## Feasibility of Classroom-based "Walkabout" Physical Activities and Impact on Classroom Engagement in preK to 2<sup>nd</sup> Grade Students

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Background and Purpose. Schools represent a natural choice for promoting physical activity (PA); however, school time provided for physical education and PA has continued to decline, primarily due to increased time focused on meeting academic achievement goals. An evolving literature demonstrates that PA in the classroom represents a promising avenue not only for increasing the PA of youth but also for facilitating academic achievement and classroom engagement. Classroom-based PA has been recommended by a number of national organizations as a potential avenue for children to meet the PA guidelines. However, structured PA programs that make clear connections with the academic standards in different subject areas across different grades are limited. The primary purpose of this study was to examine the feasibility and effectiveness of the "Walkabout" web-based program that integrates PA with academic subjects through an active learning platform on children from preK to 2<sup>nd</sup> grade. **Objectives.** To examine (a) the effect of lessons integrating PA with the Walkabout platform, compared to traditional lessons, on classroom engagement and behavioral control over a 7-week period, and (b) the feasibility of implementing the Walkabout in the classroom. **Methods.** Eleven preK to 2<sup>nd</sup> grade classes (N=245 students) from three schools were assigned to the intervention (n = 158; using the Walkabout PAs) or control (n = 87; traditional lessons) group. Teacher ratings of students' inattention and hyperactivity in the classroom were collected using the SWAN rating scale (Swanson et al. 2012) before and after the intervention in both groups. To ensure intervention fidelity, intervention teachers recorded the frequency of the Walkabout PAs they used in a daily log. Additional questions on the log addressed teacher's perceptions about their experiences and the experiences of their students using the Walkabout PAs. Repeated MANOVA showed that children assigned to the intervention group improved significantly more, compared to the control group, in both inattention and hyperactivity, whereas children in the control group had a decrease in their performance over the 7-week period [F(2,237)=39.31, p<.001,  $\eta^2=.25$ ]. The effect was strongest for preschool children whereas the results did not differ based on the gender of the students. Additionally, teachers perceived the Walkabout PAs to be feasible, physically active, of appropriate difficulty and enjoyable for the students. Conclusions. The findings provide evidence that the Walkabout PAs can help students engage in more PA in the classroom while increasing attention and reducing hyperactivity in the classroom. Implications for Practice. Schools can focus on academic achievement goals without sacrificing PA throughout the school day. Implementing PA programs that integrate PA with academic subjects, such as the Walkabout, may facilitate learning and academic achievement by increasing cognitive and behavioral control in the classroom.