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METHODOLOGICAL JOURNAL****MENTAL ENLIGHTENMENT SCIENTIFIC –
METHODOLOGICAL JOURNAL**<http://mentaljournal-jspu.uz/index.php/mesmj/index>**DEVELOPMENT OF PRE-COMPETITION AND COMPETITION
MICRO-CYCLES FOR LONG-DISTANCE RUNNERS*****Odina Khamidova****Lecturer**Uzbek State University of Physical Education and Sports**Uzbekistan**E-mail: odina_khamidova@mail.ru*

ABOUT ARTICLE

Key words: sports, athletics, endurance, methodology, result.**Abstract:** The article addresses the issues of preparing long-distance runners. During the research, pre-competition and competition micro-cycles for long-distance runners were developed.**Received:** 12.11.24**Accepted:** 14.11.24**Published:** 16.11.24

Relevance

Today, long-distance running is becoming increasingly popular among both amateur and professional athletes, contributing to the development of a training system for world-class runners. However, Uzbek athletes in this discipline currently struggle to compete on the international stage, presenting a significant challenge in the comprehensive training system for long-distance runners. [1; 78-98c, 2; 134-136c].

The potential for successful performances in competitions and the growth of athletic achievements in long-distance running depend on how clearly defined the paths for improving training methodology are and how correct the approach to their development is [3; 36-38c, 4; 28-29c.]

The training process in long-distance running has over a century of tradition. Since the first official competition held in England in 1888, training methods have been refined through the search for the most effective means and methods, as well as increasing training loads. [5; 17-18c, 6; 108-113c, 7; 12-13c.]

Research Objective

To construct training loads in micro-cycles within a holistic training system for long-distance runners, with a gradual stepwise increase in average running speed close to competition pace.

Research Tasks

To achieve the stated objective, the following tasks were defined:

- To determine the level of physical fitness indicators for long-distance runners and to gather scientific-methodical and specialized literature.
- To develop and scientifically justify the effectiveness of a training program for long-distance runners within the annual training cycle.

Research Methods

To address the tasks, the following research methods were employed:

Review, analysis, and evaluation of scientific and methodical materials;

- Pedagogical observation;
- Anthropometry;
- Pulsometry;
- Pedagogical experiment;
- Methods of mathematical and statistical data processing.
- Organization and Methods of Research

This research was conducted at the Uzbekistan Championship in Tashkent at the Uzbekistan Athletics Federation stadium.

Table 1

Training Program for the Winter Half-Year Macrocycle

1st Mesocycle		2nd Mesocycle		3rd Mesocycle	
October	November	December	January	February	March
Retracting microcycle ORU-80min SBU-420 meters at heart rate up to 150 beats/min - 47 km I at heart rate up to 180 beats/min-11 km total – 58 km. GPP-100minv	Competitive microcycle ORU-40min SBU-210 meters at heart rate up to 150 beats/min - 70 km I at heart rate up to 180 beats/min-20 km V total – 90 km.	2-Basic microcycle ORU-60 min SBU-315 meters at heart rate up to 150 beats/min - 55 km I at heart rate up to 180 beats/min - 6.8 km V total -61.8 km. GPP-80min	Basic microcycle ORU-60min SBU- 315 meters at heart rate up to 150 beats/min - 140 km I at heart rate up to 180 beats/min - 18 km V total – 158 km.	Restorative microcycles ORU-100 min SBU-525 meters at heart rate up to 150 beats/min - 330 km I at heart rate up to 180 beats/min - 49.4 km V total – 379.4 km.	Competitive microcycles ORU-40 min SBU-210 meters at heart rate up to 150 beats/min - 163 km I at heart rate up to 180 beats/min - 33 km V total – 196 km.
Supply microcycle ORU-80min SBU-420 meters I at heart rate up to 150 beats/min - 52 km	Transitional microcycle ORU-20min SBU-105 meters	1-Shock Microcycle ORU-40min SBU-210 meters	Shock microcycle ORU-20min SBU-105 meters		

