

How does attention impact false memory susceptibility?

August 2 2018, by Deann Gayman



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How we remember things, and how we falter in those memories, is a process that has been studied for decades, but human episodic memory is still poorly understood.

Using electroencephalogram technology, or EEG, John Kiat, a doctoral

candidate, and Robert Belli, professor of psychology, were able to show that people who have less ability to sustain their attention long-term are more susceptible to creating [false memories](#).

Kiat and colleagues in the Center for Brain, Biology and Behavior were able to demonstrate how a slow wave neural response—associated with [sustained attention](#) over extended time periods—predicted false memory formation during a later misinformation task, in which respondents were given a true-false test regarding images and narratives they'd read.

Participants who were less able to sustain attention were more vulnerable to false memory.

Understanding points of failure in memory-making such as this one help scientists learn how the [episodic memory](#) system works, which has direct, practical applications in the criminal justice system where many cases rely on [eyewitness testimony](#).

Kiat plans to continue to work on uncovering the role of basic processes in the episodic memory system to help further explain its operation.

More information: John E. Kiat et al. Attentional responses on an auditory oddball predict false memory susceptibility, *Cognitive, Affective, & Behavioral Neuroscience* (2018). [DOI: 10.3758/s13415-018-0618-0](#)

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