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IMAGINATION MAY OVERRIDE SPONTANEOUS RETRIEVAL OF PROSPECTIVE MEMORY INTENTIONS

Casey Bowen

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Prospective memory (PM) is often studied as the ability to carry out relevant intentions. This study focuses on the gap in the PM literature concerning one's ability to forget a previously relevant intention. There are two phases of the experiment; the active and the finished phase. In the active phase, participants encode the PM intention of pressing the 'Q' key when salient target words are presented during a lexical decision task. In the finished phase, the participant is instructed that the previously relevant intention is now irrelevant. The participant then undergoes two blocks of the lexical decision task while being probed for the response (pressing the 'Q' key). The present study analyzes two types of forgetting practice, which we believe will lead to a significant difference in commission errors (how many times a participant performed an irrelevant action). In the imagination condition, participants walk through an imaginary example of forgetting the previously relevant intention. In the control condition, participants are explicitly told they should not press the 'Q' key when presented with the target words, but they are given no practice (real or imaginary). Commission errors are recorded and analyzed for each condition using Chi-Square and T-Tests. Results support our hypothesis that there is a decline in executive control from older to younger adults. Younger adults also show a significant reduction in commission errors from the control condition to the imagination condition. We find a numeric trend in a reduction in commission errors in older adults, but not a significant difference. Based on these results, and the previous literature, we have reason to believe that imagination practice helps a participant deactivate a previously relevant intention. This could have major implications when applied to real life tasks, such as implementing a smooth change to a new medication prescription.