SUCCESSFUL IMPLEMENTATION OF EFFECTIVE UNIVERSAL, SELECT AND TARGETED ANXIETY PREVENTION PROGRAMS K-12

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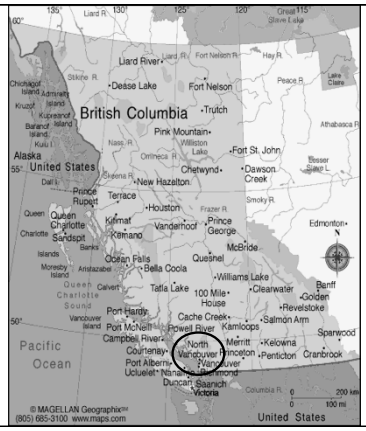
BANFF 2016
Myrne Nevison Research Professor 2008-2015



Health Literacy Defined

Mental Health Commission of Canada, 2008

Refers to people's abilities to access, understand, assess and communicate health information

Health Literacy in Mental Health & Addictions includes:

- The ability to recognize specific issues/disorders
- Knowing how to seek mental health and addiction information
- Knowledge of risk factors and causes
- Self management
- Professional help available

How are we doing so far?

The general public has a poor understanding of mental illness

- **unable** to correctly identify mental disorders
- **do not understand** underlying causal factors
- are **fearful** of those they perceive as mentally ill
- have **incorrect beliefs** about the effects of treatment interventions
- are **resistant** to seeking help
- are **not sure** how to help others

Latest Greatest Breaking Research

Mental health is the biggest single predictor of life-satisfaction.

UK, Canada, Germany and Australia ….plus six-year lag.

Mental wellness explains more of the differences in life-satisfaction than:

> physical health

> much more than unemployment

> income Layard et al., 2013

Do Schools "get" mental health?

- X % of teachers report mental health issues biggest concern? (Canadian Teachers Federation, 2012 Survey)
  - 90
- X % of principals said a child's mental health and wellbeing was an important factor in their academic life? (Stephen Lunn, Social affairs writer, 2008)
  - 94

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Children's Competencies

- Ability to initiate, maintain, and end friendships appropriately
- Problem solving methods
- Strong interpersonal skills (social skills, get along with others) *[Lacking? #1 reason for job failure in N America]*
- Adaptability, flexibility (ability to cope with demands of environment in flexible and realistic manner – avoidant, aggressive, or assertive?)
- Stress mgmt (ability to work well under pressure or resist/delay an impulse) [#1 predictor for success in university] (Parker, 2004)

Why combat anxiety through schools?

- **10% of 6-year olds**
- **15% of 12-year-olds**
- **31% of 17-year-olds**

(Kessler, 2005; Offord, 1995; Great Smoky Mtn study, 1995; Merikangas, 2010)

Fewer than 1 in 6 will see a professional for any mental health concern (Stanley, 2002)

Recent Canadian Data: 2 studies

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4 Child anxiety trajectories

- consistently extremely low (6%);
- consistently low (46%);
- initially high with decreases over time (12%);
- **initially high with increases over time (36%)**

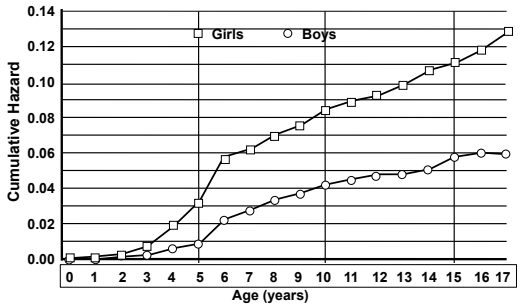
(10,000 Canadian children, parents rated their children's anxiety levels over six years; Nantel-Vivier et al., 2014).

4 Child anxiety trajectories:

- initially low, then decreasing over time (10%);
- initially moderate, increasing until grade two, then slowly declining (39%);
- initially high, then declining but **remaining relatively high (41%)**
- **consistently high despite slight declines over time (10%)** (Duchesne et al., 2008).

(1,900 Quebec children parents rated children's anxiety yearly from kindergarten to grade six).

When does anxiety begin?



Lewisohn et al, J of Abnormal Psychology, 1998

Child & Adolescent Mental Disorders* Kutcher, S

MENTAL DISORDER	Six Month Prevalence (%) Age = 9-17
Anxiety Disorder	13.0
Disruptive Behavioral Disorders (ADHD ODD CD)	10.3
Mood Disorder	6.2
Substance Use Disorders	2.0
Any Disorder	20.9

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LIFETIME PREVALENCE OF MENTAL DISORDERS IN U.S. ADOLESCENTS: RESULTS FROM THE NATIONAL COMORBIDITY SURVEY REPLICATION—ADOLESCENT SUPPLEMENT (NCS-A) 2011

Kathleen Ries Merikangas, Ph.D., Jian-ping He, M.Sc., Marcy Burstein, Ph.D., Sonja A. Swanson, Sc.M., Shelli Avenevoli, Ph.D., Lihong Cui, M.Sc., Corina Benjet, Ph.D., Katholiki Georgiades, Ph.D., Joel Swendsen, Ph.D.

