Narrative Macrostructure Profiles of Cantonese-English Bilingual Children and Contributing Factors

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Abstract

This study investigates oral narrative macrostructure (overall story structure and complexity) in Cantonese-English bilingual preschool children. Previous research has indicated cross-language transfer of macrostructural skills in bilinguals (Bohnacker, 2016), but they focused on Indo-European languages, with mixed evidence regarding the influence of language skills (Bohnacker et al., 2022; Lindgren & Bohnacker, 2022) and language input (Haman et al., 2017; Tribushinina et al., 2022). Our study explores macrostructure in Cantonese-English bilingual children and investigates the role of linguistic skills and language input on macrostructure development across languages.

This study involves 25 Cantonese-English bilingual children selected from the Early Additive Child Multilingual Corpus and the accompanying dataset. At age 3;0, these children engaged in 10-minute standard toy play sessions with their mothers, video-recorded remotely via Zoom and transcribed for analysis such as the number of different words used (NDW). At age 5;8, the same cohort underwent direct language and cognitive assessments in the laboratory, including a storytelling task using the Multilingual Assessment Instrument for Narratives (MAIN, Gagarina et al., 2019; Chan et al., 2020). Their narratives were analysed for Story Structure (SS) elements—setting, internal states, goals, attempts and outcomes—as well as Story complexity (SC), which combines goals, attempts and outcomes into episodes. Language input and proficiency measures obtained at 3;0 and 5;8 were included in our analysis.

Results show that macrostructural skills were correlated between the two languages of the bilingual children (SS: r_s=.79, p<.001; SC: r_s=.414, p=.004). SS scores were higher in Cantonese than English (z=2.045, p=.041), while SC scores did not differ. Children showing greater lexical diversity at age 3;0, as indicated by a larger NDW, achieved higher SS scores in English at 5;8 (r=.515, p=.04). Additionally, those exposed to higher-quality Cantonese input (a weighted index of nativeness and exposure level) showed higher Cantonese SS scores (r_s=.4, p=.048). Consistent with prior research, our results indicate cross-linguistic transfer of macrostructural skills in bilingual children. We extend existing evidence by demonstrating positive influence of linguistic proficiency and input quality on narrative development. These novel findings underscore the vital influence of early language skills and input in shaping bilingual narrative development. (350 words)

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