Grammatical development in L1 Cantonese in bilingual children in Hong Kong: early costs and long-term convergence

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Abstract

Bilingual children who develop their L1 as a minority/heritage language in monolingual societies have been reported to perform lower than monolingual children in toddlerhood or experience early stagnation in preschool years (Byers-Heinlein et al., 2023; Sheng, 2014). Yet, it is still unclear whether such findings can be extended to bilingual children whose L1 is the majority language in multilingual societies. This study investigated to what extent early bilingualism before the age of 3 leads to slower-than-monolingual development in L1 Cantonese in Cantonese-English bilingual children raised by Cantonese-L1 parents in Hong Kong.

The data are drawn from the newly established Early Additive Child Multilingual Corpus (EACMC) and the accompanying dataset (Mai et al., in prep). At Time 1, 52 children and their caretakers were interviewed and recorded to generate measures of language proficiency and input properties at 3;0, using tools such as parental interview, CDI, and speech samples from caretaker-child standard toy play. The speech samples were analysed for MLUw and innovatively scored for 62 grammatical constructions following a modified version of the Grammatical Analysis of Cantonese Sample (GACS, Wong et al., 2022). At Time 2, 22 of the children completed a battery of vocabulary, narration and intelligence tests at 5;8.

Analysis of Cantonese speech samples shows that compared with children who were monolingual at Time 1 (n = 21), children who were already bilingual at Time 1 ("early bilinguals", n = 31) displayed reduced complexity in their Cantonese utterances at 3;0 (ps < .05). Fine-grained scores of GACS shows that they produced less diverse verbs and post-verbal particles encoding results, direction and quantification (all ps < .05). However, at Time 2, the early bilinguals demonstrated significant growth in grammatical complexity, performing on par with their monolingual peers across transcript-based measures. Combined, our results showed an early cost of the L1 in developing bilingualism in toddlerhood, consistent with the immigrant bilingual children in the literature. Nevertheless, bilingual toddlers can benefit from the continuous and rich L1 exposure in the society and converge with the monolinguals at preschool age, which is rarely applicable to heritage children in monolingual contexts.

Key references. Byers-Heinlein, K., Gonzalez-Barrero, A. M., Schott, E., & Killam, H. (2024). Sometimes larger, sometimes smaller: Measuring vocabulary in monolingual and bilingual infants and toddlers. *First Language, 44*(1), 74-95. Sheng, L. (2014). Lexical-semantic skills in bilingual children who are becoming English-dominant: A longitudinal study. *Bilingualism: Language and Cognition, 17*(3), 556-571.