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METHODOLOGICAL JOURNAL****MENTAL ENLIGHTENMENT SCIENTIFIC –  
METHODOLOGICAL JOURNAL**<http://mentaljournal-jspu.uz/index.php/mesmj/index>**DETERMINATION AND IMPROVEMENT OF GENERAL AND  
SPECIAL PHYSICAL FITNESS OF WATER POLO PLAYERS****Akbar G. Sadikov***Professor, Senior Lecturer**Physical Education Uzbekistan State University of Physical**Chirchik, Uzbekistan***ABOUT ARTICLE**

**Key words:** Mobile player, central defender, central attacker, general physical fitness, special physical training, physical development. amplua, jumping out of water, carrying the ball, throwing a long ball, taking a basic shot from a standing position.

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**Abstract:** In modern times, the high level of results in sports, the increase in ineffectiveness of the training process, increased competition - all this allows to predetermine changes in sports training technologies in the direction based on the use of health-forming and health-preserving principles of physical education and sports training. Based on the general and special physical fitness of water polo players with a game role, a training methodology was developed with the possibility of a wide influence on the research. This method is an effective organizational and methodological form and method of using physical exercises. By adapting to the specific characteristics of the child's body, it (circular training) exists at a certain age and helps children to develop their physical qualities and movement skills in many ways.

**INTRODUCTION**

Under the initiative and constant leadership of the President of the Republic of Uzbekistan, physical education and sports are increasingly developing within the priority directions of the State Policy. A clear example of this is the Law "On Physical Education and Sports" and a number of government decisions adopted in this field and which are being consistently implemented. Especially in this regard, special attention is paid to the development of the type of water polo.

Regular growth of sports results requires new methods, forms and means of working with young athletes. Long-term training and education of high-level athletes is one of the complex processes that depend on several factors.

One of these factors is the development of physical qualities and finding effective methods, tools, methods that lead to high results in a short period of time.

Important types of training of water polo players include general and special physical training. General physical training leads to an increase in the overall performance of the athlete and leads to the development of physical characteristics and abilities of water polo players.

Special physical exercises are necessary for water polo players. This type of preparation includes water and land exercises, and some elements of other nearby sports. (general exercises with the help of own weight and weights, cross country, sports houses, etc.) basic technical elements of swimming, and exercises performed by imitation.

The sport of water polo requires the athlete to develop certain physical qualities: strength, endurance, speed, flexibility and agility.

### **MATERIALS AND METHODS**

Nowadays, the development of physical qualities of young water polo players is one of the urgent problems. By developing the physical qualities of water polo players, they will strengthen their health, and by developing their physical fitness, they will play an important role in the development of our young people in the future. It also creates an opportunity to achieve high results in international competitions.

The purpose of the study: to determine and improve the general and special physical fitness of water polo players with different playing roles in the 15-16 age group.

Research task:

1. Determining and improving the general physical fitness of water polo players in the 15-16 age group with different playing roles.
2. Identifying and improving the special physical fitness of water polo players with different playing roles in the 15-16 age group.
3. Determining and improving indicators of general physical fitness of young water polo players with playing roles.

Physically fit athletes who have mastered the technique and tactics of water polo, who have demonstrated the necessary moral and willful qualities in mastering training loads, achieve high sports results. Accordingly, in the system of sports training, the following types of training are distinguished: physical, technical, tactical, theoretical and voluntary.

The state of optimal preparation of water polo players for competitions consists of many components of physical, technical, tactical and psychological preparation. That is why the sports uniform is a state of comprehensive readiness of a person for high achievements, for the fight for victory in any competition. This situation has a phase nature. Distinguish between the time of acquisition of sports form, its relative stabilization and temporary loss. Accordingly, training periods

are called preparatory, competitive, and transition periods. In the preparation period, there are general and special preparation stages (or first and second stages), and in the competition period, the introductory and final competition stages are divided.

