Implicit Learning of Spatial Context by School-Age Children

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Abstract: The contextual cuing effect refers to a robust phenomenon in which a repeated context guides attention to relevant information by constraining search. The effect is measured by an object search task in which a target is located within repeated or nonrepeated visual contexts. Shorter response times with repeated configurations indicate that contextual information has facilitated search. Though the effect is robust among adult participants, recent tests of the effect with children yielded mixed results. Because contextual cuing could play a critical role in cognitive development, resolving this issue is important. The present study used child-friendly paradigms to investigate whether children show the effect. The study suggests that adult participants show the effect regardless of stimulus type; 9- to 12-year-old children’s contextual cuing effect was limited to certain stimuli types. The results are discussed in terms of the relation between visual complexity of stimuli and the recognition of search items.