

ALTERNATIVE WAYS OF ASSESSING EXPLOSIVE STRENGTH OF LOWER LIMBS

Dariusz Mucha¹, Robert Makuch², Karol Görner³, Adam Jurczak⁴, Jože Štihec⁵

¹Institute of Human Physiology, Academy of Physical Education, Cracow. Podhale Higher Professional School in Nowy Targ, Institute of Physiotherapy, Poland

²Institute of Physical Culture and Pedagogy – The establishment of Physical Education and Health, Technical University of Radom, Poland

³Department of Physical Education and Sports, Faculty of Humanities, M. Bel University, Slovakia

⁴Institute of Human Physiology, Academy of Physical Education, Cracow, Poland

⁵Faculty of Sport, University of Ljubljana, Slovenia

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Abstract

Strength, usually called dynamic force, is associated and strongly connected not only with sport but also with physical reaction and physical education. The aim of the undertaken studies was an attempt to solve the problem of finding a proper test of diagnosing strength, Sargent's vertical jump or a long jump. The research was carried out among 121 of schoolgirls and 128 schoolboys of the junior high school. The participants of the tests were asked to make the attempt of the vertical jump as well as the long jump twice. The obtained data were analyzed by comparing the results of the mentioned tests with the help of the Pearson's indicator. The review of the field tests with reference to both tests was also made. Research tools of the Polish and foreign authors were analyzed with regard to the strength diagnosis. Taking into account the Pearson's modulus of correlation, it can be claimed that both tests can be used interchangeably. Analysis of the fitness tests used in Poland, Europe and in the whole world shows that in almost every research tool elaborated for the needs of accessing motor abilities, the test of strength can be found, although it does not always have to be a vertical jump or a long jump trial.

Key words: strength, trial, vertical jump, long jump, norms.