Physical Activity Rates and Motivational Profiles of Adolescents While Keeping a Daily Leisure-Time Physical Activity Record

Authors: Matt Fullmer, Carol Wilkinson, Keven Prusak, Dennis Eggett, Todd Pennington

Abstract: Obesity and chronic health issues are linked to physical inactivity. Physical education (PE) programs in school can play a major role in combating these health-related issues. This study focused on supporting competence through keeping a leisure-time physical activity (LTPA) record as part of PE. Keeping a daily LTPA record may be an effective intervention helping students feel more competent toward exercise, and thus, self-determined (within the context of self-determination theory) to exercise. Little is known about the relationship between daily LTPA records and perceived competence, motivational profiles, and LTPA levels of students enrolled in PE. This study examined the relationship between keeping a daily, online LTPA record and adolescent (a) motivational profiles toward LTPA, (b) perceived competence toward LTPA, and (c) LTPA behaviors. Secondary students (N = 124) in physical education classes completed a baseline questionnaire which consisted of the Behavioural Regulation in Exercise Questionnaire-2, the Perceived Competence Scale, and the Godin Leisure-Time Exercise Ouestionnaire. For three weeks, the students were assigned to keep the Presidential Active Lifestyle Award Challenge (PALAC) as their online LTPA record. They completed the questionnaire after each week. A 2 (gender) x 4 (trials) repeated measures ANCOVA examined the relationships between recording compliance and motivation, perceived competence, and physical activity. Results showed that recording compliance was not a significant predictor of perceived competence to participate in LTPA. Examining motivational factors, a significant interaction between recording compliance and introjected regulation was found. The more students recorded the less motivated they were by guilt or obligation to exercise in their leisure-time. Also, a significant interaction was found between recording compliance and intrinsic regulation, indicating that the more students recorded the more intrinsically motivated they were to exercise in their leisure-time. Lastly, there was a significant interaction between recording compliance and LTPA. As students kept the LTPA record, girls' LTPA levels significantly decreased and boys' LTPA levels significantly increased. The key findings are that, as implemented in this study: a) the lack of PALAC compliance suggests that daily LTPA records may NOT be the most effective intervention for this population, b) keeping a daily LTPA record did NOT help students feel more competent to exercise in their leisure-time, c) a daily LTPA record may help students move towards being more self-determined in their feelings towards LTPA, and d) the outcome of keeping a LTPA record on LTPA behavior is statistically significant, although actual differences may not be practically important.

Keywords: behavioural regulation in exercise questionnaire-2, Godin leisure-time exercise questionnaire, online physical activity log, perceived competence scale, self-determination theory

Conference Title: ICPESS 2017: International Conference on Physical Education and Sport Science

Conference Location: London, United Kingdom

Conference Dates: June 28-29, 2017