In solving these problems, it is mainly achieved through the use of general physical training. In the preparatory period, water polo training is based on exercises that create physical, mental and technical conditions for further special training. They can be significantly different from competitors in character and structure. This mainly implies the wide use of various auxiliary and special training exercises, which are close to general training exercises. In the later stages of the preparatory period, the proportion of exercises close to competition in form, structure and nature of the impact on the water polo player's body gradually increases. The main tasks of the general training stage are to increase the level of general physical fitness of the athlete, to increase the capabilities of the main functional systems of his body, and to develop the necessary sports, technical and mental qualities. At this stage, first of all, the foundation is laid for further work on direct improvement of sports results. As a rule, a lot of time is spent on land work at this stage.

The structure of training depends on various factors, including regular changes in the functional activity of the water polo player's body during muscle activity, the size of the training load, the characteristics of the selection and combination of training, the day and rest mode.

The preparatory part of the training includes the organization and preliminary preparation for the implementation of the tasks in the main part. Performing warm-up exercises, choosing exercises according to the individual characteristics of water polo players.

The main task is solved in the main part. In this part, improvement of special physical training, improvement of technique, etc. are carried out. Exercises and their number determine the training direction and load.

In the final part, a gradual reduction of the training load is ensured. This part is mandatory in any training session. With its help, an important task is solved - gradually reducing the load, bringing the body to a state close to the norm. A sharp transition from training work to rest, as a rule, causes a feeling of dissatisfaction with training, worsens well-being and can lead to blood circulation disorders. If the load is gradually reduced, ensuring a smooth transition to the resting state, negative events will not occur. The best tool for the final part is to work at a calm, steady pace (eg free movement). Helpful relaxation exercises with slower and deeper breathing (3–4).

The same and different tools and methods of the training process were used in the experimental group for athletes of different training, but the size of the load was always planned to be different. At the same time, in the main part of the training, each water polo player received a task corresponding to the level of physical training, depending on the role. Depending on the role of a young water polo

player, a set of exercises was developed for athletes to develop their special physical qualities. At the same time, the size and intensity of the exercises also differ.

The technique is designed for a differentiated approach to athletes. Training in the ROSMM team of S.S.T. has a complex direction and, as a rule, is used to maintain the level of training. Classes built in this way allowed to diversify training process and speed up preparation for competitions.

The content of training with the ROSMM team of S.S.T. provided for the development of a set of qualities (speed ability, special endurance, etc.) based on the conditions created during the general training stage. An important place in the total volume of educational work was given to highly specialized tools that help to improve the quality of individual components of special work.

The direction of work performed on land has changed: strength training was mainly carried out using special training equipment, training included the involvement of the main load-bearing muscles during competitive activities. Flexibility exercises are aimed at improving mobility in the shoulder and ankle joints.

## RESULTS AND DISCUSSIONS

Based on the data obtained at the end of the experiment, it is necessary to draw appropriate conclusions: in the experimental group engaged in the methodology with the help of educational devices, the indicators of physical fitness are much higher than in the control group. After the experiment, the statistical analysis of the indicators of physical fitness of water polo players shows a high growth rate of the level of development of physical qualities of water polo players in the experimental group. Water polo players in the experimental group showed significantly higher results than their peers in the control group in the 100 m race, 10 × 10 m cross-country race, flexibility exercises, and 1000 m race. In flexibility exercises, 1000 m running, after the experiment, the boys in the experimental group were more trained than the boys in the control group. After the experiment, boys in the experimental group showed reliable high results of physical training in standing long jump, boys in the experimental group in running 1000 m, 10 × 10 m track running. differential use of tools and methods in the training and educational process helped to more effectively form the physical fitness of swimmers in the experimental group.

Establishing a system of multi-year training of the sports reserve depends on the knowledge of the laws of physical development of children and adolescents and their ability to acquire special skills at each age stage, including skills in game sports.

