Relative effectiveness of phonological and morphological awareness training on L2 word reading in EFL children

Yi-syuan Li, Shu-hui Chen

Article info
Article history:
Received 5 December 2015
Received in revised form 30 May 2016
Accepted 13 June 2016
Available online 23 June 2016

Keywords:
L2 phonological versus morphological awareness training
L2 word reading

Abstract
This study investigates the relative effectiveness of phonological and morphological awareness training on Taiwanese EFL children’s English word reading, involving real and pseudo-words with morphologically simple and complex structures, through an experimental design with three groups of 60 children. One intervention group received phonological awareness training while the other received morphological awareness training. The intervention lasted 40 min per week for 12 weeks. The control group received a regular program without intervention. The three groups had similar initial English proficiency levels before the intervention. Data were collected by assessing the participants’ English word reading before and after the intervention and were analyzed by ANOVAs. Results indicated that both intervention programs significantly improved post-test word reading to a similar extent, irrespective of word type and word structure. Nevertheless, only the phonological training program yielded a significantly better effect on the posttest L2 word reading than the regular instruction. Irrespective of word structure and group, the participants as a whole performed better in posttest real word than in pseudo-word reading. However, the phonological training displayed a significant better impact on pseudo-word than on real word reading, irrespective of word structure and test-time. The findings are discussed from psycholinguistic, literacy, and cross-linguistic perspectives.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

The importance of reading words aloud has been highlighted in previous studies as a necessary component of proficient reading during children’s literacy development (Coltheart, 2006; Ehri, 2005; Roman, Kirby, Parrila, Wade-Woolley, & Deacon, 2009; Verhoeven, Reitsma, & Siegel, 2011). Studies have suggested that children’s phonological and morphological awareness is associated with reading development (Carlisle, 2000; Goswami, 2008; Kirby et al., 2012; Melby-Lervåg, Lyster, & Hulme, 2012). To test the causal relationship between children's linguistic awareness and word reading, researchers have investigated whether phonological and morphological awareness training facilitate children’s word reading (Ehri, 2011; Nunes, Bryant, & Olsson, 2003).

* Corresponding author.
E-mail addresses: ysis95@gmail.com (Y.-s. Li), shuchen@ms7.hinet.net (S.-h. Chen).
Prior research has reported that phonological awareness training facilitates alphabetic L1 children’s word reading (Hatcher, Hulme, & Snowling, 2004; Shapiro & Solity, 2008). Nevertheless, the results of morphological awareness training were divergent in alphabetic languages, with different orthographic depth in children of different ages (Casalis & Colé, 2009; Lyster, 2002; Nunes et al., 2003). Drawing on the L1 studies, L2 intervention research has suggested that L2 phonological awareness training also helps facilitate real and pseudo word reading in alphabetic ESL children (Quiroga, Lemos-Britton, Mostafapour, Abbott, & Berninger, 2002), and logographic EFL children’s pseudo word reading (Chu et al., 2007; Sun, Zhou, & Zhu, 2013). In addition, L2 morphological awareness training has also been found to benefit alphabetic EFL children’s reading development (Zhang, 2016).

Although there is evidence for the effectiveness of L2 phonological or morphological awareness training on L2 word reading, research on the effect of the latter on logographic EFL children’s word reading is sparse. In addition, there is a dearth in the intervention research addressing the relative effectiveness of L2 phonological and morphological awareness training on logographic EFL children’s reading. Moreover, in view of the influence of cross-linguistic variations in orthography and processing style (Koda, 2000; Kuo & Anderson, 2006; Perfetti & Dunlap, 2008; Verhoeven & Perfetti, 2011), as discussed in different theories and models of word reading development (Coltheart, 2006; Ehri, 2005; Perfetti, Zhang, & Berent, 1992), the findings of previous interventional studies should not be generalized to logographic EFL children. Furthermore, understanding of the intervention effects on word reading has been further hindered by the inconsistency of word reading measures involving disparate word types and structures, two influential variables (Coltheart, 2006). For these reasons, the present study investigates the relative effectiveness of L2 phonological and morphological awareness training on logographic EFL children’s word reading by adopting a more complete set of word reading measures to assess concurrent reading of real and pseudo words with morphologically simple and complex structure.

2. Literature review

2.1. Phonological and morphological awareness in word reading

Word reading refers to competence in transferring printed information into oral sounds (Coltheart, 2006), and it plays a crucial role on the path to becoming successful readers at all levels of literacy. To learn to succeed in word reading, children need to apply phonological and morphological awareness (Carlisle, 2004; Ehri, 2011; Kirby et al., 2012).

Phonological awareness represents the ability to “reflect upon and manipulate phonological units in a language and may entail sensitivity to the phonological structure of the language” (Kuo & Anderson, 2008, p. 42). Goswami (2000) proposed three levels of the skill, including syllable awareness, onset (i.e., the consonants occurring before the vowel in a syllable) and rime (i.e., the vowel and the following consonants) awareness, and phoneme awareness, which have been shown to help facilitate children’s early reading (Castles & Coltheart, 2004; Hulme, 2002; Mann & Wimmer, 2002).

Nevertheless, English adopts a morpho-phonemic system, in which the representations of the words are in accordance with the combination of a morphemic and a phonemic principle (Reed, 2008). Hence, in addition to phonology, morphology also plays an influential role. It has been reported that children who are aware of morphological knowledge are able to utilize morphemes as the units of meaning to facilitate reading of morphologically complex words (Carlisle & Stone, 2005). In particular, morphological awareness, which refers to children’s awareness of the morphological structure of words and their ability to reflect upon and manipulate morphemes (Carlisle, 2000), has been shown to be associated with real and pseudo word reading of multi-morphemic words (Nagy, Berninger, & Abbott, 2006; Nunes & Bryant, 2011; Wolter, Wood, & D’Zatko, 2009).

2.2. L1 studies on the effects of phonological and morphological training on word reading

Prior L1 interventional studies have been conducted to address the effects of phonological and morphological training on word reading (Hatcher et al., 2004; Shapiro & Solity, 2008). An intervention study by Shapiro and Solity (2008) reported that phonological awareness and phonics training within whole class teaching were effective to help improve reading performance for both normally developing English-speaking children from UK and those with poor phonological awareness. Furthermore, morphological awareness intervention has also been shown to help improve word reading in alphabetic L1 context (Kirk & Gillon, 2009; Nunes & Bryant, 2011; Reed, 2008). For example, Vadasy, Sanders, and Peyton (2006) found that the training on the structural analysis of inflected (e.g., -s, -ed, and -ing endings), affixed (e.g., dis-, mis-, re-, pro-, ly) and multi-syllable words helps English-speaking second graders improve their gains in real and pseudo-word reading efficiency measures.

Prior studies have also investigated the relative effectiveness of phonological and morphological awareness training on word reading of different word types in alphabetic languages of both relatively shallow orthography such as Norwegian and French (Casalis & Colé, 2009; Lyster, 2002) and deep orthography such as English (Nunes et al., 2003) with diverging results. For example, Lyster (2002) found that Norwegian 4-year-old kindergarteners performed better in posttest word reading after morphological training than the control and phonological awareness groups and that the impact lasted even to the end of the first grade. However, Casalis and Colé (2009) reported that morphological awareness training with a focus on derivational morphology by oral instruction without any print exposure was shown not to exert significant influence on later first-grade
دانلود مقاله

http://daneshyari.com/article/372890