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The Endurance Quality Of Swimmers Enhancement Methods

B.M. Botirov
Fergana State University, Senior Lecturer Of The Department Of Sports Games, Uzbekistan

ABSTRACT

In this article it is described the results of research on the development of endurance of 14-year-old swimmers through the use of means of approach in the direction of impact, approach in time, force swimming, crawl swimming with underwater drugs, swimming with a rubber cord.

KEYWORDS

General endurance, special endurance, training, fluent and changing styles, strength training, physical training, pedagogical tests.

INTRODUCTION

It is known that the process of training young athletes requires taking into account their specific characteristics. The strongest swimmers of today are athletes who have a very high level of physical fitness. The methodologies in the process of training highly skilled swimmers are explained by very high loads. Proper organization of physical training plays an important role in the training of young swimmers. It is necessary to lay the foundation for high physical fitness, especially at a young age, which will be developed and strengthened in the future.When preparing swimmers for long-distance swimming, it should be borne in mind that the distances of 800 and 1500 m belong to different zones of relative intensity, and different requirements are placed on the development of aerobic and anaerobic abilities of athletes. The most significant increase in the anaerobic-glycolytic process is the most important in the run of 800 mg a, and the anaerobic process is of great importance in the

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formation of intensity in the run of 1500 m [1,2].

Other authors have shown more features in the 800m swim than in the 1500m swim among the features of special endurance and strength qualities. These authors propose to move from a general approach to a separate approach to the training process in the 800m and 1500m swimming.

A similar conclusion can be drawn by analyzing the level of use of speed qualities in the 800m and 1500m swimmers as their athletic skills grow [6].

In determining the orientation of the method of training swimmers over long distances, it is necessary to take into account the following: the "quality" of special physical training on the basis of factors includes a set of speed capabilities, overall endurance, special endurance.

The overall endurance can be increased by the degree of endurance to aerobic work, using appropriate modes of distance and variable modes [4].

The basic method of interval is that the heart rate reaches its maximum during rest intervals after a relatively load of work has been completed.

One of the most successful training methods to increase the aerobic capacity of swimmers is the distance method.

Remote heart rate 140 beats per minute. and 170 b/min is effective for increasing the functional capacity of the heart, expanding the capacity of capillaries and increasing the capacity of processes associated with oxygen consumption.

Variable speed operation is widely used in aerobic work. In this case, the variability of the relatively high and relatively low-velocity segments implies an increase in the severity of the segments from 160 to 170 beats and, finally, **"a reduction in the heart rate in the low severity from 140 to 145"** [3].

It is known that the increase in the total volume of stayer exercises in the training of 12-year-old athletes up to 65% does not have a negative impact on health, helps to increase functional capacity, has a positive effect on the level of development of basic physical qualities.

Well-known scientist L. P Matveev (2019) noted that the main condition for increasing overall endurance is the long duration of training loads in a mode that is suitable for low and high intensity work. The size of the training load should be large, because the main component of overall endurance is long-term performance. The size of the training load should be large, because the main component of the overall endurance requires a long demonstration [5].

This means that in a workout aimed at developing overall endurance, the intensity should go beyond the critical limit for a short period of time, but not every workout series or workout should result in a large oxygen debt. In accordance with these basic principles, fluent and flexible methods can be used in training aimed at developing general endurance.

The development of endurance will depend more on exercise methods

There are 3 main methods:

1) Continuous running;

2) Intermittent;

3) Method of competition.

1. The basic exercise tools of the continuous method.

Aerobic direction: 20 - 60 min. The duration of the confusion is a slow swimming speed; the pulse is 130 - 140 beats per minute. It is applied throughout the year after exercise.

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Continuous 1000 swimming 45 - 90min. (120 min. Once a month). The speed is applied at a steady pace (pulse 150 - 160 b/min) throughout the year. The maximum volume corresponds to the preparation period.

2. Aerobic - in the anaerobic direction:

20 - 60 min. Ongoing rapid swimming speed is applied throughout the year, at a pace (pulse 160 - 175 beats).

Twice a week during the training period, once every 1-2 weeks during the competition, 1-2 weeks before the responsible swimming competitions are held not only on the main distance, but also on the shortest and longest distances: competitions are held 2-4 times during the training period.

Regular pedagogical and medical-biological tests should be used to assess the exercise process and increase physical fitness.

The following medical and biological tests are used:

a) To determine the amount of hemoglobin, erythrocytes (red blood cells) and lactic acid.
b) Recording of ECG and polycardiogram after standard loads on volume and intensity;
c) Determine the average swimming speed when the pulse is 170 beats per minute.

Effective methods are used to develop the endurance skills of swimmers, in which the exercises are performed with a change in rhythm or intensity. We selected a group of 14-year-old boys as the experimental groups.

The data obtained will help 14-year-old swimmers to develop endurance qualities in physical education classes and to perform running exercises at different intensities correctly.

We used special pedagogical tests to determine before the study that 14-year-old swimmers developed general endurance. The tests included 1000 m. cross-country running, 200m complex swimming, 400m swimming, 30-minute swimming.

