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Covariance in Performance Across Multiple False-Memory Paradigms and the Validity of Web-Based Administration of False Memory Tasks.

A thesis presented in partial fulfilment of the requirements for the degree of

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Christopher Cameron Stichbury

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Abstract

False memory is a real and persistent phenomenon that has been observed under many different conditions, both in and out of the laboratory. This study asked two main questions: can these conditions be generalised to administration over the world wide web; and do the false memories observed in these different conditions share common mechanisms? This study adapted common DRM, source confusion, and misinformation tasks to a web-friendly format. The DRM was presented visually; two sets of three word lists, each consisting of 15 words and clustering around a common concept, were administered to participants through their browser for a period of 1.5 seconds per word; the participants were latter presented with a new list of words, containing both old and new words, and were required to report if they believed if each of these words were previously presented, including one word for each list that represented the common concept. The source confusion procedure presented participants with an image of an office, a story relating to that image, and a questionnaire requiring the participant to answer several questions regarding the office and the story and to indicate the source of several items. The misinformation task presented the participants with a series of slides about which they were required to answer two questionnaires; several multi-choice questions in the first questionnaire did not contain the correct answer but required that the participant provide an answer despite this. The correct answers to these questions were available in the second questionnaire. The results demonstrated that these tasks can be administered over the world wide web and still display similar false memory characteristics to laboratory-based administration. Participant responses to these tasks, the digit-number sequencing task, and the Wonderlic Quick-Test were found to provide partial, though weak, support for the notion that common mechanisms underlie different kinds of false memory; weak to moderate correlations were found among the false memory tasks and between the false memory tasks and the digit-number sequencing task and the Wonderlic Quick-Test. The administration of false memory tasks over the world-wide-web, now demonstrated to be possible, is expected to open up a substantial population of potential participants and offer new methods to study false memory.
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