Telling a good story: Age, gesture use, and bilingualism/monolingualism as predictors of preschool children's macrostructure

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Abstract

Learning to tell a good story is a critical academic skill for children. As children get older, they generally become better storytellers. Their stories become more detailed and better structured as coherent stories (macrostructure). The purpose of this study was to test whether two variables impacted children's development of macrostructure beyond age: 1) gesture use and 2) bilingualism.

Gestures are meaningful hand/arm movements. For example, when talking about how someone ran, a speaker might pump their arms at their sides, simulating running. Gestures serve many functions, including helping speakers keep in visuospatial memory the message they wish to convey. This function could support speakers in telling a long and well-structured story. Indeed, previous research has shown that when preschool children gesture, they tell longer and more complex stories (Laurent et al., 2020). We predicted that preschool children's gesture production would be associated with stronger macrostructure. We also tested whether there were any effects of bilingualism: some studies (but not all) have shown that bilingual children perform more poorly than same aged-monolinguals on macrostructure.

Participants were 126 children between 4 and 6 years of age: 49 French-English bilinguals, 64 English monolinguals, and 13 French monolinguals. All of the children watched a cartoon (without spoken words) and told the story back. The bilingual children did this twice, once in each language, the order of the language sessions counterbalanced. The children's stories were videotaped for later transcription and coding. Their stories were coded for macrostructure, following the Narrative Scoring Scheme (Kay-Raining Bird et al., 2013). Their gestures were coded following McNeill's (2006) gesture categories. Our analyses included only iconic gestures, as these gestures are the most strongly linked to visuospatial processing.

The results showed no differences between bilinguals and monolinguals in either English or French on macrostructure. In both languages, neither gesture rate nor bilingual/monolingual status was a significant predictor of macrostructure. Age was the only significant predictor of macrostructure in both languages.

In sum, in contrast to previous studies, we found no evidence that either gesture use or bilingualism predicted preschool children's macrostructure. Possible reasons for those contradictions are discussed.