Assessing Anxiety in School Children

Anxiety Research Lab
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Agenda
- Social emotional difficulties
- Mental Health prevalence rates
- All about anxiety
- Formal assessment
- Studies using formal assessment
- How you can assess anxiety

Social – Emotional Learning (SEL) in Schools
(Weissberg, Durlak, Taylor, & O’Brien, 2007)
- Quantitative analysis of 270 research studies
- Students participating in SEL programs
  - At least 15 percentile points higher on achievement tests
  - Significantly better attendance records
  - More constructive and less destructive classroom behaviour
  - Liked school more
  - Better grade point averages
  - Less likely to be suspended or disciplined

Recent Research Findings...
- Changes in academic achievement in Grade 8 could be better predicted from knowing children's social competence in grade 3 than their academic achievement (Caprara et al., 2000).
- Pro-social behaviours exhibited by students in the classroom were found to be better predictors of academic achievement than were their standardized test scores (Wentzel, 1993).

Promoting Friendship is important

Peer rejection (being disliked), and not having friends is associated with adjustment problems both concurrently and over the long term, including
- internalizing problems
- externalizing problems
- academic problems
- school drop out
(McDougall, Hymel, Vaillancourt, & Mercer, 2001)

Main social emotional competency
- Development of strong interpersonal skills (social skills, get along with others) [Lacking? #1 reason for job failure in N America]
Child & Adolescent Mental Disorders* (Kutcher, S.)

<table>
<thead>
<tr>
<th>Mental Disorder</th>
<th>6 Month Prevalence (%)</th>
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<tbody>
<tr>
<td>Anxiety Disorder</td>
<td>13.0</td>
</tr>
<tr>
<td>Disruptive Behavioral Disorders*</td>
<td>10.3</td>
</tr>
<tr>
<td>Mood Disorder</td>
<td>6.2</td>
</tr>
<tr>
<td>Substance Use Disorders</td>
<td>2.0</td>
</tr>
<tr>
<td>Any Disorder</td>
<td>20.9</td>
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</tbody>
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Age = 9–17

When does anxiety begin?

- The most common mental health concern for children AND adults (by far!!)
- Can cause serious disruption to children’s lives (school, attendance, peers, home)
- Often persistent over time
- If left untreated = other anxiety disorders, major depression, substance misuse and educational underachievement in later life

Anxiety is strikingly common, and strikingly disabling

Common Associated Features

- Depressed or irritable mood; cries easily
- Fidgety; nervous habits (e.g., nail biting)
- Sleep problems
- Headaches, upset stomach, aches and pains
- Overly dependent or “clingy”
- Difficulty coping
- Perseverance; difficulty shifting tasks; resistance to change; inflexibility; easily overwhelmed
- Perfectionism
- Difficulty demonstrating knowledge on tests or during classroom participation
- Trouble coming to school or entering school
Frequently Overlooked Symptoms

- Angry outbursts, temper tantrums
- Oppositional and refusal behaviours
- Attention seeking behaviours
- Hyperactivity and difficulty sitting still
- Attention and concentration problems
- Scholastic underachievement or resistance to doing work
- Frequent visits to school nurse or physician (especially for physical complaints)
- High number of missed school days
- Difficulties with social or group activities

Complications of Untreated Anxiety

- Diminished educational and vocational achievement*:
  - Lower college grad rates by 2%
  - Lower probability professional occupation by 3.5%
- Bullied more than their peers
  - Ledley, Storch & Coles, 2006
- Impaired relationships
- Subsequent depression, alcohol abuse and cigarette smoking
- Greatest predictor of suicide
  - Dadds et al., 1997; March et al., 1998; Muris et al., 2000; Gunn, 2000; Wittchen.

Why anxiety prevention efforts?

- Empirical studies demonstrate ability to manage anxiety successfully in school settings
  - Barrett, 2001; Dadds et al., 1997, 1999; Lowry-Webster, 2001; Muris et al., 2000
- Deleterious effects if left untreated
- Early evidence anxiety can be prevented from becoming disordered
  - Dadds et al., 1997; March et al., 1998; Muris et al., 2000; Gunn, 2000; Wittchen.

Rationale for my Research

- Need to evaluate prevention programs in more generalized settings (e.g., public school settings, delivered by classroom teachers)
- Inclusion of attention control condition (placebo) to account for non-specific effects

Overview of my Research Programs

- FP3 Universal prevention (elementary)
- VP3 Targeted prevention (elementary)
- AP3 Culturally enriched with Aboriginal elements (elementary)
- FRIENDS Youth (secondary)
- LEAF Teens
- ABC Kindergarteners
Research Design (VP3,FP3)

- Random assignment (by school)
  - Condition 1: Active FRIENDS 8 weeks
  - Condition 2: Reading program 8 weeks (attention control) FRIENDS 8 weeks

Objectives of study

1. To evaluate the efficacy of a school-based cognitive behaviour therapy (CBT) program in reducing anxiety disorder symptoms in public school children;
2. To determine whether parent education and involvement improves outcome in anxious children treated with CBT;
3. To examine the ability of school personnel in:
   - (a) recognizing anxiety disorder symptomatology, and
   - (b) delivering a cognitive behavioural intervention.

