

# The effects of real-world novelty exposure on episodic memory specificity across development

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## Abstract

Episodic memory specificity improves as we age and allows us to recall experiences in detail. In controlled experiments, novelty modulates memory specificity. Here we examine how real-world novelty exposure affects memory specificity over varying delays in a developmental sample (aged 12-25) using geolocation tracking, experience sampling, and periodic memory assessments. Data collection is ongoing, but preliminary results (N=44 of 120 target) suggest that participants' subjective ratings of experienced daily novelty are correlated with GPS metrics of daily location variability, and that the effect of encoding-to-retrieval delay on general memory is greater in older participants. High location variability interacts with subjective novelty on the encoding day, facilitating general memory on less novel days and specific memory on more novel days. Finally, for both general and specific memory, greater location variability on the retrieval day facilitates memory for more recently encoded items while hindering memory for more remote items.