

## "Nudge" attendance program Pre-K to 12 Education

Literature review updated September 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:** "Nudge" attendance programs are designed to reduce the school-to-parent information gap by sending routine messages to the student's parent or guardian. Typically, at least one parent/guardian receives timed messages about their students' absences, missing assignments, or class performance. The timing and frequency of the intervention vary across studies and outcomes. Schools using this intervention method most commonly inform parents/guardians when their student misses at least one day of school, one class assignment, or falls below a pre-determined performance threshold. Messages are sent weekly, bi-weekly, or monthly.

This analysis is restricted to studies that 1) are based in the United States, 2) use text messages to communicate with the parent/guardian, and 3) focus on middle and high school students. On average, students were 15 years old at the start of the intervention. Treatment lasted seven months.

### 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 |
| Grade point average | 1                   | 569         | 0.099                                   | 0.059 | 15  | 0.099   | 0.095   |
| School attendance   | 1                   | 569         | 0.124                                   | 0.059 | 15  | 0.124   | 0.036   |

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

Bergman, P.L.S., & Chan, E.W. (2017). *Leveraging technology to engage parents at scale: Evidence from a randomized controlled trial*. (Series: CESifo Working Paper ; No.6493.) Munich: Center for Economic Studies and Ifo Institute (CESifo).

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