Strength: Multi-informant

- Behavioral Assessment Schedule for Children (BASC–T, BASC–P, VSB request)
- Multidimensional Anxiety Screen for Children (MASC, March 1999)
- Anxiety Scale for Educators (ASE, pilot, Miller 2002)
- Anxiety Scale for Parents (ASP, pilot, Miller 2002)

BASC

- A multidimensional measure designed to evaluate observable behaviour of children across both negative and adaptive dimensions.
- TRF = 148 items related to behaviour that can be observed in the school setting.
- PRF = 138 items based on behaviours that can be observed in home and community settings.
- The BASC yields results across a number of areas of functioning, however the anxiety subscale was of primary interest.

MASC

- Multidimensional Anxiety Screen for Children (MASC, March 1999)
- 39-item self-report measure
- School setting administration = approximately 15 minutes
- Requires a fourth-grade reading level
- The MASC shows excellent internal and test-retest reliability, and captures clinically relevant anxiety symptoms both at the factor and item level (approximates DSM-IV pediatric anxiety disorders).
- The MASC measures physiological symptoms, worry, and inattentiveness associated with anxiety problems, and produces an overall anxiety score and a lie scale score.
- The MASC manual converts raw scores to T scores and differentiates anxiety in children as: 45–55 average, 56–60 slightly above average, 61–65 above average, 66–70 much above average, and scoring above 70 would be suggestive of a clinical diagnosis (March, 1997).

ASE and ASP

- The Anxiety Scale for Educators (ASE, pilot)
- The Anxiety Scale for Parents (ASP, pilot).
- The ASE and ASP are brief Likert-scaled checklists (15 or 16 items) consisting of behavioral descriptions of anxiety symptoms based on DSM–IV–TR criteria.
Strength: Multiple Time Points
- $T_1 =$ Prior to program
- $T_2 =$ Following Week 8 (FRIENDS and Attention Control)
- $T_3 =$ Following Week 16 (end of program)
- $T_4 =$ 1 year follow-up (ASE, ASP, MASC, BASC)

Population: VP3
Student pop. K–12 = 57,800
- 75 VSB elementary schools
- Invitation to school counsellors and principals to participate

$VP3 \ n = 302 \ (Year \ 1 \ & \ 2)$
Targeted (1100 screened)
- Male = 50% Female = 50%
- Age range 9–12 yrs (mean = 10 yrs)
- Grade range 4–6 (mean = gr. 5)
- Language at home
  - 65% English
  - 16% Cantonese/Mandarin
  - 5% Punjabi
  - 3% Tagalog
  - 3% Spanish
  - 2% Korean
  - 1% of Arabic, French, Hindi, Farsi, Polish, Vietnamese, Urdu

FP3 Population (Universal)
- 12 West Vancouver elementary schools invited school counsellors and principals to participate
- 10 schools, 14 classrooms
  - 374 children returned consent (81% of total)
  - 253 wanted to participate in data collection (83%)

FP3 $n = 253$
- Mean age = 9.7 years (range 8–11 yrs)
- Girls = 51%
- 40% in grade 4
- 40% in grade 5
- 20% in grade 6
- 78% of the children speak English at home
  - English and another language (7%)
  - Korean (3.6%)
  - Chinese (all forms, 2.6%)
  - Farsi (2.6%)

Separate Analysis
- Kids “elevated anxiety” = T score on MASC > 60
  - VP3 $n = 35$ (29% of consent pop.)
  - FP3 $n = 75$ (29% of consent pop.)
- Kids at “clinical level” = T score on MASC > 70
  - VP3 $n = 6$ (4.9% of total)
  - FP3 $n = 14$ (3.3% of total)
**Strength: Program Evaluation (Teacher + Child + Parent)**

- "I wish that our whole staff could participate in this training."
- "This was very helpful for having a better understanding of how to deal with anxiety."
- "I think that my new found knowledge (and attitudes) will benefit all the students in my class."

**Teacher Data**

- 50% Did not know about child anxiety prior to training
- 72% Gained significant understanding at the end
- 91% Basic understanding of CBT

**Children’s Responses (n=166)**

- Did you like the FRIENDS program?
  - 85% either sometimes or a lot
- Do you know how to use the strategies in the program?
  - 91% either sometimes or a lot
- Can you calm yourself when worried?
  - 92% either sometimes or a lot

**More Child Comments**

- "The best thing I learned was how to work together and WIN!"
- "How to calm myself down when I am worried, nervous or scared."
- "I learned to get rid of worries and stay calm and think of helpful thoughts."

