
# ASSESSMENT OF THE LEVEL OF RUNNING PREPAREDNESS OF RUNNERS FOR MIDDLE DISTANCES

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**Annotation:** The article presents the results of the dynamics of the level of general and special running preparedness of young runners for medium distances. The methodological aspects of training young runners for medium distances are revealed.

**Key words:** training process, young middle-distance runners, general and special preparedness.

**Relevance**

Currently, running has gained great popularity among young people, since this type of cyclic exercise is the simplest and most affordable. Running technique does not require special training, and its effect on the human body is extremely high. The most common means of increasing endurance is running. Since the use of running without justified methodological recommendations often leads to undesirable consequences, to ensure the effective development of endurance, strict control over the volume and intensity of the running load and a strictly metered distribution of training means over training periods are necessary. The number of publications on this issue, especially for the category of beginner athletes, is not enough. At the same time, most often the methodology for using running training means in the preparation of beginner athletes is borrowed from elite sports, and training plans are drawn up in general terms, without a specific indication of the direction of training and the relationship between the volume and intensity of the load (I.R. Soliev, L.V. Smurygina, M. S. Olimov, T. R. Rasulova, V. V. Ivanova-Tyurina, F. M. Karimov, 2021). In order to choose the optimal physical activity during the performance of physical exercises of a cyclic nature, in particular during training sessions aimed at developing endurance in middle-distance running, one must take into account the state of health, the degree of physical preparedness and other characteristics.

Middle-distance running causes maximum stress on the cardiovascular, respiratory and other systems of the body and places increased demands on the mental qualities of an athlete. The achievement of sportsmanship in running 800-1500 meters is determined by a high level of development of endurance, speed and other physical qualities, starting from adolescence.

In the problem of building the training process of young middle-distance runners, basic training occupies a central place, since during this period the foundation for future sports success based on functional changes in the body is laid.

**The degree of knowledge**

At the present stage of development of sports, in particular triathlon, the solution of many tasks facing athletes is possible only with the use of achievements in the theory and methodology of physical education, which reveal the essence of the problem of training. They relate to different aspects of the process of sports improvement - the search for effective

means and methods of educating the necessary physical abilities, training and improving technical skills to identify the relationship between them during individual training sessions, micro-, meso and macrocycles of sports training. This relationship can positively or negatively affect the growth of sports results in competitive exercises. True, in some cases, the training means used do not have either a positive or negative effect on improving sports achievements (L.V. Smurygina, 2022).

At present, in the development of mass sports, general ideas about the control system, methods for developing leading physical qualities, managing sports training in cyclic sports with a predominant manifestation of endurance are widely known. The world has accumulated some experience about training as a process of adaptation to physical activity.

However, effective copying of the theoretical provisions and practical schemes used in other sports in the sports training of middle-distance runners is possible only if the specific features of the training process are taken into account.

It is known that training and competitive loads are the main stimulus for adaptive changes in the athlete's body. This explains the constant and unrelenting interest of specialists in the problem of their rational organization in the training process (L.V. Smurygina, I.D. Ganibaev, 2012).

**The aim of the work is** to optimize the methods of training in middle-distance running at the stage of initial specialization.

**Research objectives:**

1. Determine the initial level and dynamics of general and special physical preparedness of 14-15-year-olds involved in the children's youth sports school. Based on the obtained experimental data, to substantiate the methodology for increasing endurance based on rational planning of running training loads.
2. To substantiate the distribution of fixed assets of training sessions in the annual cycle in middle-distance running at the stage of initial specialization

To solve the tasks in the work, the following research methods were used:

1. Analysis of scientific and methodological literature;
2. Pedagogical observations;
3. Pedagogical experiment;
4. Pedagogical control tests
5. Biomedical measurements;
6. Mathematical and statistical processing of the obtained data.

**The scientific novelty of the work is as follows:**

- identified and substantiated the most effective means of developing endurance used in training sessions in middle-distance running;
- the characteristic features of changes in the physical preparedness of those involved in the proposed loads were established,
- the results of special physical preparedness of young men specializing in middle-distance running were studied.

