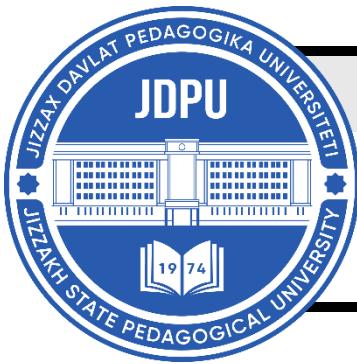


# MENTAL ENLIGHTENMENT SCIENTIFIC – METHODOLOGICAL JOURNAL



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### EFFICIENCY OF ORGANIZING ATHLETICS CLUBS IN THE HIGHER EDUCATION SYSTEM

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#### ABOUT ARTICLE

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**Abstract:** This article discusses the processes of organizing athletics clubs in higher education institutions, the effectiveness of the developed methodology, taking into account the characteristics of students' physical and functional development, and the correct selection of tools and methods applied. It highlights the positive aspects of a training system capable of preparing athletes who can compete strongly on an international scale. This determines the need for new scientific research on selecting reserve athletes and organizing effective training processes with them during multi-year preparation stages. In athletics training, structuring the training process for students first requires attention to their level of physical development.

**Introduction.** Numerous research studies have been conducted worldwide on studying and analyzing the efficiency of movements in the activities of students engaged in athletics, and issues such as normalizing training loads, increasing physical preparedness, and optimizing tools in athletics training remain among the pressing problems. Enhancing the physical preparedness of the growing young generation by involving students from higher education institutions in athletics clubs, and continuously optimizing training tools and methods, has become one of the urgent tasks of today. The insufficient development of proposals and

recommendations aimed at continuously monitoring students' physical preparedness in extracurricular activities and eliminating problematic situations necessitates the preparation of reserve athletes in athletics clubs.

**Literature Review.** In our republic, a number of studies have been conducted by F.A. Kerimov, R.D. Khalmukhamedov, T.S. Usmonkhodjaev, O.V. Goncharova, and others on enhancing the physical preparedness of youth, organizing their extracurricular sports clubs, engaging students in physical education classes, and developing fundamental physical qualities. Scientific research has been carried out by scholars such as R. Kudratov, K.T. Shakirjanova, Kh. Rafiyev, M.S. Olimov, N.T. Tokhtaboyev, M.J. Abdullayev, D.N. Rakhmatova, L.V. Smurigina, I.R. Soliyev, U.I. Sultonov, K.F. Ruzamukhamedov, R.A. Burnashev, G'S. Kho'jamkeldiyev, and A.M. Baratov regarding the preparation of track and field athletes, the specific characteristics of physical preparedness of athletes in various age groups, and types of training for young track and field athletes. Today, stemming from the mass popularity of athletics as a sport, the physical, technical-tactical, and functional preparation of young people engaged in sports on an equal footing remains one of the pressing issues facing specialists and scholars in the field [1;3;7;11].

Among CIS scholars, individuals such as V.I. Lyakh, L.Ye. Lyubomirsky, V.K. Balsevich, and L.I. Lubysheva have conducted a series of studies on monitoring the physical preparedness of school pupils, normalizing physical loads for students, and organizing and conducting extracurricular activities in higher education institutions. Scholars like A.A. Gujalovsky, A.A. Kuznetsov, and M.A. Godik have carried out research on enhancing the physical preparedness of young track and field athletes. According to a number of scholars such as V.A. Zaporozhanov and V.I. Lyakh, motor preparedness is an important component of students' health, and improving it is one of the main tasks of physical education in schools. For the purposeful and effective organization of physical education sessions, the physical preparedness of pupils at each educational stage must be properly structured. The availability of this information holds significant practical importance, especially during the stages of formation of motor functions. The volume of administered loads must be formed in accordance with the state of the growing young organism [5;6;8].

Today, in studies conducted in foreign countries with higher education institutions, scholars such as B. Ekblom, J.H. Atterhog, D.A. Bailey, K. Curry, N. Duran, T. Yaakkola, and H. Halvari consider the loads given in physical education classes to be insufficient. For this reason, on one hand, there is work to be done to improve the health level of pupils, and on the other hand, to increase the level of development of basic physical qualities, that is, to enhance the

physical preparedness of student youth. Participation in subject clubs organized in higher education institutions is not mandatory, just as students' choice of which sport to participate in is voluntary. Participation in extracurricular activities has been proven in sources to make students even healthier. These listed reasons highlight the urgency of attracting students to athletics clubs in higher education institutions.

