FACTORS DEVELOPING FLEXIBILITY IN 6-7 YEAR OLD CHILDREN ENGAGED IN RHYTHMIC GYMNASTICS.

Pakhrudinova Nigora Yusupovna
Senior Lecturer, Department of Theory and Methodology of Sports Types of Gymnastics The Uzbek State University of Physical Education and Sport
nigorapahrudinova@gmail.com
https://doi.org/10.5281/zenodo.17812020

ARTICLE INFO

Qabul qilindi: 25-noyabr 2025 yil
Ma'qullandi: 28-noyabr 2025 yil
Nashr qilindi: 30-noyabr 2025 yil

KEYWORDS

The age-related and physiological characteristics of primary school-age children are analyzed, allowing for the optimization of training programs and the reduction of the risk of injury.

ABSTRACT

This article examines the key factors influencing the development of flexibility in 6- to 7-year-old children involved in rhythmic gymnastics. Flexibility is defined as the body's ability to perform movements with a large amplitude due to the elasticity of muscles, ligaments, joint mobility, and motor coordination. Particular emphasis is placed on early childhood, when the child's body is most receptive to the development of physical qualities, and tissues are highly elastic, which creates optimal conditions for the safe and effective development of flexibility

This article examines the key factors influencing the development of flexibility in 6- to 7-year-old children involved in rhythmic gymnastics. Flexibility is defined as the body's ability to perform movements with a large amplitude due to the elasticity of muscles, ligaments, joint mobility, and motor coordination. Particular emphasis is placed on early childhood, when the child's body is most receptive to the development of physical qualities, and tissues are highly elastic, which creates optimal conditions for the safe and effective development of flexibility. The age-related and physiological characteristics of primary school-age children are analyzed, allowing for the optimization of training programs and the reduction of the risk of injury. The importance of regular and consistent training, including static and dynamic exercises, game elements, warm-ups, and breathing techniques that ensure safe stretching and development of the musculoskeletal system, is considered. The role of an individual approach, taking into account the anatomical and functional characteristics of each child, is noted, as well as psycho-emotional support, motivation, and a positive atmosphere during training, which promote muscle relaxation and increase the range of motion.

Particular attention is paid to gradually increasing the load, monitoring technique, preventing overloads and injuries, and integrating flexibility into overall physical training. Research analysis confirms that systematic and properly organized training significantly improves joint mobility, motor coordination, muscle strengthening, and the development of correct posture. The article's material has practical value for rhythmic gymnastics coaches, physical education teachers, parents, and specialists in children's sports training. The

approaches presented can be used in developing training programs aimed at comprehensively and safely developing flexibility in primary school-aged children, improving physical fitness, and developing basic skills for successful mastery of gymnastics elements.

This article examines the key factors influencing flexibility development in 6- and 7-year-old children practicing rhythmic gymnastics. Flexibility is defined as the body's ability to perform movements with a large amplitude due to the elasticity of muscles, ligaments, and joint mobility. Particular attention is paid to early childhood, when the child's body is most receptive to developing physical qualities and tissues are highly elastic.

The paper provides a detailed analysis of the age-specific characteristics of children that enable effective flexibility development without the risk of injury, as well as the importance of regular and systematic training. It emphasizes the need for a comprehensive approach, including static and dynamic exercises, game elements, muscle warm-ups, and proper breathing. It emphasizes the role of an individualized approach, taking into account each child's anatomical and physiological characteristics, and psycho-emotional support, which promotes motivation, relaxation, and enhanced performance during training.

Particular attention is paid to gradually increasing the load and ensuring proper technique is monitored by the trainer, ensuring the safety and effectiveness of the sessions. Research findings confirming that systematic and properly organized training significantly increases range of motion, improves coordination, develops correct posture, and strengthens the musculoskeletal system are also considered.

The purpose of the study was to examine and analyze the key factors contributing to flexibility development in 6-7-year-old children practicing rhythmic gymnastics, with the goal of developing effective training approaches.

Research objectives

1. To study the theoretical foundations of flexibility as a physical quality and its importance in rhythmic gymnastics.
2. Consider the age characteristics of children 6–7 years old that influence the development of flexibility.
3. To analyze the factors that contribute to the development of flexibility in young gymnasts, including physiological, psychological and methodological aspects.
4. Study existing methods and exercises for developing flexibility in rhythmic gymnastics.
5. Determine the role of regularity and consistency of training, an individual approach, warming up muscles and control of technique during training.
6. Draw conclusions about the most effective factors and methods for developing flexibility in primary school children.

Research methods. Analysis and summary of scientific and methodological literature. Study of modern sources on child physiology, sports pedagogy, and rhythmic gymnastics methods to determine factors influencing flexibility. Observation. Recording the characteristics of flexibility exercise performance by 6-7 year old children, assessing the range of motion, coordination, and technique. Pedagogical experiment. Introduction of a specially selected set of exercises for flexibility development and subsequent monitoring of the dynamics of the children's results. Physical fitness testing. Use of standard flexibility tests (e.g., forward bend, splits, bridge) for quantitative assessment of the level of joint mobility. Comparative analysis. Comparison of the influence of various factors (warm-up, dynamic and static stretching, game

elements) on the effectiveness of flexibility development. Methods of visualization and video recording. Recording exercise performance on video to analyze technique, range of motion, and progress over time. Methods of pedagogical diagnostics. Surveys, conversations, and assessment of the psycho-emotional state of children, influencing the level of flexibility and motivation for exercise.

