



DEVELOPMENT OF FLEXIBILITY IN GIRLS 10-11 YEARS OLD DURING RHYTHMIC GYMNASTICS CLASSES

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Annotation: Been developed to develop the flexibility of gymnasts. In rhythmic gymnastics, at the stage of initial training, one of the important part is the development of flexibility. Flexibility is an important psychophysical quality, which, together with speed, strength, endurance, dexterity, finds its definition in the morphofunctional biological characteristics of a person.

Key words: Rhythmic gymnastics, educational and training process, initial training, special physical training.

Flexibility is a morphofunctional property of the musculoskeletal system, which determines the degree of mobility of its parts. Flexibility is characterized by the elasticity of muscles and ligaments that determine the range of motion. Along with the leading physical qualities, flexibility is one of the main postulates of movement. From the outside, it is detected in the amplitude (span) of flexion - extension and other movements. Thus, its indicators are expressed by the maximum amplitude of movements, calculated in angular degrees or linear quantities (centimeters). Polish scientist G. Proszacka argues that when considering the structure of flexibility, it is necessary to pay attention to particularly significant components: differentiation and reproduction of muscle efforts, coordination of the activity of large muscle groups and small movements, speed and amplitude of movement.

Yu.I. Evseev defines the ability to perform movements with maximum amplitude as flexibility. He believes that flexibility is an important psychophysical quality, which, together with speed, strength, endurance, and agility, is formed by the morphofunctional biological characteristics of a person. MM. Stewart believes that flexibility can endow an individual with the main skill of skilful control of his body, the ability to sense it, constantly interact with it, know its capabilities and apply them, manage it. This skill was especially valued, and ancient people strove to acquire it.

With flexibility, a person feels light, free in actions, liberated, at ease in movements, and acquires the ability to both concentrate the strength of his body and relax it. From an aesthetic point of view, a flexible person is considered very beautiful. Flexibility personifies elegance, plasticity, grace, expressiveness of movements. A flexible person never wastes his strength on unnecessary, useless movements; his movements are extremely precise and correct. This greatly facilitates, speeds up the onset of any activity, and preserves internal energy resources. The motor basis of any activity in a flexible person is reasonable and logically justified. People who are not sufficiently flexible have a reduced ability to stretch their muscles and have increased muscle tone. This causes coordination disorders during the movement. An inflexible child expends much more energy than a flexible child, so he gets tired more quickly. Injuries are often the result of insufficient development of flexibility. Often,

experts in the field of medicine talk about flexibility as an important quality that influences the nature and result of a particular activity. In many activities, flexibility is the key to success. It makes it possible to conquer faster and better with a rational technique of performing movements, to use strength, speed and other physical qualities more economically, and on this basis to achieve the highest practical results.

Flexibility during physical education is of particular importance. Whether the child is jumping, climbing, skiing, rollerblading, cycling, swimming, flexibility simplifies his "efforts, protects his muscles from excessive tension, stretching and other damage." Flexibility is characterized by the anatomical capabilities of a person: the shape of the joints and the degree of conformity of the articulating surfaces to each other. The limiter to the actual range of movement is the articular ligaments. Under the influence of constant stretching, their elasticity increases. This is the result of increased mobility in the joint and improved flexibility.

According to Zh.K. Kholodov, the possible maximum range of movements depends not only on the shape of the joint and the correspondence of the interconnected surfaces to each other, but also on other individual characteristics of the articular apparatus: the configuration of the articular ends of the bones, the thickness of the articular cartilage. At the same time, these features do not have a significant impact on the indicators of real flexibility. The most significant factor determining the amplitude of movement when performing a motor action is the muscles surrounding the joint, their ability to lengthen and contract.

Preference should be given to using a wide range of exercises in order to be flexible and have good range of motion in all joints. It should be noted that, while developing, flexibility itself creates the best conditions for the purpose of improving certain psychophysical qualities. For example, it has been found that exercises primarily aimed at developing flexibility also contribute to the development of strength and endurance. Flexibility with its moderate expenditure of energy, with its rational movements creates the most favorable conditions for the development of endurance. In addition, flexibility is an integral part of such a complex, complex quality as dexterity, with the help of which the function of controlling our movements is realized. V.A. Baronenko proved that the manifestation of flexibility is influenced by many factors: physiological, psychological, anatomical, elasticity of muscles, ligaments, joint capsules; mental state (with emotional upsurge there is an increase in flexibility); degree of excitability of the stretched muscles (decreased with high excitability); changes in the rhythm of movements; changes to the original position; from massage (preliminary massage increases flexibility by 15%); warm-ups; external temperature; age; level of strength development (it has been revealed that physically strong people are less flexible).

