The Society for Clinical Child and Adolescent Psychology (SCCAP): Initiative for Dissemination of Evidence-based Treatments for Childhood and Adolescent Mental Health Problems

With additional support from Florida International University and The Children’s Trust.
Keynote
Evidence-based Approaches for Children with Anxiety Problems

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NIMH Research Grants: R29MH44781, R01MH49680, R21MH 54690, R01MH63997, R01 MH079943

NIMH Midcareer Development Award: K24MH73696
Additional Acknowledgments

Anne Marie Albano
CAMS Team (Golda Ginsburg, Phil Kendall)
Debbie Beidel
Eliot Goldman
Chris Kearney
Phil Kendall
Ron Rapee
Tom Ollendick
Michael Southam-Gerow
The Reach Institute (Peter Jensen and colleagues)
Talk Overview

- Why treat anxiety disorders in children and adolescents?
- Description of the EBT for anxiety
- Main characteristics of the research
- Comparative trials:
  - ICBT vs Waitlist
  - GCBT vs Waitlist
  - ICBT vs Parent involvement in ICBT
Talk Overview (cont.)

- Long term follow-up effects
- Comparative trials moving beyond waitlists
- Comparative CBT and drug trials
- Why treatment works? (Outcome-Mediation Trials)
- Effectiveness trials
- Conclusions
Primary Goal

- Highlight the progress, while acknowledging there is much room for improvement and much remains unknown

- Additional research required, both efficacy and effectiveness trials, with each informing the other
DSM-IV Anxiety Disorders

- Other disorders of Infancy, Childhood, or Adolescence
  - Separation Anxiety Disorder*

- Anxiety Disorders
  - Specific Phobia*
  - Social Phobia (Social Anxiety Disorder)*
  - Generalized Anxiety Disorder*
  - Obsessive-Compulsive Disorder
  - Posttraumatic Stress Disorder
  - Panic Disorder with Agoraphobia
  - Panic Disorder without Agoraphobia
  - Agoraphobia without History of Panic Disorder
Prevalent disorders

Anxiety disorders of childhood and adolescence are one of the most, if not the most prevalent problems.

Rates hover around 10% in community populations.

Yet, less likely to be identified and referred than externalizing disorders.
Impairing disorders

- Family
- Friends
- School
- Personal Distress
Non-remitting disorders, possible gateway to other conditions

Specific phobia
Separation anxiety disorder
Social phobia
Generalized anxiety disorder
Panic disorder
Depressive disorder
Substance use disorder

Also, anxiety disorders are associated with suicidal ideation (Carter, Silverman et al., 2008)
Summary reasons for treating anxiety disorders in youth

- Quiet distress and significant impairment
- Do not remit with time
- “Gateway” to other disorders including anxiety disorders, dysthymia/depression, and substance use/abuse problems
EBT research for child and adolescent anxiety disorders

- Over 25 randomized controlled clinical trials have been conducted.
- Cognitive Behavioral Treatment (CBT)
Cognitive Behavioral Treatment of Anxiety Disorders in Youth

- **Behavioral**: practice exposure tasks in session and out of session, positive consequences for successful efforts (rewards)
- **Cognitive**: concern with information processing, self statements
- **Emotional**: addresses feelings
- **Social**: can involves parents and/or peers
Scared?

Thoughts

Other thoughts or Other things I can do

Praise
Youth Anxiety EBT Research

- Clinic referred participants from schools & community
- Randomization of participants
- Most common diagnoses targeted: GAD, SOP, SAD
- Semi-structured diagnostic procedures (ADIS-C/P; Silverman & Albano, 1996) (dx reliability)
- Multisource, multimethod assessments
Youth Anxiety EBT Research (cont.)

- Protocolized treatments (about 12 to 16 sessions)
- Treatment integrity (sessions taped and checked)
- Treatment credibility and expectancy ratings
- Well trained and carefully supervised therapists
- Systematic followup procedures
- Majority used waitlist designs
Improvements found when comparing individual CBT vs waitlist; & group CBT vs waitlist?

- Clinician ratings
- Diagnostic recovery rates (60 to 80% - still room for improvement)
- Youth self ratings of anxiety (generally medium effect sizes)
Improvements found when comparing individual CBT vs waitlist; & group CBT vs waitlist? (cont.)