Attracting students from higher education institutions to athletics clubs and enhancing their physical preparedness holds great importance in the physical education of the growing young generation and its improvement. Determining the norm of training loads for students in athletics clubs and applying a differentiated approach during the training process requires conducting numerous scientific research works on ways to preserve and strengthen students' health.

**Methods and results.** Sports clubs provide students with the opportunity to correctly distribute norms, engage in sports daily, and, depending on climatic conditions, train twice a day. Preliminary studies conducted by us on developing and organizing educational-educational and training methods showed that students engaged in athletics clubs had increased attendance in their specialized subject programs and improved health status. Statistically significant differences were found in the results of individual indicators of physical preparedness in the experimental group compared to the control group; in particular, at the end of the pedagogical experiment, speed, speed-strength, and strength qualities in the experimental group were noted to be significantly higher than in the control group.

Below are the analytical data on the physical preparedness of students from higher education institutions; indicators of students' motivation for athletics club training were determined through tests and presented in tables.

The level of development of physical preparedness indicators was introduced into our research practice to determine the extent to which high indicators are being formed in students' physical education classes as well as in athletics clubs. During this research, students' physical preparedness and physical quality indicators were identified, including the development indicators of endurance quality, and 18-19-year-old students were selected to carry out this practice. Based on the curriculum of class sessions, we attempted to investigate the enhancement of students' sports skills to develop their endurance qualities. The conducted research involved students who regularly attended class processes and had no defects in their physical condition, and our control test consisted of running for 6 minutes.

At the beginning of our implemented research work, a 6-minute running control test was established to determine the indicators of endurance physical quality among 18-year-old

students (1st year), and the distance covered in meters by boys was determined, recorded with scores of "2", "3", "4", and "5" based on the evaluation scale. The obtained results were as follows: among 18-year-old boys, the indicators of endurance physical quality were found to be at an "unsatisfactory" low level in 34.80% of cases and were marked with "2" points according to the evaluation scale.

During the research, the primary goal of determining the physical development of the participants was to ascertain that the loads administered during the study had no negative impact on them. The physical loads given in the training sessions conducted by us consisted of exercises recommended by many scholars specifically for children of this age, and to determine that they had no adverse effect on the children's organisms, we used a widely accepted method for evaluating physical development, namely measuring the children's body length (height), body weight, and chest circumference (somatometric indicators). To understand the changes in the results, the pre- and post-research outcomes were compared (Table 1).

In the experimental group where we conducted the research, the physical development of the participating children was observed to improve by 1.2% compared to the control group, or by 4.6% overall during the study period. This indicates that the physical loads given to the participants during the research did not have a negative impact on their organisms; on the contrary, the participants in the experimental group showed better physical development compared to the children in the control group.

The physical preparedness of the students was determined based on state standards for physical education.

**Table 1**  
**Dynamics of Changes in Physical Development Indicators of Subjects in Control and Experimental Groups During the Pedagogical Experiment (n=60)**

№	Physical Indicators	Control Group						t	P
		At the beginning of the research			In the end of the research				
		$\bar{X}$	$\sigma$	V, %	$\bar{X}$	$\sigma$	V, %		
1	Body length, cm	165,44	10,54	7,56	168,93	10,21	7,14	2,26	<0,05
2	Body weight, kg	63,48	3,54	10,57	64,38	3,49	10,15	1,72	>0,05
3	Chest circumference, cm	74,76	7,49	11,57	77,12	7,48	11,14	2,12	<0,05
4	Right hand grip strength, kg	18,24	2,29	12,55	18,94	2,29	12,09	2,05	<0,05