Lifetime Prevalence Child & Adolescent Mental Disorders

Mental Disorder	Lifetime Prevalence (%) Age = 9-17
Anxiety Disorders	31.9
Disruptive Behavioral Disorders	19.6
Mood Disorders	14.3
Substance Use Disorders	11.4
Eating Disorders	2.7

Adult Mental Disorders* (Lifetime prevalence, Kessler et al., '05)

MENTAL DISORDER	Six Month Prevalence (%) Age =18-60
Anxiety Disorder	**28.0**
Disruptive Behavioral Disorders	**24.8**
Mood Disorders	**20.8**
Substance Use Disorders	**14.6**
Any Disorder	**46.4**

Anxiety has a (BIG) problem

- ~~Masquerades as physical disorders~~
- Children, kids, and adults suffer enormously
- Physicians often miss (70% primary care MDs report ADs least understood; 2007 Cdn Nat'l Physician Survey)
- Mismatch between high rates of anxiety and proper detection and effective treatment Significant cost associated with untreated (disability costs, health care costs, personal costs)

Probably the most treatable, psychologically, MH disorder

Common Elements of Prevention and Early Intervention School Programs (Browne et al., 2004)

1. Develop protective factors
2. Younger children show greater positive results than older children
3. **Address a specific problem (not broad, unfocused interventions)**
4. Involve family, school, and community
5. Informed by sound theoretical foundations
6. Long-term strategies

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Memo

To: School Administrators

~~From: District Administrators~~

In keeping with the new provincial initiative, this fall we will be implementing an exciting new district initiative of SNI in place of LYI. (Sexy New Intervention/Last Year's Intervention)

All pro-d days previously scheduled for LYI will be rescheduled as staff development for SNI. The $500 for release time and materials for LYI will be discontinued and provided instead for SNI. By the way, you will need to create local SNI teams that meet weekly.

Your new SNI binders will be coming next week. Have a great year!!!

One Model to Guide Implementation

- School-wide Positive Behaviour Support
- SWPBS is a comprehensive approach for the prevention and treatment of problem behavior (Sugai & Horner, 2009)
- Designed to change ineffective practices in schools with the goal of creating positive and predictable environments that support improved behavior and academic outcomes.

Critical Features of Universal School-wide PBS

1. **Define** school-wide expectations (i.e., social competencies)
2. **Teach and practice** expectations
3. **Monitor and acknowledge** prosocial behaviour
4. Provide **instructional** consequences for problem behaviour
5. Collect information and use it for **decision-making**

Statistically Significant Outcomes

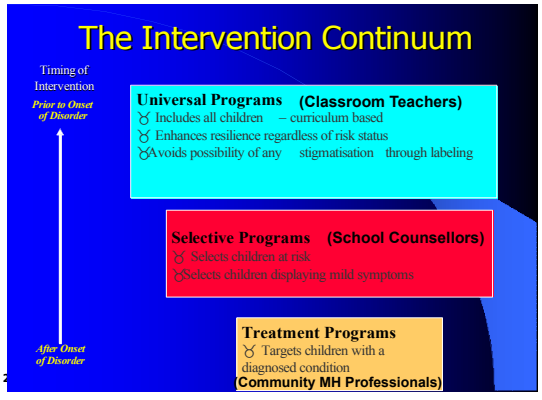
- Increased social competence
  (Metzler, Biglan, Rusby, & Sprague, 2001; Nelson, Martella, & Marchand-Martella, 2002)
- Reduced problem behaviour
  (Bradshaw, Mitchell, & Leaf, 2010; Horner et al., 2005; Metzler et al., 2001; Nelson, 1996; Nelson et al., 2002)
- Improved academic achievement
  (Horner et al., 2009; Lassen, Steele, & Sailor, 2006; Nelson et al., 2002)
- Improved perceptions of school safety
  (Horner et al., 2009)
- Improved organizational health
  (Bradshaw et al., 2008)

Which system best predicts sustained implementation 3 years later?

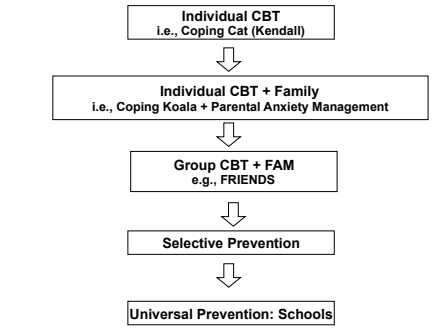
- Schoolwide
- Non-classroom
- Classroom
- Individual

Which features best predict sustained implementation?