I at heart rate up to 180 beats/min-15 km V total -67km. GPP-120min	I at heart rate up to 150 beats/min - 52 km I at heart rate up to 180 beats/min-10 km V total – 62 km.	I at heart rate up to 150 beats/min - 61 km I at heart rate up to 180 beats/min-6km V total – 67 km.	I at heart rate up to 150 beats/min - 77 km I at heart rate up to 180 beats/min-6 km V total – 83 km		
Competitive microcycle ORU-40min SBU-210 meters I at heart rate up to 150 beats/min - 44 km I at heart rate up to 180 beats/min-10 km V total – 54 km. GPP-80min	Retracting microcycle ORU-40min SBU-210 meters I at heart rate up to 150 beats/min - 63 km I at heart rate up to 180 beats/min-10 km V total – 73 km.	2-Shock Microcycle ORU-40min SBU-210 meters I at heart rate up to 150 beats/min - 68 km I at heart rate up to 180 beats/min-20 km V total – 88 km. GPT-20min	Supply microcycle ORU-20min SBU-105 meters I at heart rate up to 150 beats/min - 62 km I at heart rate up to 180 beats/min-7 km V total – 69 km.		Restorative microcycles ORU-40 min SBU-210 meters I at heart rate up to 150 beats/min - 122 km I at heart rate up to 180 beats/min - 11.8 km V total – 133.8 km. GPT-20min
Restorative microcycle ORU-20min SBU-105 meters I at heart rate up to 150 beats/min - 44 km V total – 65 km. GPT-20min	1-Basic microcycle ORU-40min SBU-210 meters I at heart rate up to 150 beats/min - 59 km I at heart rate up to 180 beats/min - 5.6 km V total – 64.6 km.	Supply microcycle ORU-40min SBU-210 meters I at heart rate up to 150 beats/min - 65 km I at heart rate up to 180 beats/min-8km V total – 73 km.	Competitive microcycle I at heart rate up to 150 beats/min - 52 km I at heart rate up to 180 beats/min-3 km V total. – 55 km. GPT-20min		
Supply microcycle ORU-20min SBU-105 meters I at heart rate up to 150 beats/min - 65 km I at heart rate up to 180 beats/min-10 km V total – 75 km. GPP-80min					
Total: 1972.2±2.1 km total running volume, of which 260.2 km is intensive load with a heart rate of 160 and above 170 beats/min., GPP - 540 minutes, ORU - 840 minutes, SBU - 4410 meters					

Note: Total V is the total volume of the training load in km, I is the intensity of the training load.

Table 2

Training program for the summer six-month macrocycle

1st Mesocycle		2nd Mesocycle		3rd Mesocycle	
April	May	June	July	August	September
Retracting microcycles ORU-1020min SBU-1680 meters I at heart rate up to 150 beats/min - 204 km I at heart rate up to 180 beats/min - 59.4 km V total – 263.4 km. GPP-420min	Supply microcycle ORU-40min SBU-210 meters I at heart rate up to 150 beats/min - 66 km I at heart rate up to 180	Supply microcycle ORU-80min SBU-420 meters I at heart rate up to 150 beats/min - 55 km I at heart rate up to 180 beats/min - 6.8 km V total – 61.8 km. GPP-100min	Basic microcycles ORU-60min SBU-315 meters I at heart rate up to 150 beats/min - 139 km I at heart rate up to 180 beats/min - 18 km V total – 157 km	Feeding microcycles ORU-120min SBU-630 meters I at heart rate up to 150 beats/min - 314 km I at heart rate up to 180 beats/min - 56 km V total – 370 km.	1-Competitive microcycle ORU-40min SBU-210 meters I at heart rate up to 150 beats/min - 73 km I at heart rate up to 180 beats/min - 37 km V total – 110 km.

