

Is the Launching Effect Weak in Autism?

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Certification

I certify that the substance of this thesis has not already been submitted for any degree and is not currently being submitted for any other degree.

I certify that any help received in preparing this thesis and all sources used have been acknowledged in this thesis.



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Abstract

Leslie (1987) claimed that autism results from an abnormality that severely constrains mental state attribution. However, autism also features weak gestalt perception, reflected in reduced susceptibility to certain visual illusions (Happe, 1996). Another type gestalt, which appears to share properties with the aforementioned illusions, is the launching effect. Michotte (1946) discovered that launching is perceived when one object pushes another object. This thesis proposes that the launching effect is weaker than normal in autism. An implication such be that the emergence of the idea that forces mediate cause and effect is delayed and, in turn, the attribution of mental states is also delayed. Based on Livingstone and Hubel (1988), the thesis also proposes that weak gestalt perception reflects abnormal magno stream processing. These proposals were tested over three studies: the first measured the strength of three visual illusions, the second measured the strength of the launching effect and the third applied a task that is arguably sensitive to the functioning of the perceptual streams. The performance of the autism group differed from the control groups in all three studies in ways that were consistent with there being abnormal magno stream processing.