

### Abstract

Many studies have investigated factors and correlates of children's academic achievement such as home learning environment (HLE). However, few have explored the effect of sibling interactions and parenting styles on HLE and indirect effect on children's academic achievements. This study examined the direct and indirect effects of sibship size and authoritative parenting style on HLE and academic achievement in a sample of 103 Hong Kong Cantonese-speaking children ( $M_{age} = 83.88$  months). The participants were assessed on Chinese word reading accuracy and fluency, English word reading accuracy and fluency, and mathematics calculation accuracy and fluency. Parents self-reported HLE for literacy and numeracy (direct teaching, parent-child interactions, and access to learning resources), authoritative parenting style, sibship size, and family socioeconomic status through a questionnaire. Results showed that sibship size negatively predicted Chinese reading, mathematics, and overall academic achievement. Authoritative parenting style positively predicted parent-child interactions for literacy and numeracy. Sibship size and authoritative parenting style did not indirectly predict academic achievement. These findings suggest the importance of family factors when examining relations between home learning environment and children's academic achievement in Asian contexts.

*Keywords:* Home learning environment, sibship size, authoritative parenting style, academic achievement