

# PCIT– Emotion Development

## A Novel PCIT Adaption for the Treatment of Preschool Depression

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### **Early Emotional Development Program**

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# PCIT-ED Pilot Randomized Controlled Trial (RCT) Overview

## □ Participants:

- Children (ages 3.0 to 7.0 years) with symptoms of depression and their parents/primary caregivers

## □ Treatment:

### □ Therapy Group:

- Utilize core techniques of PCIT
- New Emotion Development (ED) module builds on foundation of Child Directed Interaction (CDI) & Parent Directed Interaction (PDI)
- ED Module created to address and enhance emotional competence and regulation in preschoolers

### □ Control Group:

- Developmental Education Parenting Intervention (DEPI)

## □ Outcomes:

- Decreased depressive symptoms and improvements in child executive functioning
- Reduction in maternal depression and overall parenting stress

# Preschool Onset MDD

- Studies have established that mood disorders can arise as early as 3 years of age (Egger & Angold, 2006; Luby et al., 2002; Luby et al., 2003; Luby, Mrakotsky, Heffelfinger, Brown, & Spitznagel, 2004)
- Data from two independent samples support the validity of preschool MDD (Luby et al., 2003; Luby et al., 2009).
- Preschool MDD detected in several epidemiological samples (Egger & Angold, 2006; Lavigne, LeBailly, Hopkins, Gouze, & Binns, 2009; Wichstrom, unpublished data)
- School age children with PO-MDD displayed alterations in brain function and structure (similar to patterns in adult MDD). (Gaffrey et al., 2010; Luking et al., 2011; Luby, Botteron, & Barch, unpublished data).

# Symptoms of Depression in Preschoolers

- Often sad or frequently crying
- Excessive guilt
- Anhedonia
- Excessive irritability
- Sleep disturbances
- Changes in appetite
- Changes in activity level
- Self-destructive tantrum behavior
- Low enthusiasm

# Importance of Emotion Development

*Emotion Development: the development of emotional expressive range, repertoire and regulation in humans.*

□ Key to competent social and interpersonal functioning

□ Internal well-being

# Why Adapt PCIT

- Early intervention: age appropriate, highly effective for preschool disruptive disorder
- Treats not only the child's symptoms but can help strengthen and enhance parenting skills
- Provides parent greater confidence in dealing with child's difficult behaviors
- Help parent have a better relationship with child
- Parent as "arm of the therapist" (cost effective)
- Enduring efficacy has been established

# Adaptation of PCIT to PCIT-ED

- Based on standard PCIT but adds an additional ED module
- CDI and PDI retained to establish parent-child relationship stability prior to ED but are time limited
- ED module combines principles and techniques employed in PCIT (bug in the ear, parenting style, homework)
- Utilizes parent as teacher, model and external regulator
- Utilizes emotionally evocative tasks in vivo and emotionally charged memories

# PCIT-Emotion Development

- After completion of CDI and PDI modules the Emotion Development portion of the treatment begins.
- The ED module consists of 8 sessions designed to address the child's depressive symptoms:
  - Emotion Teaching
  - Parent Sessions
  - Relaxation Techniques
  - Emotion Development Teaching
  - Emotion Development Coaching
    - Anger
    - Sadness/Guilt
    - Joy



# Goals of ED Sessions

- Enhance parent's role as emotion guide/regulator for child
- Increase emotional competence
- Address maladaptive patterns of emotional reactivity
- Increase child's accurate recognition of own emotions and others' emotions
- Enhance child's emotion regulation strategies

# Emotion Teaching

## □ Teach child

- to label and understand five core emotions.
- to understand differences in intensity of emotion.
- to recognize what emotion expression communicates to others.

## □ Teach parent

- to become proficient at labeling triggers and emotional responses.
- the importance of tolerating intense and/or negative emotions in child.
- how to process emotions with child.

# Parent Sessions

## Parent Session 1:

- Discuss parent's history and style of emotion expression
- Discuss cognitions surrounding child's emotion expression
- Explain importance of modeling/being an external regulator

## Parent Session 2:

- Teach increasing positive affect skills
- Provide psycho-education about guilt and teach skills to handle this emotion

