

RELATIONSHIP BETWEEN PHYSICAL FITNESS AND ACADEMIC PERFORMANCE IN SOUTH AFRICAN CHILDREN

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ABSTRACT

The aim of this study was to determine the relationship between physical fitness and academic achievement in an urban South African group of primary school children. A one-way cross-sectional design was used to assess physical fitness of children 9 to 12 years (N=212) by means of the Fitnessgram, the Bruininks-Oseretsky Test of Motor Proficiency II, percentage body fat and Body Mass Index (BMI). Average end-of-the-year academic marks served as measurement of academic achievement. Relationships between the variables were determined by Spearman correlation coefficients and effect sizes, and a stepwise discriminant analysis. The results show a significant correlation between total strength scores and academic performance in the total group and between several fitness variables and academic performance in the female group. Significant correlations were found between specific strength tests and academic performance among older boys (12 years) and older girls (11 & 12 years). Several fitness parameters discriminated between high and low academic achievers. A positive relationship between physical fitness components and academic achievement was found with more significant correlations among girls than boys, as well as among older boys and girls.

Key words: Physical fitness; Academic achievement; Children; Obesity.