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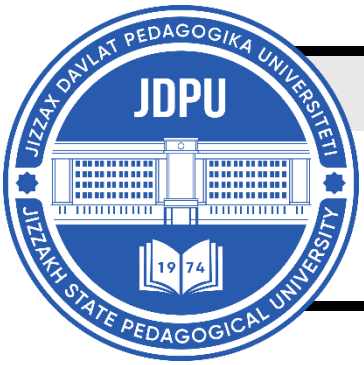
MENTAL ENLIGHTENMENT SCIENTIFIC – METHODOLOGICAL JOURNAL



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EFFECTIVENESS OF INTEGRATED TRAINING OF YOUNG TRIATHLETES

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ABOUT ARTICLE

Key words: Optimization, loading, integral training, special training, running equipment, cycle, shock absorber, puller, pre-competition, swimming, cycling, running.

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Abstract: This article provides information on modeling the athlete's condition and organizing the training effect in the special training phase of young triathletes based on the tools of integral training of young triathletes and the formation of a connection between the coach and the athlete.

INTRODUCTION

Triathlon practice in the world shows that scientific work is being carried out on the basis of various approaches to the organization of an annual training cycle for highly qualified athletes, which allows them to achieve success in high-level competitions, effectively managing the training process, in which great attention is paid to taking into account the specific features of overcoming loads in triathlon and, most importantly, to distributing complex training in annual training mesocycles . This, in turn, requires research to determine the optimal ratio of special-purpose training loads in various directions in the annual training cycle of triathletes. At the stage of improving sports skills in triathlon , it is necessary to study in more depth the

structural features of the formation of the training process based on the periodization of sports training, as well as the need to develop innovative methods, organize the training process, and optimize the training loads of young triathletes throughout the entire period of sports training.

LITERATURE ANALYSIS AND METHODOLOGY

Triathlon, with its three complex sports (swimming, cycling and running), requires athletes to have a high level of overall physical fitness. Integral training for young triathletes uses approaches aimed at developing all aspects of the athlete's body as a whole. Integral training aims to maximize the athlete's overall potential by combining physiological, psychological and technical components.

1. Integrated training efficiency.

The effectiveness of integrated training in training young triathletes is based on several factors. By using this approach, the athlete can:

- Physical endurance (aerobic and anaerobic capacities)
- High level of technique and tactics
- Psychological stability and stress resistance
- Physical and psychological recovery

The methodology being developed is aimed not only at improving individual abilities, but also at optimizing the physical and psychological state of athletes.

2. Literature review.

There are a number of scientific studies on the integral training of young triathletes, which focus on developing different aspects of the athlete together.

a) Physiological foundations

In order to develop the physical fitness of triathletes in an integrated manner, it is necessary to combine aerobic and anaerobic capacities. For example, several studies have shown that in young athletes, it is effective to optimize loads and adapt to new energy systems (e.g., increase maximal oxygen consumption, lactate clearance). The periodization methods developed by Bompa and Haff (2009) are an excellent approach for young athletes. Their approach is aimed at integrating and interrelating all the physical abilities of the athlete.

b) Technical approaches

Each type of triathlon - swimming, cycling and running - has its own technical requirements. Developing technical competence is important in the integral training of young triathletes. Therefore, individual approaches to technical training help to teach and improve the mechanisms of movement of the young athlete. Milton (2011) in his book “Triathlon: The

Science of Training" provides information on integral approaches to technical training, what methods should be used by an athlete to achieve the best technical result in each component.

c) Psychological approaches

Psychological aspects are also an integral part of integrated training. In the training of young triathletes, it is necessary to monitor the psychological state and increase the athlete's mental potential. Psychological training is aimed at ensuring the athlete's motivation, decision-making ability, stress management, and adaptation to competition conditions. Hatzigeorgiou (2016) in his research on the study of psychological training analyzed the ability of young athletes to withstand stress and what kind of motivation they have during the competition.

d) Integrated approaches

an integrated training system that combines all the components of an athlete (physiological, psychological, technical) . The scientific developments presented by Hoffmann and Boer (2018) show the importance of managing all the training processes of triathletes in an integrated manner, ensuring that each component develops in harmony with each other. In this approach, while managing separate training for each sport (swimming, cycling, running), special attention is also paid to increasing the overall physical capacity and the recovery processes of the athlete.

