

Incorrect Guesses Boost Retention of Novel Words in Adults but not in Children

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Abstract

What is the mechanism by which linguistic knowledge is updated over time? In six experiments, we asked whether error-driven learning can explain how adults and children add new words to their vocabulary. Participants were exposed to novel object labels that were more or less unexpected given participants linguistic knowledge. Two-to-four-year-olds were strongly affected by expectations based on contextual constraint when choosing the referent of a new label. However, while adults formed stronger memory traces for novel words that violated a stronger prior expectation, childrens memory was unaffected by the strength of their prior expectations. We conclude that the encoding of new words in memory follows the principles of error-driven learning in adults, but not in preschoolers.