Behavioral Monitoring and Reinforcement Program (BMRP) Public Health & Prevention: School-based

Literature review updated February 2020.

As part of WSIPP's research approach to identifying evidence-based programs and policies, WSIPP determines "what works" (and what does not work) to improve outcomes using an approach called meta-analysis. For detail on our methods, see our **Technical Documentation**. At this time, WSIPP has not yet calculated benefits and costs for this topic.

Program Description: The Behavioral Monitoring and Reinforcement Program (BMRP) is a schoolbased intervention that aims to prevent juvenile delinquency, substance use, and school failure for adolescents at high-risk for school dropout. For two school years, beginning in 7th grade, students' school records are monitored for attendance, tardiness, and disciplinary action by program staff, often a teacher at the school. Program staff informs parents of their student's progress in school. Mentoring teachers submit weekly reports to classroom teachers that assess students' punctuality, preparedness, and behavior in the classroom. Students with good evaluations earn rewards. Each week, small groups of students meet with a staff member to discuss their problem behaviors, the consequences for those behaviors, and role-play prosocial alternatives.

Student participants in the studies are "at-risk" if they presented low academic motivation, were living in families where household members exhibited substance use problems, or received several office discipline referrals over a semester.

In this analysis, we include evaluations of the Behavioral Monitoring and Reinforcement Program, the Achievement Mentoring Program, and the Early Secondary Intervention Program as they are all iterations or adaptations of the same general program.

Meta-Analysis of Program Effects							
Outcomes measured	No. of effect sizes	Treatment N	Adjusted effect size and standard error			Unadjusted effect size (random effects model)	
			ES	SE	Age	ES	p-value
Dropout	1	87	-0.252	0.282	16	-0.663	0.021
Grade point average	5	170	0.188	0.122	16	0.389	0.002
Office discipline referrals	1	49	-0.304	0.223	15	-0.304	0.173
School attendance	5	137	0.192	0.161	16	0.516	0.003
Illicit drug use before end of high school	1	30	-0.166	0.542	18	-0.436	0.426

Meta-analysis is a statistical method to combine the results from separate studies on a program, policy, or topic in order to estimate its effect on an outcome. WSIPP systematically evaluates all credible evaluations we can locate on each topic. The outcomes measured are the types of program impacts that were measured in the research literature (for example, crime or educational attainment). Treatment N represents the total number of individuals or units in the treatment group across the included studies.

An effect size (ES) is a standard metric that summarizes the degree to which a program or policy affects a measured outcome. If the effect size is positive, the outcome increases. If the effect size is negative, the outcome decreases.

Adjusted effect sizes are used to calculate the benefits from our benefit cost model. WSIPP may adjust effect sizes based on methodological characteristics of the study. For example, we may adjust effect sizes when a study has a weak research design or when the program developer is involved in the research. The magnitude of these adjustments varies depending on the topic area.

WSIPP may also adjust the second ES measurement. Research shows the magnitude of some effect sizes decrease over time. For those effect sizes, we estimate outcome-based adjustments which we apply between the first time ES is estimated and the second time ES is estimated. We also report the unadjusted effect size to show the effect sizes before any adjustments have been made. More details about these adjustments can be found in our Technical Documentation.

Citations Used in the Meta-Analysis

- 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.
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- 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.
- Holt, L., Bry, B., & Johnson, V. (2008). Enhancing school engagement in at-risk, urban minority adolescents through a school-based, adult mentoring intervention. *Child & Family Behavior Therapy, 30*(4), 297-318.
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