

# Efficacy of Parent-Child Interaction Therapy (PCIT) for Families of Children with Autism Spectrum Disorder (ASD)

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### What is PCIT?

- An evidence-based behavioral parent training program designed for preschool-age children that emphasizes changing parent-child interaction patterns to improve child behavior and enhance the quality of parent-child relationships (McNeil & Hembree-Kigin, 2010).

### 2 Distinct Phases of PCIT

- Child Directed Interaction (CDI)
  - Parents are taught to follow the child's lead and utilize "PRIDE" skills in practicing differential social attention (Eyberg & Child Study Lab, 1999)
    - PRIDE skills include:
      - Praising the child's behavior
      - Reflecting the child's statements
      - Imitating the child's play
      - Describing the child's play
      - Using Enthusiasm
- Parent Directed Interaction (PDI)
  - Parents are taught to use effective commands and specific consequences for compliance and noncompliance (Eyberg & Child Study Lab, 1999)

### What is PCIT Used to Treat?

- PCIT is an evidence-based practice for treating children experiencing externalizing behavioral and emotional problems such as Attention Deficit/Hyperactivity Disorder and Oppositional Defiant Disorder (Eyberg & Child Study Lab, 1999)
- In recent years, PCIT has been applied to other disorders such as Anxiety, Intellectually Disability, and most recently ASD.

### What is Autism?

- ASD is a neurodevelopmental disorder characterized by persistent deficits in social communication and interaction along with restricted, repetitive patterns of behavior, interests, or activities (American Psychiatric Association, 2013).

### What are evidence based treatments for ASD?

- Wong et al. (2015) identified 27 evidence-based practices for the treatment of ASD. Many of these treatments include a behavioral component, however some interventions focus on communication and social skills. The 7 most common interventions for ASD are listed below in Table 1.

ASD Evidence-Based Interventions	Description
Applied Behavioral Analysis (ABA)	Targets specific behaviors for intervention, either acquiring skills to address deficits or reducing problem behaviors
Discrete Trial Training (DTT)	Employs repetitive practice in the structure of learning trials presented in block format
Incidental Teaching (IT)	Creating an environment where students' interests are easily fostered and nurtured
Milieu Teaching (MT)	Manipulating stimuli in a preschool child's natural environment that encourages the child to engage in a targeted behavior
Pivotal Response Teaching (PRT)	Targets pivotal behaviors thought to produce broad improvements
Naturalistic Interventions (NI)	Applying principles of ABA during a learner's everyday routines and activities in order to increase a target behavior or decrease an interfering behavior
Differential Reinforcement (DR)	Application of reinforcement designed to reduce the occurrence of interfering behaviors

### Why PCIT for ASD?

- The efficacy of PCIT in treating children with disruptive behaviors has been documented (Funderburk et al., 1998)
- PCIT efficacy studies have shown key changes in parents' behaviors toward their children (Eyberg & Matarazzo, 1980)
- PCIT has been extended to other clinical populations and has been effective (Eyberg et al., 2001)
- PCIT addresses the clinical needs of families of children with ASD with benefits to the family and child (Marcus et al., 2005)

### Similarities of PCIT and ASD Treatments

- Importance of family involvement across settings (Masse, McNeil, Wagner, & Quetsch, 2016)
- One-on-one parent child interaction following the child's lead (Masse, McNeil, Wagner, & Quetsch, 2016)
- Utilizing positive social reinforcement to increase prosocial behaviors (Masse, McNeil, Wagner, & Quetsch, 2016)
- Child-compliance training (Masse, McNeil, Wagner, & Quetsch, 2016)
- Behavioral approach (Marcus et al., 2005)
- Relationship enhancement (Marcus et al., 2005)
- Parents as therapists (Marcus et al., 2005)
- Emotional support (Marcus et al., 2005)
- Conceptualization of the parent-child relationship as a transactional model established and maintained over time (Marcus et al., 2005)
- Individualization to the family's and child's specific needs (Marcus et al., 2005)
- Emphasis on collaborative parent-family relationships (Marcus et al., 2005)
- Modeling (Kasari et al. 2006)
- Positive reinforcement (Kasari et al. 2006)
- Naturalistic interaction methods (Kasari et al. 2006)

### Benefits of PCIT for ASD

- Increased Parenting Competence
- Increased child compliance
- Improved Autism Symptomatology
- Stronger parent-child relationship

### Conclusion

- I believe that PCIT is an effective treatment for ASD. Using the original protocol is beneficial to both the families and the children. To determine if PCIT can be an evidence-based practice for ASD, further research needs to be conducted.

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Table 2

### Published PCIT & ASD Research Studies

Author	Design	Participants	Modifications
Agazzi, Tan, Ogg, Armstrong & Kirby (2017)	Single-case	3 children between 3 and 7 years old w/ comorbid ASD	Variety of vocalizations and verbalizations, using gestures and minimal physical assistance, reduced time-out interval
Zlomke, Jeter & Murphy (2017)	Open Trial	17 children between 2 and 8 years old with ASD	CDI phase – less verbalizations needed
Hansen & Shillingsburg (2016)	Case Study	2 children between 30 and 45 months old diagnosed with ASD & vocalization issues	Specific language variables to increase vocalization
Masse, McNeil, Wagner, & Quetsch (2016)	Single Subject Research Design (Non-concurrent Multiple Baseline)	3 children between 2 years -7 years of age diagnosed with ASD & compliance issues	Home Setting
Armstrong, DeLoatche, Preece, & Agazzi (2015)	Case Study	5 yr. old girl w/ comorbid ASD, ID, and epilepsy	Addition of visual supports & a social story
Ginn, Clionsky, Eyberg, Warner-Metzger, & Abner (2015)	Randomized Controlled Trial	30 mother-child dyads, children 3 years – 7 years of age with ASD	Child Directed Interaction Phase Only
Lesack, Bears, Celano, & Sharp (2014)	Case Study	5 yr. old boy w/ ASD, DD, & compliance difficulties	Both phases modified; CDI: Reflection procedure, PDI: teaching of commands; time out length reduced, holding chair
Agazzi, Tan, & Tan (2013)	Case Study	7 yr. old boy w/ comorbid ASD and behavioral difficulties	Within PDI such as order and deletion of planned ignoring
Armstrong & Kimonis (2013)	Case Study	5 yr. old boy w/ comorbid ASD and severe behavioral problems	Adaptations to ensure appropriateness & generalizability
Hatamzadeh, Pouretmad, & Hassanabadi (2010)	Single Subject Research Design (A-B)	4 boys 4 – 7 years of age w/ High Functioning Autism & clinically significant behavioral problems	Not reported, ECBI not given at every session
Solomon, Ono, Timmer, & Goodlin-Jones (2008)	Wait-list control Group Design	19 boys 5 – 12 years of age w/ ASD and clinically significant behavioral problems	Prohibited mention of circumscribed interests, redirect interactions if controlling, praise initiation of social interaction