

# MENTAL ENLIGHTENMENT SCIENTIFIC – METHODOLOGICAL JOURNAL



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### THE TRAINING SESSION GROUP IS FOCUSED ON DEVELOPING THE MOVEMENT SKILLS AND ABILITIES OF LONG-DISTANCE RUNNERS DURING THE TRAINING PROCESS

**Ibrokhimjon Kosimov**

*Scientific Research Institute of Physical Culture and Sport*

*2nd course of independent researcher (PhD)*

[iqosimov047@gmail.com](mailto:iqosimov047@gmail.com)

*Chirchik, Uzbekistan*

#### ABOUT ARTICLE

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**Abstract:** This article presents key tools used in preparing long-distance runners within a training group by correctly distributing annual training plans, monitoring physiological processes occurring in the athletes' bodies, and applying workloads appropriate to their work capacity. The goal is to help athletes achieve high performance in competitions. Practical research and methodological recommendations in this field emphasize that the physical development and preparedness of long-distance runners are closely linked to biological and physiological processes. The methodological tools used during training are essential for studying the means and methods applied in training long-distance runners. A comprehensive approach to preparing skilled athletes-considering training loads, rest intervals, and their physiological processes-has a positive effect on the development of both general and specific physical qualities.

**Introduction.** Long-distance running has become popular worldwide not only among professional athletes but also among the general public. It plays a significant role in promoting a healthy lifestyle, improving physical fitness, and enhancing overall health. However, this sport requires a high level of preparation, especially during the pre-competition training period,

which demands targeted and scientifically grounded approaches. Pre-competition preparation directly influences athletes' competitive performance; moreover, the issue of more widely implementing long-distance running in global practice is becoming increasingly relevant [2].

In our country, sport and attitudes toward it are addressed at the level of state policy. Our athletes, who raise the name of the nation high in international arenas, serve as worthy role models for the younger generation [5]. In this regard, the decisions and decrees adopted by the President to support athletes are a clear example. In implementing large-scale initiatives aimed at the comprehensive preparation of Uzbekistan's talented athletes for the XXXIII Summer Olympic and Paralympic Games to be held in Paris, special attention is given to professional issues and a number of important tasks are defined. These include further improving the pre-competition preparation of long-distance runners, adopting best practices from developed foreign countries and applying them in athletes' training, as well as developing training programs for educational and training sessions.

Further improving the training process of long-distance runners, enhancing their pre-competition performance, and, based on the priority tasks of the country's socio-economic development, educating and preparing competitive athletes capable of performing successfully in the international arena are among the key objectives we face today [7]. Without such preparation, it is impossible to form and develop socially necessary qualities that enable athletes to act consciously and confidently in any situation and under any conditions of activity.

Engaging in physical education and sports enables the younger generation to grow up physically well-developed and mature, while also allowing for effective use of free time. The organization of physical training does not affect only specific muscle groups but influences the condition of the body as a whole [3]. Regular and continuous physical activity has a positive effect on human health. In particular, metabolism improves, body tissues better absorb nutrients, and the removal of metabolic waste from the body is accelerated. In addition, the heart becomes stronger and more resilient [11].

The structure of annual training and the methods and tools used in the process of preparing long-distance runners within a training group are being developed based on various scientific studies, practical research, and methodological recommendations. The annual training plan and its structure include all the necessary stages for preparing athletes throughout the year. In this process, training sessions are planned in advance and are structured based on the athletes' physiological characteristics, goals, and levels of preparedness. The physical development and readiness of long-distance runners are closely linked biological and physiological processes [9]. This study presents and scientifically analyzes

the results of research conducted on the physical development and preparedness of long-distance runners. Undoubtedly, long-distance running is considered one of the most fascinating and Olympic-recognized sports disciplines. Therefore, organizing this process and identifying talented and promising athletes from different regions has become one of the top priorities of our government's current effective policies [13].

At the stages of educational training and sports skill development, the specific characteristics of young athletes' long-term preparation, the interrelation between training stages and academic years, as well as the organization of various training groups and their regimes are explained. It is well known that the level of young athletes' sports mastery is associated with their sporting experience, the time at which specialized training begins, the developmental characteristics of the child's body, and the achievement of a certain level of sports results at optimal age ranges [15].