- Expected behaviors defined clearly
- Problem behaviors defined clearly
- Expected behaviors taught
- Expected behaviors acknowledged regularly
- Consistent consequences
- CW procedures consistent with SW systems
- Options exist for instruction
- Instruction/materials match student ability
- High rates of academic success
- Access to assistance and coaching
- Transitions are efficient



Major Research Developments: Anxiety



Complications of Untreated Anxiety

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- Diminished educational and vocational achievement:
  - Lower college grad rates by 2%
  - Lower probability prof occupation by 3.5%
- Wage reduction by 1.5 – 3%
- Impaired relationships
- Subsequent depression, alcohol abuse and cigarette smoking(Beidel & Turner, 1998; LeFauve et al., 2004; Lewinsohn & Clarke, 1999; Pine et al., 1998; Schatzberg et al., 1998; Woodward & Fergusson, 2001).
- Greatest predictor of suicide
  - Sareen et al (2005)

Unique youth issues

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- Most frequently occurring mental health concern reported by children, adolescents, and adults (Costello, Angold, & Burns,1996; Goodman et al. 2002; Kessler et al., 2005; Muris et al., 2000; Yates, 1996),
- Onset age of 10-12 years (Kessler et al., 2005; Wittchen, Kessler, Pfister, and Lieb, 2000).
- Common cause of referral to children's mental health-care providers (March & Albano, 1998),
- Bullied more than their peers (Ledley, Storch & Coles, 2006).

Transporting Evidence-Based Treatments to School Settings

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- Increasing Knowledge Base
- 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)

Children's Mental Health Research Quarterly

Children's Health Policy Centre

SFU: Charlotte Waddell

Effects of Anxiety Prevention Programs at Post-Test (Waddell, 2013)

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Small ES (< 0.4):

Coping and Promoting Strength

Feelings Club CBT

FRIENDS (8 studies)

MoodGYM

Norwegian Universal Preventative Program

Penn Resiliency Program** (Large ES @ 12 mo. FU)

Preschool Intervention Project

Primary Mental Health Project

REACH for Resilience

Anxiety at Post-Test

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- Moderate ES (0.4-0.7)
  - CoolKids
  - FRIENDS (2 studies)
  - Panic Prevention Workshop
  - Preschool Intervention

Anxiety at Post-test

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Large ES (> 0.7)

FRIENDS (2 studies)

Parent-based skills training

Stress Inoculation Training

Compelling Facts

- Families reluctant to seek mental health treatment outside of school settings (Braden & Sherrard, 1987; Conti, 1995)
- School-based services seen as accessible, increasing access to care and reduce barriers (Weist, et al., 2003)
- Natural environment increases likelihood of sustainable behavior change (Elias, 1994; Magee et al., 1999)

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Specific Target: Anxiety

- Most common mental health problem: 12 - 20% of children affected
- Mean age of onset of anxiety disorders approximately age 10-12
- Children and youth with anxiety disorders rarely receive appropriate or effective interventions

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FRIENDS

Prevention of Anxiety and Depression

What is FRIENDS?

- FRIENDS
  - Australian-developed (Barrett et al)
  - CBT based
  - Teaches children to cope with and manage anxiety (and depression) both now and in later life
- Run by the school's regular teachers/counsellors in normal class times.
- FRIENDS sits well within Provincial health, PE, and social responsibility curricula (focus on personal development skills)

The FRIENDS for Life Plan

FRIENDS FOR LIFE

F eelings
R emember to Relax
I can do it! I can try my best!
E xplore Solutions and Coping Step Plans
N ow reward yourself! You've done your best!
D on't forget to practice!
S mile! Stay calm for life!

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F = Feelings p. 18

Kelly Koala's Body Clues:

- Feeling sick
- Feeling hot
- Sweaty
- Trembling
- Difficulty breathing
- Sore neck and shoulders
- Needing to go to toilet
- Funny tummy

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R = Remember to Relax

Session 3

Relaxation exercises

- Awareness
- Diaphragmatic Breathing
- Muscle relaxation (leader p. 44)
- Visualization
- Sports relaxation… page 21

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I = I can do it! I can try my best!

(Session 4) pg. 24

- Self talk
- Helpful, positive
  green thoughts
- Unhelpful, negative
  red thoughts
- Attention training exercises
- Think like a winner !!

