

Physical Education Effects on Motivation for and Correlates of Physical Activity

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Abstract

Background/Purpose: PE can have a direct impact on physical activity (PA) among middle school youth, however, any indirect contribution to leisure time physical activity (LTPA) is uncertain. A multitude of correlates including barriers efficacy, entity and incremental beliefs, environmental beliefs (perceived safety and environmental access), sport-competence and relative autonomy (RA) have been identified to guide LTPA intervention design. The purpose of this study was to compare changes in LTPA behavior, known correlates of LTPA and relative autonomy (autonomous motivation) in 7th grade boys and girls who received a modified physical education unit (PEi) compared with standard physical education (PEc), and a non-physical education control group (C).

Method: A 7th grade mountain biking unit was modified to include lesson objectives and instructional activities targeting barriers efficacy, sport ability beliefs and perceived environment. A 3-group design (PE Intervention = PEi; PE Control = Pec; no-PE control = C) was employed. Subjects completed a survey comprised of previously validated measures at baseline, immediately following (test 1) and at four weeks following (test 2) a 4-week mountain bike unit.

Analysis/Results: 300 7th graders (girls = 151) from two schools completed the survey at baseline, test 1 and test 2. Results revealed no intervention main effects for continuous and non-continuous (equipment accessibility and neighborhood safety) dependent variables. Within group differences were observed for PEi and PEc in mountain bike competence from baseline to test 1 ($p = 0.01$) which was maintained at test 2 for PEi. PEc showed a significant decrease in RA from baseline to test 1 ($p = 0.02$) and test 2 ($p = 0.003$) and lower incremental athletic abilities beliefs from baseline to test 2 ($p = 0.02$).

Conclusions: Results of this study showed no main effects from the intervention, however, data suggest PE may influence certain correlates of and autonomous motivation for PA. Results provide evidence of sport specific skill being improved through physical education. The PEc group had a significant decrease in RA while the PEi and C groups had no change providing support for autonomy supporting PE curriculum and environments sensitive to autonomous motivation. This study should be replicated to evaluate multiple units over 3 years of middle school physical education.

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