

The Effectiveness of Teen Pregnancy Prevention Programs — a Meta-Analysis

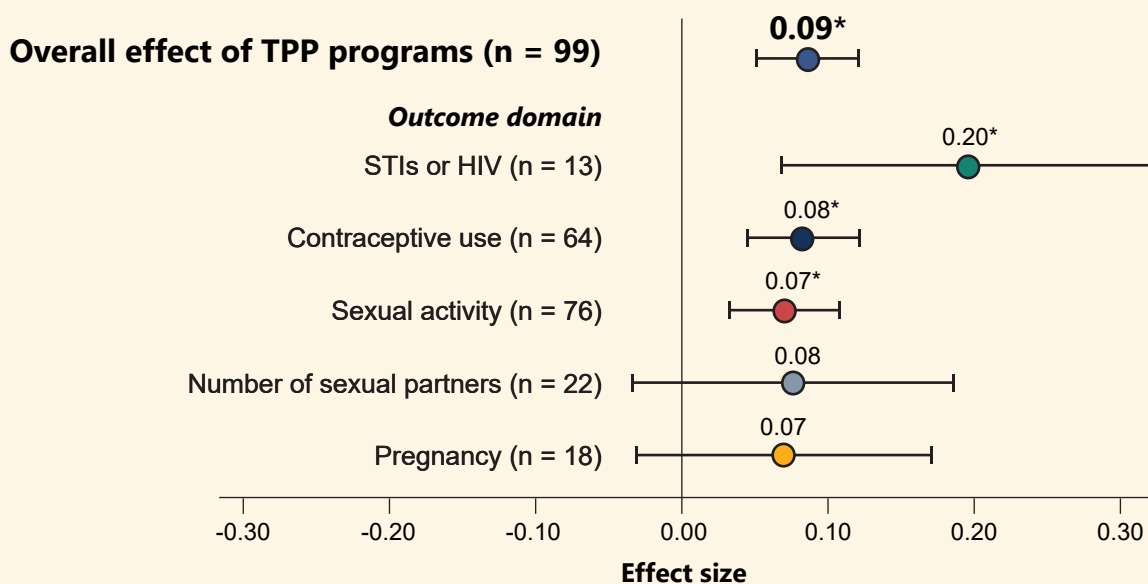
The Teen Pregnancy Prevention Evidence Review (TPPER) summarizes the magnitude of program impacts in studies that are deemed to have credible evidence. The TPPER conducted a meta-analysis of 99 high- or moderate- quality studies of 79 teen pregnancy prevention (TPP) programs, with data collected from more than 85,000 youth.

What did the meta-analysis find?



The average effect of TPP programs, when combined across all outcomes and findings, is positive and statistically significantly different from zero. On average, they have an effect size of 0.09, meaning a reduction of 4.3 percentage points in prevalence of risky sexual behavior from 50 percent to 45.7 percent.

The research also shows that for this set of TPP programs, the average effect size varies little by outcome domain, and the findings for STIs/HIV, contraceptive use, and sexual activity domains were statistically significant and positive.



*statistically significant

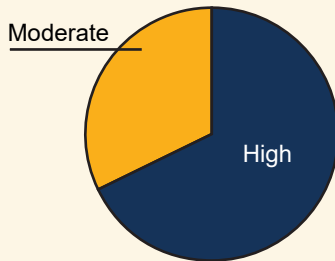
'n' refers to the number of studies contributing to the averages

The figure presents the average effect as a dot, and a 95 percent confidence interval as lines around the dot. Wider confidence intervals represent greater noise or uncertainty in the estimated average. When the line does not cross the vertical effect size line at 0, the average effect is statistically significantly different from zero. Additional findings are available in Cole et al. (2024), with details on the analytic approach in Streke et al. (2024).

