Parental psychopathology and treatment outcome for anxious youths: Roles of family functioning and caregiver strain

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Background: The Problem

• Anxiety disorders are among the most common conditions affecting youths (Costello, Egger, & Angold, 2005)

• Treatments (CBT, meds) often help! (Silverman, Pina, & Viswesvaran, 2008; Ginsburg et al., 2011)
  – But some youths respond better than others

• Ways to probe differential responses:
  – Predictors
    – Explanatory variables: mediators/suppressors
Familial stressors & youth anxiety treatment

**WHY?**

- Disrupts parents’ capacity to engage positively with youths, in tx
- Greater dysfunction in family = unpredictable home environment


More parental psychopathology  
(Cobham et al, 1998; Southam-Gerow et al., 2001; Pilowsky et al., 2008)

Worse family functioning  
(Crawford & Manassis, 2001; Victor et al., 2007)

More caregiver strain  
(Compton et al., 2004; Crawford & Manassis, 2001)

Worse youth tx response
Present Study

Tested whether relation between parental psychopathology and youth anxiety treatment response was explained by:

(a) improvements in family functioning
(b) reductions in caregiver strain

**Hypothesis:** Lower parental psychopathology → greater improvements in family functioning/caregiver strain → improved youth anxiety outcomes

**CAMS sample** (Walkup et al., 2008)

Independent evaluator (IE), parent, and youth report

Tested alternate models
Methods

• 488 youths, ages 7-17, meeting DSM-IV criteria for GAD, SP, or SAD, and their parents
  – 49.6% girls
  – 75% middle-high SES (Hollingshead, 1971)
  – 87% parents were moms
  – 19% single-parent homes

• All youths randomized to one of four 12-week treatment conditions (CBT, SRT, CBT+SRT, PBO)

• Same assessment battery pre- and post-treatment
# Measures

## Youth anxiety

<table>
<thead>
<tr>
<th>Informant</th>
<th>Measure name</th>
</tr>
</thead>
<tbody>
<tr>
<td>IE</td>
<td>CGI-S (Clinical Global Impressions-Severity Scale)</td>
</tr>
<tr>
<td>Parent</td>
<td>Parent SCARED (Parent screen for child anxiety related emotional disorders)</td>
</tr>
<tr>
<td>Youth</td>
<td>Child SCARED (Child screen for child anxiety related emotional disorders)</td>
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</tbody>
</table>

Birmaher et al., 1997; Guy, 1976; RUPP Anxiety Study Group, 2002
Measures

Parental psychopathology
  – Brief Symptom Inventory (Derogatis, 1993)
    • 53-item self report measure
    • For this study, used General Severity Index (GSI)

Family functioning
  – Brief Family Assessment Measure-III (Skinner, Steinhauer, & Santa-Barbara, 1995)
    • 14-item parent report questionnaire of general family functioning, according to Process Model (Skinner et al., 2000)

Caregiver strain
  – Burden Assessment Scale (Reinhard, Gubman, Horwitz, & Minsky, 1994)
    • 21-item parent report measure of subjective & objective strain due to caring for a child with a psychological disorder
Analyses

Multiple mediation: “simultaneous mediation by multiple variables”
(Preacher & Hayes, 2008)

**Tests for both MEDIATORS and SUPPRESSORS

Parent psychopathology → Change in family functioning → Post-tx youth anxiety → Change in caregiver strain

COVARIATES (All models)
1. Treatment site
2. Youth ethnicity
3. Youth age
4. Family SES
5. Pre-tx youth anxiety
Results: Proposed model
IE-report

Total indirect effect explained 23.93% of variance in post-tx anxiety (versus 9.41% explained by parent psychopathology + covariates)
Results: Proposed model
Parent-report

Total indirect effect explained 29.64% of variance in post-tx anxiety (versus 13.33% explained by parent psychopathology + covariates).

*\( p < .05, **p < .01, ***p < .001. \)
Results: Proposed model

Youth-report

Baseline parent psychopathology

\[ c: 1.57 \]

\[ c': 2.77^* \]

Reductions in caregiver strain (z-change score)

\[ .44^{**} \]

Post-treatment youth anxiety severity (SCARED - Youth)

\[ -2.51^{***} \]

\*p < .05, **p < .01, ***p < .001.
Alternate models tested

<table>
<thead>
<tr>
<th>Model</th>
<th>Independent Variable</th>
<th>Explanatory variables</th>
<th>Dependent Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 1</td>
<td>Baseline family functioning</td>
<td>1. Change in parental psychopathology</td>
<td>Post-treatment youth anxiety severity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Change in caregiver strain</td>
<td></td>
</tr>
<tr>
<td>Model 2</td>
<td>Baseline caregiver strain</td>
<td>1. Change in parental psychopathology</td>
<td>Post-treatment youth anxiety severity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Change in family functioning</td>
<td></td>
</tr>
<tr>
<td>Model 3</td>
<td>Baseline youth anxiety severity</td>
<td>1. Change in parental psychopathology</td>
<td>Post-treatment family functioning</td>
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<tr>
<td>Model 4</td>
<td>Baseline youth anxiety severity</td>
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<td>2. Change in family functioning</td>
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Total indirect effects for all alternate models had confidence intervals that included 0.
Main findings

**Expected:** Reductions in caregiver strain and improvements in family functioning \(\rightarrow\) lower post-treatment youth anxiety

**Unexpected:** HIGHER parental psychopathology \(\rightarrow\) larger family functioning/caregiver strain improvements \(\rightarrow\) more reductions in youth anxiety

? 

More room for improvement? (But youth anxiety severity did not differ by parental psychopathology)
Main findings

Also unexpected: suppression effect

Parental psychopathology $\rightarrow$ youth anxiety link INCREASED after controlling for explanatory variables.

Suppression & mediation: same analysis, different implications

Parent symptoms-youth outcomes link may be more complex than correlations can reveal
Limitations

• Mostly moms (~90%)

• Mostly Caucasian, middle-to-high SES families

• Other familial stressors?

• No interim assessment point (pre-tx/post-tx only)

• Effects of specific parent symptom clusters?
Conclusions & Future Directions

1. Improvements in family functioning and caregiver strain may boost tx outcomes for anxious youths, especially in families with more distressed parents.

2. Applicability to interventions
   – Should familial stressors be targeted more explicitly in treatment? (Not targeted in CAMS tx conditions)

1. Future work should include interim assessment points, more dads, diversity in SES, longer follow-up periods – and tests of youth anxiety treatments that target familial stressors explicitly.
Thank you!

Questions?