- Parent (and teacher) ratings of youth anxiety
- Youth self ratings of coping (Kendall)
- Behavioral observations
- Normative comparisons (return from deviant to nondeviant limits on CBCL)
ICBT: Child Rated Anxiety

From Kendall (1994)
GCBT: Child Rated Anxiety

Silverman et al. (1999a). *JCCP.*
GCBT: Parent Rated Child Internalizing

Silverman et al. (1999a). *JCCP.*
What about with minority samples?

FIU Samples about:

- Latinos 80%
- European-Americans 20%

(no significant differences by child sex or age)

• Rey, Silverman et al. (in prep), extending Pina, Silverman, et al. JCCP (2003)
Child Rated Anxiety

RCMAS

Pre  Post

Latinos
European Americans

Rey, Silverman et al. (in prep)
Parent Rated Child Anxiety

- Rey, Silverman et al. (in prep)
Implications

- Supports use of CBT with acculturated, English speaking largely Cuban American children and families

- Other subgroups? More evaluations needed
What about long term effects (5 to 8 years posttreatment)?

- Barrett et al., 2001
- Beidel et al., 2006
- Kendall et al., 2004
- Saavedra, Silverman, et al., 2010
Diagnostic Recovery Rates at Long-Term Follow-up

- Saavedra, Silverman, et al., 2010; J. Child Psychology and Psychiatry
Findings across four follow-up studies consistent

- Along several clinical indices, support for long-term effects of CBT for anxious youth.

- Important limitation: All studies lacked control groups that followed untreated anxious youth.
What is known when it comes to involving parents?

- Across about 15 studies, there is a failure to demonstrate consistent parent enhancing effects relative to ICBT

- Also shown through meta-analyses (Barmish & Kendall, 2003; Silverman et al., 2008; Spielmans et al., 2007)
Child Rated Anxiety

(Silverman et al., 2009, JCCP)
Parent Rated Child Anxiety

RCMAS/P

(Silverman et al., 2009, JCCP)
Parent Rated Child Internalizing

CBCL/I

(Silverman et al., 2009, JCCP)
Recap

- ICBT > Waitlists
- GCBT > Waitlists
- Inconsistent evidence that involving parents in ICBT enhances ICBT effects
What do we know when we compare CBT to active, credible control condition?
One of the first controlled study with children diagnosed with phobic disorder

- **Behavioral** - Teaching parents child management skills to facilitate exposure
  
  vs.

- **Cognitive** - Teaching children self control skills to facilitate exposure
  
  vs.

- **Education Support** - No prescribed exposure, no skills training

Silverman et al. (1999), *JCCP*. 
Child Rated Fear

Silverman et al. (1999), *JCCP*. 

FSSC-R
Parent Ratings of Child Fear

Silverman et al. (1999), *JCCP*. 
9-Year-Old Boy - Dogs
Other studies have produced similar equivocal findings re superiority of CBT over Education Support (ES)

- Last et al. (1998) – CBT vs ES for “school phobia” –
  - No significant differences between conditions.
  - Both treatments resulted in children returning to school.

- Kendall et al. (2008) – FCBT vs CBT vs ES
  - No significant differences among conditions on youth, mother, father, and teacher ratings.

- Ollendick et al. (2009) – One Session Treatment for specific phobia vs ES vs WL
  - No significant differences among conditions on child and parent ratings.
Explanations

- Measurement issues

- “Bleeding” – perhaps key procedures of CBT bleed into ES

- But if can produce positive effects simply from “bleeding,” then supports notion of ‘flexibility with fidelity’

- Highlights the importance of understanding what produces or mediates change (more later).
What do we know when we compare CBT to medication?
Child/Adolescent Anxiety Multimodal Study (CAMS)

- Relative efficacy of medication (sertraline) vs CBT vs Combination vs Placebo

(Walkup et al., 2008)
## Study Drop By Treatment Group

<table>
<thead>
<tr>
<th>Study Drop</th>
<th>Treatment Condition</th>
<th>Total N (%)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>COMB</td>
<td>SRT</td>
</tr>
<tr>
<td>Completed</td>
<td>127</td>
<td>110</td>
</tr>
<tr>
<td>Dropped Out</td>
<td>13</td>
<td>23</td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td>133</td>
</tr>
</tbody>
</table>

(Walkup et al., 2008)
Clinician Global Index of Improvement

COMB > CBT = SRT > PBO

(Walkup et al., 2008)
Pediatric Anxiety Rating Scale change over time

COMB > CBT = SRT > PBO

(Walkup et al., 2008)
CAMS Summary

- Consistent results across primary outcomes
  COMB > CBT = SRT > PBO

- CAMS Clinical Implications
  - Three good treatments
  - High quality CBT and Medication treatments are effective
  - COMB offers additional benefit

(Walkup et al., 2008)
Limits

- Parents and children unblinded in COMB treatment
- Limited number of outcomes
- Only pre to post treatment evaluated so far (followup study just beginning)
Limits (cont.)

