

### **Abstract**

The Chinese literacy is far different from English in terms of orthographic features. The present study is interested in whether the unique orthographic features of Chinese literacy requires specific developmental skills in literacy acquisition. Three clusters of measures, which include working memories, pure copying and sensorimotor were identified relevant and administered to 216 kindergarteners in Hong Kong longitudinally at age of 5 and 7 respectively. In hierarchical regression, the three clusters only produced significant effects on Chinese literacies but not English. In particular, the sensorimotor cluster produced significant effect only on Chinese writing, which was probably affected by the differences in mechanism between reading and writing. Further exploration on interaction among the clusters suggested that visual motor integration may affect Chinese literacy acquisition by a mediation route of copying clusters. The initial hypothesis that some skills highly relevant to orthographic features of literacy were exclusively more critical for Chinese literacy acquisition was substantiated. From a developmental perspective, these orthographic-related variables should be weighted as critical as traditional cognitive linguistic variables in Chinese literacy acquisition of children and respective interventions. Issues related on future research directions regarding these variables and implications on revamping intervention are discussed.

*Keywords:* Literacy acquisition, Chinese orthographies, Early predictors, Visual Motor Integration, Copying