

Math in Everyday Life: Home Math Activities, Math Talk, and Young Children's Math Learning

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Abstract

Parents often provide learning experience to stimulate their children's acquisition of school-related skills. Many studies have linked the general quality of home environments and various specific aspects of parent-child interactions and activities to children's early learning, especially early literacy. However, much less research pertains to parent-child interactions and activities that are relevant to children's acquisition of early math skills. Among a variety of activities that parents engage in to support their young children's math learning, a series of studies conducted in my laboratory identified the frequency of math application activities as a unique and persistent predictor of children's math trajectories from preschool to primary school. Additionally, we found that it might be parents' math application talk, which was embedded in math application activities, that made these activities so predictive of children's math learning outcomes. These findings suggest that parent-child interactions around math content that is related to children's real lives may play an important role in their math learning and development.

BRIEF BIOGRAPHY

Dr. Xiao Zhang is Associate Professor in Educational Psychology in the Faculty of Education at the University of Hong Kong. His research interests include children's mathematics learning and mathematics learning disability. His work appears in the leading journals such as *Child Development*, *Journal of Educational Psychology*, *Learning and Instruction*, and *Developmental Psychology*. He has been Associate Editor for *Early Childhood Research Quarterly* since 2016. He is now the chair-elect of the *Mathematical Cognition and Learning Society*.