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THE ENDURANCE OF YOUNG ATHLETES DEVELOPMENT

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ABSTRACT

Endurance is necessary for athletes not only during competitions, but also to perform large-scale training work. It depends on the level of readiness of organs and systems (especially the central nervous system, cardiovascular, respiratory and muscular apparatus), the level of perfection of sports techniques and the ability to perform movements efficiently. This article examines aspects of developing endurance in young athletes.

KEYWORDS: *Physical Education, Physical Culture, Athletics, Sports Psychology, Sports Training*.

INTRODUCTION

Athletics is part of the physical education system for children, adolescents and young adults. They are intended for academic lyceums and other educational institutions. Walking, running, jumping and throwing, as well as special exercises used in athletics, are varied, lightly standardized, and very convenient for children. Before reaching school age, children learn to perform various games, running, jumping and throwing in a simple way. **[1]**

Endurance is general and special. General endurance is an integral part of the overall physical development of any athlete and is primarily the result of serious positive changes in the central nervous system, cardiovascular, respiratory and other systems. Depending on the nature of some types of athletics, the athlete needs special endurance. It is known that a short-distance runner is unbearable in a marathon run, and a marathon runner is unbearable in a 400-meter sprint. A jumper with an anchor that can withstand a multi-hour race can turn out to be unbearable in a 1500m run. The uniqueness of special endurance in each type of athletics is so great that it has to have its own methodology for each. **[2]**

MAIN PART

Overall endurance is created through almost all means of exercise included in the annual workout.

Runners can reach up to 2030 km to increase the overall endurance of runners and fast runners with a high level of training. In this case, the speed should not be too great. In this case, trainings with running are held 3 times a week, and in the strongest stayers 67 times a week for 35 months of the training period. General endurance is mainly developed during the training period, and is only maintained during the competition period. **[3]**

General endurance, along with determining the overall work ability of athletes and their level of health, serves as the basis for the development of specific endurance. The higher it is, the better the special endurance develops on this basis.

Endurance needs to be developed in a certain order. First (during the training period) more attention is paid to the development of general endurance, then (during the competition) more attention is paid to the development of special endurance. At the same time, special endurance will be developed during the training period, while general endurance will be maintained during the competition. **[4]**

The main way to develop the special endurance of jumpers and throwers is to perform the selected type of athletics, and in part, special exercises many times.

The special endurance of many wrestlers is based on excellent overall endurance, special endurance in short-distance running, as well as perfection of all exercise techniques involved in multi-wrestling.

Specific endurance is determined by how high the special training of the athlete's organs and systems in all types of athletics.

There is a difference in the methodology of developing the special endurance of runners for different distances. It is primarily determined by the physiological characteristics of the organs, systems, and the whole organism that depend on the intensity of the run and how long the run lasts. It is especially important to take into account the ratio of oxygen demand to its consumption. It is known that the working capacity of the body and especially the nerve tissue of the brain depends on the supply of oxygen. In the absence of oxygen (especially during prolonged work), the ability to work is reduced. This is why the respiratory and cardiovascular systems, which provide oxygen to the body, are so important. In many ways, the training methodology is aimed at improving these systems. **[5]**

According to physiologists, the specific endurance of long-distance and ultra-long-distance runners is largely determined by the body's long-term need for oxygen and its ability to balance its consumption ("stagnation state"). This is also seen in the consumption of oxygen during walking, running long and very long distances, the pulse rate, the minute volume of blood being kept at the same level for a long time. Despite this "state of stagnation", fatigue gradually increases, and the athlete completes the distance with signs of severe fatigue. The reasons for this are many, but the main reason is a temporary decrease in the activity of the nerve tissue in the brain that determines walking and running. Naturally, if an athlete starts running at a speed that exceeds his or her ability, fatigue will occur quickly and he or she will be forced to slow down or stop running. **[6]**

At the same time, when the demand for oxygen exceeds the consumption, not only the muscles but also the nerve tissue of the brain are not adequately supplied with oxygen. This does not reduce the athlete's ability to work.

To cover long or very long distances with good results, the athlete needs to increase the functional capacity of the respiratory and cardiovascular systems. To do this, it is necessary to maintain a relative "state of stagnation" when the demand for oxygen is higher as a result of increased demands on the body during training and increasing the speed of movement. Such

training should first include running at a speed 34% higher than the speed at which the athlete can reach the end of the entire distance at the same time without any reduction.