5	Left hand grip strength, kg	16,27	2,21	13,58	16,97	2,22	13,11	2,12	<0,05
<b>Experimental Group</b>									
1	Body length, cm	166,19	11,07	7,84	172,69	10,44	7,12	3,43	<0,001
2	Body weight, kg	63,71	3,70	10,98	66,47	3,59	10,12	3,24	<0,01
3	Chest circumference, cm	75,49	7,81	11,93	80,21	7,82	11,14	4,05	<0,001
4	Right hand grip strength, kg	18,62	2,41	12,94	20,08	2,44	12,15	4,04	<0,001
5	Left hand grip strength, kg	16,19	2,26	13,96	17,56	2,31	13,14	4,02	<0,001

The dynamics of changes in the physical development indicators of students in the control and experimental groups during the pedagogical experiment were observed as follows. In the control group, body length was 165.44 cm at the beginning of the study and 168.93 cm at the end. For this indicator, 166.19 cm was observed in the experimental group, and 172.69 cm after the study. Body weight in the control group showed a result of 63.48 kg, and after the study, a result of 64.38 kg was recorded. For this indicator in the experimental group, it was 63.71 kg and increased to 66.47 kg at the end of the study. Chest circumference in the control group was observed at 74.76 cm, constituting 77.12 cm at the end of the study. In the experimental group, it was 75.49 cm before the study and increased to 80.21 cm at the end.

**Figure 1. Diagram view of the dynamics of changes in physical development indicators of subjects in the control and experimental groups during the pedagogical experiment**

We conducted pedagogical test trials before and after the research. Based on the results obtained before the research, a training microcycle for the autumn season was developed by us over the past month; using this microcycle, we conducted training sessions with the participants in our club. At the end of the research, we focused on determining the effectiveness of the developed preparation microcycle. The obtained research results are presented in the table below.

**Table 2**  
**Dynamics of Physical Preparedness of Students in Experimental and Control Research Groups at the End of the Study (n=60)**

Tests	Group	Before the research		After the research		t	P
		$X \pm \sigma$	V%	$X \pm \sigma$	V%		
60 m, s	TG	9,49±1,52	15,99	8,65±1,31	15,14	3,99	<0,001

	NG	9,64±1,50	15,59	9,19±1,39	15,13	2,09	<0,05
<b>100 m, s</b>	TG	15,79±2,68	16,97	14,55±2,35	16,15	3,30	<0,01
	NG	15,87±2,64	16,60	15,21±2,45	16,11	1,74	>0,05
<b>400 m, s</b>	TG	73,81±11,06	14,98	67,63±9,54	14,11	4,01	<0,001
	NG	74,37±10,85	14,59	71,17±10,05	14,12	2,05	<0,05
<b>1000 m, s</b>	TG	227,96±36,45	15,99	209,53±30,88	14,74	3,66	<0,001
	NG	226,73±35,31	15,57	217,98±32,94	15,11	1,72	>0,05
<b>Standing long jump, cm</b>	TG	170,89±29,02	16,98	188,81±30,43	16,12	4,04	<0,001
	NG	172,60±28,63	16,59	181,36±29,26	16,13	2,03	<0,05

**Table 2. Diagram view of the dynamics of physical preparedness of students in the experimental and control research groups at the end of the study.**

After the research, according to the above indicators, the experimental group improved to  $8.65\pm1.31$  seconds over 60 m, while the control group changed to  $9.19\pm1.39$  seconds; over 100 m, the experimental group achieved  $14.55\pm2.35$  seconds, while the control group subjects reached  $15.21\pm2.45$  seconds; over 400 m, the experimental group runners improved to  $67.63\pm9.54$  seconds, whereas in the control group athletes it increased to  $71.17\pm10.05$  seconds. In the 1000 m run, the results shown by the experimental group subjects improved to  $209.53\pm30.88$  seconds, reaching  $217.98\pm32.94$  seconds. In the standing long jump test, the experimental group improved to a result of  $188.81\pm30.43$  cm, while in the control group it constituted  $181.36\pm29.26$  cm. From these results obtained on physical preparedness and development, it can be seen that the results of the experimental group subjects increased differently compared to the control group.

**Conclusion.** The dynamics of development indicators of various aspects of preparedness of students engaged in athletics clubs in higher education institutions were analyzed. The effectiveness of the developed methodology for enhancing students' physical preparedness is confirmed by reliable large annual growth indicators and high final indicators of motor quality development in the students of the experimental groups.

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