**The practical significance** of this work lies in the fact that it presents the data of pedagogical research, confirming the effectiveness of the developed methodology for educating endurance at the initial stage of the training process. Practical recommendations can be further used in the training process by other coaches.

The complex physical preparedness of middle-distance runners should be understood as a high level of achievements in terms of endurance, speed qualities and strength abilities. The significance of the listed qualities should be judged by the degree of their influence on the variation of the result in running.

When planning a yearly training cycle for teenagers who begin training middle-distance runners, it is advisable to focus on the consistent development of physical qualities. At the first stage of the training process, the main time should be devoted to the development of general endurance. Then, on the basis of this quality and while maintaining it, the main attention should be paid to strength training. After these two stages, against the background of a high functional state of the body, to cultivate speed qualities. Such a concentrated use of exercises at certain stages of the training process, aimed mainly at educating one physical quality, contributes to a more effective solution of the problems of physical training of middle-distance runners.

At the end of the preparatory - the beginning of the competitive period of training, it is recommended to evaluate the endurance of adolescents with the “critical speed” indicator and percentages from it. For example, for adolescents 14-15 years old who have completed preliminary training, it is recommended:

a) "tempo run" in the amount of up to 5 km, the running speed is 90-100% of the "critical speed", which is 3.7-4.2 m / s or 4 min. 30 sec per 1 km, the heart rate in such a run reaches 170 -190 bpm;

б) cross-country running up to 8 km, running speed is 80-90% of the “critical speed”, which is 3.3-3.7 m / s or 4 min. 30 sec - 5 min per 1 km, heart rate reaches values 150-170 bpm;

в) long run of moderate intensity up to 15 km, running speed - 70-80% of the "critical speed", which is 2.9-3.3 m / s or 5 min. 40 sec. In a 1 km run, the heart rate in such a run reaches 140-160 beats / min.

Focusing on the proposed indicators and their normative assessments, coaches will be able to more objectively select groups of middle-distance runners, plan and manage the training process.

An analysis of the results of the pedagogical experiment showed that for the purpose of successful performance in competitions in a) "tempo run" in the amount of up to 5 km, the running speed of young men is 90-100% of the "critical speed", which is 3.7-4.2 m / sec or 4 min. 30 sec per 1 km, heart rate in such a run reaches 170-190 beats / min;

b) cross running up to 8 km, running speed is 80-90% of the "critical speed", which is 3.3-3.7 m / s or 4 min. 30 sec - 5 min per 1 km, heart rate reaches values 150-170 beats/min;

c) long run of moderate intensity up to 15 km, running speed - 70-80% of the "critical speed", which is 2.9-3.3 m / s or 5 min. 40 sec. In a 1 km run, the heart rate in such a run reaches 140-160 beats / min.

Focusing on the proposed indicators and their normative assessments, coaches will be able to more objectively assess the running preparedness in groups of middle-distance runners, as well as plan and manage the training process.

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An analysis of the results of the pedagogical experiment showed that the results of both general physical and special preparedness have significantly improved among young men who go in for a successful performance in competitions in middle-distance running in training sessions in order to increase special and general endurance.

Analysis of the research results showed (Table 1 and Table 2.) that in both groups, under the influence of the training methodology, the results improved.

So in the control group in the 60-meter run, the result in 1 examination was 8.03 seconds. During repeated examinations, the indicator was at the level of 7.34 sec. The increase in the average indicator was 0.69, and improved by 8.61%. However, in the experimental group, the results increased more by 1.46 seconds, which amounted to 17.84%.

In the long jump from a place in the experimental group, the result improved by 33.50 cm, which corresponded to 18.83% of the control group, the result improved by 15.08 cm, which amounted to 8.37%. The results of both general physical and special preparedness have significantly improved in the training sessions for running in order to increase special and general endurance. When performing the exercise, flexion and extension of the arms, there were also significant improvements in the result in the experimental group, so 27.31%, in the control group the result improved by 11.32. Analysis of the research results showed that in both groups, under the influence of the training methodology, the results improved.

