Physical activity is beneficial for children with ADHD

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(Medical Xpress) -- "There has long been a popular consensus that physical activity is good for children with attention deficit disorder with or without hyperactivity [ADHD] because, by definition, these children are constantly moving. But no empirical study has validated this belief... until today," says Claudia Verret, an Université de Montréal kinesiology

graduate.

As part of her doctorate, she has shown that a 10-week physical activity program can significantly improve the cognitive behaviour and functions of children aged 7 to 12 struggling with ADHD.

“Three afternoons a week, we brought together a group of 10 children, who, for 45 minutes, took part in a team sport like basketball or soccer,” explained Verret. “The physical exercise was meant to achieve a moderate to high heart rate.” These children were compared with 11 subjects also with ADHD but who did not participate in the activities.

Before and after the program, the children underwent a battery of neuropsychological tests to measure their attention. Their parents and teachers also completed questionnaires regarding their behaviour and social skills.

"Following the program, parents and teachers reported that all measured problem behaviours such as aggression, anxiety, and depression decreased, particularly social disorders," said the professor.

She said that the positive effect of exercise on social interaction is a “major” finding. "The clinical picture of children with ADHD reveals that they often find it difficult to adapt to others. Taking part in structured group physical activities helped them overcome this difficulty, even if the program was not specifically aimed at social reinforcement."

The children were also less impulsive. “The teachers told us that when the children returned from the exercise session they were able to sit longer than usual,” said Verret, who did her Ph.D. under the supervision of Professors Louise Béliveau of the University of Montreal and Phillip Gardiner of the University of Manitoba, in collaboration with Hôpital

Rivière-des-Prairies.

Attention problems also decreased. The children still made mistakes on the neuropsychological tests of course, but they completed the tests faster. “Ultimately, they were more effective, suggesting that their attention was better,” said Verret.

She also noted an improvement in motor performance. In a previous study, the researcher found that children with ADHD showed significant motor deficits. “They had difficulty running, jumping, or catching a ball,” she said. “We knew they had some problems in terms of fine motor skills, but few researchers have been interested in their gross motor skills.”

Physical activity, a supplement to therapy

Claudia Verret recognizes that this research is still exploratory because of its small sample. But, she adds, the results are encouraging to the point that it would be worthwhile to eventually consider physical activity as a supplemental aid to traditional therapies.

"In cognitive behavioural therapy sessions, we work on self-control, self-esteem, and social skills, among other things. We could integrate this structure within a sports program. Children could then apply what they learned during therapy. It would be a great way to provide enjoyment and increase their motivation.

She notes that such an initiative would require further training for the professionals who supervize the children. “Our study shows that group sports are better for these children because of the influence at the social level. But in reality, looking after a group of children with attention deficit is not easy when you lack the required training. We need to develop tools to facilitate the work of these professionals.”

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