# Attention Deficits and Differences in Risk Factors and Response to PCIT

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## **ABSTRACT**

- The purpose of this study is to examine the population of children who entered the Parent Child Interaction Therapy (PCIT) with clinically significant levels of attention problems.
- Participants included 120 children whose caregivers' responses on the Child Behavior Checklist (CBCL) indicated that the children had difficulties with attention or hyperactivity.
- Results of analyses showed that although eighty-four children had symptoms consistent with a diagnosis of ADHD (based on the CBCL responses), only three children were diagnosed with ADHD.
- Pre- to post-treatment CBCL measures showed an overall improvement for all children displaying attention problems.

#### INTRODUCTION

- ADHD is one of the most commonly diagnosed mental health conditions among children; and psychiatric drugs are frequently prescribed to treat the symptoms (Le Fever & Arcona, 2003).
- ADHD has been found to be comorbid with other mental health diagnoses (e.g., oppositional defiant disorder, conduct disorder, affective disorders, autism, and developmental disorders: Advokat et al., 2007).
- Symptoms of ADHD include lack of concentration, dissociation, hyperactivity, and fidgeting; which are also symptoms commonly seen in children with a history of trauma (Briere, 2001).
- Research has shown that behaviorally oriented treatments have been successful in reducing symptoms of ADHD (Bradley et al., 2000), including research which has found PCIT to be effective in reducing attention problems in children diagnosed with ADHD (Bateni & Timmer, 2008).
- Although attention problems within a group of children may appear to be the same, the cause of these symptoms or their associated mental health issues may affect children's responsiveness to treatment.
- The purpose of this study is to examine the variations in the effectiveness of PCIT in a population of children (N=120) entering PCIT whose caregivers reported them as having clinically significant attention deficits.

### **METHOD**

#### **Participants**

- The sample consisted of 120 caregiver-child dyads referred to the UC Davis CAARE Center for Parent-Child Interaction Therapy (PCIT) because of the child's disruptive behavior.
- Children ranged in age from 2-6 years, with a mean age of 3.9 years. Two-thirds of children were male (65.8%); 56% of children were in treatment with their biological parent, 32% with a foster parent, 12% with a kin relative.

# **METHOD (CONT.)**

#### Procedure

- Caregiver-child dyads were evaluated before entering treatment (PCIT). A clinical interview was conducted with the caregiver to attain information about the child's history and documentation was collected from CPS (e.g., court records).
- As part of the assessment, various measures were given to the caregiver to complete. Dyads were included if the caregiver reported significant levels of attention deficits on the Child Behavior Checklist (N = 120).
- Analyses of pre- to post-treatment change in functioning were performed on the 34 children who completed PCIT (35%). The average length of time to complete treatment was 8.2 months (range 3.7-14.2 months). Measures of the child's functioning were completed by the caregiver at post-treatment.

#### Measures

- Children's behaviors were rated using the Child Behavior Checklist (CBCL; Achenbach, 2001). The CBCL consists of 140 items which inventory the child's daily behaviors and is completed by the caregivers prior to the start of treatment. The Internalizing, Externalizing, and Attention Problem scales of the CBCL were used in determining the level of child problem behaviors.
- A file review was conducted in order to obtain information about the child's risk factors and the diagnoses received at pretreatment.

#### RESULTS

#### Table 1: Demographic Percentages

Characteristic		N = 120	
Mean Age (years)		3.9	
Sex of Child (% male)		65.8	
Child Relationship to Adult Biological Parent Relative Foster Parent		55.8 11.7 32.5	
History of Physical Abuse		31.3	
History of Neglect		69.6	
History of Sexual Abuse		13.0	
History of Domestic Violence		56.9	
History of Foster Care		56.1	
Substance Exposure		58.3	
Maternal Substance Abuse	69.9		
Maternal Criminal History		37.4	

