



Treatment of Comorbid Generalized Anxiety and Oppositionality in Children: Targeting the Underlying Processes

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Comorbidity

- ▶ Empirical support for comorbidity
 - Epidemiological studies report substantial rates of comorbidity between anxiety and externalizing disorders (Russo & Beidel, 1994)
 - 62% of those who reported ODD in childhood also reported comorbid anxiety (Nock, Kazdin, Hiripi, & Kessler, 2007)
 - GAD sample, 21% experienced externalizing symptoms (Masi et al., 2004)

- ▶ Comorbid children at a higher risk for negative life outcomes (Brunnekreef et al., 2007; Franco, Saavedra, & Silverman, 2007)

Emotion Regulation

- ▶ Monitor, evaluate, and modify emotional states to achieve goals, particularly intensity and duration (Eisenberg & Spinrad, 2004)
- ▶ Effortful Control
 - Ability to inhibit a dominant response, in order to perform a subdominant response (Rothbart & Bates, 1998)
 - High levels of emotionality, combined with low levels of effortful control → predictive of psychopathology (e.g., Muris, van der Pennen, Sigmond & Mayer, 2008; Rothbart, 2007)
 - Deficit for anxious and oppositional children (Eisenberg et al., 2001)
 - Link between emotions and executive functioning

Emotion Regulation

▶ Anxiety

- Difficulty managing emotions, high emotional intensity, poor understanding of emotions, low self-efficacy in regulation (Mennin, 2006; Suveg & Zeman, 2004)

▶ Oppositionality

- Difficulties managing anger, high emotional intensity, and impulsive (Zeman, Cassano, Perry-Parrish, & Stegall, 2009)

▶ Nonspecific emotion dysregulation factor (Silk,

Steinberg & Morris, 2003; Steinberg & Avenevoli, 2000)

Information Processing

- ▶ Information processing deficits occur for both anxious and oppositional youth
- ▶ **Anxiety** (e.g., Muris & Field, 2008)
 - Interpretation, attention, memory, and maladaptive solutions
- ▶ **Oppositionality** (e.g., Dodge & Crick, 1990)
 - Interpretation and maladaptive solutions
- ▶ **Anxiety & Aggression** (Reid et al., 2006)
 - Attend to negative information, interpret ambiguous events as negative and a preferential recall of negative words

Parenting Behaviors

▶ Negative Behaviors

- Uninvolved, perceived rejection or lower empathy expression are related to both anxiety and oppositionality (Hale, Engels, & Meeus, 2006; McCarty et al., 2000)
- Parents of both anxious and oppositional youth use fewer positive words (Denahm et al., 2000; Suveg et al., 2005)

▶ Control

- Behavioral: monitoring and discipline
- Psychological: excessive involvement, discourages independence

Processes	Anxiety	ODD	Comorbidity
<p style="text-align: center;">Emotion Dysregulation</p>	<ul style="list-style-type: none"> ▶ Over-control emotions ▶ Low effortful control ▶ High emotionality ▶ Particular difficulties with anxiety 	<ul style="list-style-type: none"> ▶ Under-control emotions ▶ Low effortful control ▶ High emotionality ▶ Particular difficulties with anger and impulsivity 	<ul style="list-style-type: none"> ▶ Difficulties regulating high emotional arousal ▶ Low effortful control ▶ Difficulties with both anger and anxiety
<p style="text-align: center;">Information Processing Deficits</p>	<ul style="list-style-type: none"> ▶ Interpret ambiguous situations as threatening ▶ Results in avoidant responding ▶ Attend to negative information ▶ Less likely to select positive or prosocial solutions when problem solving 	<ul style="list-style-type: none"> ▶ Interpret ambiguous situations as threatening ▶ Results in aggressive responding ▶ Attend to negative information ▶ Less likely to select positive or prosocial solutions when problem solving 	<ul style="list-style-type: none"> ▶ Interpret ambiguous situations as threatening ▶ Fluctuate between aggressive or avoidant responding ▶ Attend to negative information ▶ Less likely to select positive or prosocial solutions when problem solving
<p style="text-align: center;">Parental Psychological Control</p>	<ul style="list-style-type: none"> ▶ Over-controlling parenting style ▶ Goal to reduce anxious behaviors 	<ul style="list-style-type: none"> ▶ Over-controlling parenting style ▶ Goal to reduce aggressive behaviors 	<ul style="list-style-type: none"> ▶ Over-controlling parenting style ▶ Goal to reduce negative behaviors
<p style="text-align: center;">Parental Emotional Expressivity</p>	<ul style="list-style-type: none"> ▶ Less emotional warmth ▶ Child more likely to perceive parental neglect or rejection ▶ Parent less like to use positive encouragement 	<ul style="list-style-type: none"> ▶ Less emotionally supportive ▶ Child more likely to perceive parental rejection 	<ul style="list-style-type: none"> ▶ Less positive emotional expression ▶ Less positive emotional support

Emotion Focused CBT

- ▶ Traditional CBT infused with emotion focused concepts (e.g. Suveg, Sood, Comer & Kendall, 2009)
 - Identification (self and others)
 - Coping
 - Thinking through consequences

