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THE ROLE OF SPEED AND MUSCLE ACTIVITY IN THE DEVELOPMENT OF INDIVIDUAL SKILLS OF 16-18-YEAR-OLD ATHLETES

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ABSTRACT

In the article, the qualities of speed and strength are interrelated and influence each other when performing physical exercises at the age of 16-18 years. Training with a speed-strength orientation to a greater extent develops these personality traits and has little effect on the development of endurance. On the contrary, endurance training leads to its strengthening, having little effect on the systems and mechanisms responsible for the manifestation of muscle strength. Therefore, it was analyzed that mature and elderly people should use different complexes that allow them to resist evolutionary changes in most organs and systems when performing physical exercises.

KEYWORDS

Speed and muscle activity, flexibility, agility, endurance, individual skills.

INTRODUCTION

Sport is one of the factors that increase the prestige of our country. To comprehensively solve the problems of sports development in our country, to educate physically healthy and spiritually mature individuals, to inculcate a healthy lifestyle and a sense of love for

sports, as well as to raise the level of coordination of the implementation of state policy in the management of the sports sector, A review of the performance of all systems is given priority. In the development of physical education and sports in our country, it is very

important that several laws, decrees and decisions are adopted and consistently implemented in life, which ensure the development of sports and physical education, in order to attract the general public to sports, especially the growing young generation. In addition to the development of the mass sports movement, the talented athletes who are currently developing in the republic and are active in the national teams of the country, who can show high results in the Olympic and Asian Games, as well as the world championship and the first competitions. special importance is attached to the provision of highly qualified sports specialists who are inextricably linked to the preparation of skilled sportsmen, and to bring the indicators of sports skills to the level of world requirements. From the first days of independence in our country, great attention was paid to improving people's well-being, economic, social and cultural development of our country.

In many physical exercises, speed-power qualities are interrelated and influence each other. Training with a speed-power direction develops these qualities of the individual to a greater extent and has little effect on the development of endurance. On the contrary, endurance training leads to its strengthening, having little effect on the systems and mechanisms responsible for the manifestation of muscle strength. Therefore, mature and elderly people should use various complexes that allow them to resist evolutionary changes in most organs and systems when doing physical exercises.

Discussion. By the age of 13-14, the development of dexterity is mostly completed, which is related to the ability of children and adolescents to make precise, coordinated and quick movements. Therefore, dexterity is related, firstly, to the spatial accuracy of movements, secondly, to temporal accuracy, and

thirdly, to the speed of solving complex motor tasks. From the age of 3-4, the development of dexterity improves rapidly in the first and second childhood, which is helped by the good elasticity of muscle fibers and ligamentous apparatus in children of this age. The greatest increase in accuracy of movements is observed from 4-5 to 7-8 years. Children under the age of 6-7 cannot make fine precise movements in a very short time. Then the spatial accuracy of movements gradually develops, and then temporal accuracy. Finally, the ability to quickly solve motor problems in different situations is improved. Agility continues to improve until age 17. It is interesting that sports training has a significant effect on the development of agility, and the accuracy of movements in 15-16-year-old athletes is twice as high as in untrained teenagers of the same age.

With age, endurance lasts longer than other physical attributes. It is believed that its decrease begins after the age of 55, and when working at an average power (with aerobic energy supply), it often remains much higher at the age of 70-75. This is confirmed by the well-known facts that people of this age participate in long races, swimming, and hiking. Endurance decreases after 40-45 years when performing high-speed, power and speed-power (with anaerobic energy supply) exercises. This is because the development of endurance depends primarily on the functional usefulness of the circulatory, respiratory and blood systems, that is, on the oxygen transport system, which is not sufficiently exercised during the above exercises. Regular physical activity for endurance (running, skiing, swimming) significantly delays its decline, strength training (weights, dumbbells, expander) has little effect on the age-related dynamics of endurance.

Flexibility is characterized by the ability to perform movements of maximum amplitude. Without special training, this quality begins to decline from the age of 15-20, which disrupts mobility and coordination in various ways. complex actions. In the elderly, as a rule, the flexibility of the body (especially the spine) is significantly reduced. Training allows you to maintain this quality for many years. The best result of trying to restore flexibility is observed in those with good physical fitness. Speed refers to the speed of a person's movement, as well as the complex of functional characteristics that directly determine the time of movement reaction. There are three main elements or forms of immediacy.

1. Latent time of movement reaction.
2. The speed of certain actions.
3. Speed of actions.

Coming to one of the three types shown is fast.

The combination of the three types, which indicate the speed of movement, determines all cases of manifestation of speed. When we say the speed of a wrestler, we mean that he is able to perform some actions in a short time, and when we say that the reaction of a wrestler is good, we mean that he performs capture situations or actions quickly and in a short time, defends and uses countermeasures. In the training of the quick movement reaction, it is necessary to make quick decisions depending on the existing conditions, to act against the attack of the opponent and to understand the actions of the wrestler. Therefore, we mainly look at three types of reactions that occur in wrestling.

1. Normal reaction.
2. Complex reaction.

3. Selection reaction.

1. A normal reaction is to respond to a known or sudden signal with a learned action. For example, a wrestler responds to the initiation of a technique with a prepared defense or counter technique. An example of this is to take a running start, to quickly fire a pistol while looking at pictures, and so on. Normal reaction time of an average wrestler corresponds to 220-260 minutes and seconds. Several methods are used to train normal reaction speed. The most common of these is to react as quickly as possible to a sudden signal or a change in the surrounding situation. For example, with the coach's signal, the wrestler takes a specific position, and changes his position when the fight is called. We will dwell on two types of complex reaction, that is, the reaction to the object in motion and the reaction of choice. The reaction to the object in motion is manifested in one-on-one exercises, for example, when a wrestler learns an action with a partner or a tupup. In ball games, only when the ball is kicked into the goal, the goalkeeper's actions are an example of a complex reaction.

He: a) sees the ball; b) must estimate the direction and speed of the ball. In this case, the latent period of the reaction consists of these four elements. The selection reaction consists in choosing the right response action according to the changes in the opponent's behavior or the surrounding situation. For example, a defending wrestler chooses one of the possible defenses depending on the way his opponent is attacking. The complexity of the selection reaction depends on the rapid change of the situation. For example, in boxing, the demand on the athlete's complex reaction is extremely high, the opponent may unexpectedly try to make a variety of blows with both left and right hands.

There are more than 600 muscles in the human body, which make up 45-50% of the weight of an adult body.



Movements of a person in the external environment, labor activity, speech function, breathing and other physiological functions occur as a result of reflex movement of muscles in groups. Muscles move due to the effect of various environmental influences on sensory organs and this influence goes to the brain through the centripetal nerves, and as a result of the analysis-synthesis process there, it comes to the muscles through the centrifugal nerves. In addition, the activity of internal organs affects the functional state of skeletal muscles in a reflex way.

CONCLUSION

At the same time, the strength and speed of muscle contractions, their excitability, elasticity, flexibility, accuracy and endurance decrease, which is expressed by a decrease in the amplitude and smoothness of movements, an increase in stiffness, and a violation of coordination (uncomfortable. walking), decreased muscle tone, slowing of movements. This is due to prolongation of the action potential in myocytes, slowing down of excitation speed, decrease in the strength of nerve processes and deterioration of energy metabolism in cells.

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