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### TRIPLE JUMP OF ATHLETICS MONITORING THE EFFECTIVENESS OF TECHNICAL PREPARATION LOADS GIVEN TO ATHLETES

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#### ABOUT ARTICLE

**Key words:** athletics, triple long jump, athletes, technical training, technique, "hop", "step", "jump".

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**Abstract:** The article describes the content of technical training means, their implementation, and the use of means used in the 2-week training cycle of the pre-competition period in training processes for triple long jumps in track and field. In addition, general conclusions were given based on the analysis of the athletes' adaptability to these loads, the state of technical training.

**Relevance.** It is no secret that preparing national teams for the modern Olympic Games and ensuring their effective participation is becoming a process that reflects a country's development and the social significance of its system. As interest in sports in general, and specifically in the Olympic Games, steadily grows within the global community, significant changes are being introduced to countries' economic growth, social structure, and everyday life. In particular, today, through sports, countries, large manufacturing enterprises, and small and medium-sized businesses are finding ways to gain global recognition or pursue development by promoting themselves (2; 5).

Typically, in achieving success in the sport chosen by athletes, the coach's contribution, the effectiveness of the methods applied by the coach, and the most efficient pathways to achieve high sports results are all crucial. Therefore, in preparing their trainees for sports competitions, coaches are expected to apply reliable, proven, and effective methods and introduce them into practice. Nevertheless, coaches and athletes are constantly compelled to use factors that ensure continuous improvement in results (1; 3; 4).

By the 2020s, considering the steadily improving results in sports practice, the athlete training system is demanding new methodological approaches in training processes. This highlights the necessity of preparing athletes according to their individual physical characteristics. In particular, disciplines in athletics such as long jump and triple jump are among these areas.

**Objective of the study:** To determine the volume of technical loads given to athletes in triple jump training and assess their effectiveness in execution.

#### Tasks of the study:

- 1. Analyze and summarize previous research on the topic.
- 2. Examine the content of tools and methods used to improve athletic technique in the training process for triple jump athletes.
  - 3. Monitor the execution of technical preparation loads assigned to triple jump athletes.

**Discussion of the research results.** The organization of triple jump training is divided as follows: general physical preparation, specialized physical preparation, and technical preparation. In this regard, the proportions of general and specialized physical preparation and technical preparation are adjusted based on the athletes' skill levels. However, it is essential to consider that if athletes' performance levels improve rapidly, it is not feasible to intensify the loads at the same rate, as the athlete's body is conditioned to respond appropriately to the current loads. If an athlete's results are improving quickly or surpassing the coach's plans, it indicates that they are developing well and effectively with the current loads. Thus, these results are not accidental. Therefore, it is intended that loads are applied according to the principles of general physical education and sports theory.

Therefore, it is intended that coaches and specialists continuously monitor the adherence to these principles, specifically the implementation of loads, to regularly analyze athletes' physical development and level of physical preparedness. Below, we provide a weekly training cycle for triple jumpers.

Content of the two-week training program for triple jumpers at the level of Master of Sport during the preparation period.

#### **Day 1:**

- Light jogging: 10 minutes
- Dynamic stretching: 15 minutes
- Running exercises: 5 repetitions of 50 meters
- Sprinting from a half-run distance at 100% speed, followed by triple jump

 $\bullet$  Triple jumps: 5 repetitions using the take-off leg, then 5 repetitions with the support leg

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• Light jogging on grass: 10 minutes

#### **Day 2:**

- Light jogging: 10 minutes
- Dynamic stretching: 10 minutes
- Moderate-intensity running exercises: 6 repetitions of 50 meters
- Sprint: 4 repetitions of 150 meters with a 50-meter break, 3 repetitions of 60 meters with a 50-meter break
  - Cool-down jog: 10 minutes

#### **Day 3:**

- Light jogging: 10 minutes
- Flexibility exercises: 10 minutes
- Moderate-intensity running exercises: 6 repetitions of 50 meters
- Sprint: 4 repetitions of 30m + 40m + 60m
- Standing jump into the pit: dynamic stretching (core and lower back muscles)

#### **Day 4:**

Rest

#### **Day 5:**

- Light jogging: 10 minutes
- Flexibility exercises: 10 minutes
- Moderate-intensity running exercises: 6 repetitions of 50 meters
- Jumps: 10 repetitions of full-distance sprints with jumps, executing "hops" on take-off and support legs
  - Cool-down jog: 6 minutes

