

Acute stress improves event-based and time-based prospective memory performance in young adults

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Although a long line of studies showed that acute stress affects memory, interestingly, the possible relationship between stress and the maintenance of future-related actions and intentions (prospective memory, PM) is relatively understudied. Participants (young adults) were exposed to either a stress-inducing task (Socially Evaluated Cold Pressor Test) or a control procedure followed by three computer-controlled PM paradigms. In the event-based PM tasks, stressed subjects responded to the PM cues faster than controls. In the time-based task, stressed subjects checked the time counter clock less frequently than controls, i.e., they performed the task as successfully as the control participants but without extra monitoring behavior. Our results suggest that acute stress improves performance when individuals execute planned actions and intentions.

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