# INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE



ISSN: 2692-5206, Impact Factor: 12,23

American Academic publishers, volume 05, issue 10,2025



Journal: https://www.academicpublishers.org/journals/index.php/ijai

### METHODS OF DEVELOPING PRE-COMPETITION TECHNIQUES IN ATHLETES.

#### Abdug'aniyev Xumoyun Rustamjon ugli

Teacher at the Department of Theory and Methodology of All-Around Sports, Fergana State University.

Annotation: This work analyzes methodological approaches aimed at improving the technical skills of track and field athletes at the pre-competition preparation stage. The main goal of the study is to improve competition results by increasing the stability of technical movements, speed of movement and coordination capabilities of athletes. The work highlights the effectiveness of the use of special exercise complexes, repetitive and variable training methods, as well as video analysis and biofeedback technologies used in the pre-competition preparation process. The impact of psychological preparation and an individual approach on the quality of technique is also analyzed.

**Keywords:** athletics, pre-competition preparation, technical preparation, methodology, movement coordination, special exercises, sports technique, psychological preparation, training process, effectiveness.

Introduction

Athletics is a sport that maximizes a person's physical capabilities and requires technical, tactical and mental preparation. Each track and field discipline - whether it is running, jumping, throwing or all-around - requires the athlete's physical condition, psychological stability and technical skills to be at the highest level during the pre-competition period.

Pre-competition technical preparation directly affects the athlete's final results. Therefore, the development of a methodology for improving pre-competition techniques in track and field athletes on a scientific basis is one of the important areas of sports pedagogy and practical coaching.

Pre-competition preparation is a process carried out by an athlete on the eve of the competition in order to bring his physical, technical, tactical and mental state to an optimal level. This stage is the final part of the annual training cycle and plays a decisive role in achieving results.

The main tasks of pre-competition technical preparation:\*\*

- 1. Strengthening the athlete's technical movement stereotypes.
- 2. Increasing the accuracy and automatism of movements.
- 3. Improving coordination skills.
- 4. Combining speed and strength qualities with technique.
- 5. Conducting training sessions that are closer to competition conditions.

During this period, the athlete focuses on stabilizing the existing technique rather than learning new movement elements. At the same time, analyzing and eliminating technical errors is one of the main methodological directions.

Technical training in athletics is carried out in the following stages:

- 1. Training stage mastering new movements, forming basic technical elements.
- 2. Improvement stage automating the mastered technique, increasing accuracy and stability.
- 3. Pre-competition stage adapting technical movements to competition conditions, ensuring maximum efficiency of movements.

At the pre-competition stage, training sessions are conducted in a manner that is closer to the competition model. For example, starting technique for sprinters, technique of entering the finish line, exercises to maintain rhythm; For jumpers, the coordination of the running, push-off

## INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE



ISSN: 2692-5206, Impact Factor: 12,23

American Academic publishers, volume 05, issue 10,2025



Journal: https://www.academicpublishers.org/journals/index.php/ijai

and landing phases is important; for throwers, the accuracy of the rotation or jerk technique is important.

The following methodological directions are used in pre-competition technical preparation:

1. Model exercise system

Model exercises are a set of exercises based on the repetition of technical movements similar to competition conditions. They help stabilize the athlete's technical condition and adapt to competition stress.

### Examples:

- \* For runners: sprint repetitions at short distances at 95 97% speed.
- \* For jumpers: jumping with full force to a designated point.
- \* For throwers: training with projectiles that differ by 5-10% from the weight of the projectile in the competition.
- 2. Video analysis and technical diagnostics

In modern sports, technical errors are identified by analyzing the athlete's movements using technical analysis tools (video camera, sensors, 3D modeling).

Methodological advantages:

- \* Determining the amplitude of movement;
- \* Measuring the angle of impact;
- \* Assessing energy expenditure and time dynamics.

Based on this analysis, the coach makes adjustments that are appropriate for the athlete's individuality.

3. Psychomotor exercises

In improving pre-competition technique, psychomotor exercises - exercises to develop attention, reaction speed and coordination - are of great importance.

4. Biomechanical exercises

Reconstruction of movements based on biomechanical analysis increases the athlete's technical efficiency. For example, maintaining the push-off angle around 45 - 48° in sprinters, correctly controlling the center of gravity of the mass in jumpers, and optimizing the trajectory of rotation in throwers are the main factors in improving technique.

The athlete's mental state at the pre-competition stage also directly affects technical performance. Mental tension, lack of confidence or excessive excitement lead to technical errors. Therefore, technical preparation should be carried out in harmony with psychological preparation.

Basic psychological methods:

- 1. Auto-training and visualization methods;
- 2. Mental modeling of the competition process;
- 3. Motivational interviews and team support;
- 4. Relaxation and breathing exercises.

These methods increase the athlete's confidence in his technique, bring the movements to an automatic level.

The coach works in the following areas in pre-competition technical preparation:

- \* Formation of an individual technical model of the athlete;
- \* Drawing up an individual microcycle plan for each athlete;
- \* Balancing technical and mental load;
- \* Applying an analytical approach during training.

The coach must record the athlete's technical performance after each training session, conduct a quick analysis to identify errors and correct them.

## INTERNATIONAL JOURNAL OF ARTIFICIAL INTELLIGENCE



ISSN: 2692-5206, Impact Factor: 12,23

American Academic publishers, volume 05, issue 10,2025



Journal: <a href="https://www.academicpublishers.org/journals/index.php/ijai">https://www.academicpublishers.org/journals/index.php/ijai</a>

- 1. 10-14 days before the competition, technical loads are reduced, and attention is paid to the accuracy and rhythmic harmony of movements.
- 2. The competition model (distance, time, place, clothing, equipment) is imitated as completely as possible in training sessions.
- 3. Video analysis and technical control sessions are held at least twice a week.
- 4. At the end of the training, relaxation exercises are performed to provide psychological relief.
- 5. Regular exchange of ideas is established between the coach and the athlete.

# Conclusion

The methodology for developing pre-competition technical preparation in track and field athletes is an important factor in improving sports results. The accuracy, automatism of technical movements and the degree of adaptation to competition conditions are the main criteria that determine the athlete's success in the competition.

The most important task for coaches is to conduct technical, physical and psychological preparation in a holistic system, choosing a methodological approach that is appropriate for the individual characteristics of each athlete. The use of modern analytical tools and scientific methods significantly increases the effectiveness of this process.

#### References

- 1. Mamatov A. "Theory and methodology of athletics", Tashkent: UzDJTI, 2022.
- 2. Karpov I.V. "Theory and methodology of athletics", Moscow, 2021.
- 3. Islamov D., Kholmatova G. "Management of sports training", Tashkent: Publishing House of the National University of Uzbekistan, 2020.
- 4. Bompa T. "Periodization of Training for Sports", Human Kinetics, 2019.
- 5. Materials of the Committee of Physical Education and Sports of the Republic of Uzbekistan, 2023.