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Impact of Performing A Secondary Task on Recall

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Abstract

In a memory task, focusing on to-be-remembered information while concurrently engaging in a secondary task may result in impaired memory, possibly due to limited cognitive resources. However, previous research has demonstrated circumstances where interleaving a secondary task can impair immediate recall but enhance long-term retention. This suggests that the type and difficulty of the secondary task also affected memory. The present study explores the effect of processing a secondary task on recall. In Experiment 1, increasing complexity of the secondary task resulted in a detrimental effect on delayed free recall. Experiment 2 and 3 examine the effect of increasing cognitive load with faster stimuli presentation on delayed free recall and serial recall. These findings have implications for theories advocating the domain-general nature of cognitive resources.