**Family Component – FP3**

- 45% of all families interested in parent education (n=164)
- 18% of those interested came to Parent night #1 (n=55)
- 7.3% attended all 3 sessions

**Parent Data**

- 83% Agreed or Strongly Agreed acquired significant info on child anxiety
- 100% Agreed had significant understanding of principles of CBT
- 83% Agreed had enough skills to assist their child with anxiety concerns
Pilot Measures

- ASE and ASP high inter correlation at pre- and post-administration
- ASE scores reflected significance on pre/post measure
- ASP scores nearly reflected significance on pre/post

FRIENDS Research

- Data analysis:
  - Parent participation and MASC scores
  - Individual differences: classrooms?
  - Universal versus targeted?
- VP3 research lab “Canadianized” FRIENDS
- Trained all VSB elementary school counselors
- Province wide Professional Development 3 years

Continuing FRIENDS Activity

- MCFD (+ MOE) FRIENDS pilot sites: 7 school districts (Spring 2004)
- Program evaluation
- Province–wide roll out Fall 2004
- Negotiated printing rights with Australian Academic Press and Queen’s Press and Cdn version (Jayne Barker)
- Currently adopted (K, 4/5, 7/8)

Preliminary Evaluation of Province–wide Implementation

- > 700 evaluations returned
  - Training content useful?
  - Material well presented?
  - Material relevant to Gr. 4/5?
  - Prepared me to deliver?
  - Questions adequately addressed?
  - I enjoyed the day?
  - Important to implement?
  - 95% agreed or strongly agreed

Also: Secondary Students

- 1000 grade 6–9 students randomly assigned
- Province–wide implementation
- 40 classroom teachers
- $65,000 1 year budget
- Re–analysis currently underway (MLM)
  - Gender, transition year, urban or rural schools

Adaptation

- AP3: Aboriginal Primary Prevention Program
  - Enrich FRIENDS curriculum with culturally relevant activities
  - Urban vs. rural band children
  - Universal vs. targeted
  - $130,000, 2.5 years
  - Similar results to VP3, FP3
Strength: Urban and Rural

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
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<tbody>
<tr>
<td>8 schools (n=192)</td>
<td>15 schools (n=681)</td>
</tr>
<tr>
<td>11 classroom/groups randomly assigned</td>
<td>31 classrooms/groups randomly assigned</td>
</tr>
<tr>
<td>9 groups Tx</td>
<td>12 groups Tx</td>
</tr>
<tr>
<td>2 groups WL</td>
<td>19 groups WL</td>
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LEAF: Secondary Students

Living Effectively with Anxiety and Fear: LEAF for Teens 2004–2005

- Modify inventories (Masia–Warner’s, Mobility Inventory)
- Train peer leader + adult (school counselor)
- Run peer groups in school setting
- Pilot study

- Lionsgate Healthcare Research Foundation, W. and N. Van school districts
- Collaborators:
  - BCCW (Dr. Jane Garland), ADABC, N. Van., CMHA-BC

Current Project

ABC: Anxious Behaviour in Children

Early intervention/prevention

- Kindergarteners!
- Parents of kindergartners
- Key objective:
  - Can we find children who are showing early signs of AD in school settings? Is there a quick, effective way to find them?

Why is there a need to develop a brief screen?

- Early identification of anxious children to prevent future adverse outcomes
- A simple, cost-effective, and easy to administer method of detection
- Streamline the process by flagging those who need further assessment

Assessment

- Ask screening question to parents
- Interview parents with
  - Anxiety Disorders Interview Schedule for Children–Parent Version (ADIS–C/P) (Silverman & Albano, 1996)
  - The ADIS–P is a semi-structured interview that consists of a series of modules that cover all childhood anxiety disorders in accordance with criteria set out in the DSM–IV–TR (APA, 2000).
  - Preschool Anxiety Scale (PAS) (Spence, Rapee, McDonald, & Ingram, 2001)
    - 2 to 6.5 years of age.
    - Parent report measure that consists of 28 items rated on a 5-point scale that tap into symptoms of generalized anxiety disorder, social phobia, obsessive-compulsive disorder, physical injury fears, and separation anxiety disorder.
How are we doing?

- 2008–2009 N = 47
- 2009–2010 N = 54
- 2010–2011 N = ?

So far, screening questions holding up very well! Stay tuned!

Take Home Summary

Anxiety disorders are highly prevalent, usually get worse without treatment, but are probably the MOST treatable of all mental health concerns.

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