	beats/min-20 km V total. – 86 km. GPT-20min				2-Competitive microcycle ORU-40min SBU-210 meters I at heart rate up to 150 beats/min - 47 km I at heart rate up to 180 beats/min - 16.8 km V total – 63.8 km.
Basic microcycle ORU-20min SBU-105 meters I at heart rate up to 150 beats/min - 64 km I at heart rate up to 180 beats/min-10 km V total. – 74 km. GPP-80min	1-Competitive microcycle ORU-40min SBU-210 meters I at heart rate up to 150 beats/min - 80 km I at heart rate up to 180 beats/min-10 km V total – 90 km.	Competitive microcycle ORU-40min SBU-210 meters I at heart rate up to 150 beats/min - 57 km I at heart rate up to 180 beats/min - 25.4 km V total – 82.4 km.	Feeding microcycles ORU-60min SBU-315 meters I at heart rate up to 150 beats/min - 216 km I at heart rate up to 180 beats/min - 21 km V total – 237 km.		Restorative microcycle ORU-20min SBU-105 meters I at heart rate up to 150 beats/min - 67 km I at heart rate up to 180 beats/min-10 km V total – 77 km.
	2-Competitive microcycle ORU-40min SBU-210 meters I at heart rate up to 150 beats/min - 69 km I at heart rate up to 180 beats/min-20 km V total – 89 km.				
	Restorative microcycle ORU-20min SBU-105 meters I at heart rate up to 150 beats/min - 67 km I at heart rate up to 180 beats/min-10 km V total – 77 km.	Restorative microcycles ORU-80min SBU-420 meters I at heart rate up to 150 beats/min - 133 km I at heart rate up to 180 beats/min - 28 km V total – 161 km. GPT-20min			3-Competitive microcycle ORU-20min SBU-105 meters I at heart rate up to 150 beats/min - 40 km I at heart rate up to 180 beats/min - 17.4 km V total – 57.4 km. GPT-20min
Total: 2056.8 km total running volume, of which 365.8 km is intensive load with a heart rate of 160 and above 170 beats/min, GPP - 660 minutes, ORU - 1740 minutes, SBU - 5460 meters.					

Note: Total V is the total volume of the training load in km, I is the intensity of the training load.

Research results: Based on the results of the pedagogical research, the following was revealed:

The training program for the winter six-month macrocycle was aimed at preparing for the month of March at the highest level, and therefore a special training program for the winter season was developed and is presented in the table 1. Here it is necessary to take into account that the training macrocycle consisted of an induction, a preparatory, a competitive, a restorative, and so on. Due to the fact that it is necessary to state the fact that closer to January and February we increased the special training of long-distance runners, but in the competitive microcycle we naturally applied shock training methods that were focused on showing high

results. It is also necessary to note that when building a winter half-year macrocycle program, it is necessary to pay attention to the distance at which athletes run and in what conditions.

If athletes run cross-country for 5000-10000 meters, then certain training is required due to the fact that there are constant climbs and descents - this means that it is necessary to include strength training in the training process, and when competitions are held on a standard track, it is necessary to take into account the cadence, length and frequency of steps and in this regard, taking into account these individual indicators, it is necessary to build a training process. Thus, when compiling the training program for the winter half-year macrocycle, we took into account the total volume of running load in km starting with the warm-up, rest interval between series and cool-down, which at the end of the half-year macrocycle of preparation was 1972.2 ± 2.1 km, of which we identified 260.2 km of training loads in various intensity zones with a heart rate of 160 to 180 beats per minute, GPP was 540 minutes, ORU was 840 minutes and SBU was 4410 meters.

From the presented table 1 it follows that the training program was implemented within the framework of three mesocycles covering the period from October to March. During the first mesocycle, the athletes covered a total running volume of the training load amounting to 608.6 ± 1.9 km, of which 91.6 ± 1.1 km were intensive training loads, 380 minutes were spent on general development exercises, 1995 meters were spent on special running exercises and 400 minutes were spent on general physical training.

October includes, where the athletes completed a total running volume of 319 ± 1.5 km, of which 46 ± 1.2 km were spent at a heart rate of 160 to 180 beats per minute and 273 ± 1.4 km at a heart rate of up to 150 beats per minute, 240 minutes were spent on general development exercises, 1260 meters were spent on special running exercises and 400 minutes were spent on general physical training. November includes, where athletes completed a total running volume of 289.6 ± 2.2 km, including 45.6 ± 1.7 km with a heart rate of 160 to 180 beats per minute, and 244 km with a heart rate of up to 150 beats per minute, 140 minutes for general development exercises and 735 meters for special running exercises. During the second mesocycle, athletes covered a total running volume of the training load, amounting to 654.8 ± 1.3 km, of which 74.8 ± 1.1 km were intensive training loads, 280 minutes for general development exercises, 1470 meters for special running exercises and 120 minutes for general physical training. December includes, where athletes completed a total running volume of 289.8 ± 1.2 km, including 40.8 ± 1.1 km with a heart rate of 158.2 to 183.3 beats per minute, and 249 ± 1.4 km with a heart rate of up to 157.9 beats per minute, 180 minutes for general development exercises, 945 meters for special running exercises and 100 minutes for general physical

