

action (topspin), work on which is carried out at subsequent stages. In addition, the formation of motor actions must be accompanied by the improvement of movement technique.

Based on the research of scientists, movements are important in technical training. From this we can conclude that the training of movements (footwork) should be given at the beginning of table tennis lessons. Training of these two important technical actions should go in parallel.

The training of footwork should be started from a small beginning in order to lay a solid foundation for teaching technical actions of table tennis in the future.

Attention during training, especially physical training, should be given to leg work. Leg strength is particularly important in game practice. Simply developing leg strength is not enough for the process of learning to move, not only strength exercises but also coordination exercises should be included. And also to keep the pace of the game, you should use exercises to develop special endurance. Since during the game of table tennis the player is constantly moving, which in turn requires a well-developed physical quality like endurance.

The initiation of leg strength mainly depends on the rapid extension of the knee joint and the foot, the stability of the centre of gravity mainly depends on the strength of the thigh muscles, and the quality of the kick is related to the coordination between the torso and the lower limbs. During movement, leg strength requires explosive muscle strength and muscular endurance, as well as foot movement ability and body balance ability. Therefore, leg training for 6-8-year-old table tennis players consists of muscle stretching and relaxation, reasonable load distribution and selection of training means mainly related to the lower limbs.

Conclusion. In the formation of sportsmanship it is the stage of initial specialisation that specialists associate with the solution of the main tasks of initial training – mastering the basic technique, mastering the school of motor actions, the main variants of performing technical and tactical techniques.

When training young athletes, it is often suggested to focus on the sequential mastering of techniques. In this way, the athlete's skill is gradually «completed», completed with new techniques or tactical combinations.

To summarise, it can be stated that in individual-playing sports motor skills are manifested in a game opposing situation, and therefore it is reasonable to define them as game skills, which emphasises their creative indefinite-variant character.

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PECULIARITIES OF SELECTION AND ORIENTATION OF YOUNG SWIMMERS AT THE INITIAL STAGE OF SPORTS TRAINING

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Sport swimming is one of the most popular and accessible types of physical activity, attracting the attention of young athletes around the world. In recent years, there has been a growing interest in this sport, which emphasizes the need to develop effective methods of selection and orientation of young swimmers at the initial stage of sports training. Proper selection of children for swimming and their further orientation in this sport play a key role in developing successful athletes and ensuring their long-term participation in the training process [1; 2].

Swimming is a sport that is one of the most physically demanding and technically advanced sports. Swimming has a centuries-old history that includes a variety of competitive activities, many of which fall into two categories: those that emphasize speed and strength and are often held over short distances, and those that require exceptional endurance and are usually held over long distances [2].

In the current conditions of the sport of highest achievements, the identification of the most gifted, promising athletes is of particular importance, as record achievements are characteristic of athletes with the most optimal performance typical of the sport. When assessing the level of competition, a number of key characteristics must be considered. These include a body structure conducive to high performance, an exemplary level of physical fitness, a high level of tactical and technical proficiency, and the ability to demonstrate willpower in the face of serious adversity. Therefore, when making recruitment decisions, it is important to select talented swimmers who are naturally endowed with swimming qualities based on their sportsmanship [3].

The aim of our study is: to analyse and systematize the features of selection and orientation of young swimmers at the initial stage of sports training.

Material and methods. Analysis and generalisation of scientific literature, pedagogical observation, survey. In this article we used, analyzed and summarized publications in scientific journals on sports medicine, pedagogy devoted to sports selection.

Results and their discussion. Many authors have established correlations between morphological indicators of swimmers' body and sports performance, between morphological indicators and pulling power in water [2; 4; 5].

In addition to anthropometric indicators of swimmers, it is necessary to pay attention to changes in the size of some internal organs, including the heart. It turned out that the greater the index of active mass, absolute body surface area, the higher the efficiency and economisation of the cardiovascular and respiratory systems [3].

The human body size determines the functional capabilities of the human body: vital capacity, work capacity, oxygen consumption, buoyancy, water resistance. The vital capacity of the lungs, in turn, is related to the buoyancy of the body [1; 3]. Body buoyancy indirectly characterises the hydrodynamic qualities of swimmers. The hydrodynamic qualities are positively affected by body length. An increase in body length by 10 cm reduces water resistance by 5 % [5]. Tall graceful swimmers are in better swimming conditions than stocky athletes. Such swimmers are more likely to adapt to the environment, have better buoyancy, joint mobility and consequently better endurance [2; 3].

The largest values of longitudinal body dimensions (except for the length of the shoulder, trunk, body, upper body) have representatives of the sprint crawl. This is natural, as they have the highest body length. The difference between longitudinal body dimensions in swimmers and middle swimmers was statistically unreliable. To reduce water resistance, the swimmer's body must acquire a streamlined position and shape. Water resistance has a close relationship with absolute body surface area (0.578-0.725). Since males have a larger body surface area, they experience 9.6 % more water resistance than females.

The morphological features of the human body largely determine its ability to stay in the conditions of the aquatic environment. It is known that the lower the specific weight of the body in water, i.e. the better its buoyancy, the higher the body is located above the water surface. In this regard, it has a significantly lower drag as the swimming speed increases [3].

