Abstract

Working Memory (WM), as defined by Baddeley et al. (2021), is "a limited capacity system for the temporary maintenance and processing of information in the support of cognition and action" (p.10). Acknowledging the pivotal role of WM, it becomes evident that the disorders in this cognitive system will impact language processing. This meta-synthesis delves into the intricate relationship between WM and second language (L2) reading comprehension with a specific focus on its relevance for Grade 9-12 students engaged in the acquisition of Mandarin Chinese as an L2 within the context of English medium international schools in Thailand. This systematic review of literature presents a comprehensive synthesis of existing research literature spanning from 2004 to 2023, synthesizing key findings to shed light on the cognitive process underlying L2 reading comprehension within an inclusive educational setting. Research findings reveal that the phonological and visuospatial components of WM have been found to significantly influence L2 reading comprehension outcomes, with individual differences playing a crucial role in shaping these effects. Despite the limitations, the research empowers educators with practical insights to optimize Mandarin Chinese L2 comprehension outcomes of a diverse group of students in an inclusive learning environment.

Keywords: working memory, second language learning, L2 reading comprehension, Mandarin, Chinese, literature review