Collaborative Problem Solving

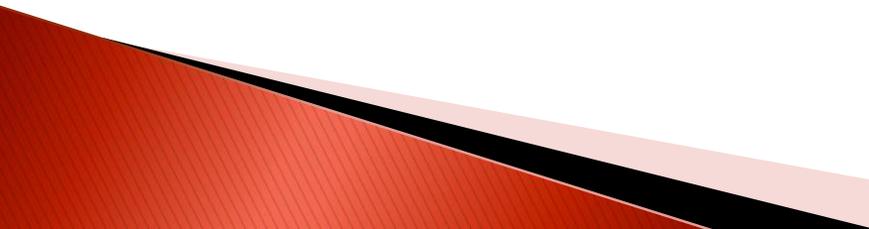
▶ Collaborative Problem Solving (CPS)

- Lagging skills & unsolved problems

Process

- Parent presents unsolved problem to child and gathers information while providing empathy
- Parent expresses their concerns
- Child is invited to generate solutions which address all concerns

Combined Treatment

- ▶ Combine ECBT with CPS for families with children who have both GAD and ODD
 - ▶ ECBT for children would target emotion regulation and information processing
 - ▶ CPS would target parenting behaviors
 - parental empathy
 - psychological control
 - ▶ As well as child processes (e.g., perspective taking, multi-step problem solving, flexibility)
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Sessions 1–5

▶ Child

- Identifying feelings (happy, sad, worried, angry)
 - Facial, voice, body language cues
 - Trigger situations
 - Different levels of emotions
- Coping skills (deep breathing, self-talk, positive activities)
- Worry and anger hierarchies

▶ Parent

- Understanding child in terms of lagging skills and unsolved problems
- Generate lists of unsolved problems that lead to anxious or oppositional behaviors
- Begin practicing CPS in session: Empathy, gathering information, appropriately expressing concerns, generating viable solutions

Sessions 6-12

▶ Child

- Thinking traps
- Focus on worry and anger hierarchies
- Imaginal exposure (Imagine in situation, process feelings, thoughts, behaviors and how to handle the situations)
- Experiencing multiple emotions

▶ Parent

- Supporting child while working through hierarchies at home
- Practicing CPS at home
- Implementing solutions
- Moving from smaller to larger unsolved problems

Specific Aims

- ▶ Aim 1: Examine the efficacy, feasibility, and acceptability of a 75 minute, 12 week intervention, in a single case multiple-baseline design
 - ▶ Aim 2: To track improvement in anxiety and oppositionality
 - ▶ Aim 3: To track improvement in the proposed underlying processes
 - ▶ Aim 4: To examine the maintenance of improvement after one month
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Hypotheses

- ▶ H_1 : The measures recorded at baseline will remain relatively consistent during baseline phase
 - ▶ H_2 : ODD symptoms will decrease as a function of treatment
 - ▶ H_3 : Anxiety symptoms will decrease as a function of treatment
 - ▶ H_4 : Underlying processes will change as a function of treatment
 - Emotion regulation will increase
 - Information processing biases will decrease
 - Parents will display more empathy and allow child autonomy
 - ▶ H_5 : Both parents and children will find the treatment feasible and acceptable
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Participants

- ▶ 9 children and their families
 - ▶ Inclusion criteria: 10–14 years of age, current DSM–IV diagnosis of GAD and ODD
 - ▶ Eligibility will be determined after a thorough assessment
 - ▶ Follow up assessments will be conducted at 1 week and 1 month, following treatment completion
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Measures

▶ Global

- Anxiety Disorders Interview Schedule (ADIS; Silverman & Albano, 1996)
- Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997)

▶ Anxiety

- Spence Child Anxiety Scale (SCAS; Spence, 1998)

▶ Oppositionality

- Disruptive Behavior Disorders Rating Scale (DBDRS; Barkley, 1997)

▶ Treatment Satisfaction

- Consumer Satisfaction Questionnaire (CSQ; McMahon & Forehand, 2003)

Measures for Processes

▶ Parenting Variables

- Alabama Parenting Questionnaire (APQ; Shelton, Frick & Wootton, 1996)
- Parental Bonding Instrument (PBI; Parker, Tupling & Brown, 1979)

▶ Emotion Regulation

- Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997)
- Children's Emotion Management Scales (CEMS; Zeman et al., 2001, 2004, 2010)
- Emotion Expression Scale for Children (EESC; Penza-Clyve & Zeman, 2002)

▶ Information Processing

- Child Automatic Thoughts Scale (CATS; Schniering & Rapee, 2002)

Research Design

- Non-concurrent baseline single-case design
- Recommended for treatment efficacy
- Each subject serves as own control
- Staggered baselines (2,3, and 4 weeks) allows for experimental control (Horner et al., 2005; Morgan & Morgan, 2009)

Analytic Plan

- Systematic visual comparison using time-series graphs (Horner et al., 2005; Kazdin, 2011)
- Non-parametric Friedman tests
 - Look at mean of symptoms at baseline, post, and one month
- Simulation Modeling Analysis (Borckardt, 2008)
 - Examines changes in symptoms levels and slope of symptom change

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- ▶ No disclosures