

Special Issue on
Physical Activity in Children's Health and Cognition

CALL FOR PAPERS

Physical inactivity has been a major public health concern in many industrialized countries. In the past decade, children are becoming less physically active partially due to technology advancement and societal changes, leading to dramatic increases in the prevalence of obesity and other chronic diseases (i.e., hypertension, type 2 diabetes). Participating in regular physical activity plays a key role in the prevention of and reduction in childhood obesity and chronic diseases, thereby contributing to the prevention of chronic diseases later in adulthood. In addition, recent studies suggest that increased physical activity influences cognitive functions in children, affecting executive functioning (e.g., working memory, cognitive flexibility). However, few studies have investigated the effects of physical activity on brain health in children. In addition, the previous studies targeted only older children and adolescents, missing an opportunity to examine physical activity interventions earlier in childhood to improve health outcomes and cognition during a critical period in child development.

In response, we invite investigators to contribute original research articles and review articles that will stimulate the continuing efforts to understand the relationships between physical activity, health, and cognitive development among children. In this special issue, we are particularly interested in articles examining the effectiveness of physical activity on various health outcomes and cognition in early childhood, as well as correlates and determinants of physical activity and sedentary behaviors from early childhood to middle childhood.

Potential topics include but are not limited to the following:

- ▶ Trials investigating effectiveness of physical activity on various health outcomes, including biomarkers, psychological, and mental health
- ▶ Trials exploring effects of physical activity programs on children's cognitive development and brain health
- ▶ Observation studies examining correlates and determinants of physical activity and sedentary behaviors in children
- ▶ Longitudinal cohort studies exploring trajectory changes of children's physical activity and health outcomes
- ▶ Descriptive studies examining the current status of physical activity and sedentary behaviors in children
- ▶ Feasibility studies investigating innovative physical activity programs on health and cognition in early childhood
- ▶ Correlation studies examining relationships among children's physical activity, cognitive and brain health, and academic achievement
- ▶ Studies investigating the role of physical activity in promoting health and learning in children with developmental disorders

Authors can submit their manuscripts through the Manuscript Tracking System at <https://mts.hindawi.com/submit/journals/bmri/pediatrics/pachc/>.

Papers are published upon acceptance, regardless of the Special Issue publication date.

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