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Children Cautious Strategy and Variable Maturation Time Window for Responding in a Visual Search Task

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ABSTRACT

Present study evaluates the changes and developmental trajectories of the attentional serial visual search and pre-attentional parallel search (pop-out) in situations in which a fast response is required. The hypothesis of present study are 1) that pre-attentional selection mechanisms develop before than serial attentional processes; 2) in the most difficult tasks, children prefer to adopt a non-responding strategy to an impulsive response patters; and 3) in speeded difficult discrimination tasks young children arrives to the criteria of correct performance in a broad temporal window. The results showed an inverse relationship between the age and the RTs and the different type of errors. For the present set of stimuli which produces an overcrowded scene and required a fast response, the behavioural trend of normal children is to the non-response pattern rather than to impulsive incorrect responses pattern. It can be suggested that young normal children present a broad temporal window to obtain the perceptual, motor and/or cognitive skills needed for responding adequately in a fast speeded discrimination task.

KEYWORDS

Development, Pop-Out; Visual Search; RTs; Error Analysis; Attention

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