

Washington State Institute for Public Policy

Meta-Analytic Results

School-based sexual education Public Health & Prevention: School-based

Literature review updated April 2012.

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: School-based sex education curricula provide information about, and instruct students in, skills for sexual abstinence, Many programs also provide students information about birth control and ways to protect against sexually transmitted diseases (STD). We did not include programs that focused only on HIV or STD risk reduction because we focused on the prevention of teen pregnancy. We analyzed 14 studies of abstinence-only programs and comprehensive sexual health programs and found no significant differences (p=0.65) in effects on teens initiating sexual activity; only comprehensive programs measured pregnancy outcomes. Usually the programs lasted less than two months, however, a few were offered over two school years. Students were typically middle school- to early high school-age and most programs were led by teachers who received training in the curriculum. An exception was abstinence-only programs, which were usually offered by trained outside facilitators and trained student peer-leaders. Programs in our meta-analysis included Draw the Line/Respect the Line (Coyle 2004), Safer Choices (Coyle 2001), Reducing the Risk (Barth 1992), Sexual Health and Relationships (Henderson 2007), Promoting Health Among Teens comprehensive education (Jermmott 2010), Project Taking Charge (Jorgenson 1991), McMasters Teen Program (Mitchell-DiCenso 1997), Randomized Intervention Trial of Pupil Led Sex Education (Stephenson 2008), It's Your Game: Keep It Real (Tortolero 2009), Managing Pressures Before Marriage (Blake 2001), For Keeps (Borawski 2005), Skills and Knowledge for AIDS and Pregnancy Prevention (Kirby 1997), and abstinence education (Treholm 2007).

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
Teen pregnancy (under age 18)	4	6130	0.121	0.080	17	0.102	0.029
Initiation of sexual activity	8	5474	-0.024	0.064	15	-0.063	0.410

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

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