NEURAL NETWORK ANALYSIS OF SOMATOTYPE DIFFERENCES AMONG MALES RELATED TO THE MANIFESTATION OF MOTOR ABILITIES

Abstract

In order to determine somatotypes and their individual relationship with motor abilities anthropometric measurements and motor testing were applied on a sample that included 99 male subjects, all of which were the 7th- and 8th-grade students in primary schools in five cities in Vojvodina. Among the population of the students three somatotypes were identified: astenomorphs (41.4%), meso-ectomorphs (31%) and endomorphs (25%). In case of motor abilities the best type turned out to be the meso-ectomorphs who appeared as the dominant ones in all types of motor abilities assessment, except for in the tests where no difference between morphological types was observed (Arm plate tapping and Crossed-arm sit-ups). Members of this somatotype are identified as accelerants and it might be one of the possible reasons for its dominance.

Key words: ectomorphy, meso-ectomorphy, endomorphy, 15-years-old