

# Visual completion in children with pervasive developmental disorder: Effects of shape complexity

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## Abstract

Much evidence has been gathered for differences in visual perceptual processing in individuals with Autistic Spectrum Disorder. These individuals show detail-focused processing in which features are perceived and retained at the expense of global configuration and contextualized understanding. The presence of the fundamental process of visual completion was tested in a subgroup of children with Pervasive Developmental Disorder (PDD), as this requires perceptually integrating visual information into wholes. In Experiment 1, it was investigated whether visual completion is present for simple partly occluded shapes in a group of children with PDD and a typically developing group. In Experiment 2, the influence of local and global processes in visual completion was investigated for the two groups. Nineteen children with PDD and twenty-eight controls who were matched for chronological age and IQ took part in two primed-matching tasks. For both groups, visual completion was found and for both groups, global influences were found to be dominant. However, the group with PDD did not have priming effects from local primes on local test pairs. We conclude that the group with PDD did integrate visual information into wholes, and also did this in a global, not a local way. However, for more complex shapes, visual completion is weaker for this group.

de Wit, T. C. Schlooz, W. A. J. M. Hulstijn, W. van Lier, R. (2005). Visual completion in children with pervasive developmental disorder: Effects of shape complexity [Abstract]. *Journal of Vision*, 5(8):296, 296a, <http://journalofvision.org/5/8/296/>, doi:10.1167/5.8.296. [CrossRef]