The literature distinguishes between active and passive flexibility. Active flexibility is associated with the magnitude of the amplitude of movements when performing independent exercises due to muscle efforts. Passive flexibility is characterized by the manifestation of the highest amplitude of movements, achieved under the action of external forces (projectiles, efforts of a partner). In passive flexibility exercises, a greater range of motion is achieved than in active exercises. The presence of a difference between the indicators of active and passive flexibility is due to the presence of "reserve extensibility", or "flexibility reserve". General and special flexibility are also distinguished. General flexibility is characterized by differences in mobility in all joints of the body and is characterized by the ability to perform a variety of

movements with a large amplitude. Special flexibility is the maximum mobility in individual joints, which determines the effectiveness of sports or professional activities.

N.I. Smirnova, E.E. Chernenko, O.A. Gordeichenko note that the time of day and environmental conditions have an ambiguous effect on the functional state of the ligamentous apparatus. Increased temperature of the body and the external environment, preliminary warm-up help improve the biomechanical properties of the musculoskeletal system and thereby contribute to greater mobility of its parts. Strength indicators prevail in inverse proportion to the level of strength development and are largely determined genetically. In turn, L.V. Volkov emphasizes the presence of age and gender differences in the pace and quality of flexibility development. From the point of view of L.G. Matveeva, the development of flexibility is interconnected with the development of muscle strength. However, muscle hypertrophy and many other morphofunctional changes in the musculoskeletal system, generated by the extensive use of strength exercises, can accompany a limitation in the range of movements. On the other hand, the rapid development of flexibility in children without adequate strengthening of the muscular-ligamentous apparatus can cause joint laxity, hyperextension, and poor posture. From this follows the need for an optimal combination in the process of physical education of exercises aimed at developing flexibility with strength and other exercises that serve the harmonious development of physical qualities. Firstly, it is necessary to ensure the development of flexibility to the extent necessary to perform movements with full amplitude, without causing damage to the normal condition and functioning of the musculoskeletal system.

Secondly, the loss of the achieved optimal state of flexibility should be prevented, as far as possible, and its age-related regression should be minimized. When performing these tasks, it is unacceptable, especially in children of primary school age, to generate incredible development of flexibility, leading to overstretching of muscle fibers and ligaments, and sometimes to irreparable distortions of joint structures, which can be observed in the presence of too intense exposure to exercises that are aimed at development of flexibility. When developing in children such qualities as grace, plasticity, and beauty of movements, one must remember that all the movements they have are acquired as a result of learning. In order for children to be able to analyze the structure and nature of the exercises being performed, to correctly assimilate the causes of errors, it is necessary to develop in them the ability to self-analyze various physical exercises in order to ensure the manifestation of a sufficiently full amplitude of movements in all directions that are permissible by the structure of the musculoskeletal system. motor apparatus. The reserve of flexibility is of great importance, because it is one of the prerequisites for the economy of movements, promotes the process of mastering new wide-amplitude movements, and helps to avoid injuries.

Conclusion: Flexibility is one of the five basic physical qualities of a person. It is characterized by the degree of mobility of the musculoskeletal system and the ability to perform movements with a large amplitude. This physical quality must be developed from early childhood, since it is important when performing many motor actions. The level of flexibility development in 7-8 year old girls is generally insufficient, and the requirements of educational programs are increasing every year.

We can identify factors on which the manifestation of flexibility depends:

1. Elasticity of muscles and ligaments.
2. Features of the structure of joints.



3. Features of the external environment.

4. Development of strength abilities.

Flexibility exercises give the greatest effect if they are performed twice in a workout, in the preparatory part of the lesson after warming up and at the end of the workout against the background of fatigue. At first, flexibility exercises should be given every other day so that the muscles have time to rest, and then daily.

References:

