

## Abstract

The present study aimed at exploring the effect of acquiring second language at different ages on performance on different cognitive tasks. Fifty-two participants (18 male and 34 female) participated in this study. The cognitive functions investigated included pictorial short-term memory, verbal short-term memory, verbal working memory, pictorial working memory, intelligence, Chinese comprehension and English comprehension. The verbal working memory size was found to be greater in late bilinguals, which ran in line with the hypothesis. Surprisingly, the Chinese proficiency level was higher in late bilinguals, while the English proficiency level was the same between groups, despite early bilinguals learned English about eight years before the late bilinguals. The possible explanations and implications for these findings were discussed.