

The Effect of Second Language Listening Proficiency on Cognitive Control among Young Adult Bilinguals

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Abstract : The existing body of research on bilingualism has consistently linked the use of multiple languages to enhanced cognitive control. Numerous studies have demonstrated that bilingual individuals exhibit advantages in non-linguistic tasks demanding cognitive control. However, recent investigations have challenged these findings, leading to a debate regarding the extent and nature of bilingual advantages. The adaptive control hypothesis posits that variations in bilingual experiences hold the key to resolving these controversies. This study aims to contribute to this discussion by exploring the impact of second language (L2) listening experience on cognitive control among young Chinese-English bilinguals. By examining this specific aspect of bilingualism, the study offers a perspective on the origins of bilingual advantages. This study employed a range of cognitive tasks, including the Flanker task, Wisconsin Card Sorting Test (WCST), Operation Span Task (OSPAN), and a second language listening comprehension test. After controlling for potential confounding variables such as intelligence, socioeconomic status, and overall language proficiency, independent sample t-test analysis revealed significant differences in performance between groups with high and low L2 listening proficiency in the Flanker task and OSPAN. However, no significant differences emerged between the two groups in the WCST. These findings suggest that L2 listening proficiency has a significant impact on inhibitory control and working memory but not on conflict monitoring or mental set shifting. These specific findings provide a more nuanced understanding of the origins of bilingual advantages within a specific bilingual context, highlighting the importance of considering the nature of bilingual experience when exploring cognitive benefits.

Keywords : bilingual advantage, inhibitory control, L2 listening, working memory

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