The body proportions of swimmers are characterised as follows: long legs, short torso, relatively narrow pelvis and short arms, medium width shoulders, cylindrical shaped chest,

straight muscular abdomen, muscles and subcutaneous fat layer are evenly distributed, body shapes are streamlined. About 74 % of swimmers have a muscular body type.

In sprinters specialising in crawl the active mass (muscle + bone tissue) is 71.4 % of the total body weight, in middle sprinters – 73 %, in swimmers – 67.9 %. Thus, statistically significant differences in representatives of the three freestyle distances are noted not only in total dimensions, diameters of indicators and areas of body cross-sections, but also in body composition, namely in the percentage of active body mass. This index is in high correlation with the value of relative strength of the athlete and, in addition, determines the nature of his physical performance. The more muscle mass a swimmer has, the more oxygen he needs to work, the higher his oxygen debt. The percentage of adipose tissue in sprinters is higher than in swimmers. Representatives of backstroke have a relative weight of 71.2 per cent of active mass (and they differ slightly from representatives of other methods of swimming) and 8.4 per cent of adipose tissue. The weight of bone has the lowest value compared to other swimmers. Obviously, for success in backstroke swimming, body mass composition is of great importance.

Those specialising in dolphin swimming have an active body mass of 71.6 %. They have the highest relative mass of fat tissue (11.0) and almost the same low percentage of bone tissue as those specialising in backstroke. Representatives of breaststroke are characterised by a low weight of active body mass – 67.6 % with a low percentage of adipose tissue 8.9%. Representatives of complex swimming have an active weight of 71.4 per cent of body weight.

Starting from the age of 16 – in boys, in girls – from the age of 15, the body mass increases, then decreases and by the age of 18-24 is mostly stabilised or slightly increases. Increasing the intensity of swimming leads to an increase in the fat-free and a decrease in body fat. Decreasing the intensity of exercise leads to a decrease in the lean and fat components with an increase in total body weight.

The authors note that stage swimmers are heavier and fuller; greater fat reserves contribute to better buoyancy and streamlining. The need to study the dependence of body composition on the nature of training for short and long distances is noted.

The study of body mass and body composition provides reliable information on morphofunctional shifts occurring in the swimmer's organism to a greater extent than data on total body size.

It was found that in 11-13 year old swimmers sex differences in morphofunctional indices are almost absent, although in 14-16 year olds they are already poorly represented. The average and high degree of difference between men and women is still significant in the indices characterising the power of physique and strength training.

In research, preference should be given to dynamic observations in standard tests according to uniform programmes. It should be taken into account that the same adaptive effect in muscular activity can be provided by different physiological pathways, different combinations of individual components forming qualitative and quantitative integral response to solve a motor task.

Effective management of the training process involves ensuring a harmonious combination of all the elements that make up this process. In swimming the sports result is expressed by the maximum possible speed of the athlete's movement when overcoming this or that distance. Achievement of high speed of swimming is conditioned by the necessity to overcome significant external resistance. The latter is connected not so much with overcoming of own body mass and inertia, as it takes place in terrestrial locomotion, but with overcoming the resistance of the environment. At the same time, the value of the achieved speed significantly depends on the power capabilities of a person. Their

level is directly related to the part of the pedagogical process aimed at the development of these capabilities.

Conclusion. Thus, the objective carrying out of sports selection in swimming depends on the variety of morphofunctional, psychological and pedagogical criteria that reveal the predisposition to swimming of gifted children and adolescents.

Taking into account the organic interrelation of teaching methods, sports selection and sports training, it is necessary to achieve continuity of their realisation in long-term educational and training work among swimmers with step-by-step control of morphofunctional state and technical preparedness. This is necessary in order not to aggravate the forcing of their performance, which causes irreparable damage to the state of health of young swimmers and their progress in more mature age.

The realisation of the main provisions of sports selection in relation to the successful acquisition of swimming skills by young athletes can be achieved in the search for the correspondence of their motor capabilities to a particular way of swimming, where they would show the best results, as well as for the optimal choice of sequential, parallel or simultaneous study of sports ways of swimming.

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THE STATE AND PROBLEMS OF TRAINING BASKETBALL REFEREES IN SPORTS COLLEGES IN CHINA

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According to the survey, a significant number of basketball referees at various levels in China are trained by sports colleges [1]. Industry experts agree that sports colleges have the conditions and facilities for training high-level basketball referees and are the main place to achieve this goal [2]. However, as practice shows, China's 14 sports colleges, as a rule, do not pay enough attention to the training of basketball referees, and the training models are uneven and arbitrary [2; 3; 4]. With such a high demand for basketball referees in society and the availability of qualified teachers, good venues and selection conditions at sports colleges, they must bear the responsibility and obligation to train more qualified talents in this field for the sports community. Therefore, sports colleges should have a more complete system and model of education, clear goals, scientific teaching methods and uniform assessment standards in the training of basketball referees. Thus, the purpose of our research was to improve the organizational, programmatic and methodological foundations of basketball referee training in Chinese sports colleges.

Material and methods. A comparative analysis of the state of basketball refereeing training staff, the content of training, teaching methods, management system, refereeing hours, textbook use, learning objectives and evaluation was conducted in 14 sports colleges.