Is Emotion Recognition Related to Core Symptoms of Childhood ADHD?

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OBJECTIVE:
Children with attention deficit/hyperactivity disorder (ADHD) have some problems in social relationships which may be related to their deficit in recognising emotional expressions. It is not clear if the deficit in emotion recognition is secondary to core symptoms of ADHD or can be considered as an independent symptom. This study aimed to evaluate the ability to detect emotional faces and its relation to inattention and hyperactivity-impulsivity in children with ADHD compared to a typically developing (TD) group.

METHODS:
Twenty-eight boys diagnosed as having ADHD, aged from seven to 12 years old were compared to 27 TD boys using a computerised Facial Emotion Recognition Task (FERT). Conners' Parent Rating Scale (CPRS) and Continuous Performance Test II (CPT-II) were also administered to assess the severity of inattention and impulsivity.

RESULTS:
The percentages of angry, happy and sad faces detected by children with ADHD were significantly lower (p<0.05) compared to the control group. The time spent in recognising happy faces was higher in the ADHD group (p=0.04). The sequential regression analyses showed a significant association between angry and sad targets recognition and inattention (P<0.05), as well as between oppositionality and angry faces detection (P<0.05) when hyperactivity-impulsivity was added to the model.

CONCLUSION:
It can be concluded that children with ADHD suffer from some impairments in recognising angry, happy and sad faces. This deficit may be related to inattention and hyperactivity-impulsivity.