38 MCFD FRIENDS TRAINING 2006-7

FLEXIBILITY in THINKING

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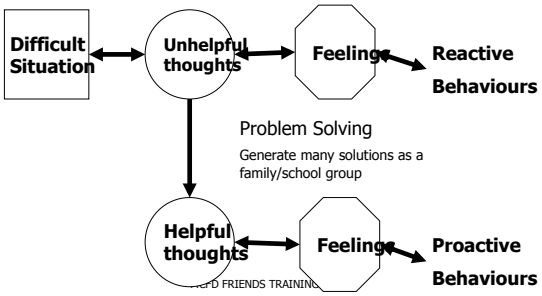
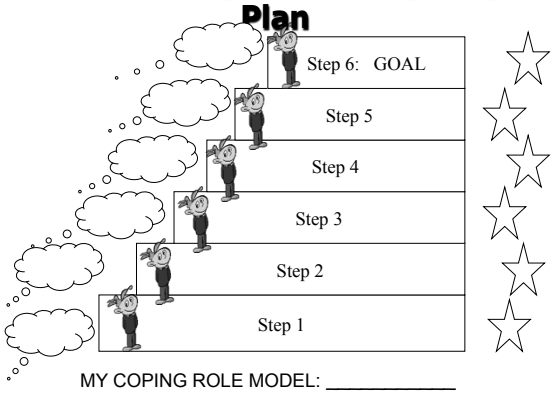


E: Preparing The Coping Step Plan

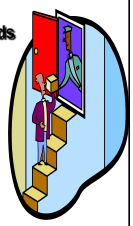


MY COPING ROLE MODEL: _____

The Coping Step Plan Applied to a Fear of Public Speaking

Step 7. **Presents speech in front of class**
6. **Presents speech to close group of friends**
5. **Presents speech to a friend**
4. **Presents speech to the entire family**
3. **Presents speech to mother/father**
2. **Writes a speech and reads it in front of mirror**

Step 1. **Reads a short story to mother/father**



Remember SMALL Steps!!

D = Do it every day

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https://youtu.be/korjLOd5WXU

4 Research Projects (FRIENDS)

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- VP3: Vancouver Primary Prevention Project (2002)
  - Urban setting
  - Targeted intervention
- FP3: FRIENDS Primary Prevention Project (2002)
  - Suburban setting
  - Universal intervention
- AP3: FN FRIENDS Primary Prevent Project (2005)
  - Urban and Rural setting
  - Targeted and Universal intervention
- FRIENDS for Youth (2005)
  - Universal intervention

Barriers to implementation (2002)

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- EBI from Australia
  - Arrived on pallet at YVR
  - No cooperation from program author
  - Vegemite sandwiches and baby joeys
- School suspicion: time, teacher training, lost academic time, mental health assessments
- High ESL School Population
- *School counsellors played a crucial role in recruiting teachers to participate in the project.*
- Small Group Format did not allow for anonymity

More challenges

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- Teachers concern re scheduling (randomization)
- Teacher(s) illness(es)
- Student/family transiency

- CIHR: ambitious! (and cut our budget)

Cross Disciplinary and Collaborative

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University BC Counseling Psychology Dept.
Tertiary TX facility (BCCW)
UBC Department of Psychiatry
Anxiety Disorders Adult TX Center
Anxiety Disorders Professional Association
School Boards
MCFD
Dr. John March, Duke University

Research Design

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

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Measures: Multiple Informants*

*** 4 time points**

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

Data collection

- T_1 = Prior to program
- T_2 = Following week 8 (Friends and Attn Control)
- T_3 = Following week 16 (end of program)
- T_4 = 1 year FU

(ASE, ASP, MASC, BASC)

Descriptive Data: VP3 + FP3

Samples:

Targeted	Universal
(Urban)	(Suburban)
17 elem schools	7 elem schools
41 classrooms	14 classrooms
998 screened	373 screened
n=192	n=254

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More Descriptive Data

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	Targeted	Universal
Male	52%	46%
Mean Age	10 yrs	9.8 yrs
Mean Grade	5	5
English	52%	82%
	(Chinese next @ 18%)	(Korean next@ 4%)

Separate Analysis

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- Kids "elevated anxiety" = *T*-score on MASC ≥ 66
  - Targeted n = 35 (29% of consent pop.)
  - Universal n = 75 (29% of consent pop.)
- Kids at "clinical level" = *T*-score on MASC > 70
  - Targeted n = 6 (4.9% of total)
  - Universal n = 14 (3.3% of total)

Results: Between subjects effects

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- No main effect of condition (MASC as DV)
  - Targeted
    F (1, 139) = .009, p = .924
  - Universal
    F (1, 183) = .174, p = .677

Targeted Post-Treatment Results

	Pre-Treatment (T1)		Post-Treatment (T2)	
	FRIENDS (N = 65)	Reading (N = 126)	FRIENDS (N = 65)	Reading (N = 126)
MASC	59.5 (16.4)	55.9 (17.5)	53.6 (16.8)*	52.2 (17.7)**
ASE-pilot	10.5 (7.6)	13.6 (8.3)	8.3 (7.1)	12.5 (7.8)
ASP-pilot	12.0 (8.4)	12.7 (7.9)	10.7 (7.8)	11.2 (8.1)***

