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Attentional strategies during category learning: an eye-tracking study

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Abstract

In categorization tasks optimization of performance depends on attention to relevant stimulus features. However, studies show that adults and children seem to use different strategies when learning new categories. Deng & Sloutsky (2016) found that adults attend selectively, whereas children prefer to attend diffusely, even when the stimuli possess deterministic features (i.e. with 100% probability of belonging to a certain category). Most studies of attention in category learning rely on behavioral effects to infer attentional strategy, despite the availability of eye-tracking technology. In this study, we combine the use of category training and transfer paradigms (see Miles & Minda, 2009 and Deng & Sloutsky, 2016) and eye-tracking methods to investigate attentional strategies of children and adults during category learning. Preliminary results of our adult pilot (N = 14) confirm the prediction that adults optimize performance by attending increasingly to deterministic features of the stimulus once the categorical rule is found.