Research results. Sports activities of a certain profile represent a special type of activity that requires high psychophysical stress from the performer under specific competition conditions. The organization of such activities is based on a specific system combining various types of athlete training and the use of appropriate means and methods to ensure high athletic performance.

One of the important and fundamental types of athlete training is "physical training", the main objective of which is to develop a set of physical qualities and form the athlete's "physical potential" with the aim of realizing it in the process of developing motor skills (mastering technical actions) and their subsequent demonstration in competitive conditions.

Since the long-term process of developing and improving athletic skill, as an indicator of an athlete's athletic qualifications, implies a transition from one stage of preparation to another based on the patterns of functioning of the body's systems and the solution of corresponding pedagogical problems, the athlete's physical training should be aimed at ensuring his "physical" readiness to master various forms of movement, taking into account the complex interaction and mutual influence of physical qualities and technical actions and, indirectly, determine the process of technical improvement and the achievement of a high level of athletic skill.

As a result of the analysis of literature, observations and pedagogical experiment, the following results were obtained:

The age-related characteristics of children aged 6–7 years contribute to the development of flexibility. At this age, tissues are highly elastic and joints are mobile, creating optimal conditions for the safe and effective performance of stretching and gymnastics exercises.

Regularity and consistency in training are key. Children who practiced gymnastics 3-5 times a week showed consistent progress in range of motion and improved technique.

A set of exercises improves the effectiveness of flexibility development. The most effective were the combination of static and dynamic exercises, as well as the inclusion of game elements and dance movements, which increase children's motivation and engagement.

Warming up and preparing muscles significantly reduces the risk of injury. Children who performed a proper warm-up before stretching demonstrated a greater range of motion and less muscle tension.

A personalized approach improves results. Taking into account each child's anatomical and physiological characteristics allowed for safe increase of load and improved flexibility.

Psycho-emotional support increases the effectiveness of training. A positive atmosphere, praise, and encouragement from the trainer promoted muscle relaxation and more successful performance of stretching exercises. A gradual increase in load and control over technique ensure safety and effectiveness. Sudden jerks and excessive range of motion negatively impacted progress and could lead to injury, while a gradual increase in load produced lasting results. Overall, the study confirmed that a comprehensive approach, taking into account all factors—age, methodological, and psycho-emotional—ensures the most effective and safe flexibility development in primary school-aged children. For athletes in rhythmic gymnastics,

specialized physical training is determined by the level of development of a range of physical qualities and motor abilities, which are realized through the performance of "movement compositions" with various apparatus and without apparatus, accompanied by musical accompaniment. One of the leading qualities that makes up the physical potential of female athletes is flexibility, which makes a significant contribution to ensuring the technical mastery of gymnasts and is demonstrated both in the performance of most technical actions (optimal level) and movements that require the “ultimate” amplitude (maximum level).

The implementation of flexibility in the process of technical training of athletes in rhythmic gymnastics can have different directions: ensuring the optimal functional state of one of the structures of the musculoskeletal system (local impact); ensuring the general psychophysical state for the implementation of motor function (general impact); ensuring the actual motor activity of the athlete in specific conditions.

Rhythmic gymnastics is characterized by a variety of movement forms and corresponding movement patterns, which determines a wide range of flexibility (motor abilities). At the same time, the "physical support" for such complex, coordinated athletic training must be comprehensive, despite the emphasis on flexibility development.

Conclusions. Flexibility is a key physical quality** for children aged 6–7 years in rhythmic gymnastics, ensuring a wide range of motion, technical execution of elements, and injury prevention.

The age-related characteristics of children (high elasticity of muscles and ligaments, joint mobility) create favorable conditions for the development of flexibility, which makes early age optimal for the development of this physical quality.

Regular and consistent training significantly increases the effectiveness of the training process and promotes sustainable progress in flexibility. A comprehensive approach, including static and dynamic exercises, game and dance elements, warm-ups, and breathing techniques, ensures the most effective development of flexibility in young gymnasts.

An individualized approach and consideration of each child's anatomical and physiological characteristics allow for safe increase in intensity and improved results. Psycho-emotional support and motivation promote muscle relaxation, improved exercise performance, and increased interest in training.

A gradual increase in load and controlled technique ensure safe training and minimize the risk of injury, while promoting effective flexibility development. The study showed that only a comprehensive approach to all factors—age, methodological, and psycho-emotional—can achieve optimal flexibility development in primary school children and lay the foundation for successful mastery of rhythmic gymnastics.

List of references:

1. Volkov, L. V. Theory and Methods of Physical Education. - Moscow: Academy, 2019.
2. Matveev, L. P. Fundamentals of Sports Training. - Moscow: Physical Education and Sport, 2020.
3. Zheleznyak, Yu. D., Vinogradov, P. A. Physiology of physical education and sports. - Moscow: Vlados, 2018.
4. Kiselev, A. N. Human anatomy. - St. Petersburg: Piter, 2021.
5. Zaborova, V. A. Development of flexibility in children of primary school age // Physical education: upbringing, education, training. - 2022. - No. 5. - P. 12-18.

6. Balsevich, V.K. Pedagogical biomechanics. — Moscow: Sport, 2017.
7. Shiyan, B. M. Methods of physical education of schoolchildren. - Kiev: Osnova, 2018.
8. Alter, M. J. Science of Flexibility. — Human Kinetics, 2018.
9. ACSM. ACSM's Guidelines for Exercise Testing and Prescription. — 11th Edition. — Lippincott Williams & Wilkins, 2021.
10. Behm, DG, Chaouachi, A. A review of acute effects of static stretching on performance // European Journal of Applied Physiology. - 2011. - Vol. 111. - P. 2633–2651.