

Abstract

Effects of phonological overlap on Cantonese di-syllabic word production in normally developing and dyslexic children were investigated using the implicit priming paradigm. Participants were instructed to name aloud picture stimuli presented sequentially. In each block of experimental trials, all target picture stimuli either had the same or different first atonal syllable. Null interaction effect was found between subject group (normal vs. dyslexic) and target relatedness (homogenous vs. heterogenous). Yet, a marginally significant phonological priming effect was observed on naming latencies, with homogenous stimuli eliciting faster naming responses for both normal and dyslexic children than heterogenous ones. The result lent support to the principle of serial phonological encoding in Cantonese spoken word production, attesting to the paramount importance of syllable unit in Cantonese phonological encoding (Wong & Chen, 2008; Wong, Huang, & Chen, 2012). Normally developing children in general were observed to be more accurate and faster in naming pictures than dyslexic children. Significant group main effect in naming reaction time was commensurate with results from previous studies, documenting that dyslexic children in general required longer naming latencies than age-matched normal children. Furthermore, phonological facilitation effect in naming latencies for dyslexic children was found to be comparatively lower than that for normal children. Intriguingly, when dyslexic children responded to homogenous stimuli, a statistically significant linear relationship between