



Children's School Success: Relative Effects in High and Low Implementation Classrooms

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Children's School Success (CSS) is a national, multisite study of a preschool readiness curriculum for 4-year-old children who are at-risk for failure in the early elementary years. The purpose of the curriculum is to promote the academic and social performances of children during a preschool year. In this study, teachers varied in the degree to which they implemented the curriculum. The primary research question in this study was: Are their differences in child outcomes on academic and social measures for children who participated in low and high implementation classrooms?

METHOD

Participants in this study were 234 children (120 boys) living in low income communities, children who were English language learners, and/or children with identified disabilities. Children were four years old and qualified for kindergarten the year after their participation in the study. These children were enrolled in 18 classrooms located in CA, KS, IN, WV, and MD.

In this study, teachers served as their own controls. The first year they participated in the study, they were in a control condition and the second year they were in the implementation condition. In the control condition, teachers followed the curriculum in place in their program. In the implementation condition, all teachers participated in initial training and also received coaching once a week from research staff. Fidelity of implementation was assessed by research staff who observed in the classroom. Staff completed a rating measure seven times during the year and at the end of the year documented the percentage of the curriculum completed by the teachers.

From the larger experimental study, a subset of teachers were identified as high and low implementers. This identification was established through a qualitative analysis (see Lieber et al., 2008) and then verified by the quantitative fidelity of implementation data. Twenty-two teachers were identified as high implementers and 11 teachers were identified as low implementers in the qualitative study. Of these teachers, we had complete data (both control and implementation data) for 13 high implementers and 5 low implementers, which we analyzed for this study.

MEASURES

All children were assessed at the beginning of the year and again at the end of the year on the following measures:

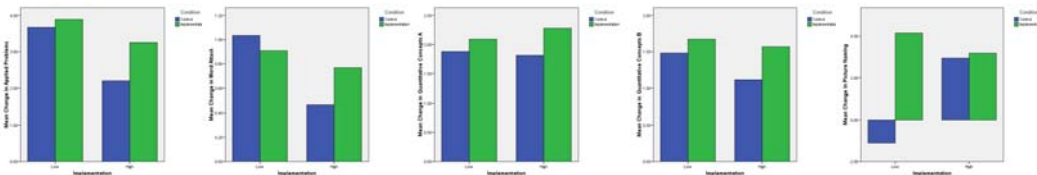
- Peabody Picture Vocabulary Test-III
- Woodcock Johnson (WJ) Word Attack
- WJ Letter/Word Identification
- WJ Quantitative Concepts A
- WJ Quantitative Concepts B
- WJ Applied Problems
- Purdue Emergent Writing
- Minnesota Picture Naming
- Social Skills Rating System (SSRS) Cooperation
- SSRS Assertion
- SSRS Self Confidence
- SSRS Externalizing
- SSRS Internalizing

ANALYSES

Pretest to Posttest Change Scores were computed for each dependent variable for teachers in their control and implementation years. Both multi-level and single level (child as unit) analyses were conducted and yielded similar results. Child-level analysis are presented here.

ACADEMIC VARIABLES

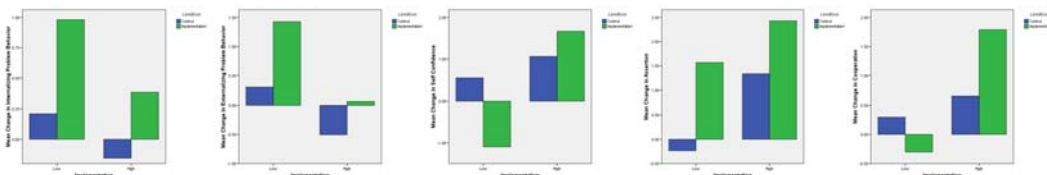
Variable	Signif. Condition Low Implement.	Partial Eta squared LOW IMPLEM	Signif. Condition High Implement.	Partial Eta squared HIGH IMP
Letter/Word ID	.53	.004	.60	.001
Applied Problems	.77	.001	.016	.025
Word Attack	.63	.002	.02	.022
Quantitative A	.59	.003	.055	.016
Quantitative B	.65	.002	.096	.012
PPVTS	.22	.014	.22	.006
Emergent Writing	.92	<.001	.84	<.001
Picture Naming	<.001	.12	.73	.001



For this analysis, only the SSRS was used as a social outcome variable. We conducted a factor analysis to determine subcomponents of SSRS for this population. Scores for items that loaded on specific factors were used to create subtest scores.

SOCIAL VARIABLES

Variable	Signif. Condition Low Implement.	Partial Eta squared LOW IMPLEM	Signif. Condition High Implement.	Partial Eta squared HIGH IMP
Cooperation	.31	.01	.009	.03
Assertion	.017	.05	.039	.02
Self-Confidence	.03	.045	.18	.008
Externalizing	.036	.040	.029	.021
Internalizing	.018	.05	.001	.05



CONCLUSION

For academic variables, the curriculum use generated significant but small effect sizes for children who were in high implementation classes on selected academic variables and significant but small effect sizes on the SSRS subscale for children in both high and low implementation classes. The next step in this analysis will be to determine effects for children with particular characteristics.