

Cognitive offloading—how the internet is increasingly taking over human memory

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Our increasing reliance on the Internet and the ease of access to the vast resource available online is affecting our thought processes for problem solving, recall and learning. In a new article published in the journal *Memory*, researchers at the University of California, Santa Cruz and University of Illinois, Urbana Champaign have found that 'cognitive offloading', or the tendency to rely on things like the Internet as an aide-mémoire, increases after each use. We might think that memory is something that happens in the head but increasingly it is becoming something that happens with the help of agents outside the head. Benjamin Storm, Sean Stone & Aaron Benjamin conducted experiments to determine our likelihood to reach for a computer or smartphone to answer questions. Participants were first divided into two groups to answer some challenging trivia questions - one group used just their memory, the other used Google. Participants were then given the option of answering subsequent easier questions by the method of their choice.

The results revealed that participants who previously used the Internet to gain information were significantly more likely to revert to Google for subsequent questions than those who relied on memory. Participants also spent less time consulting their own memory before reaching for the Internet; they were not only more likely to do it again, they were likely to do it much more quickly. Remarkably 30% of participants who previously consulted the Internet failed to even attempt to answer a single simple question from memory.

Lead author Dr Benjamin Storm commented, "Memory is changing. Our research shows that as we use the Internet to support and extend our memory we become more reliant on it. Whereas before we might have tried to recall something on our own, now we don't bother. As more information becomes available via smartphones and other devices, we become progressively more reliant on it in our daily lives."

This research suggests that using a certain method for fact finding has a marked influence on the probability of future repeat behaviour. Time will tell if this pattern will have any further reaching impacts on human memory than has our [reliance](#) on other information sources. Certainly the Internet is more comprehensive, dependable and on the whole faster than the imperfections of human memory, borne out by the more accurate answers from participants in the [internet](#) condition during this research. With a world of information a Google search away on a smartphone, the need to remember trivial facts, figures, and numbers is inevitably becoming less necessary to function in everyday life.

More information: Benjamin C. Storm et al. Using the Internet to access information inflates future use of the Internet to access other information, *Memory* (2016). [DOI: 10.1080/09658211.2016.1210171](https://doi.org/10.1080/09658211.2016.1210171)

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