#### **Day 6:**

- Light jogging: 10 minutes
- Flexibility exercises: 10 minutes
- Specialized running exercises: 6 repetitions of 50 meters
- Sprinting: 6 repetitions of 60 meters with an additional 30-meter sprint
- Cool-down jog: 5 minutes

#### **Day 7:**

• Rest (1-1.5 hour walk)

# Weekly training cycle for triple jumpers during the competition period (for athletes who have met the Master of Sport requirements):

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#### Day 1:

- Light jogging: 10 minutes
- Dynamic stretching: 15 minutes
- Running exercises: 5 repetitions of 50 meters
- Sprinting from a full distance at 100% speed, followed by triple jump
- Alternating leg jumps on grass (diagonally across the stadium): 12 repetitions
- Cool-down jog: 10 minutes

#### **Day 2:**

- Light jogging: 10 minutes
- Dynamic stretching: 10 minutes
- Moderate-intensity running exercises: 6 repetitions of 50 meters
- Hopping and bounding exercises: 30 minutes
- Cool-down jog: 10 minutes

#### Day 6:

- Light jogging: 10 minutes
- Flexibility exercises: 10 minutes
- Specialized running exercises: 6 repetitions of 50 meters
- Sprinting: 6 repetitions of 60 meters with an additional 30-meter sprint
- Cool-down jog: 5 minutes

#### **Day 7:**

• Rest (1-1.5 hour walk)

Weekly training cycle for triple jumpers during the competition period (for athletes who have met the Master of Sport requirements):

#### **Day 1:**

- Light jogging: 10 minutes
- Dynamic stretching: 15 minutes
- Running exercises: 5 repetitions of 50 meters
- Sprinting from a full distance at 100% speed, followed by a triple jump
- Alternating leg jumps on grass (diagonally across the stadium): 12 repetitions
- Cool-down jog: 10 minutes

#### **Day 2:**

• Light jogging: 10 minutes

- Dynamic stretching: 10 minutes
- Moderate-intensity running exercises: 6 repetitions of 50 meters

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- Hopping and bounding exercises: 30 minutes
- Cool-down jog: 10 minutes

#### **Day 3:**

- Light jogging: 10 minutes
- Flexibility exercises: 10 minutes
- Moderate-intensity running exercises: 6 repetitions of 50 meters
- Long jump exercises: 6 repetitions

#### **Day 4:**

• Rest

#### **Day 5:**

- Light jogging: 10 minutes
- Flexibility exercises: 10 minutes
- Moderate-intensity running exercises: 6 repetitions of 50 meters
- Sprint: 3 repetitions of 80 meters with a 2-minute break, 3 repetitions of 60 meters

### with a 1-minute break

• Cool-down jog: 6 minutes

#### **Day 6:**

- Light jogging: 10 minutes
- Flexibility exercises: 10 minutes
- Specialized running exercises: 6 repetitions of 50 meters
- Competition in triple jump, result: 15.64 meters
- Cool-down jog: 5 minutes

#### **Day 7:**

• Rest (1-1.5 hour walk).

The two-week microcycle outlined above corresponds to the pre-competition preparation period and is executed at an intensity of 80-85%. Based on the analysis of the results obtained from the conducted research, the state of physical preparedness was examined.

Table 1

Analysis of the results of men's triple jump at the Central Asian Open

Championship n=8

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Nº	Control tests	Results			
		n=8	15,21	15,35	15,74
		n=5	15,08	15,21	15,45
1.	Number of steps in running (times)	n=8	18,2	18,3	18,1
		n=5	18,1	18,3	18,2
2.	Running speed, (m/s	n=8	9,45	9,72	10,06
		n=5	9,38	9,72	9,94
3.	Time of the last step when putting	n=8	0,215	0,213	0,209
	the foot on the ground, (s)	n=5	0,219	0,215	0,210
4.	Foot placement angle (degrees)	n=8	67°	71°	67°
		n=5	68°	70°	68°
5.	Average length of "scattering" (m)	n=8	5,14	5,19	5,31
		n=5	5,05	5,09	5,14
6.	Average length of "stride" (m)	n=8	5,06	5,10	5,14
		n=5	4,98	4,99	5,01
7.	Average length of "jump" (m)	n=8	5,01	5,06	5,29
		n=5	5,03	5,13	5,30
8.	Average speed in "Scatter", (m/s)	n=8	9,26	9,65	9,87
		n=5	9,09	9,27	9,71
9.	Average speed in "step", (m/s)	n=8	9,06	9,17	9,15
		n=5	9,00	9,15	9,34
10.	Average speed in "Jump", (m/s	n=8	8,19	8,26	8,34
		n=5	8,02	8,09	8,22

In our research, we presented the technical preparation results of a total of 8 athletes who reached the finals. Among them, 5 are local athletes who served as respondents.

