Cognitive offloading increases false recall.

Xinyi Lu
University of Waterloo, Waterloo, Ontario, Canada

Megan Kelly
University of Waterloo, Waterloo, Ontario, Canada

Evan Risko
University of Waterloo, Waterloo, Ontario, Canada

Abstract

Offloading to-be-remembered information is a ubiquitous memory strategy, yet in relying on external memory stores, our ability to recall from internal memory is often diminished. In the present investigation, we examine how offloading impacts true and false recall. Across three preregistered experiments, participants studied and wrote word lists that were each strongly associated with an unstudied critical word. We compared recall in the offloading condition (i.e., when they expected to have access to their written lists during recall) with a no-offloading condition (i.e., when they did not expect to have access to their written lists during recall). In the absence of the written external stores, offloading decreased true recall of the presented words while increasing false recall for the unpresented critical words. Results are discussed in terms of offloadings differential effects on the formation of gist and verbatim traces during encoding.