We gave them special test control exercises to do the research. The following aids were used.

Zoom in on the direction of impact. The specialty of strength training on land is to include in the program of physical training exercises, exercises similar to swimming movements. Such exercises include arm and leg stretching movements. For example, exercises with the help of a rubber shock absorber or other power-oriented simulators (mini-dji, exertion, Hüttel, etc.).

1. Apply strength exercises in the water, doing as much as possible without changing swimming techniques. We combine similar exercises with the concept of 'strength swimming'.

This swimming is done in very complex conditions, under the influence of forces that are much higher than the athlete. This can be achieved as follows: i.e. to create an additional base for the lake during the climb (from hand rails, shovels, special, water-soaked wings) or by using increased resistance (drills using brakes, pulling a rubber shock absorber, using balloons).

Approximation in time. Perform alternating swimming exercises with strength exercises performed on land and on the shore.

Perform alternating strength exercises in the water or out of the water with swimming exercises.

Swimming for strength. Swimming with paddles. In recent years, it has been widely used in the training of strong swimmers.

This solves two main tasks:

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A) The athlete improves the technique of growth and achieves effective movement and condition of results in the water.
B) The athlete develops special strength and increases the strength of growth movements.

The following series of exercises (10 - 16 x 100m, 6 - 8 x 200m, 4 - 6 x 400m, etc.) are used to solve group A tasks.

B - In solving group tasks, mainly short-range and large-sized shovels are used. The duration of each exercise is 20-35 seconds.

This training exercise is done with maximum tension or at maximum speed (time swimming) or maximum lifting force (by reducing the number of lifting movements along with time swimming).

Crawl swimming with underwater medicine. These exercises have been used by many well-known swimmers in preparation. The procedure is to pull the rope at a depth of 40-60 cm along the length of the swimming pool. In the exercise, the swimmer swims in the crawl method, pulling the rope with his hands using force and pushing in it, basically once the length of the pool is floated and on the return he swims in full coordination or using hand movements.

Swimming with a rubber cord. In recent years, the world's strongest swimmers have added swimming with a rubber cord to their training sessions. Strong swimmers have been using this method.

Swimming with a rubber cord, an increase in the effectiveness of training is seen in the following case.

First, stretching the rubber causes excessive resistance in water, which in turn contributes to an increase in strength qualities.

Second, in addition to stretching the rubber cord, the athlete will soon begin to notice mistakes and shortcomings in his or her adaptation to arm and leg movements. This is manifested in the fact that the athlete cannot stretch the rubber cord to the desired, required length.

Third, swimming on a rubber cord ensures that the training process is free of the same form methods.

Through the use of these tools, the endurance development of 14-year-old swimmers is achieved.

Based on the results obtained, we see that the experimental group averaged 4.46.5 seconds in the 1000 m cross-country run before the study and 4.26.3 seconds after the study.

The experimental group averaged 3.39.1 seconds in the 200m complex swim from the study and 3.27.2 seconds after the study.

In the 400m swim, the experimental group averaged 7.01.5 seconds before the study and an average of 6.32.1 seconds after the study.

The average swimming (m) for 30 minutes was 1680 meters before the study and 1725 meters after the study.

When we compared the results obtained during the study, it was observed that the results of the experimental group swimmers were significantly improved compared to the results of the control group swimmers.

The results are shown in Table 1.

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Table 1
Average values of swimmers obtained during the experiment

Experiment	Cross-country running 1000 meters	Complex swimming 200 meters	Swimming 400 meters	30 minutes swimming (m)
Experimental group (n = 12)				
Before the experiment	4.46,5	3.39,1	7.01,5	1680
After the experiment	4.26,3	3.27,2	6.32,1	1725
Difference	20,2	11,9	29,4	45
Control group (n = 12)				
Before the experiment	4.49,8	3.40,7	7.02,4	1682
After the experiment	4.38,2	3.48,6	6.54,8	1696
Difference	11,6	7,9	7,6	14

It can be concluded that it is advisable to use the basic and special exercises to increase the physical fitness of swimmers during the training, depending on the state of training of the swimmers. To increase endurance, it is necessary to study the physiological state of 14-year-old swimmers during the training period, to monitor the muscles, respiratory organs, nervous system. It has been proven that 14-year-old swimmers need to properly distribute, normalize and monitor loads in order to develop endurance physical quality from the initial training. Achieving a high level of endurance depends on how successfully the development of basic physical qualities is carried out during childhood and adolescence.

REFERENCES

1. Vikulov A.D. Swimming. - M .: Vlados-Press, 2004.-368 p.
2. Ganchar I.L. Technology of swimming training. M .: SportAkadem Press, 2002. - 271 p.
3. Goncharova O.V. Developing the physical abilities of young athletes. T. O'zSPCI publish. 2005y. -171 p.
4. Kerimov F.A. Scientific research in the field of sports. Tashkent: "Dice pen", 2004.-334 p.
5. Matveev L.P. General theory of sports and its applied aspects. M. Sport, 2019. - 342 p.
6. Platonov V.N. Swimming. K .: Olimpic literature 2000y-496 p.