Parent Cognitive Behavioral Therapy (CBT) for Anxious Young Children

Program description:

These group-based interventions usually include psycho-education about child anxiety, strategies for encouraging children's exposure to anxiety-provoking situations, and cognitive restructuring of parents' own worries.

Typical age of primary program participant: 5
Typical age of secondary program participant: N/A

Meta-Analysis of Program Effects

Outcomes Measured	Primary or Second-ary Partici-pant	No. of Effect Sizes	Unadjusted Effect Sizes (Random Effects Model)			Adjusted Effect Sizes and Standard Errors Used in the Benefit-Cost Analysis					
						First time ES is estimated			Second time ES is estimated		
			ES	SE	p-value	ES	SE	Age	ES	SE	Age
Anxiety disorder	P	3	-0.86	0.36	0.02	-0.18	0.36	5	-0.08	0.15	10

Benefit-Cost Summary

| The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2011). The economic discount rates and other relevant parameters are described in Technical Appendix 2.	Program Benefits					Costs	Summary Statistics			
	Partici-pants	Tax-payers	Other	Other Indirect	Total Benefits		Benefit to Cost Ratio	Return on Invest-ment	Benefits Minus Costs	Probability of a positive net present value
	$1,128	$998	$653	$512	$3,291	$608	n/e	n/e	$3,899	81%

Detailed Monetary Benefit Estimates

	Benefits to:				
Source of Benefits	Partici-pants	Tax-payers	Other	Other In-direct	Total Benefits
Earnings via anxiety disorder	$909	$334	$0	$167	$1,410
Health care costs for anxiety disorder	$220	$664	$653	$345	$1,881

Detailed Cost Estimates

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta-analysis. The uncertainty range is used in Monte Carlo risk analysis, described in Technical Appendix 2.	Program Costs			Comparison Costs			Summary Statistics	
	Annual Cost	Program Duration	Year Dollars	Annual Cost	Program Duration	Year Dollars	Present Value of Net Program Costs (in 2011 dollars)	Uncertainty (+ or – %)
	$348	1	2010	$943	1	2010	-$595	10%

Source: Based on therapist time, as reported in the treatment studies, as well as training costs and a flat fee for materials (e.g., manuals). Hourly therapist cost is based on the latest actuarial estimates of reimbursement by modality in WA State (DSHS).

Cumulative Net Cash Flows Over Time (Non-Discounted Dollars)
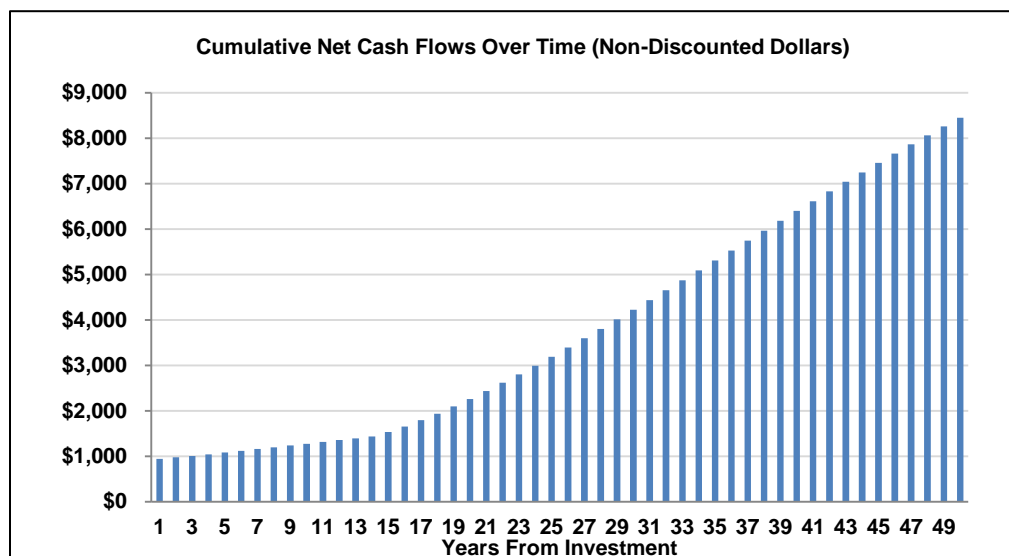
Additional Notes

Some studies included in this analysis compared the program (CBT) to control conditions that did not consist of an active treatment. Because policymakers in Washington are interested in the impact of this program above and beyond currently implemented treatments (i.e., treatment as usual), we reduced the effect size of studies utilizing a no treatment or waitlist control group in half to reflect a smaller impact that would be expected if these studies compared CBT to treatment as usual.

Head-to-head studies comparing one format of CBT to another were meta-analyzed. There were no differences between individual and group CBT, family and child CBT, and child versus child plus parent CBT. This suggests that all formats are equally efficacious in alleviating anxiety.

Type of Adjustment	Multiplier
1- Less well-implemented comparison group or observational study, with some covariates.	1.00
2- Well-implemented comparison group design, often with many statistical controls.	1.00
3- Well-done observational study with many statistical controls (e.g., IV, regression discontinuity).	1.00
4- Random assignment, with some RA implementation issues.	1.00
5- Well-done random assignment study.	1.00
Program developer = researcher	0.42
Unusual (not "real world") setting	1.00
Weak measurement used	1.00

Adjustment factors were generated by examining studies for the treatment of children or adolescents with internalizing problems. Because weak measurement and unusual setting designations were extremely rare among these studies, no discounts were assigned. Meta-regressions were conducted to test for the impact of different methodological factors on unadjusted effect size. Dummy variables for research design were not significant, indicating that this factor did not impact effect sizes. However, the involvement of program developers in the research was a significant predictor of effect size (B=-.482, p=.077), suggesting that such studies have more negative (i.e., larger) effect sizes than studies in which the developer is not involved in the evaluation. The regression coefficient was used to generate the 0.42 multiplier.

Studies Used in the Meta-Analysis

Kennedy, S. J., Rapee, R. M., & Edwards, S. L. (2009). A selective intervention program for inhibited preschool-aged children of parents with an anxiety disorder: Effects on current anxiety disorders and temperament. *Journal of the American Academy of Child & Adolescent Psychiatry, 48*(6), 602-609.

Rapee, R. M., Kennedy, S. J., Ingram, M., Edwards, S. L., & Sweeney, L. (2010). Altering the trajectory of anxiety in at-risk young children. *American Journal of Psychiatry, 167*(12), 1518-1525.

Waters, A. M., Ford, L. A., Wharton, T. A., & Cobham, V. E. (2009). Cognitive-behavioural therapy for young children with anxiety disorders: Comparison of a child + parent condition versus a parent only condition. *Behaviour Research and Therapy, 47*(8), 654-662.