The first 12 minutes of running medium distances is characterized by a sharp increase in oxygen consumption. Soon it reaches its peak and remains unchanged for a short time. However, such a "state of stagnation" in the amount of oxygen consumption is the result of the fact that the body has reached the end of oxygen consumption, and such overconsumption is impossible. Thus, running a medium distance increases the demand for oxygen from the level of consuming it (even if it is physiologically exhausted), i.e., oxygen builds up. The higher the running speed, the more the debt increases and the faster the fatigue starts. **[7]**

The main task of medium-distance runners is to improve special endurance, thereby developing organs and systems, improving their functions, as well as teaching the body to use oxygen efficiently and efficiently. This is achieved by repeating the run for a reduced distance at a speed greater than the speed indicated in the race.

Such repetitive runs create a lot of "oxygen debt" and increase the demand for organs and systems. After a long enough workout, a runner who has developed the ability to combat the sudden onset of fatigue that results from high running speeds will find it easier to do work with less intensity, even if it lasts longer than a workout. **[8]**

Experience has shown that if the running speed is higher than in the race, variable running is also useful in running training for 8001500 m. But they use a repetitive method to increase specific endurance when running medium distances (e.g., 800 m runners typically repeat the 400,600 m run, and 1,500 m runners repeat the 8001,000 m run). It is preferable to rest for 1520 minutes between repetitions, which will be necessary to perform the next repetitions at high speed as well.

The most important reason for the rapid increase in fatigue when running 100 and 200 m is changes in the nervous tissue of the brain. During maximal exertion, especially in conditions of hypoxemia, the nerve is exerted very strongly. That is why the ability to work decreases rapidly. Fatigue also increases more slowly in the 100 and 200 m races if the runner is able to run lightly without exerting too much force, despite exerting great effort. **[9]**

Developing the speed of young athletes

Agility, Dexterity.= Agility refers to the ability to learn very quickly the types of movements and to react to changing moving conditions. Dimensions of agility are therefore the time to learn movements, the ability to identify exercises to be performed, and the ability to coordinate and extrapolate (adequately solve movement tasks in changing conditions).

There are two types of agility: body and object types, that is, the ability to exert a single movement with the use of one's own body or objects (manipulation). Agility is determined using special test exercises, which are used to determine the strength of movements, the ability to chase in the field, and the ability to control temporal parameters. **[10]**

There are two types of agility in terms of adaptive properties: 1) to pre-known conditions (which are why pre-programmed behaviors are pre-programmed) and 2) to extremely changing conditions when time is tight. The complexity of the exercises characterizes three stages of

agility: 1) accuracy and coordination on the field; 2) in the same but much shorter time 3) to perform actions quickly and accurately in emergency changing situations.

Increased mobility and dynamics of neural processes in the developmental processes of agility and its age-related improvements associated with kinetic sensitivity were identified. **[11]**

6 years is a shock absorbing age in the development of movement systems that play a key role in the coordination of movements? Its formation is completed by the age of 13-14 years. Sensitive periods accumulate within this age range to show many manifestations of agility.

One of the manifestations of agility is the accuracy of the assessment of the parameters of the movement in the field - from 5 to 11 years develops very rapidly, and the level of muscle tension from 11 to 16 years; From 7 to 10 years of age, the programming of motor functions is actively formed.

The accuracy of jumping to or from a specified distance also assesses agility. Between the ages of 4 and 6 and between the ages of 10 and 13, the highest growth rates are observed. At the age of 7-8 years, the accuracy of targeting scientists is significantly improved. This is due to the improvement of the functions of the visual sensor system. **[12]**

The reorganization of the management of motor mechanisms occurs at the age of 9-10 years, and this is accompanied by a deterioration of a number of coordination skills.

CONCLUSION

The speed of movement of the athlete is primarily caused by the corresponding nerve activity of the cerebral cortex, which directs and directs the movements that tense and relax the muscles. This activity largely depends on how well the athlete's sports technique is improved, the strength and elasticity of the muscles, the mobility of the joints, and his endurance during prolonged work.

Once an athlete’s speed increases as a result of training in one exercise, it is important to know if he or she can perform other exercises quickly as well. Experiments show that the resulting speed does not shift to other exercises where the movement structure is not similar. For example, sprint training does not increase the frequency of working with the telegraph key. This is not the case in actions with similar controls. The speed characteristic that is formed in sprint running runs into depressing in jumping and straightening motion of the foot in throwing.

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