

Executive functions (EF) is a set of high-order cognitive skills responsible for directing our own thoughts and behaviors. EF plays a crucial role in all aspects of academic and social-behavioral achievements. Since home education is critical to a child's growth, it is important for parents to provide children with a home environment that best supports their EF development. However, researchers have yet to identify effective ways to help parents foster an EF-stimulating home environment.

The current project examines the use of parent-child shared book reading to nurture EF skills among preschoolers. Shared reading is one of the most popular educational tools widely adopted by parents around the world. However, the potential effect of shared reading on stimulating EF skills was not well studied. We take the initiative to identify the types of shared reading behaviors of parents (stimulation, scaffolding, sensitivity, control) that are specifically related to EF. A three-year longitudinal study will be conducted in which 250 Chinese preschool children (aged 3.5 to 5.5) and their parents will participate. We aim to examine the unique contribution of parental behaviors to children's EF and the mechanism(s) that underlie such contribution over time. Moreover, a theoretical model demonstrating the structural relationship among shared reading behaviors, EF skills, and later academic and behavioral outcomes of children is constructed and examined. Given the complexity of human cognition, the interplay between EF skills and other cognitive mechanisms (language, theory of mind, and problem-solving) are also considered in the theoretical model. The findings are expected to provide a novel and comprehensive understanding of the relationship between parent-child shared reading and EF skills.

The present study aims to provide initial empirical support for the use of shared reading for EF stimulation. With such a theoretical foundation, further exploration of the practical effectiveness of shared reading intervention in promoting EF could be conducted in the future. Since parent-child shared reading is already embedded in daily family life and requires low cost to implement, the practical implications of this project may benefit families from diverse socioeconomic backgrounds.