

## Assessing Anxiety in School Children

Anxiety Research Lab  
University of British Columbia

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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

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## 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

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## 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)

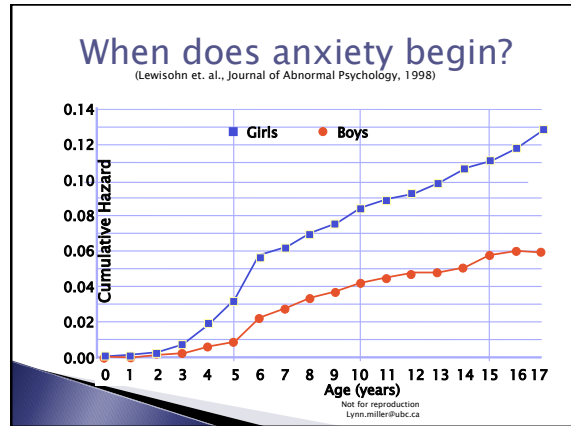
## Main social emotional competency

- ▶ Development of strong interpersonal skills (social skills, get along with others) *[Lacking? #1 reason for job failure in N America]*

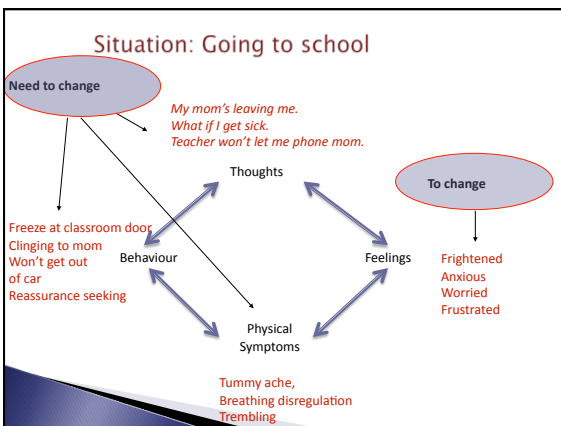
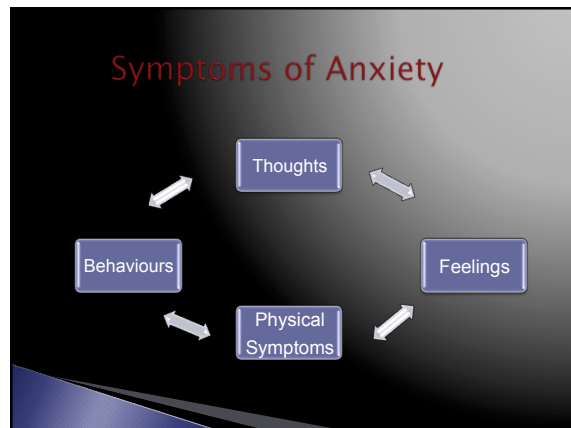
### Child & Adolescent Mental Disorders\* (Kutcher, S.)

Mental Disorder	6 Month Prevalence (%) Age = 9-17
Anxiety Disorder	13.0
Disruptive Behavioral Disorders*	10.3
Mood Disorder	6.2
Substance Use Disorders	2.0
Any Disorder	20.9

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- ### Anxiety...
- ▶ 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



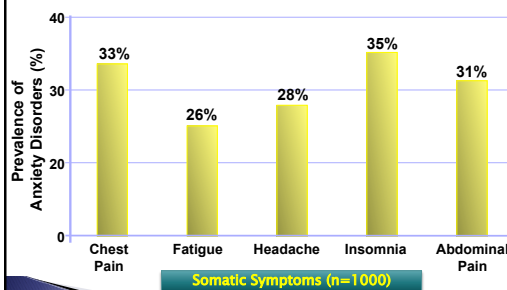
- ### Common Associated Features
- Depressed or irritable mood; cries easily
  - Fidgety; nervous habits (e.g., nail biting)
  - Sleep problems
  - Headaches, upset stomach, aches and pains
  - Overly dependent or "clingy"
  - Difficulty coping
  - Perseverance; difficulty shifting tasks; resistance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

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## Physical Symptoms as markers for the Anxiety Disorders\*



\*Data was collected from patients presenting at 4 primary care clinics. Adapted from Lydlard RB. Lynn.miller@ubc.ca

## 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; Murray et al., 1996; Sareen, 2005; Wittchen, 1999)

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## 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

## 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



## Strength: Multiple Time Points

- T<sub>1</sub> = Prior to program
- T<sub>2</sub> = Following Week 8 (FRIENDS and Attention Control)
- T<sub>3</sub> = Following Week 16 (end of program)
- T<sub>4</sub> = 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
- Year 1 = 6 schools, 12 classrooms (2002– 2003)
- Year 2 = 12 schools, 29 classrooms (2003 – 2004)

## 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% @    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

### Year 1

8 schools (n=192)  
11 classroom/groups  
randomly assigned

9 groups Tx  
2 groups WL

### Year 2

15 schools (n=681)  
31 classrooms/groups  
randomly assigned

12 groups Tx  
19 groups WL

## 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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