

## S07-4: The Impact of Physical Fitness Levels on Student Engagement in Physical Education: Study Across Different Age Groups

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**Purpose:** To analyse the engagement and participation of students with varying levels of overall physical fitness in physical education and health classes in different age groups. How does students' overall physical fitness level influence their engagement and participation in physical education and health classes over the course in different age groups? The study provides insights into how physical fitness and engagement evolve over time and it differs from other studies that focus solely on physical performance.

**Methods:** Quasi-experimental research design was used. A total of 76 students participated in the study. The combination of scientific literature analysis, surveys, fitness assessments, pedagogical observations, and statistical analysis (descriptive statistics and the inferential statistics) offers a multi-dimensional perspective on the relationship between physical fitness and engagement. The respondents provided data anonymously, the study was conducted with the permission of the Research Ethics Committee of Latvian Academy of Sport Education.

**Results:** The results indicated that students' overall physical fitness improved over the semester, which correlated with increased engagement in physical education classes ( $r_s = -.575$ ;  $p < 0.05$ ). Fitness assessment data showed that better-conditioned students participated more actively and exhibited more positive emotions ( $r_s = .380$ ;  $p < 0.01$ ). In contrast, students with lower physical fitness levels were more likely to miss classes, showed lower motivation ( $r_s = -.554$ ;  $p < 0.01$ ), and demonstrated less emotional involvement ( $r_s = -.473$ ;  $p < 0.01$ ).

**Conclusions:** Mostly in all ages, students with higher general physical fitness scores are more actively engaged in physical education and health lessons, which indicates that more inclusive pedagogical approaches are needed to promote the development of physical literacy in students. The findings highlight the need for tailored physical education approaches to support students with lower fitness levels, offering actionable insights for teachers to foster greater inclusivity and motivation of the engagement in physical education classes.

**Keywords:** Student engagement, student participation, physical education and health class, student physical fitness