*p = .009 **p = .003 ***p = .05

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Targeted One-Year Follow-up Results

	TX - FRIENDS		Reading + delayed FRIENDS	
	T1	T4	T1	T4
MASC *n*	57.9 (17.0) *49*	42.5 (16.4)*	55.6 (18.3) *101*	44.3 (16.8)*
ASE-pilot *n*	6.3 (7.7) *18*	5.1 (5.5)	14.3 (7.9) *58*	9.8 (6.8)*
ASP-pilot *n*	11.2 (7.7) *25*	7.2 (5.6)**	12.4 (7.6) *37*	9.1 (6.4)***

*p = .000 **p = .003 ***p = .005

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Universal Post-Treatment Results

	Pre-Treatment (T1)		Post-Treatment (T2)	
	FRIENDS (N = 133)	Reading (N = 104)	FRIENDS (N = 129)	Reading (N = 95)
MASC	**46.8 (17.7)**	**47.4 (18.3)**	**45.1 (15.3)**	**42.9 (16.3)***
ASE-pilot	7.2 (7.3)	4.9 (6.2)	5.5 (5.9)*	4.1 (6.3)**
ASP-pilot	7.5 (5.4)	8.2 (5.7)	7.2 (5.8)	7.9 (6.0)

*p = .000 **p = .01

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Universal One-Year Follow-up Results

	TX - FRIENDS		Reading + delayed FRIENDS	
	T1	T4	T1	T4
MASC *n*	47.3 (18.4) *112*	38.8* (12.7)	48.7 (18.4) *82*	37.6 (17.0)*
ASE-pilot *n*	5.4 (5.1) *15*	5.3 (4.0)	7.1 (5.0) *8*	6.5 (6.7)
ASP-pilot *n*	8.1 (5.9) *61*	6.6 (5.8) **	11.5 (7.9) *26*	9.7 (6.5)

*p = .000 **p = .03

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VP3 Subgroup Analysis (T ≥ 66)

	T1	T2	T3	T4
FRIENDS				
Mean	82.9	72.4*	72.3	54.8†
(SD)	(11.9)	(20.5)	(13.3)	(13.4)
N	11	10	10	8
Attn control-reading				
Mean	78.4	66.6**	65.4	54.5 †
SD	(6.6)	(13.5)	(12.7)	(16.5)
N	26	25	24	20

* p = .03 ** p = .000
†T1-T4 differences in both conditions are significant, p = .000

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FP3 Subgroup Analysis (T ≥ 66)

	T1	T2	T4
FRIENDS			
Mean	67.2	57.5*	45.0*
(SD)	(11.0)	(13.0)	(14.0)
N	40	39	35
Attn control-reading			
Mean	68.5	57.7*	47.5*
(SD)	(7.6)	(12.7)	(18.0)
N	35	31	30

* p = .000

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Why ? ? ? ? ? ?

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- Sample size too small (would need tens of 1,000s to show effect)
- Self report
- Dose/response?
- Fidelity?
- Program evaluated by non-interested party
- Maybe FRIENDS doesn't work?
- Harry Potter rocks!
- Good news for school children in schools however!

Implication of Findings

- **Entire sample** = the CBT intervention did not show significant reduction in symptoms of anxiety within the general population of school aged children compared to reading group.
- **At Risk subset** = the CBT intervention was successful in reducing symptoms in children who reported moderate to severe anxiety symptoms at pre-intervention, but so did reading.

Program Evaluation (Teacher Comments n=21)

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- *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.*

Family Component

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- 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

Teacher and Parent Data

- Gained significant understanding of child anxiety
  - 72% teachers
  - 83% parents
- Gained basic understanding of CBT principles
  - 91% teachers
  - 100% parents
- Acquired skills to assist
  - 83% parents

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Children's Responses (n=166)

65

- 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

Other Project Outcomes

- Research lab "Canadianized" FRIENDS (for sale across N America: 2005)
- All 60 school districts in BC have FRIENDS training and materials (2016)
  - Many Independent and FN schools
- 2004-Present (2016):
  - 10,000 BC teachers trained
  - Avg 50 trainings per academic year (700-1000 educators involved)

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More Outcome Data

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- 3 Levels: K-1, Gr 4-5, Gr 7
  - Fun Friends greatest uptake
- Province-wide Teacher in-service last 10+ years
- Target audience: Schools
  - Universal implementation

Be careful what you wish for?

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Parent Cooperation

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- Partner with the FORCE Society, which consists of parent workshops (have reached over 1,000 parents)
- Since 2012 developed together the BC FRIENDS Online Parent website - (thousands of parents have viewed the site) so that parents/ families could also be involved, learn the skills so they can be reinforced and modelled at home.

