

# Impact of an Early Childhood Educator e-Learning Course in Physical Activity and Sedentary Behaviour on Young Children's **Movement Behaviours in Childcare: The TEACH-Preschooler Study**

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## Introduction

- Engaging in greater levels of physical activity and limiting sedentary behaviour are critical for children's healthy development (Carson et al., 2017).
- However, children in Canada are largely inactive and are highly sedentary.
- The childcare environment has been identified as the ideal setting to promote physical activity in young children and develop their skills for an active life.

#### **Purpose**

- The Training pre-service EArly CHildhood educators in physical activity (TEACH) study developed an e-Learning course in physical activity with early childhood educators (ECEs).
- With the success of the e-Learning course in ECEs, the TEACH-Preschooler study will test if the course would have a positive impact on children's physical activity, fundamental movement skills, and cognitive development.



# **Methods**

- A two-arm cluster randomized controlled trial was utilized for this study.
- The 5-hour TEACH e-Learning course will be compared to a waitlist control
- <u>Participants</u>: ECEs working in childcare centres in London, Ontario.
- Intervention: The TEACH intervention will be completed by ECEs working in 3 childcare centres at their own convenience within a 2week timeframe. 3 additional centres will act as the waitlist control group in which ECEs will be asked to continue with their usual practices.



## **Physical Activity**

# **Fundamental Movement Skills**

# **Cognitive Development**

# **Significance**

Given the overwhelmingly positive feedback from participants in the pilot study, it is clear that Canadian ECEs are in need of more professional learning and development. With physical inactivity becoming a growing worldwide health concern, training educators to embed movement into learning environments is a necessary and proactive approach to get kids to sit less and move more.

#### **Outcomes**

• ActiGraph GT3X+ accelerometers were worn by young children (2.5-5 years) to capture their moderate-to-vigorous physical activity (primary outcome) during childcare hours.

• Data was collected for one week at baseline, postintervention, and 2-month follow-up.

 Fundamental movement skills were measured in a randomly selected subsample of children in the intervention and control group (n = 20 per group) using the Test of Gross Motor Development Third Edition (TGMD-3; Ulrich, 2013)

• A range of tests from the Early Years Toolbox (http://www.eytoolbox.com.au/) were used to measure children's cognitive development.