training. January includes, where athletes completed a total running volume of 365 ± 1.8 km, including 34 ± 1.3 km with a heart rate of 160 to 180 beats per minute, and 331 ± 1.8 km with a heart rate of up to 150 beats per minute, 100 minutes for general development exercises, 525 meters for special running exercises and 20 minutes for general physical training. During the third mesocycle, the athletes covered a total running volume of the training load of 708.8 ± 1.3 km, of which 93.8 ± 1.1 km were intensive training loads, 180 minutes were for general development exercises, 945 meters were for special running exercises and 20 minutes were for general physical training. February includes, where the athletes completed a total running volume of 379.4 ± 1.7 km, of which 49.4 ± 1.2 km with a heart rate of 160 to 180 beats per minute, and 330 ± 1.4 km at a heart rate of up to 150 beats per minute, 100 minutes for general developmental exercises and 525 meters for special running exercises. March includes, where the athletes completed a total running volume of 329.8 ± 2.1 km, of which 44.8 ± 1.4 km at a heart rate of 160 to 180 beats per minute, and 285 ± 1.8 km at a heart rate of up to 150 beats per minute, 80 minutes for general developmental exercises, 420 meters for special running exercises and 20 minutes for general physical training. The first mesocycle was held from October to November and consisted of nine microcycles: two introductory, two preparatory, two competitive, recovery, transitional and the first basic microcycle. The second mesocycle was conducted from December to January and consisted of nine microcycles: the second basic microcycle, the first and second shock microcycles, two preparatory, two weekly basic microcycles, a shock microcycle and a competitive one. The third mesocycle was conducted from February to March and consisted of eight weekly microcycles: 6 recovery and 2 competitive. Thus, when compiling the training program of the summer semi-annual macrocycle, we took into account that the training macrocycle consisted of an introductory, basic, preparatory and competitive, etc.

Due to the fact that it is necessary to state the fact that closer to July and August we increased the special training of long-distance runners, who were focused on showing high results. The total volume of running load in km starting from the warm-up, rest interval between series and cool-down, which at the end of the six-month macrocycle of training amounted to 2056.8 ± 2.7 km, of which we identified 365.8 ± 1.9 km of training loads in various intensity zones at a heart rate of 160 to 180 beats per minute, GPP was 660 minutes, ORU was 1740 minutes and SBU was 5460 meters. From the presented Table 2 it follows that the training program was implemented within the framework of three mesocycles covering the period from April to September.

During the first mesocycle, athletes covered a total running volume of the training load amounting to 679.4 ± 1.6 km, of which 129.4 ± 1.3 km accounted for intensive training loads, 1180 minutes for general development exercises, 2520 meters for special running exercises and 520 minutes for general physical training. April includes, where the athletes completed a total running volume of 337.4 ± 1.7 km, of which 69.4 ± 1.1 km with a heart rate of 160 to 180 beats per minute, and 268 ± 1.3 km with a heart rate of up to 150 beats per minute, 1040 minutes for general development exercises, 1785 meters for special running exercises and 500 minutes for general physical training. May includes, where athletes completed a total running volume of 342 ± 1.6 km, including 60 km with a heart rate of 160 to 180 beats per minute, and 282 ± 1.3 km with a heart rate of up to 150 beats per minute, 140 minutes for general developmental exercises, 735 meters for special running exercises and 20 minutes for general physical training.

During the second mesocycle, athletes covered a total running volume of the training load, amounting to 699.2 ± 1.8 km, of which 99.2 ± 1.2 km were intensive training loads, 320 minutes for general developmental exercises, 1680 meters for special running exercises and 120 minutes for general physical training. June includes, where athletes completed a total running volume of 305.2 ± 1.5 km, including 60.2 ± 1.3 km with a heart rate of 160 to 180 beats per minute, and 245 ± 1.5 km with a heart rate of up to 150 beats per minute, 200 minutes for general development exercises, 1050 meters for special running exercises and 120 minutes for general physical training. July includes, where athletes completed a total running volume of 394 ± 1.7 km, including 39 ± 1.1 km with a heart rate of 160 to 180 beats per minute, and 355 ± 1.6 km with a heart rate of up to 150 beats per minute, 120 minutes for general development exercises and 630 meters for special running exercises.