3. Methodology and practical approaches

The methodologies used in the integrated training of young triathletes are based on the following key elements:

a) Periodization

Periodization is a system of controlling the time, intensity and volume of training, which helps an athlete achieve maximum results. For young athletes, working with a system of micro-, meso- and macrocycles is effective. Proper planning of periodization should be adapted to the physical condition of the athletes. This methodology helps to balance the physical, psychological and technical training of young athletes.

b) Multicomponent training

In integrated training, multi-component training (aimed at developing multiple skills) is effective. For example, combining training in several sports, developing the technique of each sport, and exercises aimed at increasing overall endurance.

c) Physiological monitoring and control

Physiological monitoring methods are used to analyze athletes' load levels, their recovery rates, and adaptive responses . This monitoring is used to monitor individual

developmental characteristics of young triathletes, such as oxygen consumption (VO2max), lactate levels, and other physiological parameters.

d) Psychological support

To improve the psychological preparedness of young athletes, special programs will be developed to increase psychological training (stress management, reducing anxiety before competitions) and motivation.

DISCUSSION AND RESULTS

The exercise is studied in depth, its main elements are combined and performed automatically, reaching a level of proficiency. The goal of training at this stage is to form full-fledged motor skills, the ability to independently perform motor movements. At the same time, minor technical errors are eliminated . The athlete's attention should be focused on spatial (for example, when sitting on a bicycle - bending the elbows, leaning forward, in hand movements - trajectory, amplitude, direction), temporal (frequent pedaling, increasing speed, frequent stepping) and dynamic characteristics of the movement (propulsive force, overcoming friction, aerodynamics), expressed in understanding the exercise being performed and preventing possible errors. For example, an athlete who is first learning to ride a bicycle tries to maintain balance, develops riding skills, and then improves them by mastering the techniques of smooth pedaling, achieving smoothness and uniformity of movement. In this case, exercises are used to develop the muscular system and the whole body, taking into account the characteristics of the motor movement being studied.

The goal of the final stage is to strengthen and improve motor skills, which allows you to achieve high results. The ability to rationally apply the mastered movement in the process of training and competition is formed. Individual characteristics of the technique bring it to the necessary level of development. At the same time, it allows you to further improve in the training sections, the necessary strength and other physical qualities are developed. For example, a well-developed skill in riding a bicycle allows you to effectively control it when moving both on the highway and on uneven roads. There are two ways to get on a bicycle - from a stop and on foot. To get on a bicycle, you need to lean on the push leg, throw the flywheel into the saddle and put it on the pedal, press and start moving. The athlete sits down while moving, rests his pushing foot on the pedal, performs 2-3 consecutive pushes of the supporting foot off the road to accelerate the bike, throws his rotating foot onto the saddle, puts it on the pedal, presses it, and the pedal starts to rotate. It was determined during our analysis that long-distance cycling is possible by performing the movements in the correct sequence.

sharply improving the running component in the competitive training of young triathletes at the initial specialization stage is confirmed by the results of our study, as well as the data obtained in the process of analyzing various scientific and methodological studies . In addition, at present, there is practically no scientific research on the issues of planning and combining training loads of various directions at the special preparatory stage of training young triathletes. Based on the above, the training loads of young triathletes were optimized.

As a result of the research, a model for constructing a special preparatory stage of training young triathletes was developed, which includes algorithms for constructing this part of the training process, which solves the problem of planning, organizing and implementing the process of training triathletes. The planned goal was achieved by optimizing and improving training loads (see Fig. 1).

<table>
<tr><td colspan="5">MANAGEMENT SYSTEM (COACH)</td></tr>
<tr><td colspan="5">MODELING THE ATHLETE'S STATE AND ORGANIZING THE EFFECT OF TRAINING IN YOUNG TRIATHLON ATHLETES AT THE SPECIAL PREPARATION STAGE BASED ON RUNNING PREPARATION TOOLS</td></tr>
<tr><td colspan="5">1. Analysis of the initial level of running preparation of triathletes</td></tr>
<tr><td colspan="5">2. Dividing athletes into groups with different levels of preparation</td></tr>
<tr><td colspan="5">3. Goal setting (based on forecasting)</td></tr>
<tr><td colspan="5">4. Setting running training goals</td></tr>
<tr><td colspan="5">5. Heart hit to the speed looking at physical of downloads intensity zones according to exercise the effects distribution</td></tr>
<tr><td>Aerobic 1 (Intensity 50-60%)</td><td>Aerobic 2 (Intensity 60-70 %)</td><td>Aerobic 3 (Intensity 70-80%)</td><td>Mixture (Intensity 80-90%)</td><td>Anaerobic (Intensity 95-100%)</td></tr>
<tr><td colspan="5">6. Special preparation in the phase young triathletes running tools based on preparation sports of training structural parts planning and programming .</td></tr>
<tr><td colspan="5">7. Running 5 of the preparation physical downloads intensity zones according to differentiated exercise of tools created base based on working issued exercise programs done increase</td></tr>
<tr><td colspan="5">8. Determining the current level of athletes' specific running preparation before the start (predicting the result)</td></tr>
<tr><td colspan="5">9. Plan your running distance at the start</td></tr>
</table>

