

Abstract

Reading comprehension is conceptualized as the capacity to extract or construct an appropriate mental representation or situational model from written text (Hoover & Gough, 1990). As one of the most influential models in the field, the Simple View of Reading (SVR) postulates that reading comprehension (R) is a product of decoding (D) and linguistic comprehension (L) skills, and can be expressed as: $R = D \times L$ (Gough & Tunmer, 1986; Hoover & Gough, 1990). A recent Direct and Indirect Effect Model of Reading (Kim, 2017) expanded the SVR and revealed that word reading and linguistic comprehension completely mediated the relationship of language and cognitive skills to reading comprehension. That is, language and cognitive skills predict reading comprehension completely through word reading and linguistic comprehension. The proposed study investigates the direct and indirect associations of executive functioning (i.e., working memory, inhibitory control, and cognitive flexibility), lexical quality (i.e., morphological awareness, orthographic awareness), with word reading and linguistic comprehension, in predicting reading comprehension among Chinese primary school grade 3 students across Hong Kong (with inconsistent oral-written language arising from linguistic distance (differences between spoken and written languages)) and Shenzhen (with perfectly consistent oral-written language). Three possible models are hypothesized. First, executive functioning predicts reading comprehension directly beyond word reading and linguistic comprehension. Second, executive functioning predict reading comprehension indirectly through lexical quality, word reading and linguistic comprehension. Alternatively, there may be both direct and indirect roles of executive functioning in Chinese reading comprehension. Given previous literature (Chung & McBride-Chang, 2011; Kim, 2017), the second or third possibility involving indirect effects is more likely to be supported. Notably, we expected that executive functioning likely plays a more salient role in reading comprehension in Hong Kong than in Shenzhen, because linguistic distance may heavily tax cognitive resources. The study can impact the field in three aspects. First, it potentially establish executive functioning as a fundamentally essential component in the reading theories. Second, with the evidence from a deep orthography (i.e., Chinese), it contributes to the understanding of the role of writing system variation in reading universally (Daniels & Share, 2018). Third, it leads ultimately to a better understanding of reading comprehension challenges in the Hong Kong context arising from the linguistic distance. Findings of the project offers important implications on effective practice in education in Hong Kong, particularly on how linguistic distance taxes cognitive resources in language learning.