

Google Effects on Memory: Cognitive Consequences of Having Information at Our Fingertips

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The Google Effects on Memory: Cognitive Consequences of Having Information at Our Fingertips by Betsy Sparrow, Jenny Liu, and Daniel M Wegner investigates “whether the Internet has become an external memory system that is primed by the need to acquire information” (1). In other words, their main investigation was to determine whether the Internet has become a method for people to store memories and information instead of storing the information into their brains. The scientists hypothesis discusses how instead of remembering the things that they learn from the internet, people will instead remember how to access that information. So once somebody acquires information from somewhere, they are more likely to remember how to acquire the information and where that information is stored rather than recollect what the information was itself.

This study was conducted by administering four experiments. Each experiment carries out a different hypothesis related to the main hypothesis. The first experiment evaluated whether computer words were more accessible than general words. They used a modified Stroop method to evaluate reaction time of the participants to match computer and non-computer terms. This experiment concluded that when people are faced with challenges about their knowledge, or they come in contact with something they do not know, they are primed to turn to the Internet to acquire the knowledge. In experiment two, the experiment “tested whether people remembered information that they expected to have late access to - as they might with information online”(2). They conducted this experiment to assess whether people will remember the information they read better if they type it up and believe that it will be automatically saved vs if they believe that their work will not be saved. Since the Internet is so readily available to everyone, people do not believe that it is necessary to remember the information. However if they believe that the

information is not available to them at all times, then they are more likely to remember the information for later in the future. The third experiment analyzed whether people would remember where to find information that they could look up online. If they typed up the information, would they remember what they had typed if their information was saved or erased or would they remember what folder it was saved in, if it was saved somewhere else. Finally, in the fourth experiment, they evaluated if people would remember where to find information rather than the information itself.

Some criticisms about this experiment is not within the information, but the lack thereof. The study does not mention who the participants were, the gender, race or age range of the participants who took part in the experiments. This creates some confusion on who the target demographic was for this study, thus generalizing the findings to everyone. It is also unclear whether the participants were debriefed or not about what they were partaking in. However, even with these criticisms, the study did have some interesting findings.

Overall, the results of these experiments concluded that “processes of human memory are adapting to the advent of new computing and communication technology”(4). People’s memory processes are becoming more adapted to relying on technology. People feel as though they do not need to remember certain things because it is so readily available to them and easily found online. The findings are useful because it lets people know how dependent they have become to technology, it has come to the point that it sometimes hinders people's ability to remember information. By knowing this people can determine how they want to go about trying to remember information. The findings from this study can help students figure out a better study

method than typing notes online and creating online flashcards. It can also help people figure out a way to better remember things than just “asking Google/Alexa/Siri”.