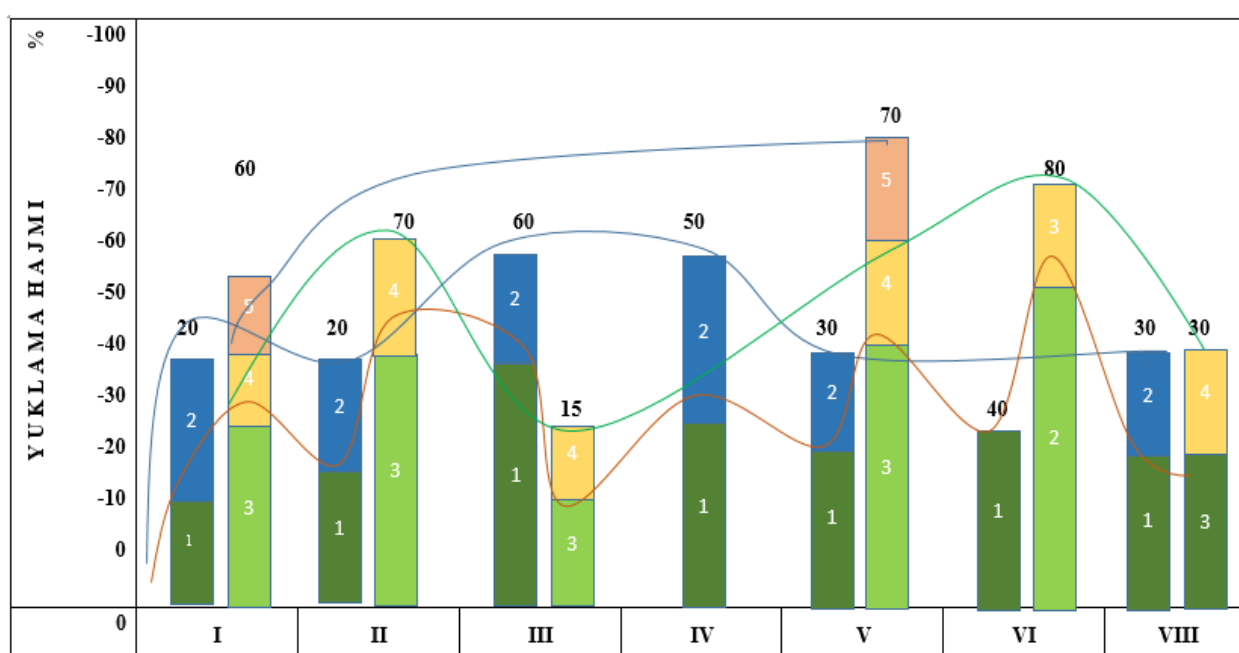
Therefore, when organizing the long-term training process and taking pre-competition preparation into account, it is necessary to adhere to the following fundamental principles: deepening specialization and individualization, ensuring the unity of general, specialized, and technical training, and gradually increasing training loads in order to achieve the intended results.

**Materials and methods.** According to great scientists M. S. Olimov, N.T. Tokhtaboyev, and G.S. Khojamkeldiyev conducted research on the preparation process of long-distance runners and achieved optimization of the training process. As we know, the distribution of the preparatory phases (such as the general preparation period, pre-competition period, and recovery phase) within the annual training structure plays a crucial role. These stages are coordinated with each other and are aimed at achieving high-level results [1]. Modern training methodologies are used in annual training programs to prepare athletes, including interval training, specialized methods for long-distance runners, and psychological preparation techniques. Currently, in order to increase the effectiveness of training methods, athletes' levels of preparedness are regularly measured using physiological and biochemical assessments. Improving the structure and methodology of annual training also places great emphasis on enhancing the skills and knowledge of coaches. For this purpose, participation in various seminars, exchanging experiences, and preparing scientific articles are actively promoted.

**Result and discussion.** The goals of the training sessions are determined based on the athlete's individual objectives. In the case of long-distance runners, special attention is given to increasing their physical strength, developing endurance, and effectively managing competition preparation and recovery processes.

The system of training athletes is a rather complex process, in which a properly organized training plan is considered one of the main means of achieving the intended goals. When designing a training plan that takes into account athletes' work capacity and functional condition, the coach's experience plays a very important role [10].

The table presented below provides a set of exercises aimed at increasing the lung vital capacity of long-distance runners at the educational training group stage. This exercise complex details how much time should be allocated each day of the week and which specific exercises should be performed. The training load volume is expressed in percentages. This method is systematized in such a way that it is adapted for athletes' non-training periods, particularly during the pre-competition preparation process.



