The influences of language background on Chinese phonological awareness and Pinyin spelling skills in English and Arabic learners of Chinese as a second language

Research has established the significance of phonological awareness in children acquiring literacy in English and Chinese (Li, Shu, McBride-Chang, Liu, & Peng, 2012; Melby-Lervåg, Lyster, & Hulme, 2012; Swanson, Trainin, Necoechea, & Hammill, 2003). Studies on learners of English or Chinese as a second language (L2) show that the native language strongly influences the development of phonological awareness and in turn, word spelling skills in the L2 (Branum-Martin, Tao, & Garnaat, 2015; Gao, 2001). The current study further investigates this topic and focuses on the influence of English and Arabic on both phonological awareness and Pinyin spelling skills in Chinese L2, with learners at different levels of proficiency.

Four adult CSL learner groups participated, two pre-intermediate and two intermediate proficient English and Arabic CSL learners, all living in their native countries and studying Chinese as a major subject in the universities.

The questionnaires and research tools include (1) LLAMA-D and LLAMA-E (Meara, 2005) tests to examine phonological aptitude, (2) a short HSK test to test Chinese proficiency, (3) a questionnaire to test Chinese phonological awareness, and (4) a list of two-Hanzi words in order to test Pinyin spelling skills.

The results for phonological awareness revealed main effects of language background: the English group performed better in syllable awareness, onset awareness and overall phonological awareness than the Arabic group. The main effects of Chinese proficiency were not found. However, language background and Chinese proficiency interacted in syllable awareness, tone awareness and overall phonological awareness. Linear regressions found that language background, listening skills and LLAMA-E were the significant factors in accounting for the variance in different levels of phonological awareness.

The results for Pinyin spelling found main effects of language background in spelling onset, rhyme and syllable, and again, English speakers performed better than Arabic speakers overall. In addition, the main effects of Chinese proficiency were found in spelling rhyme, tone and syllable, in which intermediate group achieved higher accuracy rates than pre-intermediate group did. No interaction effects between language background and Chinese proficiency were found. Linear regressions showed that language background, listening skills and LLAMA-E uniquely explained the variances in spelling different levels of Pinyin.

This study implies that native language influences the development of Chinese phonological awareness and Pinyin spelling acquisition in different ways among English and Arabic CSL learners, likely to be caused by the typological distance between native language and target language. As for the acquisition of tone that is absent in both English and Arabic, phonological aptitude seems to be a significant factor. This study is of practical and theoretical importance for Chinese teaching and research on cross-language transfer.

References


