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METHODOLOGICAL JOURNAL<http://mentaljournal-jspu.uz/index.php/mesmj/index>METHODS OF DEVELOPING THE PHYSICAL PREPARATION
OF FOOTBALL PLAYERS AGED 13-15**Vakhob Murotovich Sultanov***Teacher of the Department of "Physical Culture and Sports" of
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ABOUT ARTICLE

Key words: football, physical development, aerobic loads, anaerobic loads, physical training, physical qualities, anthropometric body measurements, partial and total body measurements, professional skills.

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Abstract: This article examines and analyzes, based on anthropometric measurements, the ways of developing the general physical and special preparedness of 13-15-year-old football players with different playing roles and the level of their physical development depending on their age. Data on the development of physical fitness, professional skills, and personal qualities of young football players by applying aerobic and anaerobic loads for the purpose of correcting training processes are presented.

Introduction. Football is considered one of the priority sports in our republic, and the results shown by our country's athletes in recent prestigious competitions determine the development trend of this sport. The task of identifying talented athletes and creating a reserve for youth national teams is one of the pressing issues. Consistent measures are being implemented in our country to popularize physical culture and sports, create the necessary conditions and infrastructure for promoting a healthy lifestyle among all segments of the population, especially young people, and ensure the country's worthy participation in international sports arenas. In modern football, regular monitoring of the level of physical fitness indicates the need to take into account the characteristics of physical fitness when selecting football players. Based on the above-mentioned tasks, it is necessary to conduct

research on a precise comprehensive assessment of the features and capabilities of the "early" selection system for young football players to achieve high results in the chosen sport in the future. The creation of an effective system for the selection and training of promising and talented football players in our country, the formation of a high-quality sports reserve for national teams and professional football clubs, is of great importance. In our country, there is a need to organize the training process on a scientific basis for the scientific study of many problems that need to be studied, such as increasing the popularity of football, creating scientific and methodological manuals on selection and early selection, training young talented athletes for the national teams of Uzbekistan, maintaining the results achieved in international competitions, as well as developing optimal ratios of loads.

Literature review. The level of long-term training of qualified football players is largely determined by the regularities of the formation of sports mastery. In a particular sport, in particular in football, the factors determining the structure and effectiveness of competitive activity, the laws of adaptation of functional systems and mechanisms that receive the main load during training and competitions predetermine the growth rates of sports results [1,2,3].

The implementation of one or another variant of the structure of long-term training in football depends on a number of factors, primarily on the age at which children begin to engage in sports, the characteristics of training at the first stages of improvement.

In football, the training of young reserves for the top league teams is a pressing issue and should be based on a scientifically proven system. In the training of qualified football players, the main problem is not only the development of experimental programs, but also the development of comprehensive training control programs and the timely elimination of identified shortcomings [1,4].

It is known that in the initial stages of specialization, the basics of technique are established, the player's position is determined, and the effectiveness of young football players is determined [2,4].

In connection with the repeated continuation of defeat periods for youth and junior teams, the decrease in the number of young players in the higher league teams, the problem of training reserve players has become urgent. In particular, the process of training the sports reserve, having a scientific basis in the training of young football players, has become one of the urgent tasks of today [4,5,10]. It should be noted that optimizing the training process of qualified football players requires not only the development of training programs, but also the creation of a control system that allows timely correction of the level of preparedness. This is crucial in the initial stages of developing sports specialization, such as forming the basics of

technique and positioning, and substantiating the future achievements of young footballers [5,9]. Several parameters characterizing preparedness - the level of development of physical qualities, the athlete's functional state, mental state, the state of technical and tactical actions - are aimed at developing the necessary motor qualities in appropriate programs and are one of the tasks of modern football [5,7,8].

Methodology. In our research, such methods as scientific and theoretical analysis and generalization of data from domestic and foreign literature, pedagogical control, diagnostics of the prospects of football players based on anthropometric and functional indicators, pedagogical experiment, expert evaluation method, and mathematical statistics were used. The reliability of the research results is ensured by the practical and scientific validity of the goals and objectives of the work, the logic of the author's initial methodological positions, a comparative analysis of the data obtained using various methods of pedagogical research, a targeted analysis of real practical activity, confirmation of the hypothesis with specific theoretical and practical results, the reliability of the results is ensured by the use of generally accepted methods for obtaining empirical data, generally accepted statistical methods for processing results, and the breadth of choice.

Results and discussions. The rapid growth of the level of achievements and development due to the improvement of sports training in the field of football requires the search for and creation of new effective methods of training athletes.

In the training of young athletes, the correct planning of the training process, the selection of its main directions, the distribution of time, and the correct application of convenient methods allow for a complete solution to the set goal. In this study, training programs and plans were developed for 15-17-year-old football players. The preparation of the results was guided by the goals and objectives inherent in the annual pedagogical experience. In addition, the guidelines and recommendations of recognized scientists A.B. Antipov, V.P. Guba, S.Y. Tyulenkov, R.I. Nurimov, S.R. Davletmuratov were also used.

Table 1 shows the parameters of training loads characteristic of young football players. The table summarizes the universal parameters of physical loads characteristic of all sports.

To increase the aerobic capabilities of football players, it is recommended to use exercises used in cyclic sports, and the athlete's pulse should not exceed 150 beats per minute.

In increasing aerobic and anaerobic capabilities, the development of all physical qualities is ensured, and specific tasks are performed. When performing tasks, the pulse can fluctuate around 150-170 beats/min. During rest periods, it can drop to 120-130.