It was revealed that the effectiveness and prospects of the training process of middle-distance runners are significantly increased when using training programs for running training aimed at developing special endurance and other aspects of preparedness, taking into account the "leading" and "lagging behind" physical qualities.

Table 1.

The dynamics of the results of general and special preparedness of the boys in the control group during the experiment

| Options | at the beginning of the experiment | | | at the end of the experiment | | | abs | nis % | t | p |
|---|---|---|---|---|---|---|---|---|---|---|
| | $\overline{X}$ | σ | V, % | $\overline{X}$ | σ | V, % | | | | |
| Running a distance of 60 m (s.) | 8,03 | 0,85 | 10,58 | 7,34 | 0,74 | 10,08 | 0,69 | 8,61 | 2,13 | <0,05 |
| long jump from a place (cm) | 180,17 | 17,22 | 9,56 | 195,25 | 17,83 | 9,13 | 15,08 | 8,37 | 2,11 | <0,05 |
| Flexion and extension of the arms in an emphasis lying (number of times) | 22,08 | 2,77 | 12,54 | 24,58 | 2,97 | 12,08 | 2,50 | 11,32 | 2,13 | <0,05 |
| 3000 m running (s.) | 612,75 | 64,68 | 10,56 | 569,25 | 57,61 | 10,12 | 43,50 | 7,10 | 1,74 | >0,05 |

Table 2.

Dynamics of the results of general and special preparedness of the young men of the experimental group during the experiment

| Options | at the beginning of the experiment | | | at the end of the experiment | | | abs | nis % | t | p |
|---|---|---|---|---|---|---|---|---|---|---|
| | $\overline{X}$ | σ | V, % | $\overline{X}$ | σ | V, % | | | | |
| Running a distance of 60 m (s.) | 8,18 | 0,89 | 10,89 | 6,72 | 0,68 | 10,12 | 1,46 | 17,84 | 4,51 | <0,001 |
| long jump from a place (cm) | 177,92 | 17,73 | 9,97 | 211,42 | 19,18 | 9,07 | 33,50 | 18,83 | 4,44 | <0,001 |
| Flexion and extension of the arms in an emphasis lying (number of times) | 21,67 | 2,81 | 12,97 | 27,58 | 3,34 | 12,11 | 5,92 | 27,31 | 4,70 | <0,001 |
| 3000 m running (s.) | 622,08 | 68,16 | 10,96 | 543,08 | 54,89 | 10,11 | 79,00 | 12,70 | 3,13 | <0,01 |

**CONCLUSIONS**

1. The analysis of literary sources made it possible to reveal that in the training process of middle-distance runners it is necessary to search for new methods and forms of organizing lessons. The need for such a provision causes the absence of modern publications on the effectiveness of using different types of physical activity in the preparation of middle-distance runners, taking into account training areas.
2. Analysis of the results of the pedagogical experiment showed that the results of both general physical and special fitness have significantly improved among young men who go in for a successful performance in competitions in middle-distance running in training sessions in order to increase special and general endurance. It was revealed that the effectiveness and prospects of the training process of young runners are significantly increased when using training programs for running training aimed at developing special endurance and other aspects of triathletes' preparedness, taking into account the "leading" and "lagging behind" physical qualities.
3. The technique of evaluating special physical preparedness, which is a series of pedagogical tests, the purpose of which is to evaluate the leading components of special physical preparedness in each type, has been scientifically substantiated. On the basis of the results of pedagogical testing of middle-distance runners of various qualifications, a special physical preparedness assessment scale has been developed.

The structure and content of training and competitive loads among young runners for medium distances in the annual cycle have been revealed. As a result of statistical analysis, it was found that with an increase in the level of sportsmanship, a statistically significant increase in the total volume of training loads is observed. With the growth of sportsmanship, there is a trend towards a two-cycle organization of training loads in running. In young middle-distance runners, the waviness in the distribution of the volume of specialized loads is more clearly seen. In the training of young middle-distance runners, there are stages with a large concentration of unidirectional training loads.

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