



Can boosting physical activity improve ADHD symptoms in preschoolers?

By Dr. Jessica Edwards

New data suggest that more moderate-to-vigorous physical activity (MVPA) is associated with improvements in inattention (IA), hyperactivity/impulsivity (HI) and peer functioning in preschool children with lower cognitive processing speed (PS). The study researchers, based at the University of Vermont, collected information on MVPA (averaged over one school year), baseline PS, and changes in teacher-rated IA, HI, oppositional behaviours, moodiness and peer functioning in a community sample of 85 preschoolers with high levels of socioeconomic disadvantage. They then performed regression analyses to determine whether MVPA was associated with ADHD symptom and behavioural changes, and whether associations varied by baseline PS.



“Our study findings highlight the possibility that MVPA might be a tool that can be used to reduce preschoolers’ ADHD behaviours and associated impairments, especially for young children at risk for ADHD”, explains lead author, Betsy Hoza. “In addition to addressing problematic behaviours, MVPA is a viable, low-cost means for promoting early childhood health across a variety of domains”

Based on the findings thus far, the researchers consider that randomized controlled trials that explore the impact of different levels of MVPA on ADHD symptoms in preschoolers are now warranted. In addition, parent reports could also be helpful in determining whether similar changes in behaviour also manifest in the home environment. “There are numerous benefits for including structured MVPA in preschool classrooms for all children, but especially for those at risk for ADHD”, says Hoza. “We urge policy-makers and early childhood educators to consider the possibility that structured MVPA might be a low-cost, easily accessible method for reducing ADHD levels and related behaviours in preschool classrooms”.

Referring to:

Hoza, B., Shoulberg, E.K., Tompkins, C.L., Martin, C.P., Krasner, A., Dennis, M., Meyer, L.E. & Cook, H. (2020), *Moderate-to-vigorous physical activity and processing speed: predicting adaptive change in ADHD levels and related impairments in preschoolers*. *J. Child Psychol. Psychiatr.* doi: 10.1111/jcpp.13227.

“We urge policy-makers and early childhood educators to consider the possibility that structured MVPA might be a low-cost, easily accessible method for reducing ADHD levels and related behaviours in preschool classrooms”

