



PHYSICAL PREPARATION OF STUDENTS WHO RUN SHORT DISTANCE IN THE TRAINING GROUP

(in the example of the girls)

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Abstract

The article studies the experiences of leading scientists on the physical training of short-distance runners (girls) of the training group. Preliminary results of research on the physical training of short-distance runners of the training group in running at distances of 30-60-100-200-400 meters are determined. Specific recommendations are given for improving the physical training of short-distance runners. Preliminary results of research were also obtained for general physical training, taking into account their physical training in the training system for short-distance runners. Necessary suggestions are given for the correct planning of training sessions, the correct distribution of load ratios.

Keywords: sprinter, training, frequency, experience, reaction, load, physical training, strength, start, result, planning, method, technique.

Introduction

Currently, a number of scientific research works are being conducted in leading countries of the world on the training of sprinters, their selection for sprinting, orientation to a narrow specialization, planning and management of annual and multi-year training sessions organized with them. Of particular importance is the effective establishment of sports schools. The teaching of athletics, along with many other sports, in sports schools and the high desire of young people to engage in this sport require further improvement of training [1,2]. In addition, a number of scientific studies are being conducted on the use of tools and methods aimed at developing physical fitness in training sessions organized with them, the use of tactical methods for qualifying technical and tactical training, and improving their psychofunctional state. However, today, it is precisely the issues of training a



reserve of highly qualified athletes that are one of the urgent tasks facing scientists around the world [3].

Resulta and discussion

The physical fitness of the trainees of the training group, who run short distances, occurs as a result of the correct distribution of sports training. For this, first of all, good functioning of the cardiovascular, respiratory and central nervous systems and the proportionality of the body structure are of great importance. In order to determine this condition of the athletes and assess the level of their preparation, we conducted a special functional test and assessed their level of readiness for the load and their ability to recover using various modern equipment. Many scientists have conducted scientific research on the development of physical fitness of short-distance runners and their preparation for sports competitions at different stages. In particular, V.B. Zelichenok and others conducted research on the development of model indicators of special physical fitness of short-distance runners (100-200 m) by age group.

We studied the physical fitness of female sprinters in order to determine the indicators given by co-authors V.B. Zelichenok, V.N. Nikitushkin, and V.P. Gubalar[4].

Table 1 Dynamics of physical fitness indicators of the experimental group before the study (n-15)

Number	Name	30 m. prestart running	30 m. running	60 m. running	100 m. running	150 m. running	200 m. running	400 m. running
1	M. M.	4,39	4,56	8,31	14,01	20,23	29,67	72,8
2	R. M.	4,67	4,96	9,12	14,79	22,19	30,08	74,9
3	M. U.	4,59	4,71	9,02	14,61	21,28	29,78	73,8
4	A. R.	4,89	5,12	9,13	15,02	23,11	31,11	75,9
5	Sh. M.	4,93	5,09	9,78	14,94	22,98	31,04	71,1
6	T. O'.	4,91	4,98	9,71	15,00	23,38	30,13	74,7



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7	A. S.	4,87	5,03	9,00	15,38	23,36	31,98	75,6
8	O. M.	4,83	5,00	9,01	15,31	23,48	30,96	75,2
9	K. U.	4,92	5,14	9,65	14,96	22,91	31,24	77,3
10	K. R.	5,00	5,26	9,74	15,36	23,10	31,93	78,1
11	S. B.	5,01	5,19	9,19	15,74	23,71	31,16	78,3
12	J. Sh.	4,96	5,26	9,11	14,90	22,95	31,45	72,9
13	M. S.	4,93	5,06	9,09	14,87	22,94	30,93	71,2
14	E. U.	4,88	5,09	9,05	14,19	22,89	30,91	72,4
15	O.A.	4,86	4,99	8,93	15,06	23,13	31,59	75,1
\bar{x}		4,84	5,03	9,19	14,9	22,8	30,9	74,6
σ		0,17	0,19	0,39	0,44	0,91	0,72	2,27

