

RELATIONSHIP BETWEEN ANTHROPOMETRIC CHARACTERISTICS AND MOTOR ABILITIES OF GIRLS IN THE FIRST GRADE OF ELEMENTARY SCHOOL

Abstract

This paper aimed to determine the relationship between anthropometric characteristics and motor abilities of girls in the first grade of elementary school by applying two anthropometric measures (body height and body weight) and six motor tests (medicine ball throw, bent arm hang, shuttle run test, bend forward on a bench, standing jump and sprint length 20 m) on a sample of 155 girls, aged 7.5 years±3 months. The applied regression analysis revealed that, in the manifest space between anthropometric characteristics and motor abilities, there were statistically significant relationships ($p<0.01$), such as the positive influence of both anthropometric characteristics and the motor variable medicine ball throw, and the negative influence of the variable bent arm hang. Determination of the latent structure of motor variables by component factor analysis reduced the motor correlation matrix of variables to two latent dimensions, suggesting a topological differentiation of motor abilities to the upper extremity and lower extremity strength.

Key words: *relations, anthropometric characteristics, motor abilities, girls, first grade, elementary school*
