Early Intervention for Childhood Anxiety in a School Setting: Outcomes for an Economically Disadvantaged Population

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Overview

- Construct of Anxiety
- CBT
- Anxiety & CBT
- Anxiety & SES
- Purpose of the study
- Research Design
- Participants
- Outcomes Measures
- Intervention
- Limitations
- Strengths
- Implications
Anxiety: Multidimensional Construct

Ethologic model
- Fear & anxiety adaptive functions (flight-fight system)
- Maladaptive anxiety results in problem behaviours & interfere with daily functioning
- Basis for psychoeducation in CBT

Tripartite model
- Incorporates physiologic, cognitive, & behavioural components
- Independent but interact constantly with each other

Temperament
- Behavioural inhibition as vulnerability

Familial Factors: genetic + environmental

(Chorpita & Southam-Gerow, 2006; Roblek & Piacentini, 2005; Weissman, Antinoro, & Chu, 2009)
Cognitive-Behavioural Theory

Feelings

Thoughts ↔ Behaviours

(Weissman et al., 2009)
Anxiety & CBT

• Focuses on maladaptive cognitions & their effect on a child’s behaviours & emotions
• Cognitions play a role in the etiology, expression, & maintenance of anxiety
• CBT enhances insight into the connection between thoughts, feelings, & behaviours
• Helps children develop new problem-solving & coping skills
• Facilitates experiences to test beliefs

(Weissman et al., 2009)
Anxiety & CBT

• Core CBT techniques:
  • affective education
  • behavioural relaxation
  • modeling
  • role-play
  • cognitive restructuring
  • imaginal & in vivo exposure
  • reinforcement
  • contingency management
  • behavioural parent training

• Empirical support for CBT in clinical settings
• Initial support for CBT in group format: implications for transporting CBT to school settings

(Albano & Kendall, 2002; Roblek & Piacentini, 2005; Weissman et al., 2009)
Anxiety & SES

- Socioeconomic disadvantage places families at higher risk for the development of a variety of mental health problems
- Children with internalizing disorders are often under-referred
- The use of services does not match higher prevalence of difficulties
- Barriers prevent families from getting MH care
  - poor social support systems, priority for food and shelter, parental stressors
- School = gateway to services
- Research generally focused on average SES

(Mifsud & Rapee, 2005)
Purpose of the Study

- Evaluate a school-based early intervention program in reducing anxiety symptoms of at-risk children from low SES neighbourhoods

(Mifsud & Rapee, 2005)
Research Design

• Nine economically disadvantaged schools
• Randomly assigned to active intervention or waitlist control
• 5 schools (50 students) allocated to intervention commencing next school term
• Waitlist control group allocated to receive treatment in last term of school year

(Mifsud & Rapee, 2005)
Participants

- 425 children in grade 4 & 5 (ages 9-10) screened for high-level anxious symptoms

- High scores (above 75th %ile) on Revised Children’s Manifest Anxiety Scale (RCMAS) plus teacher nomination

- 94 families offered placement, a total of 91 consented to participation

- No significant differences in demographics, gender, or pre-intervention symptoms

- Exclusions: children with intellectual delays & those with known behaviour problems

(Mifsud & Rapee, 2005; Shoenfiled & Morris, 2009)
Outcome Measures

- Children
  - Spence Children’s Anxiety Scale (SCAS)
  - Children’s Automatic Thoughts Scale (CATS)

- Parents
  - Spence Children’s Anxiety Scale-Parent Version (SCAS-P)
  - Background questionnaire

- Teachers
  - Child Behavior Checklist-Teacher Report Form (Internalizing scales)

*Data Collection: Before intervention + after intervention + 4 months follow-up

(Mifsud & Rapee, 2005)
Intervention

• Cool Kids Program: School Version (indicated intervention)
• Groups of 8-10 children
• Groups were not separated on the basis of gender or problem type
• 8 weekly sessions during school time
• Structured workbook
• 2 parent sessions (low attendance)

(Mifsud & Rapee, 2005)
Intervention

- Co-facilitated by school counselor (registered psychologists) & experienced mental health professional
- 1 day training workshop
- Manualized program
- Treatment integrity...???

**+** co-facilitation = improved continuity of care & reduce individual resource needs

**-** co-facilitation = added cost

(Albano & Kendall, 2002; Mifsud & Rapee, 2005)
Cool Kids Program: School Version

• School-based CBT for children with clinical & subclinical anxiety, and those at-risk
• Built upon earlier clinical programs
• Psychoeducation + cognitive restructuring + gradual exposure + social skills + assertiveness + dealing with teasing
• For children aged 6-12
• Includes parent training & booster sessions

*intervention was shortened from original program

(Mifsud & Rapee, 2005; Schoenfield & Morris, 2009)
## Results

Report Data Across Time for All Participants

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<th>Posttreatment</th>
<th>4-Month Follow-up</th>
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*means of intervention effects

(Mifsud & Rapee, 2005)
Results: Summary

• Children in active intervention reported significant reductions in symptoms of anxiety as well as in related beliefs (thoughts of threat, personal failure)
• Effects were maintained (slightly increased) at 4 month follow-up
• Teacher and parent reports support these results

Poor return rate of parent data = interpret with caution

(Mifsud & Rapee, 2005)
Limitations

- Parent involvement: generalization of skills to the home environment
- Participant selection: result in inclusion of children who do not need treatment (or it is inappropriate)
- Participants do not reflect comorbidity typically seen in settings
- Waitlist control group
- Does not directly compare implementation challenges across diverse SES schools
- Pros/cons of manualized program: treatment integrity, flexibility, & effects on outcomes

(Albano & Kendall, 2002; Mifsud & Rapee, 2005; Roblek & Piacentini, 2005; Weissman et al., 2009)
Strengths

- Relatively brief program can demonstrate good effects with this age group
- Parent participation low (common in SES) still see results
- Utilizing self-reports in combination with teacher & parent reports (higher reliability)

(Mifsud & Rapee, 2005; Weissman et al., 2009)
Research Implications

- Selection of children: More thorough assessment into self-reported anxiety (result of anxiety disorder or environmental stressors)
- Better understanding of methods to maximize parent involvement (especially for low SES populations)
- Studies that compare intervention to other types of intervention or “treatment as usual” control groups
- Additional research into effects of CBT for comorbid anxiety (impact of comorbidity on response)

(Mifsud & Rapee, 2005; Roblek & Piacentini, 2005)
Practice Implications

- Program fits within school context and time frame = increase likelihood it will be used
- Savings in cost & resources = sustainability
- Program may be feasible & effective in schools with minimal resources
- 2 professionals co-leading groups
- Decrease in symptoms is effective for children with subclinical levels of anxiety & those at-risk
- May reduce ‘burden’ on clinical services

(Mifsud & Rapee, 2005; Weissman et al., 2009)
Practical Implications

- The intervention reached children who likely have limited access to treatment
- School-based programs can be effective even with low parent involvement
- CBT strategies can successfully treat anxiety in school settings
- Potential stigma associated with participating in program is likely outweighed by benefits
- Levels of symptomology after intervention were still greater than in community samples = school-based programs do NOT replace the need for traditional services

(Mifsud & Rapee, 2005; Weissman et al., 2009)
Take Home Message...


