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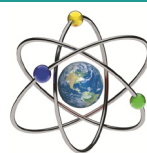


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- 13.00.00 Pedagogika fanlari
- 13.00.01 Pedagogika nazariyasi. Pedagogik ta'limotlar tarixi
- 13.00.02 Ta'lim va tarbiya nazariyasi va metodikasi (sohalar bo'yicha)
- 13.00.03 Maxsus pedagogika
- 13.00.04 Jismoniy tarbiya va sport mashg'ulotlari nazariyasi va metodikasi
- 13.00.05 Kasb-hunar ta'limi nazariyasi va metodikasi
- 13.00.06 Elektron ta'lim nazariyasi va metodikasi (ta'lim sohaları va bosqichlari bo'yicha)
- 13.00.07 Ta'limda menejment
- 13.00.08 Maktabgacha ta'lim va tarbiya nazariyasi va metodikasi
- 13.00.09 Ijtimoiy pedagogika
- 07.00.00 Tarix fanlari
- 19.00.00 Psixologiya fanlari
- 01.00.00 Fizika-matematika fanlari
- 02.00.00 Kimyo fanlari
- 03.00.00 Biologiya fanlari
- 09.00.00 Falsafa fanlari
- 10.00.00 Filologiya fanlari
- 11.00.00 Geografiya fanlari

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OPTIMISATION OF TECHNICAL AND PHYSICAL POTENTIAL IN THE IMPLEMENTATION OF THE ROTATIONAL METHOD OF PUSHING THE CORE

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Abstract: Based on accelerometric analysis of the shot-put technique, a method for the conjugate development of special physical qualities and technical skills of qualified athletes using the rotational method has been substantiated. Its effectiveness has been experimentally confirmed in a six-week pre-competition mesocycle focused on speed and strength.

Key words: shot put, athletes, athletic preparedness, technical and physical training, training sessions.

Annotatsiya: Yadro uloqtirish texnikasining akselerometrik tahlili asosida malakali sportchilarning maxsus jismoniy sifatlari va texnik ko'nikmalarini aylanish usulidan foydalangan holda uyg'un rivojlantirish metodikasi asoslab berildi. Uning samaradorligi tezkor-kuch sifatlarini rivojlantirishga yo'naltirilgan olti haftalik musobaqaoldi mezo-siklda eksperimental ravishda tasdiqlandi.

Kalit so'zlar: yadro uloqtirish, sportchilar, sport tayyorgarligi, texnik va jismoniy tayyorgarlik, mashg'ulot jarayonlari, akselerometriya.

Аннотация: На основе акселерометрического анализа техники толкания ядра обоснована методика сопряжённого развития специальных физических качеств и технических навыков квалифицированных спортсменов с использованием вращательного способа. Её эффективность экспериментально подтверждена в шестинедельном предсоревновательном мезоцикле, ориентированном на развитие скоростно-силовых качеств.

Ключевые слова: толкание ядра, спортсмены, спортивная подготовленность, техническая и физическая подготовка, тренировочные занятия, акселерометрия.

INTRODUCTION

The progressive improvement of sporting results in world athletics, including men's shot put, highlights the need to optimize the forms and methods of managing the training process for domestic athletes. Training elite athletes is a long-term process, the initial phase of which involves establishing fundamental prerequisites: creating a stable dynamic pattern of competitive exercises and achieving the required level of general and specific physical fitness.

RESEARCH METHODOLOGY

In modern practice, there is a steady trend towards the dominance of the rotational method of shot put (rotational technique) among the world's strongest athletes. Despite this, its prevalence among specialists remains limited. The key reason for this situation is the insufficient theoretical and methodological development of the process of mastering the rotational shot-put technique at both national and international levels. Taking into account the historical origin of this method (also known as the 'circular swing') in the domestic school, it cannot be argued that there is a complete lack of an appropriate methodological basis. However, the existing developments, in their current form, do not correspond to modern realities. The evolution of the rotational technique has led to a significant transformation of both the biomechanics of the movement itself and, consequently, the system of requirements for the special physical training of shot putters. The aim of the study is to develop and theoretically substantiate a methodology for teaching the rotational shot-put technique and for the associated development of technical and physical fitness in athletes specializing in this event.

Research objectives: to assess the current level of technical skill and special physical fitness of qualified throwers. To develop and test a method for the integrated improvement of technical and special physical training in shot putters using the rotational technique.

Research methods: The study employed a set of complementary methods, including: theoretical analysis and synthesis of data from scientific and methodological literature.

Pedagogical methods:

- systematic pedagogical observation;
- pedagogical testing of physical and technical preparedness;
- structured pedagogical experiment.

Instrumental methods for recording and analysing technique:

- video analysis of competitive and training exercises;
- accelerometry to assess the kinematic parameters of movement.

Mathematical and statistical methods for processing and interpreting the data obtained. The research hypothesis is based on the assumption that the effectiveness of shot putters' performance can be improved by introducing a scientifically grounded methodology that integrates initial training in the rotational technique, enhances technical and physical fitness, and implements the principle of conjugate training within the overall training process.

