

Parent Child Interaction Therapy for Children with Disruptive Behavior Problems

Program description:

In this program, a therapist directly observes a parent and child through a one-way mirror, and provides direct coaching to the parent through a radio earphone. The focus is building the skills of the parent to more positively interact with the child and manage his or her behavior. Therapists aim to ultimately restructure the parent-child relationship and provide the child with a more secure attachment to the parent.

Typical age of primary program participant: 5

Typical age of secondary program participant: N/A

Meta-Analysis of Program Effects

Outcomes Measured	Primary or Secondary Participant	No. of Effect Sizes	Unadjusted Effect Sizes (Random Effects Model)			Adjusted Effect Sizes and Standard Errors Used in the Benefit-Cost Analysis					
			ES	SE	p-value	First time ES is estimated			Second time ES is estimated		
						ES	SE	Age	ES	SE	Age
Disruptive behavior disorder symptoms	P	10	-1.05	0.18	0.00	-0.53	0.18	5	-0.22	0.07	10
Attention deficit hyperactivity disorder symptoms	P	5	-0.69	0.16	0.00	-0.35	0.16	5	-0.15	0.07	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
	\$667	\$1,120	\$1,039	\$559	\$3,385	-\$1,335	\$2.53	8%	\$2,049	100%

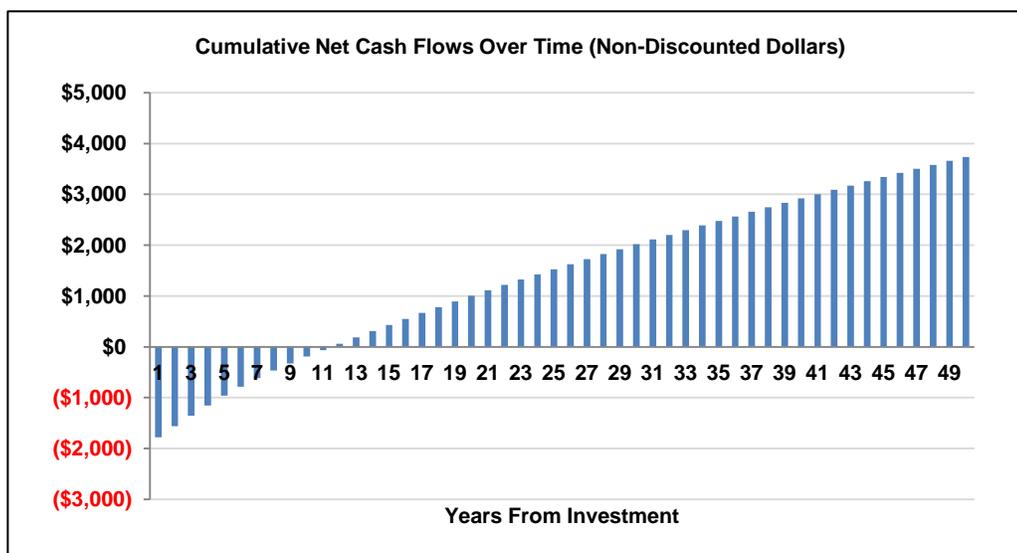
Detailed Monetary Benefit Estimates

Source of Benefits	Benefits to:					Total Benefit
	Partici-pants	Tax-payers	Other	Other In-direct		
Crime	\$0	\$38	\$105	\$19		\$162
Earnings via high school graduation	\$303	\$111	\$0	\$56		\$470
Earnings via test scores	\$50	\$18	\$0	\$9		\$77
K-12 grade repetition	\$0	\$3	\$0	\$1		\$4
Health care costs for ADHD symptoms	\$10	\$31	\$31	\$16		\$89
Health care costs for disruptive behavior symptoms	\$304	\$918	\$903	\$458		\$2,583

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 - %)
	\$2,240	1	2007	\$1,000	1	2007	\$1,334	10%

Source: Standard PCIT expenditures provided by Children's Administration (average reimbursement rate for families receiving PCIT in Washington in 2007).



Multiplicative Adjustments Applied to the Meta-Analysis

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., instrumental variables).	1.00
4- Random assignment, with some implementation issues.	1.00
5- Well-done random assignment study.	1.00
Program developer = researcher	0.64
Unusual (not "real-world") setting	1.00
Weak measurement used	0.5

Adjustment factors were generated by examining studies for the treatment of children or adolescents with disruptive behavior problems. Meta-regressions were conducted to test for the impact of different methodological factors on unadjusted effect size. Because research design rating and unusual setting were not significant predictors of effect size, multipliers of 1.0 were assigned. The involvement of a program developer in the research study was a statistically significant predictor of effect size, indicating that such studies had larger effects than studies in which the developer was not involved. This coefficient was used to determine the 0.64 multiplier. Finally, we coded as weak measures outcomes that were based solely on the report of individuals who were involved in the intervention (such as parents in a parenting program). Due to concern that such measures might be biased in favor of the programs reviewed, we used the standard Institute multiplier (0.5).

Studies Used in the Meta-Analysis

Bagner, D. M., Sheinkopf, S. J., Vohr, B. R., & Lester, B. M. (2010). Parenting intervention for externalizing behavior problems in children born premature: An initial examination. *Journal of Developmental and Behavioral Pediatrics, 31*(3), 209-216.

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