

# INPLASY

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### What Works to Reduce Student Absenteeism? A Systematic Review of the Literature

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#### ADMINISTRATIVE INFORMATION

**Support -** Institute of Education Sciences, Smith Richardson Foundation.

Review Stage at time of this submission - The review has not yet started.

Conflicts of interest - None declared.

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**Amendments** - This protocol was registered with the International Platform of Registered Systematic Review and Meta-Analysis Protocols (INPLASY) on 10 April 2024 and was last updated on 10 April 2024.

#### INTRODUCTION

Review question / Objective The purpose of this study is to conduct a systematic review of absenteeism interventions that yields quantitative estimates of effectiveness of different interventions and provides guidelines about the types of interventions that may work best for different settings or student populations. It addresses the following research questions: (1) What types of strategies or interventions are most effective for reducing chronic absenteeism? (2) Do the effect sizes vary by subgroups or settings?

**Rationale** Even prior to the pandemic, there were significant concerns about students missing large numbers of school days, where national data suggested that nearly 16% of students were chronically absent. These rates have been exacerbated since the COVID-19 pandemic, and

chronic absenteeism has increased to 30% in some states from the years prior to the pandemic. Given this ongoing and heightened absenteeism crisis, many different interventions have been implemented and evaluated. However, for policymakers and district leaders deciding which chronic absenteeism intervention to implement, they may need more information than what currently exists. As policymakers and district leaders face an array of absenteeism strategies from which to choose, they need guidance about evidence-based approaches that will fit their specific contexts.

**Condition being studied** To find studies that will be included in the meta-analysis, our team will search electronic databases using key search terms such as "attendance, "absence," "absenteeism," "truancy," and "skipping/cutting school." Subscription and non-subscription

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databases will be searched, which include but are not limited to Academic Search Elite, IDEAS search engine, EBSCOhost, EconLit, Education Abstracts, ERIC, JSTOR, PsycInfo, Education Source, Psych Behav Sci Collection, SocINDEX, SSRN, NBER, Academic Search Premier, Web of Science, WorldCAT, NBER Working Papers, Dissertations Abstracts Database, and Cochrane Collaboration.

#### **METHODS**

**Participant or population** We will restrict our population to students enrolled in school settings in the U.S. in preschool through the twelfth grade. This criterion excludes postsecondary students, students in international settings, and students educated in home-school community settings or juvenile correction facilities.

**Intervention** The studies must examine absenteeism mitigation strategies.

Comparator Not applicable.

**Study designs to be included** We will limit our analysis to well-implemented randomized designs (i.e., with at least 350 participants conducted in more than one school), well-implemented quasi-experimental designs (i.e., with at least 350 participants conducted in more than one school), or correlational designs with statistical controls for selection biases.

**Eligibility criteria** We will limit our review to studies: (a) published in English from 2015 through the present; (b) examined student attendance data obtained through administrative records; and meets the study designs and populations described earlier.

Information sources Subscription and nonsubscription databases will be searched, which include but are not limited to Academic Search Elite, IDEAS search engine, EBSCOhost, EconLit, Education Abstracts, ERIC, JSTOR, PsycInfo, Education Source, Psych Behav Sci Collection, SocINDEX, SSRN, NBER, Academic Search Premier, Web of Science, WorldCAT, NBER Working Papers, Dissertations Abstracts Database, and Cochrane Collaboration. Grey literature will be included.

Main outcome(s) The review will provide a standardized effect size pooled across studies.

Additional outcome(s) Not applicable.

Data management Metareviewer software.

**Quality assessment / Risk of bias analysis** We will restrict the design to well-implemented randomized designs, well-implemented quasi-experimental designs, or correlational designs with statistical controls for selection bias (described earlier). This corresponds to Tiers 1, 2, and 3 under the Every School Succeed Acts levels of research evidence that are acceptable for interventions funded by the School Improvement Grants.

Strategy of data synthesis An efficient estimator of the mean of the true effects is the weighted average of the observed effect sizes, where the weight is the inverse of the squared standard error. The mean effect size estimate of the standardized regression coefficients (i.e., ( $\beta$ )) and the associated standard errors (i.e., SE( $\beta$ )) can be estimated by:  $\beta$  = ( $\sum [w_ijk \beta]$  \_ijk)/( $\sum w_ijk$ ) and SE( $\beta$ <sup>-</sup>) =  $\sqrt{(1/(\sum [w_ijk \beta]))}$ , where  $w_ijk=1/((v_ijk+\sigma^2))$ ) where  $\beta_ijk$  is the standardized regression estimate for the i^th effect size in treatment j for study k, v\_ijk is the squared standard error that is unique to each study, and  $\sigma^{(2)}$  represents the common between-study variance resulting from random effects pooling.

**Subgroup analysis** We will conduct a mixedeffects meta regression of the form:  $\theta_k = \alpha + \beta$ [[X]]\_k+ [[ $\epsilon$ ]]\_k+  $\zeta_K$  where  $\theta$  denotes the observed effect size for study k, X represents study characteristics,  $\epsilon$  indicates within-study sampling error associated with study k deviating from its true effect, and  $\zeta$  denotes a second source of error in which the true effect of study k is sampled from a distribution of potential effect sizes.

**Sensitivity analysis** It is possible that COVID-19 may have changed the way that students reacted to certain interventions or strategies. For example, multiple studies showed that many students indicated their mental health declined during the pandemic because of social distancing and school closures. This may mean that absenteeism mitigation efforts that focus on mental health or social connections to school may show particularly strong effects after the pandemic. We will explore this hypothesis via meta-regression.

**Language restriction** The search will be restricted to articles published in English.

Country(ies) involved United States.

Keywords Absenteeism; chronic absence.

**Dissemination plans** Infographics, conferences, peer-reviewed journal articles.

#### **Contributions of each author**

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