

Autism as an attentional disorder

Petra Björne
Christian Balkenius

Lund University Cognitive Science
Kungshuset
S-222 22 Lund
Sweden

Tel: +46 (0)46 2228588
Fax: E-mail: petra.bjorne@lucs.lu.se

Attention is probably one of the most fundamental abilities for learning. It has been proposed to encompass parts such as disengagement from current focus, orienting to new target, reengagement at the new target, as well as selective and sustained attention. An early attentional deficit will possibly account for many of the impairments associated with autism. Research has not yielded consistent results as to which part of attention is specifically impaired in autism. One way to catch the qualitative attentional impairment is to analyze videotapes of persons with autism performing daily tasks, correlating these results with instruments designed to measure their general cognitive abilities, which display a characteristic, uneven profile. Then it is possible to design experiments that can properly tap the attentional abilities and deficits in persons with autism. We expect to find a deficit in voluntary attentional shift to expected target, perhaps due to a lower level of attentional engagement. We also expect to find difficulties in orienting and reengaging attention, which could in part account for the fragmented understanding of the world and the difficulties in generalizing knowledge across domains. Besides direct experimental evidence, these hypotheses can be tested in computational simulations of a model of context processing.

Abstract presented at XIth EUROPEAN CONFERENCE ON DEVELOPMENTAL PSYCHOLOGY, Lido di Venezia, Italy, 2003.