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In a series of experiments we investigated how different types of cognitive control demands modulate subsequent memory. At study, participants had to switch between two classification tasks and later, free recall performance was assessed. The stimuli consisted of two interleaved words, one word had to be categorized and the other word had to be ignored. The congruency between target and ignored words was manipulated by changing the distractor category. Our results showed that task switching consistently impaired subsequent memory. Moreover, the co-activation of a target and a distractor word that required a different response enhanced later memory performance. Together, our research demonstrates that attention allocation at study is crucial for later memory. Task switching reduces top-down attention toward the targets and results in lower memory performance. Processing response incongruent stimuli enhances top-down attention toward the targets and results in better memory performance.

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