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Technical training of female high jumpers at the stage of higher sportsmanship

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Abstract

Aim: Determination of the level of technical training of highly qualified athletes.

Methods: The study involved athletes specializing in high jumping from a great height (n = 16). The average age of athletes at the time of the study was 20 years. The subjects were divided into two groups: experimental (EG, n = 8) and control (CG, n = 8), depending on the predominance of certain motor skills in specific physical training ("fast" and "power" method). The study was conducted in February 2019 and May 2021.

Results: Analyzing the results (presented by representatives) of highly qualified high jumpers of Uzbekistan, we found that in many respects the technical training of our athletes almost does not differ from the model technical parameters of high jumps.

Conclusion: In practice, we can see that there is a significant variability in the indicators of technical readiness of highly qualified high jumpers. Variability of indicators of technical training of highly qualified athletes in high jumping (n = 16):

- The speed at the last step is 5.5%;
- The pace for 4 steps before the repulsion is - 9.4%;
- The pace for 3 steps before the repulsion is – 11.8%;
- The pace for 2 steps before the repulsion is – 8.0%;
- The pace at the last step is 14.6%;
- The average activity rate of 3 steps is 11.9%;
- The support time before repulsion is 4.2%.

Keywords: Female high jumpers of high qualification, indicators of technical training, motor skills.

Introduction

It is no secret that the Uzbek high jump school has received wide recognition today. The success of our high jumpers is largely due to the training methodology developed by leading experts on the program of this type of athletics. V.A.Kreer, Yu.V. The work of Verkhoshansky, A.P. Strizhak, N.G. Ozolin, V.B. Popov, I.N. Mironenko, A.L. Ogandzhanov laid the foundations of the theory and methodology of athletics jumps. As a result of training based on advanced training methods, our leading athletes have won many medals among women at continental competitions.

However, it should be noted that the studies of these scientists and methodologists mainly relate to the second half of the twentieth century. At the same time, many advanced developments of experienced trainers and scientists of that period, unfortunately, are now forgotten for the general public.

The training system for high jumpers often does not work at the individual level for highly qualified athletes due to an average approach without taking into account the individual qualities of each athlete, the structure of the athlete's special training and many years of training experience. Unfortunately, the training of qualified athletes today is often dominated by a personal orientation, which is closer to the generally accepted system of training high jumpers, regardless of their special, physical and technical training, characteristics, level of motivation and personality psychology. However, everyone is offered approximately the same training system, and in many cases the athlete is not ready for such an organism to work with overload, which, in turn, leads to injuries and ends with the athlete's early retirement from sports.

As a result of insufficient substantiation of the theoretical and methodological rules of individual training in athletics high jumps, the contradiction between the constant increase in time and material costs for the training of highly qualified high jumpers is one of the urgent problems of recent years. It is possible to solve this problem of high-level high jumpers by constantly improving the theoretical, methodological and practical aspects of individual training.

At the stage of high sportsmanship, individualization of training is important, since

an increase in the volume and intensity of training no longer gives the desired result, but leads to overstrain and injury of high jumpers. The individual structure of the training of highly qualified athletes includes an analysis of all previous experience, strengths and weaknesses of the athlete, planning of long-term training.

In the theory of sports training based on the theoretical and methodological principles of deep specialization and individualization of sports, the development of technology for adapting a modern training method to a specific athlete contributes to improving the effectiveness of the training process, achieving the peak of sportsmanship (3, 5).

The development and scientific substantiation of individual jumping technologies in athletics using modern innovative data processing and control technologies makes it possible to make the necessary adjustments to the process of technical training of athletes. The existing method of training female high jumpers, taking into account individual characteristics, technique and special structure of physical training, will raise the bar of personal achievements to a higher level.

Methods

From 2019 to 2021, pedagogical control was carried out in the training of highly qualified jumpers at the athletics training base, indoor complex of the Republican College of the Olympic Reserve, the Dukent Stadium, the Yangiabad Training Base. With the help of protocols and tables (training tools, their size, intensity, division into macrocycles), the characteristics of the training load of jumpers were recorded. At the final stage of pedagogical observations, a statistical analysis of protocols and tables was carried out in order to summarize the experience of training qualified high jumpers.

To assess the level of technical readiness and variability of jumpers, pedagogical control tests were conducted as part of the experiment. 16 athletes (CMS-MS-MSIC) took part in the control tests.

When selecting control exercises for jumpers, the following methodological rules were taken into account: the tests should be checked for informativeness and reliability, correspond to competitive exercises according to individual kinematic parameters, are technically simple and well assimilated by athletes. In addition, the testing process should be easy to organize and conduct, comply with a comprehensive control procedure and not take much time. Control exercises were selected on the basis of traditional methodological recommendations. The methodology includes exercises with a level of reliability and satisfactory data content.

At the first stage, special pedagogical technologies of individualization of technical training of high jumpers were tested. The analysis of the technical readiness of high jumpers (in the winter and summer championships of Uzbekistan) was carried out. In the competitions organized in 2019-2021, the video analysis was carried out in two stages and the results were processed.

Results and discussion

Differences in the natural propensity of athletes to develop certain motor skills, individual characteristics of the entire long-term training of high-class athletes determine significant differences in the composition of special training of athletes at the stage of high sportsmanship. In order to verify this theoretical and methodological position of highly qualified jumpers in the conditions of competitive activity, individual variability of indicators of technical readiness of athletes was carried out.

