Scientific Work Review

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INDIVIDUALIZATION OF PLANNING AND PROGRAMMING OF TRAINING WORK WITH SPORTSMEN

SUMMARY

Efficiency of sportsmen is determined by the level and structure of large number of characteristics and knowledge. Reliable and valid measuring instruments (tests) for the assessment of functional and motor abilities are used in practice. Dijagnosing the status of the preparedness sportsmen planers is one of the prereguisites of a successful management of their process. It is necessary to compare the model values of the top sportsmen and the test values of sportsmen who are likely to make the team. On the basis of the obtained values it is possible to design programmes for the development of those abilities in which the potential sportsmen have achived significantly lower value than those comprised in the characteristics model of top sportsmen.

Key words: diagnosis, planning, programming, sportsmen, individualization

INTRODUCTION

Radi što objektivnijeg planiranja i programiranja, a time i sprovodjenja individualizacije u trenažnom procesu na razvoj fizičkih sposobnosti, neophodna je dijagnoza antropoloških obeležja sportista, posebno morfoloških karakteristika, motoričkih, funkcionalnih i situaciono motoričkih sposobnosti, kao i usvojenost tehničko taktičkih znanja. Ovakvim pristupom stiče se uvid u aktuelno stanje, da bi se izvršio izbor optimalnih sredstava telesnih vežbi, metodičkih formi i oblika rada i utvrdio obim i intenzitet opterećenja.

Važno je da da se u procesu trenažnog rada na razvoj fizićkih sposobnosti sa mladim sportistima primenjuju odgovarajući naučni postupci za utvrđivanje strukture dimenzija, njihovih relacija i razvojnih zakonitosti koje omogućuju efikasnu kontrolu rada za praćenje stanja i promena antropoloških obeležja primenom sredstva telesnih vežbi (*Pržulj, 2007*).

High sports results, at the present level of development of sports preparation, come as a consequence of programmed training, competition and recovery based on scientific findings.

Different scientific disciplines (biomechanics, physiology, and kinesiology) are attempting to determine the mechanisms and abilities which are of utmost importance for sports activity in general as well as for each individual sport and sport discipline. One of the ways in which scientists in the field of physical culture can participate in the creation of top results is, surely, individualization of planning and programming of training work with sportsmen. For the training process individualization it is of special importance to diagnose the training-ness that enables the measurement of basic and specific abilities that are assumed to be of importance for success in a particular sport (*Pržulj, 2012*).

Accordingly, the aim of the paper is to make trainers, sportsmen and other subjects from the field of physical culture acquainted with the current knowledge about the methods and principles of work individualization in the training process. This knowledge should be considered in the context of assisting the trainers in creating the process of exercises for enhancing the training quality.

CHARACTERISTICS OF INDIVIDUALIZED PLANNING AND TRAINING WORK PROGRAMMING

The level and dynamics of planned sports results can be achieved only by planned and programmed training.

The training planning is a complex managing action used to define objectives and tasks of the training process, time cycles for their achievement and the needed technical, material and staff conditions. The planning must be based on the real and feasible assumptions and it must be adapted to the individual abilities of sportsmen and teams.

The training programming is a complex managing action in which, on the bases of the defined plan elements, the procedures comprising information about means, loads and methods of the training work and competition are determined. The programming is used for making distribution of the chosen means of physical exercises suitable to be applied in particular cycles of the sports activity compatible with individual abilities and characteristics of sportsmen and the conditions in which the sports preparation is carried out.

For individualized planning and programming of the training work it is essential to know good and bad sides of each individual sportsman's preparation. These data are obtained by comparing individual characteristics of the examined sportsmen with the model characteristics of the top sportsmen. The successful training process can only be the one in which the sportsman achieves the level of sports preparation identical or close to the model characteristics of the best sportsmen.



Table 1. Forms of Planning and Programming of the Training Work with Respect to the Duration of the Sports Preparation Cycle (Milanović, 2007).

A long-term planning of the training work process refers to the time of the overall sports career and to the two-Olympic cycles' interval (period of eight years).

A middle-term planning and programming of the training process refers to the Olympic cycle. The principles of the training structure in the Olympic cycle are:

1. in the first two years the extended preparation cycles are carried out while the training is used for keeping up the basic functional-motoric preparation of sportsmen as well as to perfect the technical and tactic knowledge,

2. in the third year the most dominant training structure and competition system is that of the Olympic year while the model of trainings and competitions is also tested, and,

3. the fourth year is devoted to the model's checking with possible corrections; this provides for the highest level of sports achievements at the Olympic competition.

A short-term planning and training programming refers to a year or half-year training cycle.