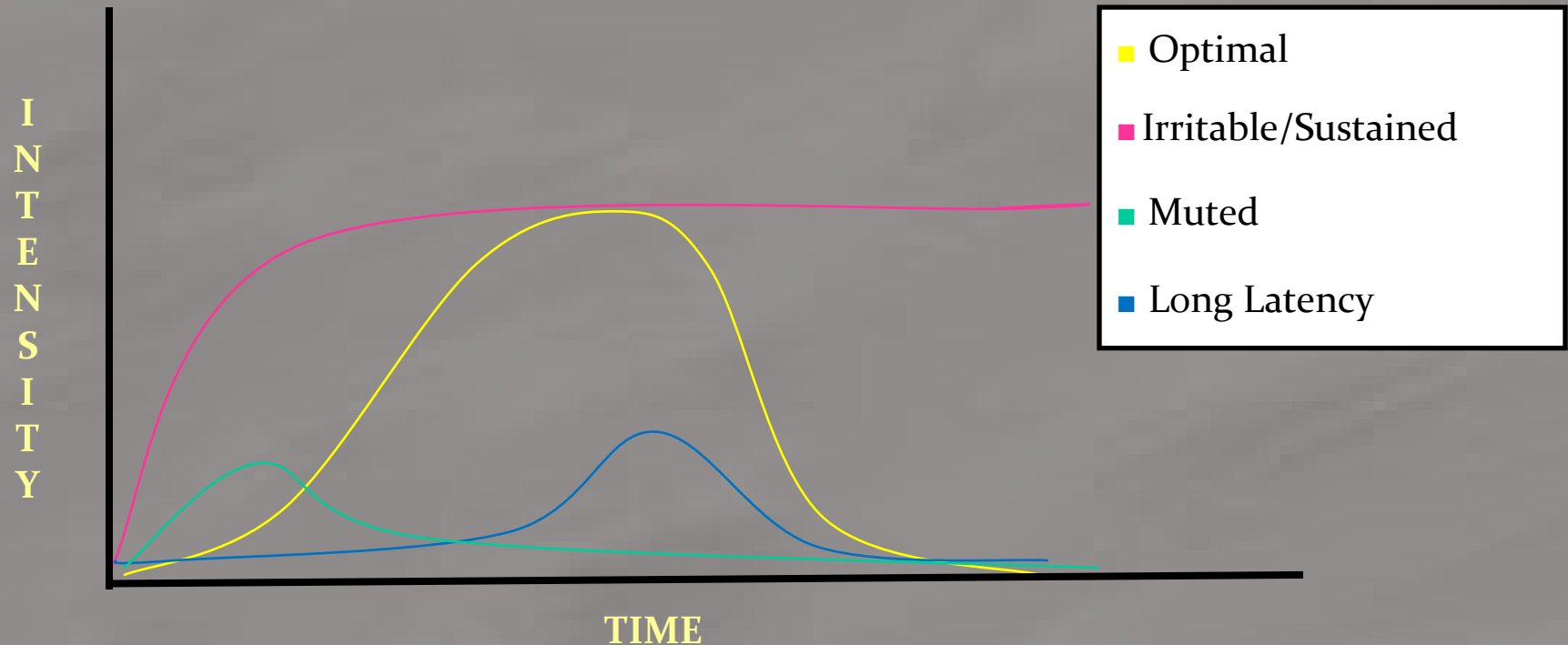
# Relaxation Techniques

- Teach parent and child relaxation skills
  - Deep breathing
  - Muscle relaxation
  - Visualization/Imagery
  - Supportive touch
- Educate parent on appropriate situations in which to suggest child utilize relaxation technique

# Emotion Development Teaching

□ Introduce parent to emotion reactivity curve and its relationship to emotional dysregulation

□ Emotion Reactivity Curve:



# Emotion Development Skills

- Tolerate child's emotion
- Align with child
- Label triggers and emotions
- Suggest strategies for calming, if necessary
- Use labeled praise
- Mark a new beginning
- Emotion work/Processing emotions
- Increasing positive affect

# ED Coaching-Anger/Frustration

- Therapist coaches parent to utilize ED skills during anger/frustration-inducing tasks
  - Transparent box
  - Wrong gift



video clip

# ED Coaching-Sadness/Guilt

- Parent applies new understanding of child's manifestations of guilt while being coached by therapist during a guilt-inducing task
  - Broken tea cup



video clip



# ED Coaching-Joy

- Therapist coaches parent using ED skills
  - If anhedonic symptoms present, this task aims to produce positive affect in the child
  - If anhedonic symptoms absent or child excessively exuberant, this task aims to help regulate/calm child to help maintain optimal levels of joy
- Bubble popping



