The Effect of Childhood Bilectalism and Multilingualism on Executive Control
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Abstract
Several investigations report a positive effect of childhood bilingualism on executive control (EC). However, an issue that has remained largely unexamined is the role of the typological distance between the languages spoken by bilinguals. In the present study we focus on children who grow up with Cypriot Greek and Standard Modern Greek, two closely related varieties that differ from each other on all levels of language analysis (vocabulary, pronunciation, grammar). We compare the EC performance of such bilectal children to that of English–Greek multilingual children in Cyprus and Standard Modern Greek-speaking monolingual children in Greece. A principal component analysis on six indicators of EC revealed two distinct factors which we interpreted as representing working memory and inhibition. Multilingual and bilectal children exhibited an advantage over monolinguals that was evident in overall EC skill and emerged only after statistically controlling for their lower language proficiency. These results demonstrate that similar EC advantages as previously reported for ‘true’ bilingual speakers can be found in bilectal children, which suggests that minimal typological distance between the varieties spoken by a child suffices to give rise to advantages in EC. They further indicate that the effect of speaking more than one language or dialect on EC performance is located in overall EC ability without a particular component being selectively affected. This has implications for models of the locus of the bilingual advantage in EC performance. Finally, they show that the emergence of EC advantages in bilinguals is moderated by the level of their language proficiency.

Keywords: bilectalism; multilingualism; typological distance; executive control