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“Effects of Bilingualism on Cognitive Control and Novel World Learning.”

Abstract:

In this talk, I will present evidence from two studies that examined the effects of bilingualism on cognitive control and novel word learning. The first study investigated the effect of socio-economic status on bilingual cognitive control. Previous studies have suggested that the advantages shown by bilinguals on some cognitive tasks may be associated with higher socio-economic status. The study therefore explored this issue in bilingual and monolingual illiterates of lower socio-economic status using two cognitive control tasks: The Simon task and the Attentional Network task. The results showed that bilinguals were faster overall than monolinguals for both tasks: a global bilingual advantage. The finding of a bilingual advantage even for individuals of comparable lower socio-economic status confirms that these advantages are not due to a confound with higher socio-economic status. The second study examined whether the positive effects of bilingualism extend to benefit novel word learning and, if so, the specific mechanisms that drive the advantages of bilingual speakers. Specifically the phonological (phonotactic probability) and lexical (phonological neighborhood density) of the novel words were manipulated to see if bilingual advantages are influenced by these properties. A bilingual advantage for learning novel words was found regardless of phonotactic probability and neighborhood density effects indicating that the mechanisms underlying bilingual word learning advantages are not constrained by the phonological and lexical features of the novel words.

These results indicate that the positive consequences of bilingualism are not confined to cognitive control mechanisms, and bilingualism exerts unique effects in other domains such as novel word learning.