

MATHEMATICS RTI/MTSS IMPLEMENTATION: A LITERATURE REVIEW FROM THE PERSPECTIVE OF IMPLEMENTATION SCIENCE

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Abstract

This article reviews published research on implementing the Response to Intervention (RTI)/Multi-tiered System of Support (MTSS) educational framework in mathematics at schools. We utilized the Implementation Driver framework from Implementation Science (Eccles & Mittman, 2006) to analyze current RTI/MTSS implementation practices. Eleven studies qualified to be included in this research. Findings showed more research is needed to expand the investigations in implementation fidelity, systems intervention, facilitative administration, decision-support data systems, coaching, and selection driver.

Introduction

Mathematics has long been considered a cultural imperative. The MTSS framework, which includes mathematic intervention in its academic support system, holds considerable potential for improving student outcomes (Jimerson et al., 2016). Regardless of the continuing efforts from researchers to employ RTI/MTSS in improving students' academic performance, promising interventions from controlled research failed to be implemented in authentic school contexts and hardly helped at-risk students (Schumacher et al., 2017). Implementation Science works to bridge the gap between research and practice (Eccles et al., 2006).

Results and Discussion

The most frequently mentioned implementation driver (ID) is Competency Driver. Within the Competency Driver, the sub-driver Training was the most studied ID ($n = 8$), followed by Selection ($n = 4$), Coaching ($n = 3$), and Fidelity ($n = 1$). Leadership Drive is the next studied ID ($n = 4$). Organization Drivers were the least mentioned aspects of the school's tiered support system.

While much research has provided examples at the elementary school level, the field has inadequate research in secondary school settings (Bartholomew & de Jong, 2017). Fidelity Driver and Systems Interventions Driver need more effort from the research field to improve the systematic implementation of the tiered support system.

References

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