Other Key Point

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- FRIENDS aligns well with curriculum. More recently with BC's curriculum re-design and the emphasis on SEL, FRIENDS continues to align well.
- MCFD holds a training license agreement with program author/Barrett Resources (Pathways) for the training and program delivery in BC
- Increase in attention and conversation now about importance of school mental health and literacy.

Evaluation of Province-Wide Implementation (educators' response)

71

> 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

Ripples...

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- Knowledge Network 1-hour documentary on child and adolescent anxiety
  www.knowledgenetwork.ca

- > 420 clinicians trained in CBT for child anxiety identification and treatment in fourteen 2-day workshops

More ripples . . .

Aboriginal Primary Prevention (of Anxiety) Project: AP3
- Urban, rural; selected, universal
- N = 850

FRIENDS for Youth (gr 7)
- Province-wide gr. 7/8 n = 1050 universal RCT

FRIENDS Parent Project
- 15 school districts

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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

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Examples of cultural enhancement

Raven (stickers)
Medicine Pouches
"Good medicine"
Less reading, more oral
Names, hair colour, cultural references ...
- (e.g., hippo → wolf
- Kelly Koala → Rusty the Raven)

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Summary of FRIENDS in BC

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https://www.youtube.com/watch?v=xxMv2N8ZMyk&feature=youtu.be

What did BC do right?

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1. Develop protective factors
2. Younger children show greater positive results than older children
3. **Address a specific problem (not broad, unfocused interventions)**
4. Involve family, school, and community
5. Informed by sound theoretical foundations
6. Long-term strategies

And...

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"Ground up and top down" enthusiasm
Anxious Graduate Students
WHO endorsement
Public increasingly informed and requesting
Charismatic Leadership
Luck!

More Anxiety Prevention Programs:
Skills for Academic and Social Success (SASS)

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- **Target population:** Socially anxious youth
- Cognitive-behavioral school-based program
- 12, 40-minute weekly group sessions
- 2 booster sessions
- 2 15-minute individual meetings
- 4 weekend social events with prosocial peers
- 2 45-minute parent group meetings
- 2 45-minute teacher meetings-
- See more at: http://www.childtrends.org/?programs=skills-for-academic-and-social-success#sthash.eyUaYRPo.dpuf

Adapted SASS: Secondary Students
Skills for Academic and Social Success
(Fisher, Masia-Warner, & Kelin, 2004)

- 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
  - N=60 Gr 9-10

Lionsgate Healthcare Research Foundation, W. and N. Van school dist.

Collaborators:
BCCW (Dr. Jane Garland), ADABC, N. Van., CMHA-BC

Lions Gate Healthcare Research Foundation

Table of Means and Standard Deviations for Self-Report Measures

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	PRE (Mean (SD))	POST (Mean (SD))
CES-DC	27.24 (13.46)	18.74 (13.04)*
MASC	54.16 (15.43)	41.39 (19.21)**
Mobility Inventory	2.16 (0.62)	1.89 (0.61)***

Taming Worry Dragons
(Garland, Clark, et al)

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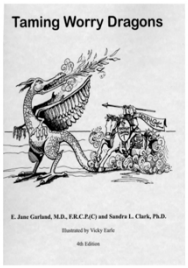
- Manual designed to be read by kids and those who help them.
- Anxiety as a "dragon," children learn what worrying does to the mind and body.
- Tour of the zoo with different kinds of "dragons" (habits, obsessions, panic and generalized worries).
- Basic and advanced tools for dragon "taming" and "trapping" and offers tips for parents and other coaches.



Pre-Taming Worry Dragons

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Post - Taming Worry Dragons
(Garland, Clark, et al; BC Children's Hospital)

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Modified for Classroom (C Short)

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- TWD was not successful in reducing symptoms of anxiety within the general population of school aged children (universal).
- Children with elevated self-report scores only (T score of 55+ in treatment and WL groups). Those in the treatment condition significantly improved following the intervention (effect size of .8) while those in the waitlist condition remained unchanged.

Cool Kids
(Ron Rapee, Macquarie Univ., Centre for Emotional Health)

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Cool Kids (Ron Rapee, Macquarie Univ., Centre for Emotional Health)

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- Learning about feelings and anxiety
- Detective thinking, and learning to think more realistically
- Ways that parents can help
- Fighting fear by facing fear (stepladders)
- Learning to solve a problem
- Building assertiveness and dealing with teasing
- Ages 7 to 17 years: (up to 12 years) and older (13-17 years)

Cool Little Kids
Social Story #1: Going to school

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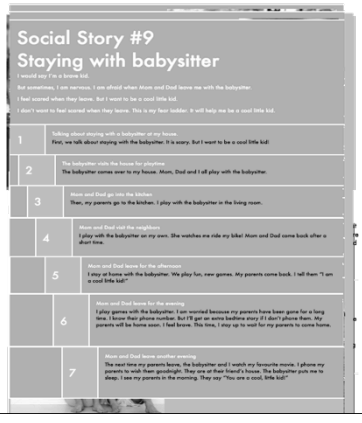
- I think I'm a brave kid. But sometimes, I am nervous. I am afraid when it's time for Dad to leave after we have walked to school.
- I don't like it when he says he's leaving. My tummy hurts and I get scared. But I want to be a **cool little kid**. This means not feeling scared when Dad leaves. This is my fear ladder. It will help me be a **cool little kid**.



