METHODS FOR THE EVALUATION OF EFFECTIVENESS AND ACQUIRED LEVEL OF SHOT PUT TECHNIQUE

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The previous works published by us (1, 2 and others) reflected the results of biomechanical research on shot put technique, gained using such methods as stereophotogrammetry, tenzodinamometry, goniometry, electromiography, among others. This work is devoted to the problem of the evaluation of shot put technique effectiveness and acquired level.

To evaluate the absolute and comparative effectiveness of technique we have used criteria arrived at experimentally or theoretically, the informative and discriminative indices of the technique, the technique model indices of individual and top athlete groups. We have stated the realization effectiveness of the technique according to the level of physical condition realization.

A separate part of the research was devoted to the evaluation of the acquired level in shot put technique. A well acquired technique is characterized by:

1) the stability of technique element characteristics while executing a movement under standard conditions;
2) the steadiness of technique element characteristics while executing a movement under changeable conditions (fatigue, changes in one's condition);
3) unchangeability of technique element characteristics after a rest period in the training process.

We have made the individual model indices of shot put technique for 4 athletes of different classifications who executed 40 pushes in succession. For making the top shot putter model indices we used the average values of 27 athletes' technical indices. The numerical values of model indices were calculated for 21, 22 and 23 meter long pushes.

To evaluate the effectiveness of technique realization, the coherence existing among the three indices - sports result, level of physical condition and technique - was used.

The stability, steadiness and unchangeability of the technique were evaluated by stating the individual variation of technique indices, inter-individual, group (variation of indices for the athlete group of one classification) and inter-group (different classification groups) variations in one training session, in different training periods and after a rest period in the training process.

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