During the third mesocycle, the athletes covered a total running volume of the training load of 678.2 ± 2.1 km, of which 137.2 ± 1.7 km were intensive training loads, 240 minutes were for general development exercises, 1260 meters were for special running exercises and 20 minutes were for general physical training. August includes, where the athletes completed a total running volume of 370 ± 1.3 km, of which 56 ± 1.1 km with a heart rate of 160 to 180 beats per minute, and 314 ± 1.5 km with a heart rate of up to 150 beats per minute, 120 minutes for general development exercises and 630 meters for special running exercises. September includes, where athletes completed a total running volume of 308.2 ± 1.8 km, of which 81.2 ± 1.3 km with a heart rate of 160 to 180 beats per minute, and 227 ± 1.9 km at a heart rate of up to 150 beats per minute, 120 minutes for general developmental exercises, 630 meters for special running exercises and 20 minutes for general physical training. The first mesocycle was

held from April to May and consisted of nine microcycles: introductory, basic, preparatory, two competitive and recovery. The second mesocycle was held from June to July and consisted of nine microcycles: two preparatory, competitive, recovery and a basic macrocycle. The third mesocycle was held from August to September and consisted of eight weekly microcycles: one preparatory, three competitive and recovery.

This program includes optimal quantitative parameters of the volume and intensity of running equipment for training long-distance runners within the macrocycle and demonstrates high efficiency. This is due to the fact that its development involved the use of modern innovative technologies that help improve the quality of the training process.

References:

1. Akimov V.G. Training of a Marathon Runner. Monograph - Minsk: Polymya, Sovetsky Sport. 2005. - P. 78-98.
2. Bondarchuk A.P. Management of the Training Process of High-Class Athletes. Monograph. - M.: Olimpia Press, 2007.- P. 134-136.
3. Goykhman P.N. Philosophy of Loads. Monograph / P.N. Goykhman, E. Sosina. - Minsk: Kolograd, 2017. - P. 36-38.
4. Lebedev N.A. Use of Various Means of Improving Endurance in the Preparation of Young Middle and Long Distance Runners // Physical Education. Theory and Practice of Physical Education. - 2001. - No. 2. - P. 28-29.
5. Suslov F.P. Middle and Long Distance Running: Classification of Training Aids / P.F. Suslov // Track and Field. - 1970. - No. 7. - P. 17-18.
6. Yushkevich T.P. Detailing the Main Modes of Training Load in Middle and Long Distance Running / T. P. Yushkevich, A. V. Sharov // Theory and Practice of Physical Culture and Sports: Republican Interdepartmental Collection. - Minsk, 1995. - Issue 25. - P. 108-113.
7. Yakimov A.M. How to Build a Training Routine for an Amateur Runner // Running and Us. Coll. of Scientific Conferences - Moscow: 2003. - No. 38. - P. 12-13.
8. Xo'jamkeldiyev, G. S., G'Aniboyev, I. D., Ziyayev, F. C., & Karimov, F. M. Kichik razryadli o'rta masofalarga yuguruvchilarning musobaqa oldi tayyorgarligi // Central Asian Research Journal For Interdisciplinary Studies (CARJIS), 1(3), (2021). – P.270-274.
9. Khojamkeldiyev, G. Sport mashgulotlari zharayonlarida tiklanishning ahamiyati // Izhtimoiy-humanitarian fanlarning dolzarb muammolari/Actual problems of social and humanities/Actual Problems of Humanities and Social Sciences., 3(7), (2023). 233-237.
10. Khojamkeldiyev, G. S. Medical and biological means of increasing working capacity and recovery of athletes // Mental Enlightenment Scientific-Methodological Journal, Jizzakh, 2023. - P.232-237.
11. Khujamkeldiyev, G. S. (2023). The importance of recovery in the processes of sports exercises // In Physical education and sport in higher educational institutions: collection of articles of the XIX Intern. Scientific conf., Belgorod, April 25-26, 2023 / Belgorod state technological university. - Belgorod: Publishing house of BSTU, 2023. - 471 p. ISBN 978-5-361-01170-4 (P. 462).
12. Khodjamkeldiyev, G. (2023). The study of sports sciences // Current Problems of Humanities and Social Sciences., 3(7), - P.233-237.