ABSTRACT

Title:

The effect on somatic characteristics for success rate in the tests ensuring assumptions for the special physical training in the Army of the Czech Republic.

Objective:

To identify and compare the impact of somatic characteristics (body composition and somatotype) for the results of the tests ensuring the assumptions for the special physical training in the Army of the Czech Republic.

The method:

The dissertation corresponds with empirically based study of observational type. The measured research group was consisted of students (n = 12) of Military Department (VO) attending full-time studies at the Faculty of Physical Education and Sport (FTVS) of Charles University (UK) in Prague. To characterize the group, there were used the methods of descriptive statistics - rate position (arithmetic mean) and a measure of variability (standard deviation). Somatotype determination was performed according to the method of Heath and Carter (1967) using the program for somatotypes 1.2.5. To analyse the body composition was used a bioelectrical impedance analysis (BIA), it was measured using a device Tanita MC - 980. For the measurement and evaluation of probands were used tests for ensuring the conditions for special physical training (STP) in the Czech Army (AČR), which are part of VO FTVS admission procedure at Charles University in Prague. To evaluate the relationship between the somatic features and the test results was chosen Spearman rank correlation coefficient (r_s).

The results:

The most frequently occurring somatotype students of VO FTVS at Charles University in Prague was ectomorphic mesomorph (8 probands of 12) and the strongest correlation relationship arose at ectomorphic (r_s = 0,585; r_s = −0,585), and mesomorphic components (r_s = −0,559; r_s = 0,559) components with discipline to carry the burden (time and points). For ectomorphic components were able to demonstrate a significant correlation significant at $p \leq 0.05$.

Keywords: Anthropometric measurements, bioelectrical impedance analysis, somatotype, special physical preparation, correlation