

# **STUDENTS' PERCEIVED PHYSICAL COMPETENCE AND PHYSICAL ACTIVITY ENGAGEMENT ACROSS ONE YEAR OF SCHOOL-BASED PROGRAM**

**Arto Gråstén**

University of Jyväskylä, Finland

## **INTRODUCTION**

Several school-based interventions have shown to be successful in regard to promote students' physical activity engagement (e.g. Carrell et al., 2005; Gråstén et al., 2015; Schneider-Jamner et al., 2004; Ward, 2011; Webber et al., 2008). Despite, an age-related decline in physical activity indicates that there might be deficiencies in the programs being implemented (Cairney et al., 2012). Previous studies have consistently revealed that perceived physical competence is a crucial factor behind physical activity (Cox, Smith, & Williams, 2008; Kalaja, 2012; Yli-Piipari, 2011). The Physical Activity as Civil Skill Program was implemented to prevent long-term effects of inactivity on children's and youth's well-being and health by promoting moderate to vigorous physical activity (MVPA) and perceived physical competence. The present study investigated the effects of the particular program. The covariance effects of gender, grade, mark, and body mass index (BMI) on MVPA and physical competence were also analyzed.

## **METHODS**

A total sample comprised 240 intervention ( $n = 143$ ) and control ( $n = 93$ ) students aged 13 to 16 years ( $M = 14.48$ ,  $SD = .99$ ) from three small cities located in Northeast Finland. All Grade 7 and 8 students were invited to participate through a direct contact with school principals. Twenty-four percent of all students in the region participated in the study. The longitudinal data was collected using online questionnaires in 2010-2014. Students completed the questionnaires under the supervision of the teachers in the schools' computer labs. The cross-lagged model was implemented to analyze the associations of physical competence and MVPA.

## **RESULTS**

The present program showed to be effective in order to increase perceptions of physical competence across one year of program. In addition, the lower BMI scores were linked to higher physical competence and MVPA after one year of program within the intervention group. The marks were more important in terms of physical competence and MVPA perceptions among the control group than the intervention group.

## **DISCUSSION**

Although, students' MVPA sustained at the same level across program, all attempts to increase physical activity are valuable. Because school physical education classes cannot be substantially increased, the more efficient use of physical education classes to enhance students' physical competence could make the modest contribution to the meeting of the current physical activity guidelines.

## **REFERENCES**

- Cairney, J et al. (2012). *Int J Behav Nutr Phys Act*, 9(3).
- Carrell, A. et al. (2005). *Arch Pediatr Adolesc Med*, 159(10), 963-968.
- Cox, A., Smith, A., & Williams, L. (2008). *Journal Adolesc Health* 43(5), 506-513.

Gråstén, A. et al. (2015). J Sch Health, 85(2), 125-134.

Kalaja, S. (2012). Doctoral thesis, University of Jyväskylä.

Schneider-Jamner, M. et al. (2004). Journal Adolesc Health 34(4), 279-289.

Ward, D. (2011). Princeton, NJ: Robert Wood Johnson Foundation.

Webber, L. et al. (2008). Am J Prev Med 34(3), 173-184.

Yli-Piipari, S. (2011). Doctoral thesis, University of Jyväskylä.

Keywords: school-based, intervention, physical activity, physical competence.