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, 2004; Robles & Piacentini, 2005; Weissman, Althoff, & 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
  • modelling
  • 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

(Urbano & Kendall, 2002; Robles & 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

Purpose of the Study

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

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

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

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 (Internalising scales)

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

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)
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

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

Results

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

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

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

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)
**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)

**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

**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

**Take Home Message…**

References


