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**Topic: Cognitive & Developmental Abstract**

**Economic Hardship and Early Childhood Academic Achievement: The Role of Parenting, Cognitive Function and Delay of Gratification**

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**Objectives:** This paper aimed to examine how economic hardship influences children's cognitive function and academic performance through parental emotional and cognitive ability, parenting practices and Delay of Gratification (DoG).

**Design:** A two-wave national study "Singapore Early Childhood Development Longitudinal Study (SGLEADS)" was designed to investigate the factors shaping child development in Singapore, by interviewing 5000 children below 7 years old and their primary caregivers.

**Methods:** A subset of the nationally representative sample, 759 children (n = 2700 by September 2019) aged 3-6 years completed a DoG task, Working Memory (WM) Tasks, and Woodcock-Johnson Tests of Achievement on Reading and Math. Parental cognitive ability was assessed by a passage comprehension test. Economic hardship, psychological distress, harsh punishment, parents' rules and cognitive stimulation were self-reported. Structural Equation Modelling was used to test the proposed model.

**Results:** Economic hardship negatively affected children's academic performance through primary caregiver's increased psychological distress and decreased cognitive ability. Increased harsh punishment and fewer enforced rules reduced children's ability to delay gratification, through which further lowered children's WM and Math scores. Moreover, worse WM predicted worse performance in Reading and Math. In the cognitive path, cognitive stimulation provided by parents partially mediated the positive influence of parental cognitive ability on children's WM, which further improves children's Math and Reading.

**Conclusions:** Economic hardship affects children's academic performance and cognitive functions through parental stress and cognitive stimulations. They were also associated with children's delay of gratification, which can be enhanced by enforced rules set by parents and reduced harsh punishment.