POSTER: ASSOCIATION BETWEEN MOTOR COMPETENCE AND MUSCULOSKELETAL FITNESS: A LONGITUDINAL STUDY

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Objective: To investigate the association between motor competence (CM) and its skill categories (locomotion -LOC; object control - CO) with the musculoskeletal fitness (MFit) of schoolchildren throughout childhood. Method: In 2016, 97 children (55.31% boys; mean age = 8.31 years, SD = 1.3) were evaluated, being reassessed in 2018. Motor competence was assessed with TGMD-2, and MFit was calculated by adding the arm flexion and abdominal flexion number. The descriptive analysis used mean and standard deviation, and Pearson's test to the correlations ($p < 0,05$). Results: in 2016, the children's motor quotient average was 60.70 (SD = 10.85), mostly classified as very poor; in 2018, the children had a motor quotient = 59.22 (SD = 9.20) and the same classification. The average MFit in 2016 was 25,04 (SD = 11,99) and in 2018 was 24,24 (SD = 12,64). In 2016, there was a positive association between MFit and LOC ($r = .22$; $p = .02$), CO = ($r = .3$; $p = .00$) and total CM ($r = .33$; $p = .00$). In 2018, there was a significant correlation only between MFit and LOC ($r = .30$; $p = .00$). Implications: The results reveal that motor development throughout childhood can be negatively affected, for example, the contemporary way of life tends to be more sedentary over the years, and this can interfere with CM's levels. Besides, care with the category of CO must be taken into account as these will be the basis for very complex skills throughout life and can interfere with the CM of children, even contributing to a possible risk to their health. A more sophisticated analysis can help explain these results