1. Тойлибаев, С. М. (2019). Некоторые особенности профессиональной деятельности студентов факультетов физической культуры. In *Современные векторы развития образования: актуальные проблемы и перспективные решения* (pp. 148-150).
2. Кузнецова, Е. Т., Турдымуратов, Ж. А., & Тойлибаев, С. М. (2022). Организация стажировок как одна из важных составляющих дополнительного образования преподавателей.
3. Тойлибаев, С. М. (2023). ОСОБЕННОСТИ ОСНОВНОЙ ГИМНАСТИКИ В ПРОФЕССИОНАЛЬНОЙ ДЕЯТЕЛЬНОСТИ СТУДЕНТОВ УНИВЕРСИТЕТОВ ФИЗИЧЕСКОЙ КУЛЬТУРЫ И СПОРТА. In *Проблемы и перспективы развития спортивного образования, науки и практики* (pp. 241-245).
4. Тойлибаев, С. М. (2021). ОСОБЕННОСТИ ИСПОЛЬЗОВАНИЯ ТЕРМИНОЛОГИЧЕСКИХ СРЕДСТВ ОСНОВНОЙ ГИМНАСТИКИ В СТАНОВЛЕНИИ СПЕЦИАЛИСТОВ ФИЗИЧЕСКОГО ВОСПИТАНИЯ. In *Проблемы и перспективы развития спортивного образования, науки и практики* (pp. 334-337).
5. Alimbaevich, Y. A., & Mukhtarovna, A. D. (2022). Influence of Free Wrestling on Physical Student Development in Karakalpakistan. *Eurasian Journal of Learning and Academic Teaching*, 7, 93-95.
6. Жарылкапов, У. Б. (2023). КУРАШЧИЛАРНИНГ ЖИСМОНИЙ ВА ТАКТИК ТАЙЁРГАРЛИГИНИ РИВОЖЛАНТИРИШ МАСАЛАЛАРИ. *Fan-Sportga*, (2), 110-111.
7. Bahadirovich, J. U., Polatovich, Q. R., & Koptileovich, T. M. (2022). Peculiarities of planning freestyle wrestling training sessions. *Texas Journal of Multidisciplinary Studies*, 5, 59-62.
8. Жарылкапов, У. Б., & Алимбетова, А. (2022). ЭЛЕМЕНТЫ ГРЕКО-РИМСКОЙ БОРЬБЫ В ПРОЦЕССЕ ЗАНЯТИЙ ПО ФИЗИЧЕСКОМУ ВОСПИТАНИЮ. In *Развитие отраслей АПК на основе формирования эффективного механизма хозяйствования* (pp. 530-532).
9. Жарылкапов, У. Б., & Жолдасов, А. (2022). ТАКТИЧЕСКАЯ ПОДГОТОВКА БОРЦОВ ЖЕНЩИН. In *Развитие отраслей АПК на основе формирования эффективного механизма хозяйствования* (pp. 532-534).
10. Jarilkarov, U. B., Qaljanov, R. P., & Tolibaeva, D. K. (2024). DEVELOPMENT OF JUMPING ABILITY IN VOLLEYBALL PLAYERS BY MEANS WEIGHTLIFTING STRENGTH EXERCISES. *International Journal of Pedagogics*, 4(01), 74-80.
11. Alimbaevich, Y. A., & Mukhtarovna, A. D. (2022). Influence of Free Wrestling on Physical Student Development in Karakalpakistan. *Eurasian Journal of Learning and Academic Teaching*, 7, 93-95.
12. Primbetov, A. (2023). THE USE OF INNOVATIVE METHODS IN THE DEVELOPMENT OF WOMEN'S WRESTLING. *Journal of Academic Research and Trends in Educational Sciences*, 2(1), 196-201.

13. Auesbaevich, P. A. (2020, August). IMPROVING THE PROCESS OF TRAINING FOR ACTIVITY ACCORDING TO THE CHARACTERISTICS OF KURASH. In The 8 th International scientific and practical conference—Eurasian scientific congress|(August 9-11, 2020) Barca Academy Publishing, Barcelona, Spain. 2020. 370 p (p. 178).
14. Primbetov, A. (2023). THE USE OF INNOVATIVE METHODS IN THE DEVELOPMENT OF WOMEN'S WRESTLING. Journal of Academic Research and Trends in Educational Sciences, 2(1), 196-201.
15. Ayesbaevich, P. A. (2023). WAYS TO DEVELOP WOMEN'S PHYSICAL FITNESS IN FREESTYLE WRESTLING. Open Access Repository, 4(3), 247-252.
16. Ayesbaevich, P. A. (2023). TOOK THE RACE PREPARATION AND PLANNING IT. Open Access Repository, 4(03), 25-27.
17. Auyesbayevich, P. A. (2023). INJURY PREVENTION AND RECOVERY STRATEGIES FOR HIGH-LEVEL FEMALE FREESTYLE WRESTLERS. European Journal of Interdisciplinary Research and Development, 21, 61-65.
18. Auyesbayevich, P. A. (2023, November). THE ROLE OF TECHNOLOGY IN ENHANCING TRAINING AND TECHNIQUE IN WOMEN'S FREESTYLE WRESTLING. In E Conference Zone (pp. 1-7).