video clip

# Outcomes of PCIT-ED Study

	Intent-to-Treat Analyses									
	PCIT-ED (N=25)					DEPI (N=18)				
	Pre Mean (SD)		Post Mean (SD)		ES	Pre Mean (SD)		Post Mean (SD)		ES
PFC-S score	42.8	(5.8)	30.1	(11.3)	2.17***	39.8	(10.3)	33.7	(10.6)	0.58**
MDD severity sum score <sup>b</sup>	11.3	(4.2)	7.6	(4.0)	0.86***	9.0	(4.7)	7.5	(4.7)	0.31
HBQ-P internalizing symptoms <sup>c</sup>	0.76	(0.29)	0.65	(0.34)	0.37*	0.74	(0.26)	0.63	(0.28)	0.40*
HBQ-P externalizing/ADHD <sup>d</sup>	0.91	(0.37)	0.82	(0.41)	0.25*	0.84	(0.41)	0.79	(0.40)	0.10
HBQ-P functional impairment-self <sup>e</sup>	0.86	(0.31)	0.64	(0.43)	0.72**	0.79	(0.39)	0.61	(0.47)	0.46*
HBQ-P functional impairment-family <sup>d</sup>	1.26	(0.53)	0.93	(0.56)	0.60***	1.20	(0.68)	1.08	(0.71)	0.17
PECFAS total score <sup>b</sup>	63.2	(21.7)	50.0	(25.5)	0.60**	61.2	(23.9)	55.3	(29.0)	0.24
ERC negativity/lability score <sup>f</sup>	41.5	(6.0)	37.8	(7.2)	0.60**	38.9	(7.8)	38.5	(8.9)	0.05
ERC emotion regulation score <sup>f</sup>	21.6	(3.1)	23.3	(3.5)	0.53**	22.8	(3.6)	24.0	(3.2)	0.32
Penn Emotion Differentiation score <sup>g</sup>	19.9	(8.2)	23.6	(9.1)	0.44**	20.3	(5.3)	17.1	(7.6)	0.59
BRIEF inhibit + emotional control T score <sup>h</sup>	77.7	(13.9)	72.4	(13.5)	0.37***	69.5	(12.4)	70.6	(14.5)	0.09
BRIEF shift + emotional control T score <sup>h</sup>	76.7	(11.4)	70.9	(12.4)	0.50***	69.3	(10.6)	67.3	(11.2)	0.18
BRIEF working memory + plan/organize T score <sup>h</sup>	70.6	(14.9)	65.6	(13.4)	0.33**	65.2	(12.5)	63.1	(14.2)	0.16
BDI-II total score	10.7	(8.3)	8.0	(8.8)	0.31**	14.5	(8.4)	13.1	(9.7)	0.17
PSI child domain percentile <sup>i</sup>	94.6	(9.3)	80.1	(25.8)	1.53**	89.8	(18.9)	89.5	(18.2)	0.02
PSI parent domain percentile <sup>i</sup>	47.3	(31.9)	46.6	(32.0)	0.02	63.1	(28.8)	72.2	(24.8)	0.31
PSI total stress percentile <sup>i</sup>	79.6	(22.9)	67.0	(32.3)	0.54**	82.9	(20.0)	83.7	(23.2)	0.04
PSI life stress percentile <sup>i</sup>	63.0	(30.4)	43.0	(35.7)	0.65**	69.2	(25.8)	61.6	(33.9)	0.29

PFC-S = Preschool Feelings Checklist – Scale Version, HBQ-P = Health and Behavior Questionnaire – Parent Version, PECFAS = Preschool Early Childhood Functional Assessment Scale, ERC = Emotion Regulation Checklist, BRIEF = Behavior Rating Inventory of Executive Function – Preschool Version, BDI-II = Beck Depression Inventory-II, PSI = Parenting Stress Index

<sup>a</sup> comparisons were made using paired t-tests; <sup>b</sup> N=17 DEPI; <sup>c</sup> N=24 PCIT-ED, N=16 DEPI; <sup>d</sup> N=24 PCIT-ED, N=17 DEPI; <sup>e</sup> N=24 PCIT-ED, N=17 DEPI;

<sup>f</sup> N=16 DEPI; <sup>g</sup> N=19 PCIT-ED, N=16 DEPI; <sup>h</sup> N=23 PCIT-ED, N=16 DEPI; <sup>i</sup> N=23 PCIT-ED, N=18 DEPI; \* p<0.05; \*\* p<0.01; \*\*\* p<0.001

# Outcomes –for an individual case of a 6 year old boy:

Symptoms	<u>Pre PCITED</u>	<u>Post PCITED</u>
<b>Irritability</b> [crying, arguing, whining]	-10-12x/day -could last all day	-less than 1x/day -2 minutes
<b>Sadness</b> [crying, moping, pouting]	-5-10x/day -lasts 1 hour	-10x/month -2 minutes
<b>Anhedonia</b> [not enjoying fun activities]	-8x/week -lasting 6 hours	-NONE
<b>Diobedience</b> [hitting, chores]	-5x/day	-2x/month

# Future of PCIT-ED

- Currently, studying PCIT-ED in new phase of data collection/therapeutic intervention
- Future grant applications
- Feedback

# Related Articles

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