Schematic Versus Realistic Face Processing in Autism Spectrum Disorder: Implications for Gaze Cueing

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Abstract

This study investigated how the complexity of facial stimuli impacts attentional orienting to eye-gaze in adults with and without autistic traits. Using a gaze cueing task, participants responded to schematic line-drawn faces or realistic photographic faces providing nonpredictive central gaze cues to the potential location of a lateralized target. Reaction times were faster on congruent than incongruent trials for both schematic and realistic face cues at both 100ms and 300ms SOAs, with no overall differences in accuracy. Reaction times were faster for longer SOAs, indicating more efficient orientation with additional processing time. No main effect for face type or interaction with autistic traits was observed, suggesting comparable processing to gaze direction in both schematic and realistic faces, and across group type. The findings indicate that gaze orienting is similar in high-functioning individuals with autistic traits and not critically dependent on the perceptual richness of the face stimulus.

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