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Brave Buddies (Child Mind)

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- Intensive group behavioral treatment program
- Children ages 3-8
- Target: Selective Mutism (SM)
- "brave talking"
- Multi-day intensive program twice a year, and as one-day sessions several times throughout the year.
- Structured like a typical school day, with morning meeting, craft and sport activities, meals, and field trips to the library and the park.

More projects

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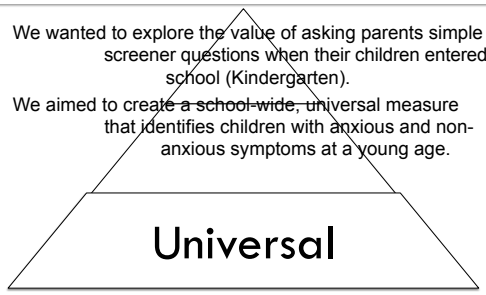
- Myrne Nevison Prevention Research
- ABC Project: Anxious Behaviour in Children
  - VSB
  - Parents of kindergartners
  - 1 question proxy for clinical interview

Our Study

Overview

- We wanted to explore the value of asking parents simple screener questions when their children entered school (Kindergarten).
- We aimed to create a school-wide, universal measure that identifies children with anxious and non-anxious symptoms at a young age.



Our Study

Method

Sample for first two (of three) years:

- 31 Elementary schools in BC
- 2 school districts (n= 1500 consents)
- N = 116 Kindergarten students (49% male)
- Predominantly Caucasian
- Mean age (child) = 6 yrs old
- Parents completed a brief survey and a 1 hour diagnostic interview

Our Study

Method

Brief Survey Questions:

1. In your opinion, is your child much more **shy or fearful** than most other children of the same age?
2. In your opinion, is your child much more **anxious** than most other children of the same age?

Answers were compared to results from the diagnostic interview *Anxiety Disorders Interview Schedule for Children/Parent* (ADIS-IV-TR).

- Interviewers were trained graduate students who were blind to screener question results.

Our Study

Method

Sensitivity & Specificity

- **Sensitivity** is the proportion of actual positive cases of anxiety the screening question correctly identifies (a/(a+c))
  - How good the tool is at correctly identifying people who **have** the disorder.
- **Specificity** is the proportion of negative cases of anxiety that the screening question correctly identifies (d/(d+b)
  - How accurate the tool is at ensuring "normals" **do not** get selected
- Balance between sensitivity and specificity.
  - As Levitt et al. (2007) suggest, universal preventing/screening may favour being over-inclusive (i.e., favour high **sensitivity**) in order to identify all children who may be at-risk.

	Disease Positive	Disease Negative
Test Positive	a	b
Test Negative	c	d

Our Study

Method

Real-world examples of sensitivity and specificity

- Pregnancy tests
- Cancer screening
- Strep throat

Our Study

Results

Table 1. Sensitivity, Specificity, and LR for Childhood Anxiety Screener Questions with the ADIS-IV-P as the Reference Standard for Anxiety

			LR	
Screener Questions	Sensitivity (95% CI)	Specificity (95% CI)	Positive Test (95% CI)	Negative Test (95% CI)
Two anxiety questions (Phase 1)	90.5 (71.1 to 97.3)	78.6 (60.5 to 89.8)	4.2 (2.1 to 8.7)	0.12 (0.03 to 0.46)
Two anxiety questions (Phase 2)	73.3 (48.0 to 89.1)	91.7 (64.6 to 98.5)	8.8 (1.3 to 58.9)	0.29 (0.12 to 0.69)
Two anxiety questions (Phase 1 & 2 combined)	83.3 (68.1 to 92.1)	82.5 (68.1 to 91.3)	4.62 (2.4 to 9.5)	0.20 (0.10 to 0.43)
Two anxiety questions (Phase 3)	TBD	TBD	TBD	TBD

80-90% = good (Cicchetti et al., 2004)

Our Study

Conclusions

- Combining two questions to parents of kindergarten students provides useful information for identifying children that require additional levels of social-emotional support in their first year of school.
- If parents endorse "Yes" to both screening questions, their child is ~ 80% likely to meet criteria for an anxiety disorder.

