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Patterns of visual attention in blocked and interleaved learning

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Abstract

Interleaving—as opposed to blocking—information improves learning of categories, such as artists' painting styles (Kornell & Bjork, 2008). The aim of the present study was to replicate this finding and to assess whether blocked and interleaved schedules result in different patterns of visual attention during learning. For this purpose, 116 participants (Mean age: 19.98 years, SD = 1.68) studied paintings from 12 different artists on either a blocked or interleaved schedule. Participants then identified the artists for a series of new paintings. The results replicated prior research: Participants were significantly better at learning the painting styles for artists whose paintings were presented on an interleaved schedule. Furthermore, the distribution of visual attention to the stimuli differed between the two presentation schedules; participants scanned the screen more on interleaved presentations. Future studies will assess how individual differences in attention, working memory, and prior knowledge impact the magnitude of the spacing effect.