At the moment, the development of sports games is going along two directions that at first glance contradict each other: universalization and specialization of players. However, universalization does not exclude improvement in performance of certain game tasks.

The tendency to perform a certain task (role) in the game requires changes in the preparation process. Nevertheless, the complex of qualities that determine the inclination to the role has a

sufficiently stable character. For this reason, it is possible to talk about pre-determination of employment from the first stages of selection, because it allows for a more accurate assessment of abilities. By taking into account the different demands placed on certain roles, it is possible to avoid errors arising from these differences in the assessment of sports fitness.

By the age of 15, the game potential of athletes is clearly visible. They have a unique effect and leave a mark on the entire technical training of water polo players. The technique will not be the same for everyone, but will focus on ensuring that specific tasks are performed very well in the team.

In our research, the task was to determine and improve the characteristics of physical development, strength capabilities, and special training of water polo players with different playing roles in the age group of 15-16 years.

During the special training phase, training is aimed at increasing special performance, which is achieved through the extensive use of special training exercises that are close to competitive and truly competitive.

The effectiveness of the proposed complex exercises was determined by the results of changes in the level of physical training and changes in sports results in the control and experimental groups.

The study showed that the central defender showed better results, relatively mobile players and central attack. It was determined that the study group was superior to the control group. 3) Effectiveness of the technique of communication with the ball (catching the ball, shooting) (number): before the study mobile player  $0.90+0.18$  central defender  $0.95+0.19$  central attack  $1.09+0.16$ ; after research mobile player  $0.88+0.17$  central defender  $0.90+0.17$  central attack  $1.02+0.17$ . And the control group before the study mobile player  $0.89+0.19$  central defender  $0.96+0.16$  central attack  $1.05+0.14$ ; after research mobile player  $0.88+0.18$  central defender  $0.94+0.13$  central attack  $1.04+0.15$ . The study showed that the central attack showed better results, relatively mobile players and the central defender. It was determined that the study group was superior to the control group. 4) Performance of the most important elements of the game, actions under time constraints, points (numbers) Effectiveness of the technique of communicating with the ball (catching the ball, shooting) (numbers): mobile player before research  $2.75+0.62$  central defender  $3.0+0.70$  central attack  $2.0+0.50$ ; after research mobile player  $4.0+0.12$  central defender  $3.43+0.70$  central attack  $3.0+0.52$ . And the control group before the study mobile player  $2.65+0.54$  central defender  $3.10+0.74$  central attack  $2.27+0.32$ ; after the study mobile player  $3.01+0.13$  central defender  $3.23+0.66$  central attack  $2.41+0.41$ . The study showed that central attack showed better results compared to mobile players and central defender It was determined that the study group was superior to the control group.

After the end of the experiment, a comparison of the results of determining and improving the special physical fitness of water polo players in the 15-16 age group with different playing roles

showed that the experimental group was superior to the control group. of the control group with significant differences ( $p < 0.05$ ).

## CONCLUSION

Based on the obtained data, the following conclusions can be made:

1. The analysis of literary sources and practical experience showed that the training methodology of young water polo players in the initial training stage is insufficiently developed, which at the same time meets the modern requirements of the sport and the age characteristics of young water polo players.

2. As a result of the analysis, the complexes and organizational-methodological foundations developed for improving the general and special physical fitness of water polo players with a playing role for young water polo players, this improves the training process in general and systematically develops the training material in accordance with its goals and objectives. allows exit.

3. We have developed a training methodology based on the general and special physical fitness of water polo players with a wide range of influence. This method is an effective organizational and methodological form and method of using physical exercises. Adapting to the specific characteristics of the child's body, it (circular training) exists at a certain age and in many ways helps children develop their physical qualities and motor skills.

4. Experimental groups showed that the dynamics of physical fitness of water polo players was reliably 14-16% higher than those of control groups.

5. We recommend that coaches use the method and recommended complex exercises to improve the general and special physical fitness of water polo players with a game role in their practical work.

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