



Evidence in Action

A K20 Center Research Brief

STEM Success through Summer Bridge Programs

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Introduction

This intervention brief explores the findings from the research article titled "A Meta-Analysis of After-School Programs That Seek to Promote Personal and Social Skills in Children and Adolescents" by Joseph A. Durlak, Roger P. Weissberg, and Molly Pachan, published in 2010. The authors conducted a meta-analysis to evaluate the effectiveness of after-school programs (ASPs) in enhancing the personal and social skills of children and adolescents. The literature reviewed highlights the controversy surrounding the academic benefits of ASPs, particularly those funded by the 21st Century Community Learning Centers (21st CCLC). Despite mixed results from large-scale evaluations, the authors argue that ASPs can significantly improve self-perceptions, social behaviors, and academic performance, and reduce problem behaviors when they incorporate recommended practices for skill training.

Methodology

Research Design:

The study employed a meta-analysis approach, systematically reviewing and synthesizing findings from multiple studies to assess the overall impact of ASPs on various outcomes. The inclusion criteria required programs to aim at developing personal and social skills in youth aged 5 to 18, have a control group, and provide sufficient data for effect size calculation.

Sample:

The meta-analysis included 75 reports evaluating 69 different programs, with data collected from elementary, middle, and high school students. The programs varied in duration, with most lasting less than one year. Participants were predominantly from diverse ethnic backgrounds and varying socioeconomic statuses.

Data Analysis:

Effect sizes were calculated using standardized mean differences (SMDs) corrected for small sample bias and weighted by the inverse of their variance. The analysis employed a random effects model to account for variability across studies. Moderator analyses were conducted to examine the influence of recommended skill training practices (SAFE: Sequenced, Active, Focused, and Explicit) on program outcomes.

Results

The meta-analysis revealed that ASPs had a positive and statistically significant impact on participating youth. Key findings include:

- **Self-Perceptions:** Significant increases in self-esteem and self-concept (SMD = 0.34).
- **School Bonding:** Improved attitudes toward school and teachers (SMD = 0.14).
- **Positive Social Behaviors:** Enhanced social interactions and cooperation (SMD = 0.19).
- **Problem Behaviors:** Reduction in conduct problems and aggression (SMD = 0.19).
- **Academic Performance:** Improved achievement test scores (SMD = 0.17) and school grades (SMD = 0.12).

Programs that incorporated all four SAFE practices yielded significantly better outcomes across multiple domains compared to those that did not.

Application into Practice

To replicate the intervention in a school context, the following steps are recommended:

1. **Program Design:** Develop a structured after-school program that includes activities aimed at enhancing personal and social skills. Ensure the program is sequenced, active, focused, and explicit in its skill training approach.
2. **Staff Training:** Train staff to implement SAFE practices effectively. Provide ongoing support and supervision to ensure fidelity to the program design.
3. **Participant Engagement:** Encourage consistent attendance and active participation. Monitor engagement levels and adjust activities to maintain interest and motivation.
4. **Evaluation:** Conduct regular assessments to measure program impact on self-perceptions, social behaviors, academic performance, and problem behaviors. Use reliable and valid outcome measures.

Work Cited

Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology*, 45(3-4), 294-309.
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