The experimental group of the test subjects returned the following results at the beginning of the study on the level of physical fitness of the short-distance runners of the training group. According to it, to determine the quality of speed and strength, we used the 30-meter pre-start running test. The average result of the short-distance runners of the training group participating in the study in the 30-meter pre-start running was 4.84 ± 0.17 s. In the 30-meter run from the lower start, the test subjects recorded an average result of 5.03 ± 0.19 s., while in the 60-meter run from the lower start, the average result of the short-distance runners of the training group in this distance, which represents the speed and strength of the short-distance runners of the training group, was 9.19 ± 0.39 s. In the 100-meter dash, the athletes from the training group recorded a result of 14.9 ± 0.44 seconds. The average result of the athletes of the training group in the 150-meter run in determining the speed-strength endurance was 22.8 ± 0.91 seconds. The average time of the athletes of the training group in the 200-meter run in determining the speed-strength and endurance quality was 30.09 ± 0.72 seconds. The average time of the athletes of the training group in the 400-meter run in determining the speed-strength and endurance quality was 74.6 ± 2.27 seconds.

Table 2 Dynamics of physical fitness indicators of the experimental group before the study

Number	Name	Long-jump	Triple long jump	Five step long jump	Throwing a 3 kg ball forward from behind the head (cm)	100-meter hop (times)	Step frequency (times) in 20 s while standing	Step frequency (times) per minute while standing	Sit-up with a 40 kg barbell
1	M. M.	203	511	892	611	55	66	167	15
2	R. M.	198	494	866	549	59	59	162	14
3	M. U.	201	498	857	613	57	67	166	14
4	A. R.	191	469	839	518	54	62	160	13
5	Sh. M.	187	473	838	524	58	57	163	12
6	T. O'.	180	465	834	428	56	59	156	12
7	A. S.	200	488	860	519	57	56	159	14
8	O. M.	197	483	826	524	57	60	157	13
9	K. U.	199	459	821	516	58	54	162	11
10	K. R.	171	467	841	521	56	55	158	11
11	S. B.	176	459	819	498	59	54	164	14
12	J. Sh.	184	466	816	546	57	59	162	15
13	M. S.	188	461	831	549	56	61	157	14
14	E. U.	201	459	826	496	55	58	163	13
15	O.A.	185	486	865	529	58	56	160	13
\bar{x}		190,7	475,9	842,1	529,4	56,8	58,9	161,1	13,2
σ		10,1	16,43	21,59	44,42	1,47	3,93	3,31	1,26

The results of the standing long jump test, conducted to determine explosive speed and power, were 190.7 ± 10.1 cm. The average result was 475.9 ± 16.43 cm in the standing three-point jump, and 842.1 ± 21.59 cm in the five-point jump (which determines the level of development of fast explosive power). In the next control exercise, namely, in the study of throwing a 3 kg ball forward with both hands above the head, the athletes of the training group recorded a result of 529.4 ± 44.42 cm. In the next test control, aimed at determining the length of steps by jumping from foot to foot at a distance of 100 meters, the athletes of the training group



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recorded a result of 56.8 ± 1.47 times. Standing for 20 s. In the control test to determine the number of repetitions of the step frequency during the training group, the athletes of the training group showed a result of 59.8 ± 3.93 times. In the next test to determine the number of steps in a standing position for 1 minute, the trainees of the training group recorded a result of 161.1 ± 3.31 times. In the test aimed at determining the level of development of the quality of strength, namely, in the control exercise of squatting with a 40 kg barbell, we can see from the results of the study that the trainees of the training group squatted with a barbell an average of 13.2 ± 1.26 times.

Conclusion

The results of the study on the physical fitness of the training group of short-distance runners (girls) allowed us to draw the following conclusions.

The study on the physical fitness of short-distance runners (girls) suggests that it is necessary to monitor the functional state of the athletes' body during this intense load, including the number of steps, the distance covered, and the reaction of the cardiovascular system to it, dividing the above distances into details and monitoring the results of each of them separately, their achievements and shortcomings.

In this regard, it is necessary to organize individual conversations with athletes on the growth and shortcomings of their results in each detail. By providing athletes with information on their results in each detail, functional states of the heart rate, and keeping them under control, it serves to improve the results of athletes.

Achieving high sports results in short-distance running is mainly based on their physical fitness, with stride frequency and length being important factors. Improving the results obtained in the remaining general physical fitness shown in the table above serves to strengthen the physical capabilities of female short-distance runners.



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