Characteristics of Exposure Sessions as Predictors of Treatment Response in Anxious Youth

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BACKGROUND
Exposures in Youth CBT

• **Avoidance** is a key characteristic of anxiety disorders in youth.

• **Exposure** to feared and avoided situations in a ranked hierarchy is considered a key component of CBT.

Exposures in Youth CBT

- Guidelines for conducting exposures with anxious youth:
  - Pre-exposure preparation
    - Coping skills
    - Cognitive restructuring
    - Role play
  - Post-exposure processing
    - Evaluation of the experience
    - Reflection on whether predicted events occurred
    - Rewards for effort
    - Out-of-session “homework” task

Bouchard et al., 2004; Kendall et al., 2005; Rapee et al., 2000
Behavioral and Cognitive Theories

- Repeated exposure tasks reduce fear via:
  - Counterconditioning
  - Habituation

- Cognitive representations of situation shift
  - Threat and avoidance → coping behavior and lessened anxiety

Foa & Kozak, 1986; Wolpe, 1958
THE CURRENT STUDY
Aims and Hypotheses

• Is the quality of pre-exposure preparation and post-exposure processing associated with treatment outcome?
• Are specific features of exposure sessions associated with treatment outcome?

• **Primary Hypothesis:**
  Better exposure preparation and post-exposure processing would be associated with better treatment outcomes for anxious youth receiving CBT.
Method

**Participants:** 61 anxiety-disordered youth and their parents

- 38 male (62.3%)
- Ages 7 to 13 years
- Principal diagnosis of GAD, Separation Anxiety Disorder (SAD), or Social Phobia (SP)
  - 65.5% with another anxiety disorder diagnosis
  - 6.5% ADHD
  - 4.9% depressive disorder
  - 10.3% other disorders
Method

Intervention: 16 weeks of individual or family CBT

- **Teaching skills** (8 weeks)
  - Recognizing anxious feelings and thoughts
  - Modifying anxious self-talk
  - Problem-solving
- **Practicing skills** (8 weeks)
  - Exposure tasks
  - Self-reward
Method

Dependent Measures:
- Diagnoses and severity: ADIS – C/P
- Self/parent-reported anxiety: MASC
- Parent/teacher-reported functioning: CBCL & TRF
- Clinician-rated functioning: CGAS
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Independent Measures:
- Exposure Session Rating Form (ESRF)
  - 3 exposure sessions coded: Low (10-11), Medium (12-13), High (14-15)
  - Presence or absence (yes/no) of features
  - Amount of time spent in introductory, preparatory, and processing activities
  - Qualitative ratings of level of preparation and post-task processing
    - 1 = not at all to 5 = very much/extensive
Exposure Features Coded

- **Introductory Activities**
  - Rapport-building
  - Review of homework

- **Preparatory Activities**
  - Selection of exposure task
  - Role-play
  - Practice with therapist
  - Imaginal exposure
  - Review of relaxation
  - Rationale/explanation
  - Selection of reward

- **Processing/Closing Activities**
  - Evaluate performance
  - Discuss features
  - Discuss SUDS
  - Select next task
  - Assign homework task
  - Reward for effort
RESULTS
**Primary Hypothesis:** Quality of Preparation and Post-Task Processing

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>Preparation</th>
<th>Processing</th>
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<tbody>
<tr>
<td>ADIS CSR</td>
<td>0.10</td>
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<td>CGAS</td>
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<td>MASC Total</td>
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<td>MASC Harm Avoidance</td>
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<td>TRF Total</td>
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<td>TRF Internalizing</td>
<td>-0.23</td>
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</table>
Exploratory Aim: Features of Exposures and Treatment Response

- Treatment responders were significantly more likely than treatment non-responders to:
  - Get rewarded for completing the exposure task
    - $F(1,59) = 4.34, \ p < 0.05, \ \eta^2 = 0.26$
  - Have a “homework” exposure task assigned
    - $F(1,59) = 11.96, \ p < 0.01, \ \eta^2 = 0.41$
CONCLUSIONS
Conclusions

• Contrary to expectations, preparation for exposures was not related to treatment outcome.

• However, overall quality of post-exposure processing was associated with clinician-rated change in anxiety severity.
  • Rewards and assigning homework tasks, in particular, were associated with treatment response.
Conclusions

- Behavioral and cognitive theories of exposure
  - Habituation
  - Changes in anxious cognition
- Reductions in anxious self-talk mediate positive treatment gains

- Post-exposure processing involves reflecting on changes in avoidance behavior (habituation) and in cognition during the exposure task, possibly making these shifts more salient.

Foa & Kozak, 1986; Hudson, 2005; Kendall & Treadwell, 2007; Wolpe, 1958
Conclusions

• **Rewards**
  - Positive reinforcement
  - Sense of mastery

• **Selecting a homework task**
  - Increase coping self-efficacy
  - May have completed more homework tasks

Bouchard et al., 2004; Galla & Wood, 2012; Kendall et al., 2005
Conclusions

• **Limitations**
  • Informant disagreement
  • Correlational
Conclusions

• **Limitations**
  - Informant disagreement
  - Correlational

• **Future Directions**
  - More nuanced change across treatment
  - Maintenance of gains at follow-up
  - Wider age range/developmental considerations
  - Other exposure factors (type, location, parent-involvement)
Thank You!

- Past and present CAADC graduate students and research assistants
- Participating families
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