### The lung vital capacity of long-distance runners in the training group.

Weekly program for increasing lung vital capacity (LVC): 1-Breathing exercises, 2-Warm-up exercises, 3-Running, 4-Breathing techniques, 5- Balloon blowing II. 1-Interval running, 2-Warm-up exercises, 3-Speed running, 4-Breathing exercises. III. 1-Swimming exercises, 2-Breathing exercises, IV. 1-Uphill running, 2-Warm-up exercises, 3-Various running techniques, 4-Breathing exercises V. 1-Flexibility exercises, 2-Yoga exercises VI. 1-Various running techniques, 2-Breathing exercises. VII. 1-Combined rest, 2-Light running, 3-Balloon blowing, 4-Various breathing techniques.

A special program aimed at increasing lung vital capacity has been developed for long-distance runners in the training group. This program is designed in accordance with a one-week microcycle and includes deep breathing combined with steady-paced running, 10 minutes of warm-up exercises, 20 minutes of running at a stable speed, breathing techniques, balloon

blowing, and interval running methods. On the second day of the week, warm-up exercises, speed running, and breathing exercises are scheduled. The third day includes swimming exercises and breathing exercises. On the fourth day, uphill running, warm-up exercises, various running techniques, and breathing exercises are planned [14]. On the following day, flexibility exercises and yoga exercises are included. Toward the end of the week, slightly reduced-intensity methods are applied, including various running techniques and breathing exercises. On Sunday, combined rest, light running, balloon blowing, and various breathing techniques are planned as part of a special program aimed at increasing the athletes' lung vital capacity.

**A weekly plan developed to increase the lung vital capacity of long-distance runners in the training group**

N.	Days of the week	Exercise content	Methodical instruction
1	Monday	Deep breathing and running at a steady pace: 10 minutes of warm-up exercises, 20 minutes of steady-speed running (inhale through the nose, exhale through the mouth), 5 sets of the "4-7-8" breathing technique, blow up a ball 10 times	When performing these exercises, special attention should be paid to expanding lung capacity.
2	Tuesday	Interval Running ( $VO_2$ max exercise): 10 minutes of warm-up exercises, 8 sets of 400 m fast run and 200 m slow walk, after running, 5 sets of 15-second breath-holds	Ushbu mashqlarni bajarish jarayonida funksional holatning yaxshilanishiga e'tibor qaratish kerak
3	Wednesday	Breath control and swimming technique duration: 30–40 minutes of swimming, inhale every 3 strokes, breath-hold exercises: 5 repetitions, hold a deep breath for 30 seconds each, diaphragmatic breathing: 5 minutes	In the course of the workout, focus should also be given to developing specific endurance qualities.
4	Thursday	Active Recovery (yoga or flexibility exercises), 20–25 minutes of yoga (pranayama and stretching), "kapalabhati" or "anuloma viloma" techniques – help strengthen the respiratory muscles	During the performance of these exercises, emphasis should be placed on stimulating an increase in lung vital capacity.
5	Friday	Hill Running: 10 minutes of warm-up exercises, 10 sets of 100 m fast uphill run followed by	During the training session, special emphasis should be placed on

		walking downhill, 10 minutes of cool-down jogging, 10 deep-breathing exercises	developing specific strength
6	Saturday	Long-distance running. Run slowly but steadily for 60–90 minutes (keep your heart rate at 65–75%). Pay attention to deep breathing every 15 minutes.	While performing these exercises, emphasis should be placed on enhancing the body's functional state
7	Sunday	Combination – Relaxation 20 minutes of light running, 3 sets of 10 ball-blowing exercises, 5 rounds of the “4-7-8” technique, 10 minutes of stretching exercises	During the performance of these exercises, primary attention should be paid to increasing lung capacity

***Weekly program for the endurance training group of long-distance runners to increase lung vital capacity (VC)***

In the table above, a methodology for increasing the lung vital capacity (VC) of athletes is presented, with systematically organized training sessions to be conducted over seven days a week. The program primarily includes breathing exercises, agility drills, long-distance running, hill running, yoga exercises, and combination workouts. This training methodology helps athletes significantly improve their lung vital capacity over the course of a week. Applying it during pre-competition preparation enhances their functional condition and contributes to an increase in work capacity [9].

The methodological tools used during the training period are crucial for studying the means and methods applied in preparing long-distance runners. Both aerobic and anaerobic training play a role, but aerobic physical loads are of primary importance in long-distance running. At the same time, anaerobic methods (such as interval and fartlek training) are used to enhance the athlete's endurance (Table 1).

