

Effects of School-based Intervention Programmes in Promoting Moderate to Vigorous Physical Activity During Leisure Time

Masato Kawabata and Nikos L. D. Chatzisarantis

KEY IMPLICATIONS

- Most students in Singapore secondary schools do not achieve 60 minutes of daily moderate-vigorous physical activity (MVPA) as recommended by the World Health Organization.
- The sedentary students should be informed about their current PA participation level and supported to change their PA and dietary behaviours.
- Students' PA should be measured objectively (e.g., by using accelerometers) instead of solely relying on self-reported questionnaires.

BACKGROUND

Physical education (PE) in schools plays an important role in promoting lifelong participation in PA. In fact, one of the six objectives highlighted by the Ministry of Education, Singapore is associated with the benefits of living a physically active and healthy life through regular participation in physical activity. However, teachers and health professionals have found it challenging to motivate children to engage in PA via school-based interventions.

FOCUS OF STUDY

The present study aimed to investigate whether a school-based intervention, targeting salient PA benefits and barriers based on the theory of planned behaviour, would promote young people's participation in MVPA during leisure time and reduce the body mass index (BMI) of overweight/obese students.

KEY FINDINGS

The school-based intervention programme proposed in this study was useful in a) enhancing each participant's intentions to be involved in MVPA and b) promoting weekday's MVPA based on the self-reported PA, but not based on the objective measures (i.e., accelerometers). Overweight/obese student's BMI was not reduced after the intervention.

SIGNIFICANCE OF FINDINGS

Implications for practice

Students should be explicitly informed about their current PA participation level using an objective measure.

Implications for policy and research

Schools need to alert sedentary students about their current situation and assist them in changing their PA and dietary behaviours. To conduct research rigorously, researchers should measure MVPA objectively rather than solely relying on self-reported PA questionnaires.

Learning gains (for studies involving intervention)

Researchers should critically control the methodological effect of wearing accelerometers to evaluate the effect of an intervention on promoting MVPA.

Proposed follow-up activities

It would be beneficial to incorporate objective PA measures into the school setting for the purpose of promoting PA.

PARTICIPANTS

A total of 171 students (male: 84, female: 87) aged 13 to 16 years old, from three co-educational secondary schools voluntarily participated in the present study.

RESEARCH DESIGN

This study adopted a 2 (type of condition: control vs intervention) × 3 (measurement time points: Baseline, Post 1 and Post 2) within-subjects design in which all participants underwent the control condition followed by the intervention condition. In the control condition, PE teachers encouraged students to participate in PA during leisure time without delivering persuasive messages in PE lessons. In the intervention condition, PE teachers delivered the persuasive messages that targeted the salient benefits and barriers associated with PA at the last 5 to 10 minutes of each PE lesson.

About the authors

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