According to the table, we first provided the best 3 successful attempts from 6 attempts made by the 8 athletes, followed by the results of the local athletes. The analysis utilized 10 specific tests, focusing on the number of steps taken during the approach run, the speed during the approach, the time of the last step upon foot placement, the angle of foot placement, the average length of the "hop," the average length of the "step," the average length of the "jump," the average speed during the "hop," the average speed during the "step," and the average speed during the "jump."

**Conclusion:** It is evident from the table that the physical performance indicators of our local athletes are relatively lower. Nevertheless, their chances of competing for medals are nearly equal. It is important to emphasize that the training loads and the execution of exercises applied in the athletes' technical preparation were examined for correctness.

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It is also worth mentioning the opinions of the coaches. In sports competitions, the results achieved by athletes can be divided into two categories: reaching the initial best attempt and then executing subsequent attempts linked with tactical movements.

The provided information covers the results of the triple jump competition held during the Central Asia Open Championship in Tashkent in 2024. A total of 13 athletes participated in this competition, with 8 of them competing in the finals according to the competition rules. Among them, 5 are local athletes who took part in our study and specifically secured 2nd and 3rd places following the research conducted by us.

The research also allowed us to draw another conclusion: if the training processes for athletes are conducted in a complete and rigorous manner as planned, it will undoubtedly yield positive results.

#### **Used literature:**

- 1. Oganjanov A.L., Mironov D.L. "Methodology for assessing the physical fitness of long jumpers at the stages of sports improvement and higher sports mastery." News of the Tula State University of Physical Culture and Sports, 2019. Issue 10, pp. 97-103.
- 2. Platonov V. N. System of training athletes in Olympic sports. General theory and its practical applications. K.: Olympic Literature, 2004. 808 p.
- 3. Platonov, V.N. Motor qualities and physical training of athletes / V.N. Platonov. M.: Sport Publishing House, 2019. 656 p.
- 4. Sergienko L.P. Sports selection: theory and practice: monograph [Text]: / L.P. Sergienko. M.: Soviet sport, 2013 1048 p.
- 5. Shakirzhanova K.T., Lyulina E.S., Kamolova D.A. Comparative analysis of the level of preparedness and the result of the competition between women of Uzbekistan and world leaders in horizontal jumps. Fan sportga. No. 7-/2022 y. 7-10 b.
- 6. Shakirzhanova K.T., Lyulina E.S., Kamolova D.A. Comparative analysis of the level of preparedness and the result of the competition between women of Uzbekistan and world leaders in horizontal jumps. Fan sportga. No. 7-/2022 y. 7-10 bPedagogical technologies and interactive methods as a factor of increasing special knowledge of students
- 7. Xoʻjamkeldiyev, G. S., GʻAniboyev, I. D., Ziyayev, F. C., & Karimov, F. M. Kichik razryadli oʻrta masofalarga yuguruvchilarning musobaqa oldi tayyorgarligi // Central Asian Research Journal For Interdisciplinary Studies (CARJIS), 1(3), (2021). P.270-274.
- 8. Ходжамкелдиев, Г. Спорт машғулотлари жараёнларида тикланишнинг аҳамияти // Ижтимоий-гуманитар фанларнинг долзарб муаммолари/Актуальные

проблемы социально-гуманитарных наук/Actual Problems of Humanities and Social Sciences., 3(7), (2023). 233-237.

- 9. 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.
- 10. Khujamkeldiyev, G. S. (2023). The importance of recovery in the processes of sports exercises // In Физическое воспитание и спорт в высших учебных заведениях: сб. статей XIX Междунар. науч. конф., Белгород, 25–26 апр. 2023 г./Белгор. гос. технол. ун-т.–Белгород: Изд-во БГТУ, 2023.–471с. ISBN 978-5-361-01170-4 (P. 462).
- 11. Ходжамкелдиев, Г. (2023). Спорт машғулотлари жараёнларида тикланишнинг аҳамияти // Ижтимоий-гуманитар фанларнинг долзарб муаммолари/Актуальные проблемы социально-гуманитарных наук/Actual Problems of Humanities and Social Sciences., 3(7), C.233-237.