

Working memory may compensate for lack of attention

14 August 2017

A study in *eNeuro* shows that, when remembering a sequence of events, the brain focuses on the event paid the least attention, rather than replaying the events in the order they occurred. This finding suggests that attention during the initial encoding of a memory influences how information is manipulated in working memory.

Anna Jafarpour and colleagues presented adults with a series of three images to remember. After a five-second delay, participants were presented with one of the images and asked whether it was shown from the same perspective (front, left or right views) as in the original sequence and in what position (1, 2 or 3) the image had been presented.

The authors found that the image that generated the weakest response in the <u>brain</u> during encoding was most strongly replayed during the delay period.

This result may indicate that the brain addresses the limitations of working <u>memory capacity</u> by focusing on the event that requires the most effort to remember.

More information: Working memory replay prioritizes weakly attended events, *eNeuro*, <u>DOI:</u> 10.1523/ENEURO.0171-17.2017

Provided by Society for Neuroscience

APA citation: Working memory may compensate for lack of attention (2017, August 14) retrieved 29 April 2021 from https://medicalxpress.com/news/2017-08-memory-compensate-lack-attention.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.

1/1