RESULTS AND ANALYSIS

The basis of the conjugate technical and physical training methodology was a set of exercises that selectively targeted the leading muscle groups involved in the biomechanical structure of the rotational shot put. The methodology was implemented in two stages: during the first six-week mesocycle, the athletes mastered 28 specialised test exercises, the complexity of which progressively increased within weekly microcycles. In the subsequent six-week stage, these exercises were performed with the requirement for maximum power output.

The training session using the experimental method had the following structure:

1. General warm-up.
2. Special warm-up, including a set of exercises designed to prepare the musculoskeletal system for the main load and strengthen the core muscles. This component was combined with static and statodynamic strength exercises of a general impact.
3. The main part, based on the principle of regional speed-strength impact. Exercises for the muscles of the upper and lower extremities were performed sequentially and alternately. The semantic load of the sessions varied: in one training session, the emphasis was on improving the components associated with the entry phase into the turn; in the next, on the elements of the final effort. This ensured a targeted and differentiated impact on the key components of special training.

The main part of the session focused on technical work. It included: exercises with implements of various masses (6-10 kg): shot put from various starting positions, as well as shot put from a standing position and in full coordination (with a turn). A series of simulation exercises aimed at isolated and combined practice of individual phases and elements of the kinematic structure of the rotational technique. The results of each exercise were systematically recorded. The technical execution of the rotational shot put was monitored using instrumental methods:

1. High-speed video recording (recording frequency – 210 frames/s) for subsequent biomechanical analysis of movement kinematics.
2. Accelerometry – recording the projection of the acceleration of the pushing arm, which indirectly characterized the dynamics of the implement's acceleration.

The accelerometer readings demonstrated positive progress in improving the shot-put technique among athletes who trained using the experimental method. Analysis of the obtained data shows the following: while maintaining the same maximum acceleration of the implement at the moment of the final effort (peak phase, tooth D exceeding 3.5 g), by the end of the experiment there was a decrease in the amplitude of acceleration reduction during the phase of assuming the two-support position (tooth G). This indicates a reduction in implement deceleration in this critical transitional element of the technique. This change in parameters indicates optimization of movement kinematics: the two-support position is achieved before the final effort within a shorter time interval, and the implement's velocity demonstrates greater stability. The combination of these factors constitutes an objective criterion of technical skill development, which naturally leads to progress in sporting performance.



CONCLUSION

The study confirmed the effectiveness of two key elements: the use of accelerometry for objective monitoring and assessment of technical skill dynamics. The developed methodology for the combined improvement of special physical and technical training of qualified shot putters using the rotational method. The implementation of this methodology within the framework of a six-week pre-competition mesocycle contributes to the optimization of the biomechanical structure of movement, which is reflected in objectively recorded parameters and leads to an increase in athletic performance.

References:

1. Alexeev, V. I. Alexander Baryshnikov and the rotational shot-put technique // Legkaya atletika. - 1997. - № 8. - P. 16-17.
2. Buyak, G. Ya., Voronkin, V. I. Technique of shot putting with rotational speeding-up // Sovershenstvovanie sistemy sportivnoi trenirovki i obucheniya v legkoi atletike: sbornik nauchnykh trudov kafedry legkoi atletiki po itogam NIR za 1998 g. - M.: RGAFK, 1999. - P. 14-17.
3. Kengesbayevich, R. M. (2025, January). Didactics of Physical Culture and Sport. In International Conference on Adaptive Learning Technologies (Vol. 13, pp. 20-21).
4. Miller, V. I., Rubin, V. S., Machkanova, E. V. Theoretical and methodological substantiation for testing and training of shot putters in learning rotational putting // Sbornik trudov uchenykh RGUFKSIT: materialy nauchnoi konferentsii professorsko-prepodavatel'skogo i nauchnogo sostava RGUFKSIT (24-26 fevralya 2010 g.). - M.: Svetoton, 2010. - P. 144-149.
5. Miller, V. I., Rubin, V. S., Machkanova, E. V. Improving Technical and Physical Fitness in Rotational Shot Put // Bulletin of Sports Science. - 2012.

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- 13.00.00 Pedagogika fanlari
 - 13.00.01 Pedagogika nazariyasi. Pedagogik ta'limotlar tarixi
 - 13.00.02 Ta'lim va tarbiya nazariyasi va metodikasi (sohalar bo'yicha)
 - 13.00.03 Maxsus pedagogika
 - 13.00.04 Jismoniy tarbiya va sport mashg'ulotlari nazariyasi va metodikasi
 - 13.00.05 Kasb-hunar ta'limi nazariyasi va metodikasi
 - 13.00.06 Elektron ta'lim nazariyasi va metodikasi (ta'lim sohaları va bosqichlari bo'yicha)
 - 13.00.07 Ta'limda menejment
 - 13.00.08 Maktabgacha ta'lim va tarbiya nazariyasi va metodikasi
 - 13.00.09 Ijtimoiy pedagogika
 - 07.00.00 Tarix fanlari
 - 19.00.00 Psixologiya fanlari
 - 01.00.00 Fizika-matematika fanlari
 - 02.00.00 Kimyo fanlari
 - 03.00.00 Biologiya fanlari
 - 09.00.00 Falsafa fanlari
 - 10.00.00 Filologiya fanlari
 - 11.00.00 Geografiya fanlari



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