Oddball projects

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- Cyberpsychology and Schools
  - VSB and Coquitlam
  - 300 gr. 7 kids
  - Virtual Reality application
- Funded by CFI (equipment)
- SSHRC funded

Evaluating on-line self help

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- www.anxietybc.com
- Parent training - evidence based approaches
- Survey research
- Translational research/dissemination

What is anxiety?

- NORMAL human emotion essential for survival
- Feeling anxious, fearful, nervous, worried, apprehensive, on guard, "freaked out", etc.
- Best viewed on a continuum from low to high
- Individual differences in the feeling of anxiety
  - Types of symptoms
  - Intensity of symptoms
  - Frequency of symptoms

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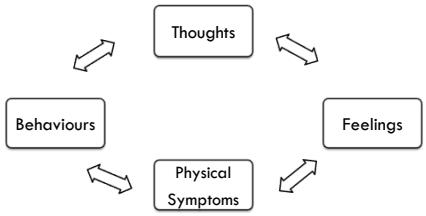
Symptoms of anxiety: Multi-dimensional & interconnected



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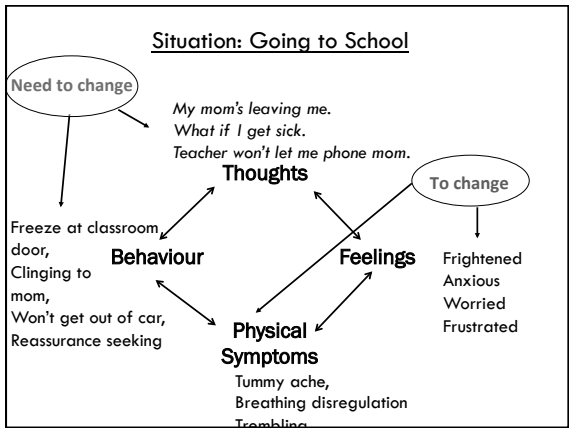

Anxiety is normal

- Survival systems:
  - Avoid separation from adults
  - Be vigilant for predators
  - Avoid specific dangers: heights, injury, animals, etc.

Anxiety is developmental

- Infant/toddlers – separation, novel
- Preschool – animals, dark, separation
- School – adaptations, performance, family
- Adolescence – social, existential, future

Anxiety is behavioural

- *Fight*: aggression, tantrums, oppositional, irritable
- *Flight:* refusal, avoidance
- *Freeze*: physical, mental

- Seeking reassurance: co-sleeping, demanding

Behavioural symptoms: What does a child do?

- "Safety Behaviours" can include…
  - Avoidance
  - Escape from the situation
  - Distraction
  - Reassurance seeking
  - Resistance to change

Anxiety is physical

- Abdominal: nausea, stomachaches, etc
- Arousal: heart rate, breathing, shaky, dizzy
- Tension: headaches, muscle aches, fatigue
- Sleep: insomnia, avoidance

Common associated features

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

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Typical development of disorders

Most common in childhood:

- Specific Phobias
- Separation Anxiety Disorder
- Obsessive-Compulsive Disorder
- Generalized Anxiety Disorder

Most common in adolescence:

- Panic Disorder (w/o Agoraphobia)
- Social Anxiety Disorder
- Post Traumatic Stress Disorder

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Anxiety . . .

- Is the most common mental health concern in children and adults (by far!!)
- Can cause serious disruption to children's lives (school, attendance, peers, home)
- Often persists or increases over time
- Left untreated?

  other anxiety disorders, depression, alcohol and tobacco misuse, suicide, educational/vocational underachievement

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Vulnerabilities

- Genes
- Avoidance
- Modeling/Parenting Reaction
- Early Experiences
- Friendship Difficulties

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Common symptoms

- Depressed or irritable mood; cries easily
- Fidgety; nervous habits (e.g., nail biting)
- **Headaches, upset stomach, aches and pains**
- Overly dependent or "clingy"
- Perseverance; difficulty shifting tasks; resistance to change; inflexibility; easily overwhelmed

MAY LOOK LIKE . . .

- School underachievement or excessive resistance to doing work or participating in class
- Frequent visits to school nurse or physician (especially for physical complaints)
- High number of missed school days/ Difficulties entering the classroom
- Difficulties with social or group activities

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Frequently overlooked symptoms

- Angry outbursts
- Oppositional and refusal behaviours
- Temper tantrums
- Aggression
- Hyperactivity and difficulty sitting still
- Attention and concentration problems; difficulty learning

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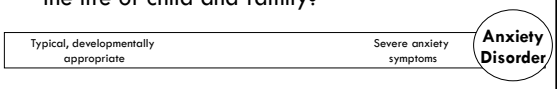
When is it a "problem"?

- Developmentally appropriate?
- Duration?
- Compared to peers?

KEY Question: How much is anxiety interfering with the life of child and family?



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Take home summary

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

Contact Information

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