Moderating Effect of Motor Proficiency on the Relationship Between ADHD Symptoms and Sleep Problems in Children with Attention Deficit Hyperactivity Disorder-Combined Type.

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Abstract

OBJECTIVES/BACKGROUND:
A high proportion of children with Attention Deficit Hyperactivity Disorder- Combined type (ADHD-CT) experience sleep and motor problems. This study investigated (a) whether motor proficiency moderated the relationship between ADHD symptoms and sleep problems in children with and without ADHD-CT and (b) whether this moderation differed as a function of ADHD diagnosis.

PARTICIPANTS:
A sample of 70 primary school male children between 8-15 years were recruited; children with ADHD-CT (n = 38; mean age 10 years, 2 months [SD = 1 year, 6 months]) and a typically developing (TD) (n = 32; mean age 9 years, 6 months [SD = 1 year, 5 months]) group.

METHODS:
Motor proficiency was measured using the Movement Assessment Battery for Children-2nd Edition (MABC-2), ADHD symptoms were measured using the Conners’ Parent Rating Scale (CPRS) and parent reported sleep problems were measured using the Children's Sleep Habits Questionnaire (CSHQ).

RESULTS:
Children who reported higher ADHD symptoms and lower motor proficiency scores reported more sleep problems. The moderation effect only held in children with a diagnosis of ADHD-CT and not in the typically developing group.

CONCLUSIONS:
These findings indicate that children who experience greater severity of ADHD symptoms who also have lower motor proficiency may be at increased risk of experiencing sleep problems. These findings also illustrate the importance of considering motor proficiency when exploring risk factors for sleep problems in children with ADHD-CT as well as sleep interventions.