

PREDICTIVE VALUE OF KINEMATIC PARAMETERS ON THE RESULTS OF THE LONG JUMP WITH STUDENTS

Abstract

The aim of the research is to determine predictive value of kinematics' parameter variable value of a long jump affecting effecting jump length. The research was conducted on the sample of 50 students I year of Faculty of physical education and sport. The sample of variables presented 9 kinematics parameters variables (as predictor variable system) and one variable effective long jump length (as criteria variable). In order to determine predictor set of variables and criteria variable of a long jump we applied regression analysis. Appliance of regression analysis we obtained that the coefficient of multiple correlations (R) of predictor set of data with criteria variable KPEDSK (effective long jump length). 806, with total variability (R Square) .646 on the level of significance .000, According to analysis of individual partial regression correlation of predictor variable kinematics parameters affecting criteria variable KPEDSK, we can conclude that the biggest and statistically significant influence had three variables as follows; KPBZ5M – speed in last 5 meters (.465 Beta), then KPVTTO variable – body gravity height at bounce (.556 Beta) and variable KPVTTL – body gravity height in the highest stage of a flight (.673 Beta). We assume that the results of the research can help further planning and programming of education, curriculum and training.