**Functional Indicators in Long-Distance Runners**

Numb.	Physiological Indicators	<u>Control group</u>		<u>Experiment group</u>	
		<u>BE</u>	<u>AE</u>	<u>BE</u>	<u>AE</u>
<u>1</u>	Heart Rate (HR, beats per minute)	76,9±4,5	75,8±4,1	76,4±4,3	74,1±3,8
<u>2</u>	Breath-Holding Duration (Gerche test, seconds)	20,4±3,8	21,5±3,6	21,7±3,7	22,7±3,2
<u>3</u>	Maximal Oxygen Consumption (VO <sub>2</sub> max, ml/min)	2894±196	3017±178	3045±181	3242±188
<u>4</u>	Lung Vital Capacity (LVC, ml)	2924±511	3224±459	3279±491	3895±465

5	Relative Lung Vital Capacity (RLVC, ml/kg)	56,1±4,9	57,8±4,3	58,4±5,4	61,2±4,4
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*Note: The training group of long-distance runners was analyzed based on special methodologies focused on competition preparation, with assessments conducted at the beginning and end of the research*

Result. This table presents the pre- and post-research results of the long-distance runners from the training group. The research was primarily based on tests measuring heart rate, lung vital capacity, breath-holding duration, and maximal oxygen consumption (VO<sub>2</sub> max) [8]. The study focused on improving athletes' endurance and strength qualities through a specially developed annual training plan. Following the training camps conducted under this plan, the results of the experimental group showed significant improvement, as revealed through mathematical and statistical analysis.

**Conclusion.** Long-distance running is a sport that requires not only physical strength but also psychological resilience. This type of sport not only promotes a healthy lifestyle but also plays a significant role in helping student-athletes achieve success in competitions. Despite the clear necessity and logic of systematically using health-enhancing tools in the preparation of qualified athletes, in practice, the issue of finding a rational balance between training loads and recovery measures remains a challenge and calls for further research.

#### References:

- [1]. Тўхтабоев Н.Т. 13-15 ёшли спортчиларни чидамлилигини тарбиялаш. Магистр.дис. Т.; 2003. -8-23 б.
- [2]. Травин Ю.Г., Чернов С.С., Карманов В.Д. Предсоревновательная подготовка бегунов на средние дистанции: Метод разраб для слушателей ВШТ и фак. повышения квалификации. - М.: ГЦОЛИФК, 1981. - 80 с.
- [3]. Султонов У.Н. Чуқурлаштирилган ихтисослик босқичи узоқ масофага югурувчилар машғулот жараёнини инновацион технологиялар асосида бошқариш. Дисс. 2020. -143 б.
- [4]. Селуянов В.Н. Подготовка бегуна на средние дистанция. СпортАкадемПресс, 2001. - 170 с.
- [5]. Озолин Н.Г. Настольная книга тренера: Наука побеждать. 2004.- 356.с
- [6]. Олимов М. С. Ўрта масофага югурувчи спортчи талабаларни ЎзДЖТИ ўқув юкламасига мослаштирилган мусобақа олди тайёргарлиги дастури бўйича мусобақаларга тайёрлаш самарадорлиги. Т : 2011.- 68 б.
- [7]. Керимов Ф.А. Спорт соҳасидаги илмий тадқиқотлар. - Т.: Зар қалам., 2004.- 334 б.



- [8]. Попов В.Б. 555 специальных упражнений в подготовке легкоатлетов. -М.: Олимпия пресс, Терра-Спорт, 2002. - 208 с.
- [9]. Попов В.Б., Суслов В.Ф., Германов Г.Н. Легкая атлетика для юношества. - М.: Воронеж, 1999. - 220 с.
- [10]. Сакун Э.И. Построение учебного процесса по физическому воспитанию студентов в ВУЗе. - М.: Дашков. - 2009. - 208 с.
- [11]. Никитушкин В.Г., Квашук П.В., Бауэр В.Г. Организационнометодические основы подготовки спортивного резерва: Монография. - М.: Советский спорт., 2005. - 232с.
- [12]. Лидьярд А., Гилмор Г. Бег с лидьярдом - М.: ФиС, 1987. - 109 с.
- [13]. Локтев С.А. Легкая атлетика в детском и подростков возрасте: практ. рук. для тренера. Сов. спорт, 2007.- 404 с.
- [14]. Макаров А.Н. Легкая атлетика. - М.: Просвящение, 1990. – 205 с.
- [15]. Матвеев Л.П. Общая теория спорта и ее прикладные аспекты. - М.: ФиС, 2001.-250 с.