## The study of prognostication of the throwers competitive performance

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## Abstract

*Background*. Control events should allow the assessment of the adaptation degree of the important functions to the effort requirements specific to the event, to the values of motor qualities development and to the level of knowledge of some technical procedures.

*Aims*. We aim to check to which degree the tests and the norms set by the Romanian Athletics Federation are in accord with the throwing tests and if on their grounds a diagnosis of the level of preparation or the diagnosis of the competitional performance can be made.

Methods.

In this application were included 30 senior male and female throwers, at all types of throws: javelin, hammer, discus and shott put during 2006-2007. The control events taken into account are these results that preceded the contest result three weeks ahead of the competition, at the most. In order to facilitate the results interpretation, we resorted to their grapho-analytical processing, by using statistical functions (correlation).

*Results*. In order to facilitate the results interpretation, we resorted to their grapho-analytical processing, by using statistical functions (correlation).

Javelin throw: only the standing long jump and the snatch weightlifting are significantly correlated with the javelin throw. Some control events are inter-correlated, such as: snatch with 30 m sprint and standing long jump. The significance is calculated for a confidence threshold of 95%. The same thing is valid for the next tables too, where the significant values are symbolized by "n".

*Hammer throwing:* the detent, genuflections, pushing from lying down position, standing long jump, weight throw backwards and forwards are significantly correlated with the athletic event of weight throw. Some events are inter-correlated, such as standing long jump with 30 m sprint, detent and genuflections.

*Discus throw:* only the detent and the strength movement in speed conditions represented by snatch weightlifting are significantly correlated with the proximal competition results.

Conclusions. Many of the control events are statistically correlated, a situation which can be redundant, namely which can offer superfluous information for the prediction of the subsequent performances. We mention that only some of these events are justified namely the diagnosis of the training level, the control of the evolution of the motor skills development, etc. The selection and the moment of the control events performance is made in such way to get structured and easy information concerning the following matters: diagnosis of the training level (general, specific, special physical training, etc); diagnosis of the organism condition (fatigue, sportive shape, etc); selections, controls, finding out of deficiencies etc.

**Keywords**: athletics, throws, control event, prognostication.