

## Abstract

**Title:** Assessment of motor performance and body holding in young school-age children

**Objectives:** The aim of this thesis is the assessment of motor performance, body holding and basic information concerning movement activity in young school-age children and to reveal any possible interrelations between these data.

**Hypothesis:** 1. The volume of movement load in young school-age children affects their motor performance and body holding.  
2. Motor performance evaluated by a modification of the UNIFITTEST has a significant correlation with body holding in young school age children.

**Methods:** In order to determine the level of motor performance of the children, I used a modification of the UNIFITTEST (Měkota et al., 2002), while I also evaluated their basic somatic parameters. Their body holding was evaluated according to Mathias (Hošková and Matoušová 2007), Jaroš and Lomníček (Hošková and Matoušová 2007) and Adams's Test (Haladová and Nechvátalová 2005). Information about the frequency of the children's sports activities and their lifestyle, I collected with the form of a short survey.

The research group consists of 19 boys and 11 girls with an average age of 9 years old (age range 8-11 years – by 1.1.2018), mean body height of 1.4 m ( $\sigma=8,2$  cm) and mean body weight of 36.5 kg ( $\sigma=9,1$  kg).

**Results:** Two-thirds of the children were having regular physical activity daily. This fact was compared with the ranking of the children in the motor performance evaluation and in the assessment of the posture. An insignificant relationship is indicated between the frequency of physical activity and motor performance, however a relationship between the frequency of physical activity and body holding must be refuted according to my results. The correlation analysis of the relationship

between movement load and motor performance ( $r_1$ ) and between movement load and body holding ( $r_2$ ) confirmed these findings. The volume of movement load of young school-age children does not affect their motor performance and body holding.

In half of the examined children there was a deviation of up to a maximum of 10% between the results in motor tests and the assessment of body holding whereas in the second half the deviation reached up to 78 %. In one fifth of the children examined, the deviation was more than 50 %. Correlation analysis revealed an insignificant relationship between motor performance and body holding, the correlation is weak ( $r_3 = 0.32$ ) and it cannot be considered significant. Motor performance has an insignificant relationship with body holding in young school age children.

**Conclusion:** I failed to confirm the hypotheses. The hypotheses were rejected.

**Keywords:** motor performance, physical fitness, motor tests, body holding, poor posture, young school-age