

## SYMPTOMS OF INATTENTION AND HYPERACTIVITY IN CHILDREN WITH RISK FACTORS FOR OBESITY

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**Background and aims:** Surprisingly, previous research has suggested an association between overweight and symptoms of inattention/hyperactivity (ADHD) in children. This study aims to explore whether children with risk factors for obesity recruited to an activity intervention have higher rates of inattention/hyperactivity compared to a normative population.

**Method:** Children in 12 primary schools aged 9 to 11 years were screened for teacher rated overweight, low exercise self-efficacy, self reported inactivity and other barriers to activity such as asthma. Children meeting inclusion criteria were recruited to a school-based physical activity intervention. Baseline measures included body mass index (BMI) and the teacher and parent reported Strengths and Difficulties Questionnaire (SDQ).

**Results:** Of 1087 children screened, 447 met inclusion criteria. Of those, 180 (40%) children were recruited to the study (42% boys) with 62 (35%) of the children above the 91<sup>st</sup> centile for BMI. The teacher-rated SDQ hyperactivity/inattention subscale mean score was 3.65 compared to the norm value of 2.9 ( $p=0.001$ ) and 36.7% scored above the cut-off for possible disorder compared to 17.5% in the normative sample (OR =2.09, CI=1.47-2.97). The parent-rated SDQ hyperactivity/inattention subscale mean score was 4.0 compared to normative value of 3.5 ( $p=0.05$ ). Twenty-seven (26%) of children scored above the cut-off for possible disorder: a non-significant difference compared to 22.1% in the normative sample. There was no relationship between BMI and symptoms of hyperactivity/inattention in this selected sample.

**Conclusion:** The findings indicate that inactive children with barriers to exercise have higher levels of reported hyperactivity/inattention problems compared to a normative sample.