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On learning a new grammar and vocabulary in adolescence

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Abstract

Learning a second language to a native level gets harder with age. However, the increased difficulty is uneven across linguistic elements (DeKeyser, 2000). Artificial language learning studies show that adults acquire vocabulary better than morphosyntax, but young children acquire both just as well (Barbir, 2019; Havron & Arnon, 2020). The developmental trend across adolescence, however, remains empirically undefined (Culbertson & Schuler, 2019). We thus investigated acquisition patterns across vocabulary and morphosyntax in middle adolescence ($n=25$, $\text{mean}=16\text{yrs}$) using an artificial language learning task. Mixed-effects regression analyses revealed above chance performance on both linguistic elements (vocabulary: $p<0.001$; morphosyntax: $p=0.02$) and no significant difference in performance between linguistic elements (with a trend toward a vocabulary advantage: $p=0.07$). These results suggest that adolescent learning patterns differ from those of adults and young children. Adolescents may thus provide fundamental insights into the cognitive development that underlies second language learning difficulties in adulthood.