



DRM AND DRIVING: FALSE MEMORIES UNDER COGNITIVE WORKLOAD

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To understand the importance of memory and attention in everyday function, a research project was conducted. It was hypothesized that when more memory and attention are used, there may be instances when the qualities of these aspects suffer. Not only are humans unable to recall things that actually occur, but they may also recall information that did not occur, thus contributing to the hypothesis that people are not more productive by combining tasks, instead such productivity is an illusion. Participants completed three within-subject conditions: a single driving task, a single memory task, and a combined driving and memory task. For the single driving task, participants used a high-fidelity driving simulator to drive on a freeway loop for fifteen minutes. For the single memory condition, participants completed a task based on the Deese-Roediger-McDermott (DRM) false memory paradigm (1995). Participants were read a word list and then asked to verbally recall as many words as they could. In the dual task condition, participants completed the DRM memory task and driving task simultaneously. Data includes a comparison of veridical and false memories to give us an understanding of the influence multitasking can have on recollection. Initial results reveal a dissociation between single task and dual task conditions. As predicted, veridical recall was reduced under divided attention, while false recall was relatively stable. These preliminary results suggest that combining multiple tasks to increase productivity is largely unproductive.

