ORAL: THE EFFECT OF SEX AND THE TYPE OF INVOLVEMENT WITH PHYSICAL EXERCISE ON MOTOR COMPETENCE

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Objective: The aim of this study was to understand the link between the involvement with physical exercise (oriented by professional or not physical exercise) body mass index (BMI) and sex on motor competence. Method: 446 children and adolescents (249 boys), with 13.9 ± 2.3 and 13.4 ± 2.0 years old, for girls and boys, respectively, from a school program, “Family in Move” were included. That program aims to identify barriers, motivations and family’s perceptions related to healthy lifestyles, reported by parents and children. The Körperkoordinationstest Für Kinder (KTK) tests protocol was used to assess motor competence. The total score was converted into a standardized motor quotient. Type of involvement with
physical exercise was assessed using questionnaire and the weight and height of adolescents were measured and body mass index (BMI, kg/m 2) was calculated. Pearson correlation analysis was performed among BMI, practice of oriented sport in school (OSS), practice of oriented physical exercise (OPE), practice of non-oriented physical exercise (NOPE) and KTK. An independent sample t-test was conducted to analyze differences between sexes.
Results: In girls, a negative correlation between KTK and BMI was found (r=-0.198, pp=0.01). In boys, a negative correlation was registered between BMI and OPE (r=-0.234, pp=0.01) and between NOPE and KTK (r=0.171, pp=0.05). When comparing by sex, it was observed that boys were more involved on OSS, OPE and present better results on KTK (88.2±10.7 vs. 94.1±13.8, p<0.001). Implications: Different patterns were expressed by each sex, denoting that BMI could be a measurement to give insights about the level of motor competence in girls. In boys, our results seem to indicate that we should pay more attention to physical exercise or sports with a professional guidance, as NOPE is exerting a positive relationship with motor competence. Finally, girls need to be more encouraged to practice oriented physical exercise as they show lower OPE and KTK values comparing with boys.