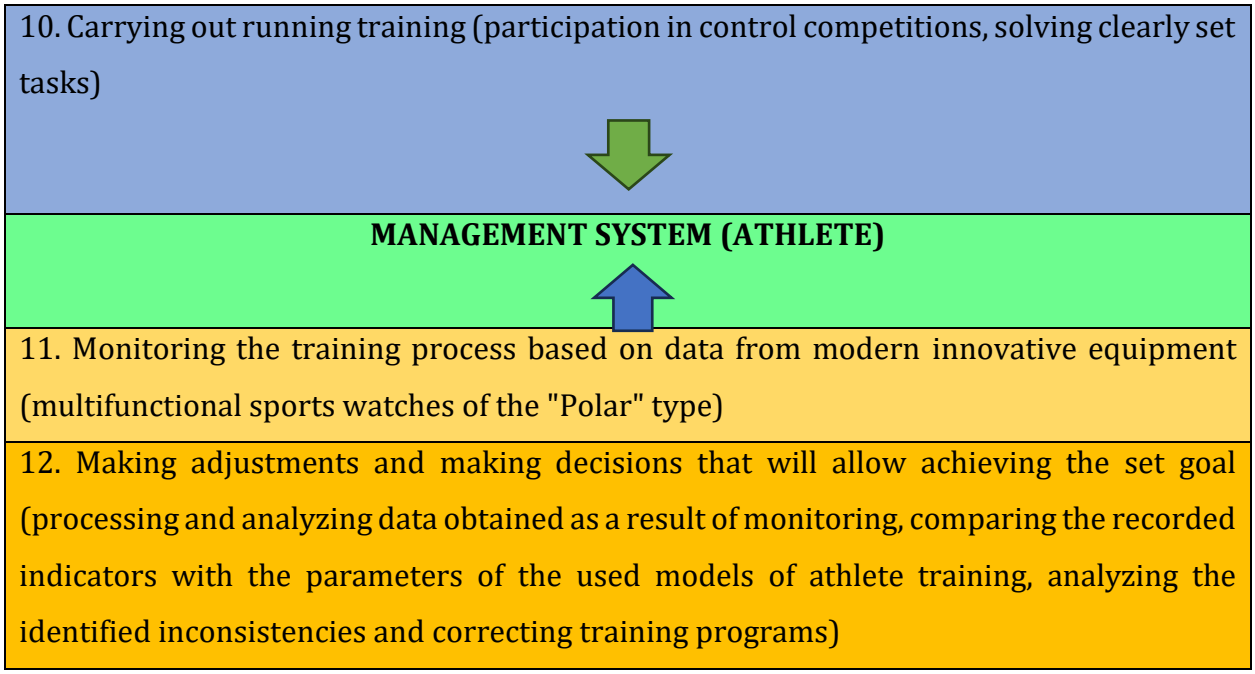

Figure 1. Model for constructing a special training phase for young triathletes based on running equipment .

The presented model was developed based on the following: selection of adequate means of running training for young triathletes; systematization of training tools and methods based on an analysis of existing approaches to building this process, inclusion of these tools in the general scheme of building a special preparatory stage of training for young triathletes; formulation of the tasks of running training at the special preparatory stage of training for young triathletes, taking into account the norm of the training load, all its types, taking into account the relationship between the content of running training and other components of the triathlete's training; developed in order to establish the continuity between the effectiveness of training when applying loads of different directions (training, microcycle, etc.).

The model for constructing a special training phase based on running training tools for young triathletes assumes the following option for the ratio of training loads: swimming 40%, cycling 20%, running 40%. The structure of the developed model is represented by a repetition of a mesocycle (with a gradual increase in the volume and intensity of the load), consisting of three loading microcycles and one recovery microcycle. Each microcycle includes six periods focused on running, two of which are devoted to basic work in the aerobic-anaerobic (mixed) mode, one training session is of a restorative nature, the remaining three classes are combined (cycling + running) and focused on developing technique in cycling training. Also, six training

sessions were carried out on the development of swimming elements, two of which were carried out in basic training.

CONCLUSION

In conclusion, by using the model for creating a special training phase for young triathletes based on running equipment , the opportunity for integrated training of young triathletes has increased, while the technical and tactical training indicators of young triathletes have improved by 14.3% overall.

To increase the effectiveness of integrated training of young triathletes, it is necessary to combine physiological, psychological and technical approaches. This training system helps young athletes achieve maximum results, prevent injuries, and maximize their sports potential. Literature analysis and methodological approaches create broad opportunities for the effective organization of integrated training.

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