- **Dose effects?**
  - ICBT = 14 sessions, 60 min;
  - SRT = 8 sessions, 30 to 60 min
  - Placebo = 8 sessions, 30 to 60 min
  - Combined = 14 sessions, 60 min of ICBT **plus** 8 sessions of SRT, 30 to 60 min

- Sequencing remains unexplored
Social Effectiveness Training vs. Fluoxetine vs. Placebo with children with social phobia (N=122)

- SET-C: Individualized exposure sessions, social skills training, peer generalization experiences

- Double blinded

- 13 drop outs after randomization
  - 10 to pill condition

(Beidel et al., 2007)
SET-C vs. Fluoxetine vs. Placebo
Clinician Global Index of Improvement

Beidel et al. (2007).
Clinician Global Index of Improvement

Beidel et al. (2007)
Recap

- SET-C > Drug > Placebo on most measures of treatment outcome with youth social anxiety disorder

- Not a combined study so that is still unknown
Why important to develop and test theories underlying EBT?

- If we know **how** treatments work then we can emphasize the effective elements and eliminate the redundant or unnecessary elements leading to streamlined treatments.

- If we have streamlined treatments then we can more easily train mental health professionals in EBTS.

- If we can more easily train mental health professionals in EBTS then more children can potentially receive EBTs.
Outcome-Mediation Trials

Mediators suggests how or why Treatment affects Outcome
3-Component Parent Mediator Theory

CBT/P
ICBT

Parent Management Training

Parent-Child Relationship

Parent Anxiety

Child Anxiety Outcome

Silverman et al. (2009); JCCP
Appraisal of Parent (CBQ-C)

Silverman et al. (2009); JCCP
Silverman et al. (2009); JCCP
Silverman et al. (2009); JCCP
Silverman et al. (2009); JCCP
Findings are the first to empirically suggest

- Plausible that as changes occur in children, changes occur in parents
- Not necessarily that as changes occur in parents, changes occur in children
- Preliminary, bidirectional effects also plausible
- Highlights the importance of not accepting common assumptions regarding mediational role of parents in treatment outcome
Two additional “parent as mediator” funded studies

- One just completed
- One in middle of third year
- Both studies use improved measurement strategy
  - Full measures of mediators and outcome
  - Brief measures throughout treatment and follow-ups
Also assessing additional outcomes and turning anxiety into a mediator

CBT → Decreased Anxiety → Improved Academic Performance
Recap

• Important to conduct outcome-mediation trials to understand key change producing procedures.

• If we know key change producing procedures, then we can focus our EBT training on those procedures
  ◦ e.g., if we have parents in a child’s treatment, what should be parents be taught to do?
Knowing what produces changes

- Seems especially important given equivocal findings coming from community effectiveness studies...
3 Effectiveness trials: CBT vs. Usual Care (trials using T-scores)
Failure to find CBT superior over usual care. But,

- 41% in UC received concurrent services vs 0% in CBT
  - Need for concurrent services in UC suggest CBT more effective because no need to supplement?

- Again, if we know procedures leading to change (mediators), perhaps we would have more effective/efficient training?
Conclusions

- For now, CBT has most evidence but much room for improvement
- Active, credible conditions such as Education Support produce positive effects in some studies
- Highlights flexibility with fidelity
- Also highlights need to understand how positive treatment effects are produced (mediation research).
  - Parent mediation studies are showing surprising findings
  - Other mediators??
Conclusions (cont.)

- CBT vs. Medication vs. Combined requires further testing, including sequencing effects (e.g., ADHD work)

- Effectiveness trials so far questions superiority of CBT over Usual Care; more research needed given limits noted

- (Use of technology; computer assisted, virtual reality – being developed and evaluated; e.g., patient compliance)

- Efficacy and effectiveness trials informing each other
For more information, please go to the main website and browse for workshops on this topic or check out our additional resources.

**Additional Resources**

**Online resources:**
2. Center for Children and Families website: http://ccf.fiu.edu

**Books:**

**Peer-reviewed Journal Articles:**
Keynote: Evidence-based Approaches for Children with Anxiety Problems

Websites:
2. Center for Children and Families website: http://ccf.fiu.edu

Books:


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