

Visual search and emotion: How children with autism spectrum disorders scan emotional scenes

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This study assessed visual search abilities, tested through the flicker task, in children diagnosed with autism spectrum disorders (ASDs). Twenty-two children diagnosed with ASD and 22 matched typically developing (TD) children were told to detect changes in objects of central interest or objects of marginal interest (MI) embedded in either emotion-laden (positive or negative) or neutral real-world pictures. The results showed that emotion-laden pictures equally interfered with performance of both ASD and TD children, slowing down reaction times compared with neutral pictures. Children with ASD were faster than TD children, particularly in detecting changes in MI objects, the most difficult condition. However, their performance was less accurate than performance of TD children just when the pictures were negative. These findings suggest that children with ASD have better visual search abilities than TD children only when the search is particularly difficult and requires strong serial search strategies. The emotional?social impairment that is usually considered as a typical feature of ASD seems to be limited to processing of negative emotional information. © 2014, Springer Science+Business Media New York.

Autism spectrum disorders

Change blindness

Change detection

Emotional processing

Flicker task

Visual search

accuracy

adolescent

Article

Asperger syndrome

child

clinical article

controlled study

emotion

female

human

intelligence quotient

male

response time

statistical significance

vision

autism

emotion

perception

physiology

psychology

reaction time

vision

Adolescent

Child

Child Development Disorders, Pervasive

Emotions

Female

Humans

Male

Reaction Time

Social Perception

Visual Perception