

## THE IMPACT OF MORPHOLOGICAL AND MOTOR DIMENSIONS ON EXPLOSIVE STRENGTH OF BOYS AGED 11-12

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### **Summary**

*The sample of 97 boys aged 11 ± 6 months was applied to the system of 27 variables of which 3 were explosive strength variables (as the system of criteria variables), 12 morphological and 12 motor variables (as the system of predictor variables). The aim was to establish the impact of predictor variables on criteria variables. Relations between manifesting variables on some anthropological fields were processed by correlation matrix while the influence of the system of morphological and motor variables (as the system of predictor variables) on particular criteria variables of explosive strength was calculated by regressive analysis. Analysing intercorrelation matrix concerning particular anthropological fields relatively high and statistically significant variable correlations were got with the majority of applied variables. The results of regressive analysis showed that the predictor system of variables of morphological characteristics and motor abilities significantly influences all particular criteria variables of explosive strength on the level of .00 ( $p=.00$ ) except morphological variables of explosive strength of arms ( $p=.04$ ). The conclusion is that morphological characteristics and motor abilities have great impact when explosive strength of boys of this age is involved.*

**Key words:** boys, morphological characteristics, motor abilities, relations, impact

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