Abstract

This study examined the direct and indirect relationships between playfulness (social and cognitive spontaneity), executive functions, convergent thinking, divergent thinking, and academic skills in Hong Kong Chinese kindergarten children. Participants were 181 second-year (4 to 5 years) kindergarten children (45.9% boys) and their parents. Parents reported demographic information and children’s playfulness and executive functions through a questionnaire. Children were administered behavioral assessments of convergent thinking, divergent thinking, Chinese word reading, and number word comparison at their kindergarten. Results from a path analytic model revealed the mediating roles of convergent and divergent thinking in the relationship between playfulness and number word comparison. In contrast, convergent thinking mediated the link between playfulness and Chinese word reading. Executive functions were positively related to playfulness but unrelated to children's academic skills. The findings suggest that playful children might develop better creative thinking processes, supporting their academic skills. Practically, the findings underscore the importance of play-based learning in developing children’s creativity and academic skills in the early years.

**Keywords:** playfulness, executive functions, convergent thinking, divergent thinking, academic skills, kindergarten children