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Title

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Journal

Proceedings of the Annual Meeting of the Cognitive Science Society, 43(43)

Authors

Kim, Sejin

Lee, Hee Seung

Publication Date

2021

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Peer reviewed

Appreciating interleaved benefits: The effect of metacognitive activities on the selection of learning strategy

Sejin Kim

Yonsei University, Seoul, Korea, Republic of

Hee Seung Lee

Yonsei University, Seoul, Korea, Republic of

Abstract

Empirical evidence demonstrates the superiority of interleaved over blocked learning schedules in inductive learning, yet many students believe the opposite. We investigated the effect of metacognitive activities on learners' awareness of interleaved benefits. Participants experienced two learning schedules for different painting styles and took a transfer test. Then we manipulated the provision of post-test feedback for each schedule and metacognitive prompts to reflect on the learning schedules. Finally, participants were asked to choose a more effective schedule between the two. Although there were no significant effects of either the post-test feedback or metacognitive prompts, the performance difference between the two schedules significantly predicted participants' schedule selection. The greater benefits from the interleaved schedule the participants experienced, the more likely they chose the interleaved schedule. Furthermore, participants' responses to metacognitive prompts revealed that those who acknowledged spacing benefits from the interleaved schedule were more likely to choose the interleaved schedule.