

ORAL: ASSESSING THE IMPACT OF BMI ON MOTOR PERFORMANCES, SELF EFFICACY AND ENJOYMENT IN PRIMARY SCHOOL CHILDREN

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Objective: The aim of this research work is to evaluate and compare motor performances and psychological correlates in relation to gender and BMI. **Method:** The survey was conducted on a sample of 3360 primary school students (1665 F - 1695 M, age 8 ± 0 year) in Apulia Region, Italy. Participants were divided into three groups according to gender and BMI (normal weight, overweight and obese). Three motor tests (SLJ, shuttle run and 6 min walk test) were assessed to evaluate strength and resistance and two self-reports were proposed for evaluating self-efficacy and enjoyment. In addition to the descriptive statistics ($M\pm SD$), analysis of variance with ANOVA 3 (group, normal-weight vs overweight vs obese) x 2 (gender) was performed, to highlight significant differences in relation to the dependent variables considered. The significance index was set at $p=0.05$. **Result:** The following results can be highlighted: a) 64,38% of children were normal weight, 20,60% overweight and 15,03% obese, independently from gender; b) boys showed better results in all motor tests and self-reports than girls, except for enjoyment; c) overweight and obese children (both male and female) showed lower motor performances than the normal weight group; e) BMI had a significant influence on children's psychological factors, evidenced a progressive decline in perceived self-efficacy and enjoyment from Nw to Ow and Ob children, in both male and female. **Implications:** Results of the SBAM program confirmed previous studies highlighting that obese and overweight children have lower motor performance than normal-weight peers. Psychological correlates, as perceived self-efficacy and enjoyment are related to motor development and BMI as factors of mediation to promote physical activity during the developmental age. It is therefore necessary to adapt the motor tasks to the motor skills of children with a high BMI, in terms of executive difficulty, duration and intensity, to help increase the quantitative and qualitative levels of physical activity, promoting success and motivation.