

Behavioral Monitoring and Reinforcement Program

Program description:

This is a school-based intervention that aims to prevent juvenile delinquency, substance use, and school failure for high-risk adolescents. For two years, beginning in seventh grade, participants' school records are monitored for attendance, tardiness, and disciplinary action. Program staff contact parents by letter, phone, and occasional home visits to inform them of their children's progress. Teachers submit weekly reports assessing students' punctuality, preparedness, and behavior in the classroom, and students are rewarded for good evaluations. Each week, 3-5 students meet with a staff member to discuss their recent behaviors and their consequences, and role-play prosocial alternatives to problem behaviors.

Typical age of primary program participant: 12

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
Crime	P	1	-0.56	0.32	0.10	-0.11	0.32	16	-0.11	0.32	26
Employment	P	1	0.71	0.35	0.13	0.27	0.35	16	0.27	0.35	26
Truancy	P	4	0.70	0.70	0.18	-0.34	0.70	16	-0.34	0.70	17
Grade point average	P	3	0.79	0.25	0.00	0.42	0.25	16	0.42	0.25	17

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
		\$341	\$531	\$866	\$256	\$1,995	-\$1,276	\$1.56	9%	\$719

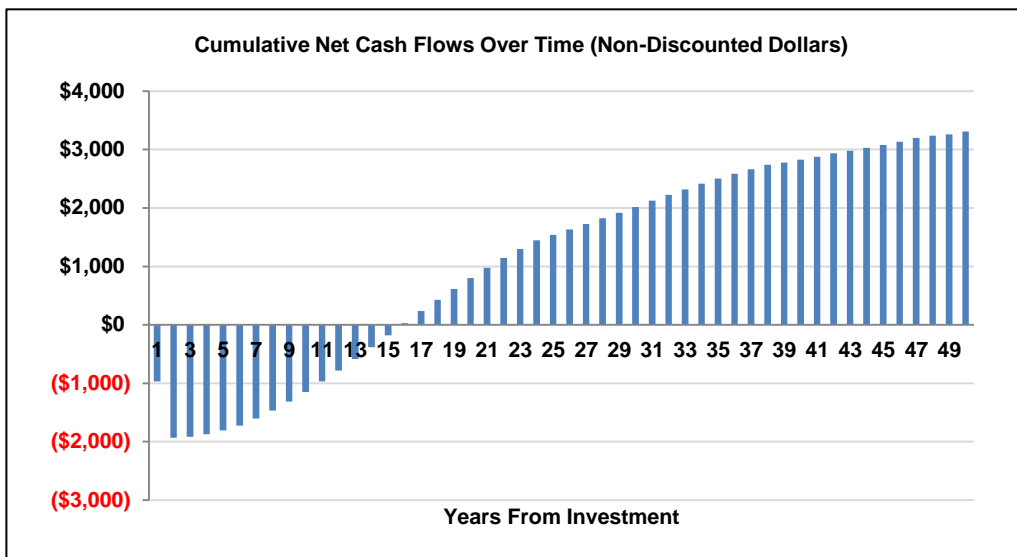
Detailed Monetary Benefit Estimates

Source of Benefits	Benefits to:				
	Partici-pants	Tax-payers	Other	Other In-direct	Total Benefits
Crime	\$0	\$357	\$902	\$173	\$1,431
Earnings via high school graduation	\$347	\$128	\$0	\$58	\$533
Health care costs via education	-\$6	\$47	-\$35	\$24	\$30

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 - %)
		\$500	2	1999	\$0	2	1999	\$1,275

Source: Miller, T.R., and Hendrie, D. (2005). "How should governments spend the drug prevention dollar: A buyer's guide." In: Stockwell, T., Gruenewald, P., Toumbourou, J., and Loxley, W., eds. *Preventing harmful substance use: The evidence base for policy and practice*. Chichester, England: John Wiley & Sons. pp. 415-431.



Multiplicative Adjustments Applied to the Meta-Analysis

Type of Adjustment	Multiplier
1- Less well-implemented comparison group or observational study, with some covariates.	0.5
2- Well-implemented comparison group design, often with many statistical controls.	0.5
3- Well-done observational study with many statistical controls (e.g., instrumental variables).	0.75
4- Random assignment, with some implementation issues.	0.75
5- Well-done random assignment study.	1.00
Program developer = researcher	0.5
Unusual (not "real-world") setting	0.5
Weak measurement used	0.5

Studies Used in the Meta-Analysis

Bry, B. H. (1982). Reducing the incidence of adolescent problems through preventive intervention: One- and five-year follow-up. *American Journal of Community Psychology*, 10(3), 265-276.

Bry, B. H. (2001). *Achievement mentoring makes a difference: 1999-2001 program evaluation results for Bry's Behavioral Monitoring and Reinforcement Achievement Mentoring Program*. Rochester, NY: Rochester City School District.

Bry, B. H., & George, F. E. (1979). Evaluating and improving prevention programs: A strategy from drug abuse. *Evaluation and Program Planning*, 2(2), 127-136.

Bry, B. H., & George, F. E. (1980). The preventive effects of early intervention on the attendance and grades of urban adolescents. *Professional Psychology*, 11(2), 252-260.