Abstract Title: Physical literacy in the early years: A loose parts intervention

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Introduction
Preschoolers (age 3-4 years) are recommended to accumulate at least 180 minutes of any intensity physical activity each day (Tremblay et al., 2017), including a progression to 60 minutes of moderate-to-vigorous intensity physical activity per day by age 5 (Tremblay et al., 2016). Data from a nationally representative sample of Canadian children indicates 73% of 3 to 4 year olds and 30% of 5 year olds, meet their respective recommendations (Garriguet et al., 2016). Interventions in early childcare centres may be an optimal location to positively increase physical activity in preschoolers given their extensive time in this environment (Vanderloo et al., 2013). Loose parts materials (e.g. wood, rope, balls) may encourage creative movements in children, and may contribute to fundamental movement skill and physical literacy development (Houser et al., 2016).

Objective
To describe the Physical Literacy in the Early Years study.

Methods
The Physical Literacy in the Early Years study is a quasi-experimental, randomized, mixed-methods control trial. The main objective is to determine if children who participate in active outdoor play, facilitated by educators trained in embedding loose parts into outdoor play spaces, to develop an enhanced physical literacy. The selected Nova Scotia early years centres (n=16) were randomly assigned to intervention and usual practice (control) conditions. Educators provided measures of their centre’s outdoor environment (Go NAP SACC) and attended training regarding physical literacy, active outdoor play, loose parts, and risky play prior to the intervention. Children had
their physical activity (accelerometers) and movement skills measured, and intervention centres were provided with loose parts kits. Three-month post-intervention measurements have been collected while the 6-month post-intervention data collection is in progress. Educators are documenting children’s outdoor play (Photovoice) followed by post-intervention focus group discussions. Parents completed a questionnaire (demographics, PA, sleep, screen time, physical literacy, risk-taking) with a subsample participating in an end-of-project one-on-one interview.

Results
This study will reveal the impact of embedding loose parts into early years’ outdoor spaces along with educator training on children’s physical literacy development, active outdoor play, and risk-taking. Further, this study will share the barriers/facilitators to promoting active outdoor play with loose parts in early years centres, and whether parents’ attitudes towards risk-taking and understanding of the importance of physical literacy, have changed throughout the intervention.

Conclusion
This novel research will provide support to policy and practice changes in early years centres that encourage active outdoor play and physical literacy development in young children.

References
Tremblay et al. (2017). Canadian 24-hour movement guidelines for the early years (0-4 years): An integration of physical activity, sedentary behaviour and sleep. *BMC Public Health*, 17(Suppl 5):874


