

Implementation of an individually differentiated approach in training runners

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Abstract

Objective of the study was to develop and substantiate a model for the implementation of an individually differentiated approach in the training of highly qualified runners.

Methods and structure of the study. Participants in the experiment were members of the national track and field team of 57 student-athletes. At the stages of the study, the following were carried out: questionnaire testing and analysis of the results shown at competitions, mathematical processing of the results obtained.

Results and conclusions. The article reveals the features and patterns of training highly qualified runners. A model for implementing an individually differentiated approach in training runners is presented. External factors and individual characteristics that must be taken into account when selecting and differentiating tasks are identified.

Keywords: *individually differentiated approach, training, individual characteristics, differentiated tasks.*

Introduction. Modern requirements for elite sports, in athletics in particular, force us to pay special attention to the training of highly qualified athletes. The growing level of sports achievements, the time limit, require a search for the most rational means and methods aimed at the effectiveness of the training process. Modern developments in coaching practice, various approaches to the use of well-known methods and new technologies in the preparation of high-class athletes do not always allow achieving the desired sports results.

Often, a Russian trainer does not have expensive diagnostic equipment, modern simulators, or advanced recovery tools in his arsenal. Therefore, a contradiction arises:

- there are many methodological developments for training high-class athletes, but the conditions in which the training process takes place do not allow them to be maximally adapted to a specific athlete;
- there is a stereotype in the physical and technical training of runners at various distances, but the individual characteristics of the athlete, given his ini-

tial abilities, do not allow him to achieve high sports results;

- the level of physical fitness of the athlete indicates an expected effective performance, but the result at the competition is unsatisfactory.

Individual approach and differentiated learning are considered in many scientific works [1, 3, 4, 5]. The modern training process is based on the basic principles of physical education, where the principle of individualization occupies a special place [3]. Therefore, it is relevant to implement an individually differentiated approach in the preparation of highly qualified runners. The training of athletes should be aimed at using training means that are adequate to competitive exercises and have a targeted effect [6]. It is necessary to rationally use means and methods that have an optimal training effect, plan the actually available use of restorative means, in accordance with the preparation stage.

Objective of the study was to develop and substantiate a model for the implementation of an individually differentiated approach in the training of highly qualified runners.



Methods and structure of the study. Experimental research work to develop and search for ways to implement an individually differentiated approach for highly qualified runners was carried out in 2020-2023. on the basis of the Ural Federal University. The participants in the study were members of the track and field team of 57 student-athletes. At the stages of the study, the following were carried out: questionnaire testing and analysis of the results shown at competitions, mathematical processing of the results obtained.

Results of the study and discussion. The study identified individual characteristics and factors that determine the implementation of an individually differentiated approach in the training of highly qualified runners.

Individual characteristics:

- 1) physical fitness,
- 2) biomechanical features (running technique),
- 3) anatomical (physical development) and functional features, metabolism,
- 4) psychological characteristics.

External factors:

- 1) situation (life, environment),
- 2) training conditions (location and equipment),
- 3) techniques, methods, means of training,
- 4) rehabilitation measures and nutrition,
- 5) circumstances beyond our control (accident).

It was further revealed that the individual characteristics of an athlete are interconnected with each other and with the influence of external factors. A change in one factor directly affects a change in another, which in turn requires a comprehensive differentiation of the entire training process. Based on this, a model for implementing an individually differentiated approach was developed (Fig. 1).

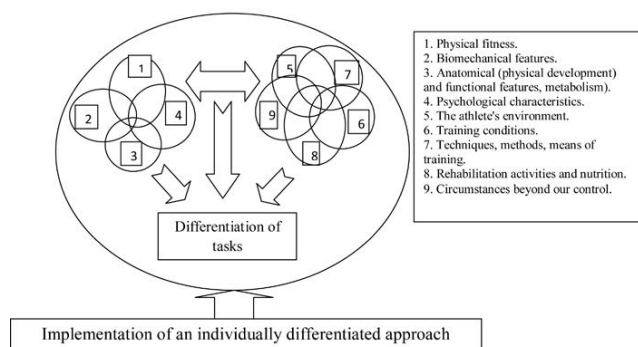


Figure 1. Model for implementing an individually differentiated approach

In the course of our research, practical recommendations were developed for the implementation of an individually differentiated approach in the process of training runners:

1. The trainer needs to constantly improve the level of his knowledge both at the level of fundamental sciences and highly specialized ones. Learn about the possibilities of using modern methods and technologies in the training process.

2. In accordance with the parameters of individual characteristics and factors that determine the implementation of an individually differentiated approach in the training of highly qualified runners presented in Table 1, it is necessary to clearly imagine the model (Fig. 1) of training a particular athlete, individual characteristics of influence and interaction when differentiating tasks.

3. In accordance with the principles, develop a training methodology, select and build a system of certain methods and methodological techniques, using highly differentiated exercises used in a certain sequence and dosage (volume and intensity), aimed at increasing the effectiveness of the training process and, consequently, achieving high athletic performance result.

4. Develop highly specialized options (complexes) of differentiated tasks.

5. In the training process, the dynamics of individual indicators should be constantly monitored, and the influence of external factors should be identified. Taking this into account, the results are analyzed, which leads to adjustments to the entire training process.

Athletes took part in a study on the implementation of an individually differentiated approach in the process of training runners under the guidance of a coach, who was completely guided in his work by the recommendations and the presented model.

Rank of participants at the ascertaining stage

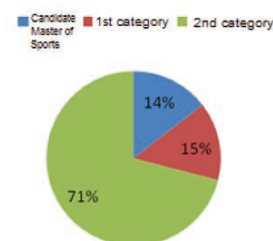


Figure 2. Sports categories of study participants



Using this approach in three years, the following were trained: two masters of sports of international class (and one of the athletes was “written off” as unpromising until that moment at the age of 25); three masters of sports, 17 candidates for master of sports, 26 people completed the first category.

Performing sports categories at the formative stage

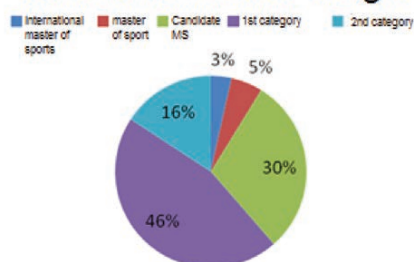


Figure 3. Performance of categories in running events by study participants

Conclusions. Modern achievements in world athletics indicate a significant increase in scientific and methodological research in this area. It is necessary to deeply study these researches and more effectively implement them in practice. Which, in turn, requires a special approach to the entire training process.

Determining individual characteristics and factors influencing the training process is very important and requires a highly differentiated focus. As practice has shown, the implementation of an individually differentiated approach in the training process will optimize

the process of training runners, which in turn will lead to the emergence of new, possibly great, athletes.

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