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Meta-analysis of the relationship between home and family experiences and young children's early numeracy learning.

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Summary: This chapter includes analyses of the relationships between informal and formal home and family early numeracy learning experiences and preschool children's mathematics performance. The research synthesis consisted of 13 samples of children between 36 and 84 months of age (Median age = 69 months). The 13 samples comprised more than 5000 children and their parents or other primary caregivers. Results showed that variations in the children's early numeracy experiences are associated with variations in the children's mathematics performance. The various analyses of the relationships between the early numeracy experiences measures and children's mathematics achievement also showed that informal learning opportunities are better predictors of children's mathematics achievement compared to formal teaching activities, and that the types of experiences afforded children as young as three years of age are beneficial in terms of explaining variations in the children's mathematics achievement. Implications for both research and practice are described.

Classification: C31 C61 D41

Keywords: numeracy experiences; informal and formal learning opportunities; toddlers and preschoolers; mathematics performance; meta-analysis

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