

Abstract

The diploma thesis is focused on the evaluation of the level of basic motor skills of preschool children in relation to gender, age, completion of the first figure changes, body composition and level of physical posture development. The study held from May 2013 to January 2014 included 208 children (101 boys and 107 girls) in the age range of 3 – 6 years old attending kindergartens. Each subject was observed based on 32 somatic characteristics (body height, weight, 8 width dimensions, 8 peripheral characteristics of the trunk and limbs, thickness of 14 skinfolds). There was performed the body mass fractionation according to Matiegka's equations for the analysis of body composition. The completion of first character transformations was examined by aspect assessment (according to Filipin rate), so was examined the quality of posture (methods according to Matthias) and the quality of postural functions (method according to Jaroš and Lomíček). In the case of basic motor skills there was chosen 20 ms run with standing start for the testing of speed capability, for the evaluation of explosive strength abilities was selected jump from the spot with two legs reflection, the testing of explosive strength of the upper limbs was exercised by a ball throw (150 g) by both right and left hand and the evaluation of muscle and joint flexibility was measured by deep forward bend with a range of standing on an elevated surface.

Results showed that the motoric efficiency improves with raising age and with the completion of the first posture changes. Comparison of long-term changes in the development of motor skills of children within the same age range was carried out based on studies from 1977 (Pařízková, 1977), 2010 (Dvořáková, Baboučková, Justián, 2010) and 2010 (Sedlak, 2010). The study held for the purposes of this diploma thesis showed that children reached significantly worse results in all tests (except for speed capability) comparing to previous studies. Generally are boys better than girls in all exercises except for muscle and joint flexibility. The results of the current study showed that children today are significantly lower and slimmer than current standards show, which is contrary to the study held in the 2010, when the secular trend of increasing body height and weight was still confirmed. The negative relationship between the amount of body fat and levels of motor performance was confirmed. Significant relationship between motor skills and the quality of posture was not confirmed.

Keywords: physical activity, motor skills, body posture, preschool age, the first change of body posture, obesity