With anaerobic-glycolytic work, the qualities of speed and endurance gradually begin to develop. The execution of the exercises occurs with the expenditure of all strength. The duration of each exercise can be from 20 seconds to 4 minutes, the pulse can be 170 beats/min and higher.

Table 1 shows the distribution of the ratio of means and methods in the training of football players at the annual stages of the experiment.

Table 1

Distribution of the ratio of means and methods in training at the annual stages of the experiment, %

Yuklamalarni ko'rsatkichlari	Stages		
	I	II	III
Direction (pedagogical, physiological), %			
- general endurance (aerobic orientation)	30	20	26
- complex development of motor qualities (mixed);	40	36	41
-speed resistance (glycolytic orientation)	3	4	8
Speed strength, strength qualities (alactate, anabolic)	27	40	25
Training methods			
Smoothly;	19	10	15
unstable	45	40	30
- repeat;	29	30	40
- interval-serial;	16	20	15
Load volume, %:			
-great;	30	30	30
- medium;	60	60	60
-small;	10	10	10
Coordination complexity, %			
- low;	15-20	15-20	15-20
- medium;	40-50	20-30	40-50
-high;	20-30	40-50	30-40
Specialization:			
- definite;		65	75
- undefined;		35	25

In the presented tables, means for the development of aerobic capabilities are used at the general preparatory stage. At this stage, 55% is allocated to special-purpose exercises and 45% to non-specific exercises. Tools used in developing general endurance include swimming and track and field cross-country running. In each microcycle, one high-load training session is planned, and in such a high-load training session, the pulse can reach 170-180.

In the second stage of the experiment, the volume of speed-strength exercises increases by up to 40%. When applying exercises, means of the nature of jumps and accelerations are used in short-distance running. At the final stage of the pre-competition microcycle, the use of large loads is planned for up to 65 hours, of which 65% is the use of special means.

The third stage of the program is aimed at improving the physical qualities and functional capabilities of football players during the competition period. The volume of large loads was 30%, the level of use of special means was 70%, which was ensured by the conducted calendar games. The coordination complexity of movements was 40-45%. Consequently, the methods used at the experimental stages were aimed at improving physical qualities and enhancing the technical and tactical preparedness of football players, and the loads were distributed accordingly.

Based on the obtained results, it has been proven that aerobic-anaerobic loads are the most optimal for football players and are the most important and effective in organizing and conducting the training process.

The level of general physical fitness of football players aged 13-15 was checked in the control and experimental groups. The study used a methodology for the repeated application of the selected exercises. Before the study, the degree of difference between the control and experimental groups was practically not determined. However, in the 7x50 shuttle run, higher results (+2.24) were observed in the experimental group. On the contrary, in the 15 m run test, the results of the football players in the control group were higher than in the experimental group. In shuttle running, a special quality of movement for football players is considered to be a short-distance run, which ends with a quick stop.

Table 2

Results of pedagogical tests on general and special physical training of football players aged 13-15 (at the beginning of the study)

Pedagogical tests	Control group $\bar{X} \pm \sigma$	Experiment group $\bar{X} \pm \sigma$		
Standing long jump (m)	39±0,03	44±0,19	83	0,05
Shuttle run 7x50m (s)	07±0,05	05±0,03	24	0,05
5m run (s)	66±0,02	68±0,05	53	0,05
10m run (s)	74±0,03	65±0,13	48	>0,05
15 m run (s)	30±0,16	33±0,22	23	>0,05
20 m run (s)	2,8±0,2	2,9±0,21	24	>0,05

In shuttle running, a special quality of movement for football players is considered to be a short-distance run, which ends with a quick stop. This movement is provided by the activity

of the group of muscles of the thigh. The effectiveness of performing such actions depends on the state of functional preparedness of the football players.

At the end of the experiment, the level of general physical fitness of the football players was rechecked in the control and experimental groups. At the end of the study, it was established that the level of difference between the control and experimental groups is high.

Table 3

Results of pedagogical tests on general and special physical training of football players aged 13-15 (at the end of the study)

Pedagogical tests	Contro group $\bar{X} \pm \sigma$	Experiment group $\bar{X} \pm \sigma$		
Standing long jump (m)	41±0,03	48±0,19	83	0,05
Shuttle run 7x50m (s)	04±0,05	0±0,03	26	0,05
5m run (s)	62±0,02	53±0,05	53	0,05
0m run (s)	70±0,03	61±0,13	37	<0,05
0 m run (s)	21±0,16	82±0,22	07	<0,05
00 m run (s)	2,8±0,2	2,4±0,21	24	<0,05

Table 3 presents the results at the end of the experiment. In the standing long jump, the results increased by 1.83%; in the 7x50 shuttle run, the results increased by 2.26%; in the 15-meter run, the results increased by 3.53%; in the 30-meter run, the results increased by 2.37%; in the 60-meter run, the results increased by 3.07%; in the 100-meter run, the results increased by 2.24%. The reliability of all results is clearly visible from the method of mathematical statistics.

Conclusion. In conclusion, the indicators of physical fitness of athletes serve as an important factor in managing the training system of athletes. The use of the above-mentioned pedagogical tests is of great importance in determining the general fitness indicators of athletes. Taking into account the fact that the process of formation of important morphofunctional systems in athletes aged 13-15 is largely completed, we conducted anthropometric studies in athletes of this age in full, analyzing the indicators not only on the basis of total body measurements, but also on the basis of partial characteristics. During the preparatory and competitive periods, young football players were trained according to the content of the programs and plans indicated in Tables 1-2. Throughout the entire experiment,

the examined players were under the supervision of doctors working in the medical department of the "Nasaf" academy. At the end of the experiment, it was retested according to the above-mentioned set of tests, and the results were evaluated.

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