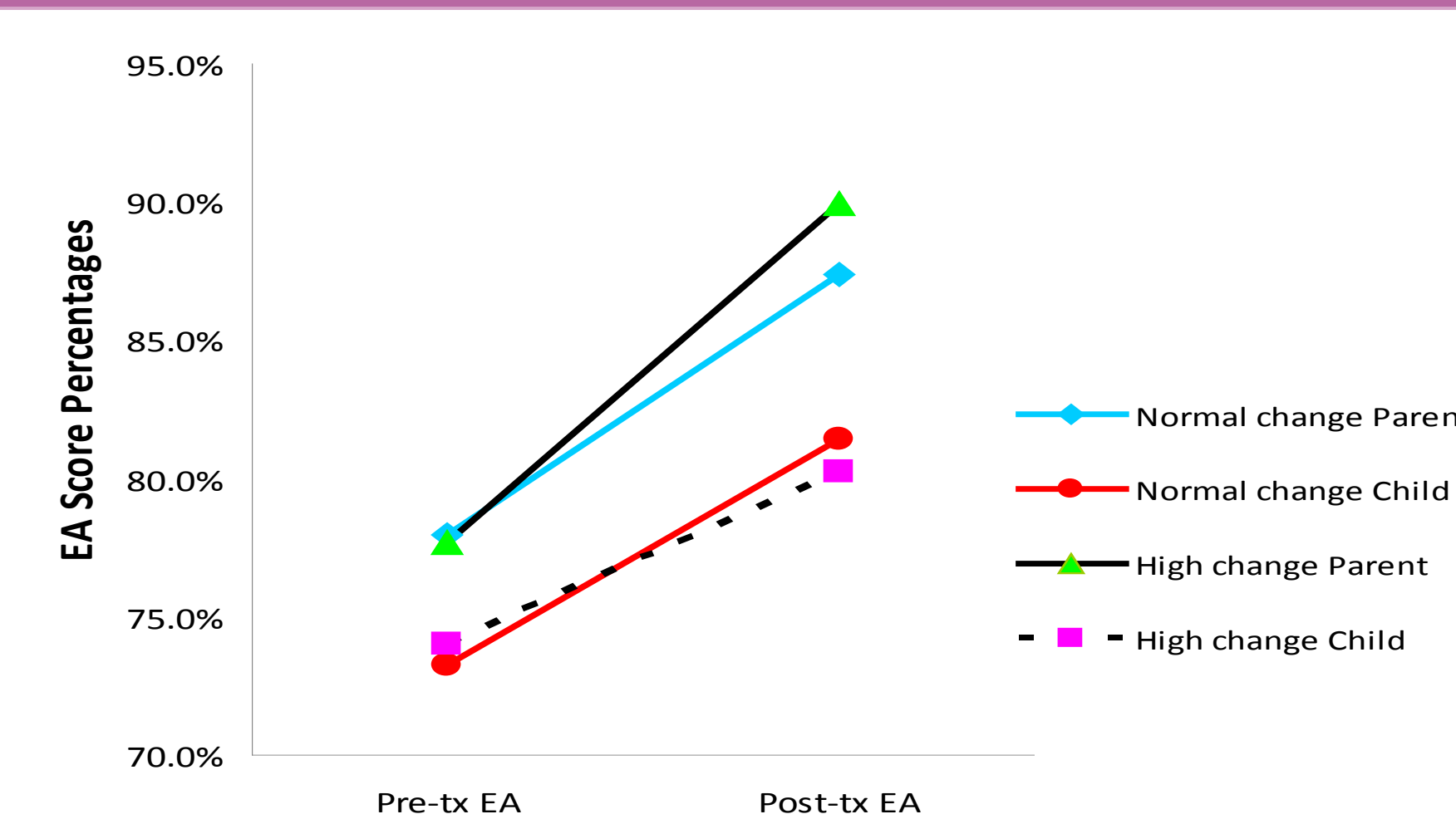


Results of the 2 X 2 repeated measures MANCOVA showed a significant interaction of assessment point, subject, and change in directive statements from pre- to post-treatment, $F(1, 85) = 7.185$, $p < .05$. Mothers who reduced discouraged verbalizations more than 50% over the course of treatment showed the greatest gains in emotional availability, particularly in contrast to the children's gains.

## RESULTS cont.

- To test effects of changing parenting skills on EA, we performed 2 X 2 repeated measures MANCOVA, with assessment point and subject (parent vs. child) as within-subjects measures, covarying initial levels of skills and change in skills from pre- to post-treatment. Interaction terms were also included. Results showed significant change in parents' and children's EA scores from pre- to post-treatment, $F(1, 85) = 6.648$, $p < .05$.
- Results also showed a significant interaction of assessment point, subject, and change in directive statements from pre- to post-treatment, $F(1, 85) = 7.185$, $p < .05$; such that mothers who reduced discouraged verbalizations more than 50% over the course of treatment showed the greatest gains in EA, particularly in contrast to the children's gains.
- There were no significant effects of encouraged verbalizations on the improvements in parents' or children's emotional availability.
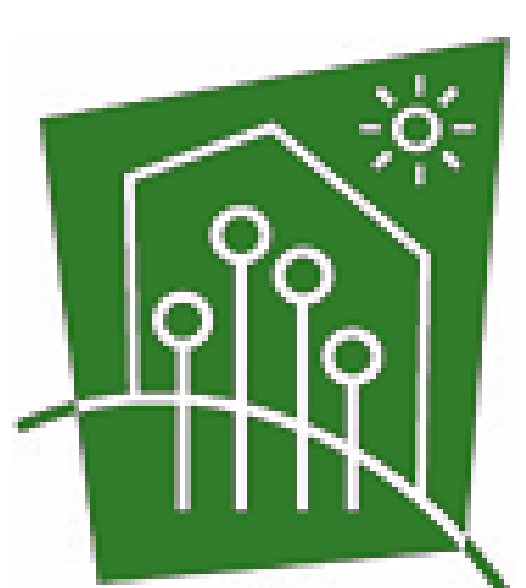
## DISCUSSION

- The purpose of this study was to examine the relationship between parenting skill acquisition in PCIT and change in parent and child EA from pre- to post- treatment.
- Results of analyses showed significant improvement in mothers' and children's EA, increased use of encouraged verbalizations (i.e., praise, description, reflection), and decreases in in verbalizations discouraged by PCIT therapists (i.e., commands, questions, criticisms) during free play.
- Findings showed few connections between changes in verbalization patterns and improvements in EA. We found that reductions in discouraged verbalizations predicted the greatest gains in mothers' EA. These changes did not predict changes in their children's EA, however.
- We expected that a rise in encouraged verbalizations would predict improved EA. However, parents' increased use of these skills may not have been always associated with genuine warmth and non-depressive affect.
- EA scales tap into qualities of parent-child interaction that are not targets of PCIT coaching- sensitivity, synchrony, reciprocity. PCIT coaching focuses on improving the way parents talk to children in order to shift the affective quality of their relationship. Overall, the findings suggest that reducing negative and directing verbalizations has an immediate effect on mothers' availability to their children, but that children are slower to reciprocate.
- The findings of this study partly support the method employed by PCIT therapists who coach parents to decrease their negative and directive verbalizations toward their children.

## LIMITATIONS/FUTURE

- This study's sample was a clinical population of children, and families with significant risk histories. A third of our sample was in the process of reunifying while in PCIT. Future studies should look at the effects of children's placement and risk history on patterns of change.

## CLINICAL IMPLICATIONS

- The results of this study reinforce the usefulness of reducing parents' negative and directive speech as a way to improve the quality of the parent-child relationship.

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