The parameters of technical training of high jumpers were determined in competitive attempts using video recording and video analysis. High jumpers (n = 16) demonstrate different variants of the technique of jumping in the "fosbury flop" technique, the same result in the studied attempts (1.80 m) of the high jump

has important indicators of the variability of technical readiness (see table 1).

division of jumpers into groups according to the predominance of certain motor skills in the

Table 1. Average post-experimental statistical parameters and indicators of variability of technical readiness of Uzbekistan's leading high jumpers in experimental (EG, n = 8) and control (CG, n = 8) groups

Indicators	EG	CG	Difference	Difference in %
The speed at the last step	6.78	6.41	0.37	5.5
The pace for 4 steps before the repulsion	2.24	2.03	0.21	9.4
The pace for 3 steps before the repulsion	2.63	2.32	0.31	11.8
The pace for 2 steps before the repulsion	3.01	2.77	0.24	8.0
The pace at the last step	3.96	3.38	0.58	14.6
The average activity rate of 3 steps	3.20	2.82	0.38	11.9
The support time before repulsion	0.191	0.183	0.008	4.2

With the help of tests to determine the individual variability of specific indicators of physical fitness of athletes, testing of indicators of technical readiness of highly qualified high jumpers was carried out. Tests conducted under the current supervision of special training of highly qualified high jumpers in training sessions allowed us to determine the variability of performance during the competition.

The above results are based on the

structure of the athlete's physical training: "sprinter-enforcer", "jumper-enforcer", "universal", "sprinter-jumper" (2).

Technical training based on the group characteristics of the structure: groups of "high-speed", "model" and "high trajectories", as well as differentiation of the technical style: "raking", "running", "amplitude" and "ricocheting" styles (1, 4).

Conclusion

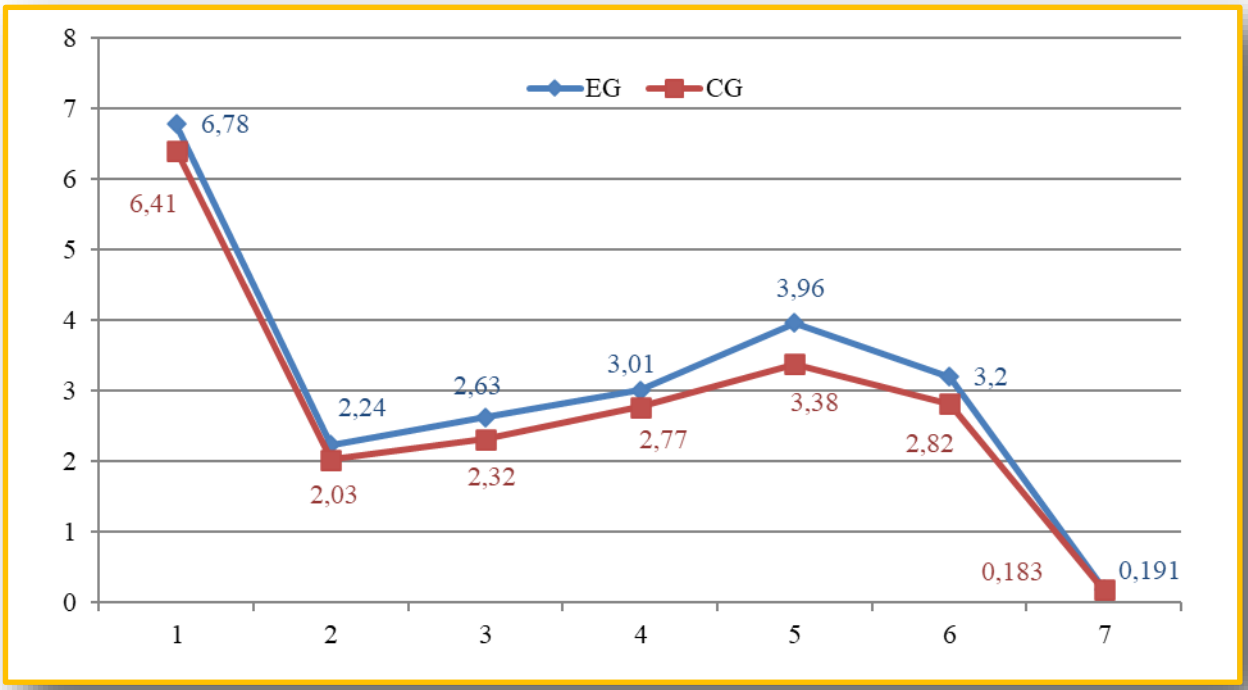


Figure 1. Variability of EG and CG indicators of technical readiness of female high jumpers.

In practice, we can see that there is a significant variability in the indicators of technical readiness of highly qualified high jumpers. Variability of indicators of technical training of highly qualified athletes in high jumping (n = 16):

- The speed at the last step is 5.5%;
- The pace for 4 steps before the repulsion is - 9.4%;
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Through a comparative analysis of the technical training of the leading jumpers, we saw a high variability in the technical training of athletes-high jumpers, which indicates the use by athletes of various techniques of jumping techniques to achieve results in competitive training in high jumping.

References

Ogandzhanov A. L. (2014) Kompleksnyj kontrol' v legkoj atletike [Complex control in athletics] textbook. Moscow. pp. 160. (in Russian).

Ozolin N. G. (1970) Sovremennaya sistema sportivnoj trenirovki [Modern system of sports training] textbook. Moscow. pp. 479. (in Russian).

Kreer V. A. (1986) Legkoatleticheskie pryzhki [track and field jumps] Fizkul'tura i sport. pp.174. (in Russian).

Matveev L. P. (1964) Problemy periodizacii sportivnoj trenirovki [Problems of periodization of sports training] Fizkul'tura i sport. pp. 247. (in Russian).

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