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# **RESULTS (CONT.)**

#### Table 2: Treatment Characteristics

N = 120	Percent
Diagnosis	
<ul> <li>Anxiety</li> </ul>	5.8
<ul> <li>Separation Anxiety</li> </ul>	1.7
<ul> <li>Adjustment Disorder</li> </ul>	22.5
•PTSD	5.0
<ul> <li>Depression</li> </ul>	0.8
<ul> <li>Disruptive Disorder</li> </ul>	50.0
<ul> <li>Disorder of Infancy</li> </ul>	5.8
•ODD	5.0
•ADHD	2.5
<ul> <li>Mixed Language Disorder</li> </ul>	0.8
% on Prescription Medications	5.8
% Complete Treatment	35.3

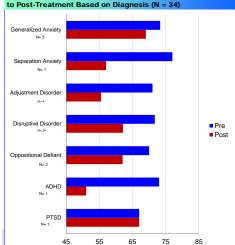
#### Table 3: Overall Mean Group Scores from Pre- to Post-Treatment on CBCL Scales

#### N = 34

CBCL Scale	Pre	Post
DSM-IV ADHD scale	70.38	59.47
Attention problems	71.76	61.59
Internalizing	63.91	54.91
Externalizing	74.12	58.53

The group as a whole showed significant improvements from pre- to post-treatment on all scales; however, when broken down by diagnoses there was some indication of variation in effectiveness by comorbid symptoms. However, cell sizes were small and the statistical test of overall differences was not significant.

#### Graph 1: Mean Scores on CBCL Attention Problems Scale Pre-



Pre- to post-treatment measures showed strong improvements on the Attention Problems Scale for all diagnoses, except Anxiety and PTSD. However, the number of children with elevated attention problems and these diagnoses was small.

# **SUMMARY OF RESULTS**

- While there was a large number (N = 120) of children whose parents felt that they had attention problems, only 3 were clinically diagnosed with ADHD.
- Out of 120, 7 entered treatment with psychotropic medication prescriptions; 2 of these children had an ADHD diagnosis.
- Out of 102 children who had at least one coaching session and were not currently in treatment, 35.3% (N = 36) completed treatment.
- The average level of attention problems significantly decreased from pre- to post-treatment for the entire group.
- Internalizing and externalizing behaviors significantly decreased from pre- to post-treatment for the group as a whole.
- Results showed that caregivers reported reductions in attention, internalizing, and externalizing behavior problems for children with all diagnoses, except for those diagnosed with PTSD

# **DISCUSSION**

- The purpose of this study was to examine the characteristics of children with clinically significant attention deficits and the effectiveness of PCIT treatment in reducing their symptoms. We were interested in the amount of risk in their history and the variety of diagnoses they may receive, and whether comorbid mental health problems might affect their responsiveness to PCIT
- Results showed that very few of the children with elevated attention problems received either an ADHD diagnosis or prescription medications for their hyperactivity.
- Attention problems may be a barrier to treatment completion. The percentage of children with attention problems completing PCIT (35.3%) is significantly lower than rates reported in recent research from this clinic (e.g., Timmer et al. 2010).
- Caregivers completing PCIT with their children reported significant improvements in attention, internalizing, and externalizing behaviors suggesting that PCIT may be an effective therapy for children displaying these behaviors.
- Analysis of pre- to post-treatment differences by diagnosis showed some variation in decreases in attention, internalizing, and externalizing behavior problems. However, the small numbers populating the different diagnostic categories makes it difficult to draw firm conclusions. Future research should investigate the effectiveness of PCIT for children with anxiety and PTSD when there are also elevated attention problems.

#### **CLINICAL IMPLICATIONS**

❖ ADHD is a widely known and often medically treated mental health disorder. It is important to understand the characteristics of the population that present with clinically significant attention deficits and hyperactive behavior. Children are often times labeled as having ADHD by their parents or pediatricians, when in fact the child needs mental health treatment because of adjustment difficulties or parent-child relationship problems. PCIT and other behaviorally oriented therapies can be effective when children have attention problems; however, caution should be taken when symptoms of trauma are also present, as other treatment may also be needed.