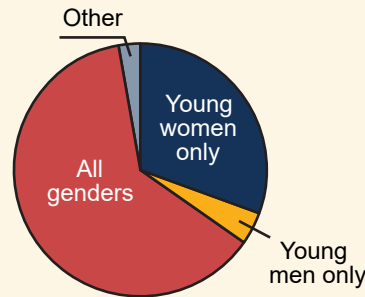
What types of studies were included?

The meta-analysis includes research where data was collected since 2004 because TPPER uses a 20-year window to define eligible research. The following pie charts provide a summary of the kinds of evidence included in the meta-analysis.

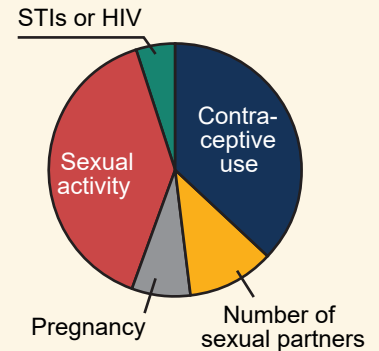
Study quality rating



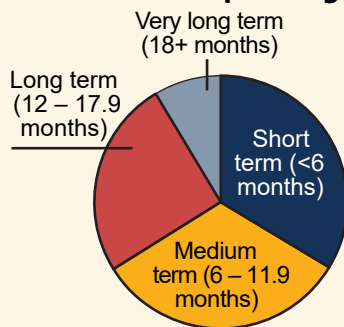
Sample characteristic



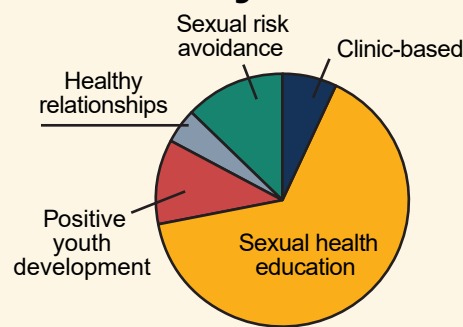
Outcome domain



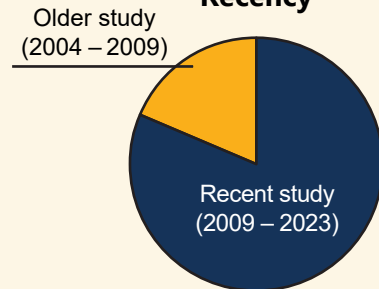
Follow-up timing



Program focus



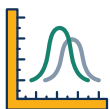
Recency



How might these meta-analytic findings be used by researchers?



Informing power calculations for prospective impact evaluations of TPP programs ([Moreno and Cole 2023](#)) – these meta-analytic findings can give researchers a sense of an average effect of a TPP program to use as a goal for their prospective study.



Conducting Bayesian interpretation of ongoing impact evaluations ([Deke and Finucane 2023](#)) – these meta-analytic findings can be used to calculate the probability that a program has a favorable effect under a Bayesian interpretation framework.

For more details

Cole, R., Lugo-Gil, J., and Streke, A., E. “The Effectiveness of Teen Pregnancy Prevention Programs – a Meta-Analysis.” U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, Office of Human Services Policy, December 2024.

Deke, J., and M. Finucane. “Bayesian Interpretation of Estimates.” Webinar and resources provided to Office of Population Affairs TPP Tier 2 Phase II Grantees, September 2022. Resources available at <https://rhntc.org/resources/bayesian-interpretation-estimates-webinar>.

Moreno, Lorenzo, and Russell Cole. “Calculating Minimum Detectable Impacts in Teen Pregnancy Prevention Impact Evaluations.” Evaluation Technical Assistance Brief no. 7. Submitted to the Office of Adolescent Health and the Administration on Children, Youth, and Families Teenage Pregnancy Prevention Grantees. Mathematica, November 2023.

Streke, A., E. Dench, J. Lugo-Gil, and R. Cole. “Meta-Analysis Report of Teen Pregnancy Prevention Evidence Review (TPPER) Studies: Technical Appendices.” U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, Office of Human Services Policy, December 2024.