Psychosocial risk factors underlie the link between attention deficit hyperactivity symptoms and overweight at school entry

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Abstract

The link between symptoms of attention deficit hyperactivity disorder (ADHD) and increased body weight is well established, while the underlying mechanisms are not yet clear. Since increased body weight and ADHD symptoms have been found to be associated with psychosocial risk factors in childhood, we analyzed whether the psychosocial risks explain the association between the two conditions. The sample consisted of 360 children (age range 6–7 years, 173 boys) attending the obligatory medical health exam before school entry. The childrens’ height and weight were measured during the examination. ADHD symptoms were ascertained by parent-report questionnaires. Psychosocial risks were ascertained by a structured interview. The link between ADHD symptoms and body weight could be completely explained by cumulative psychosocial risks while controlling for gender, symptoms of depression/anxiety and oppositional defiant disorder of the child, maternal smoking during pregnancy, parental body mass index, and potential diagnosis of ADHD in the parents. In current models pertaining to the etiology of overweight/obesity and ADHD, chronic stress caused by psychosocial adversity is assumed to act as a trigger for these conditions. Psychosocial risks experienced during childhood may activate processes that specifically lead to the combined ADHD-overweight phenotype.