The current planning and programming provide for functional management of the cumulative training effects while ensuring, at the same time, the desired rhythm of development of sports form and adaptation process that can both guarantee a high level of sports results in the competition period.

The operational planning and programming (microcycle, training day and individual training) ensure the making of the detailed plan of the training work, namely:

1.in the microcycle, what has to be determined is the number of training days, of individual trainings and of hours of training work as well as contents, load and methods of trainings on particular days and trainings,

2.the training day may include many individual trainings of different target orientation and different load, and,

3. individual training as the basic training unit realizes immediate, that is, instant effects in its inner work structure (introductory, preparation, main and final parts).

DIAGNOSTIS OF SPORTSMEN'S ABILITIES AND CHARACTERISTICS IN THE TRAINING WORK

Training process with sportsmen represents organized influence on anthropological marks and level increasing of adoption and improving of motorical knowledge under direct trainers leading and sportsmen cooperation.

One of the main conditions for increasing of training work process is that planning, programming, leading and working control is based on scientific research results. In the aim of work optimization in training process, they should know about actual state of capabilities and characteristics and motorical knowledge of sportsmen¹. For that purpose, we use diagnosis acts for establishing the sportsmen beginning state, valorization of achieved effects in some working cycles and for planning and programming of further training process course.

Diagnosis in a training process includes methods which are used for establishing of individual sportsmen characteristics through testing and measuring of anthropological marks dimensions.

In the area of anthropological marks we have to have the cooperation of a trainer and psychologist in analysis of cognitive abilities and conative characteristics. For those two segments there are different measure instruments with which we could successfully estimate important functions and modes of behaving. Information about that area is important for a trainer and others who take care of education, especially if it is all about younger sportsmen. However, what a trainer should measure, tests and analyze refers to anthropological, motorical and functional marks of sportsmen. The bigger part of anthropological measures and tests from those areas can also be established by sportsmen themselves and in that way we can save our time. It is especially useful if sportsmen can constantly control the state of some of their marks and analyze the changes. To make this true, sportsmen should know which anthropological marks define some measures and tests, to know about norms and criterion for each mark, to make this possible have to know how work on a computer like bringing in data and counting the individual position compared to some wanted final state (Zeljaskov, 2003; Malacko, 2002).

During the one year training work there is a dynamic process of body exercise influence on anthropological marks changes of sportsmen and motorical knowledge. Most authors emphasis (*Bala, 1991*) that right establishing of training work effects is needed so that a trainer can have reliable information about capability state and characteristics and motorical knowledge of sportsmen. According to that, it is needed to follow lecture's effects constantly by using diagnostically methods through the realizations of a training process. The most convenient thing is that 4 kinds of sportsmen state are established in physical education lectures by diagnoses (*Mrkovic, 1997*):

1. Initial state refers to sportsmen state directly before a training work. This state should be established in area of measure and variables with which the wanted final state is described and represents programming basics of further work.

2.Transitional or control state of sportsmen is important for establishing the work efficiency and correction of further exercises process. The connection of training work can be done by increasing the intensity, step by step, by connection of chosen methods and chosen training means. In fact, it is needed to change the means and methods which can't disturb homeostasis of those functions we want to develop.

3. Final state of sportsmen represents the measure of parameters between initial state and the same parameters at the end of final teaching treatment. In the range of final state, the first shape is so called ideal final state which is hard to achieve, especially in activities in which results are close to the border of human abilities. The second shape is wanted final state that represents the estimate between the some marks of initial and final state so that changes of some characteristics capabilities and motorical knowledge can be established.

4. Real final state is the one achieved at the end of training treatment and represent the basic thing for analysis of work effects and programming of further training work.

One of the main conditions for achieving success in training work is diagnoses of capabilities and characteristics and motorical knowledge, respectively currently state in which sportsmen are at the beginning of training work. Diagnosis, respectively establishing the state of anthropological marks, represents the first step in creating, leading and control of training process.

According to diagnostic size of sportsmen, we can make a plan and working program and establish means, loads and methods which correspond to individual characteristics of sportsmen and goals which we want to fulfill in each phase of training work.

CONCLUSION

For effective individual planning and programming of the training work with sportsmen, the following conditions have to be realized first:

1. Professional aptitude of the trainer and other experts involved in the work with sportsmen,

2. Reliable determination of the initial state of abilities, characteristics and technical knowledge of sportsmen or sports team,

3. Precise determination of the desired final state in accordance with the requirements of the sports activity and real possibilities to achieve it in the defined time period, and,

4. Permanent analysis of the programs and their correction regarding the feed-back information about the achieved transitional states.

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