DOI: https://doi.org/10.31392/UDU-nc.series15.2024.7(180).47

УДК: [796.012.1+796.015.31/793.3]

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IMPROVEMENT OF THE METHODOLOGY OF DEVELOPING THE PHYSICAL QUALITIES OF ATHLETES IN SPORTS DANCES AT THE PRELIMINARY BASIC TRAINING STAGE

In this article, the authors consider the issue of improving the methodology of developing the physical qualities of athletes aged 9-11 years in sports dances at the preliminary basic training stage. It is at this stage that the foundations of movement culture are established, motor skills and skills are developed, knowledge of physical culture is provided, the foundation of health is strengthened and physical qualities necessary for successful participation in various forms of motor activity are formed. By comparing the state of development of the physical qualities of the athletes of the control and experimental groups at the beginning and after the experiment, the effectiveness of the use of the modified complex in the educational and training process in the sports dance classes was determined. Physical qualities are understood as innate morph functional characteristics that provide the possibility of physical activity and reasoned human movement. Strength, speed, endurance, flexibility and coordination abilities are among the main physical qualities.

The physical education of children aged 9-11 years at the current stage of training is marked by insufficient effectiveness. Physical training programs used in modern school curricula focus on the use of general forms and types of motor activity during the school day, such as morning gymnastics, sports breaks between lessons, physical culture lessons, walks, and so on. However, the essence and content of these forms and types of motor activity do not allow to fully taking into account the peculiarities of children of this age period and do not contribute to the effective development of most physical qualities.

Key words: young athletes, sports dances, physical qualities, modified complex.

Горбенко Олена, Лисенко Альберт, Шкурєєв Кирило. Удосконалення методики розвитку фізичних якостей спортсменів у спортивних танцях на етапі попередньої базової підготовки. У даній статті автори розглядають питання удосконалення методики розвитку фізичних якостей спортсменів віком 9-11 років у спортивних танцях на етапі попередньої базової підготовки. Саме на цьому етапі встановлюються основи культури рухів, розвиваються рухові вміння та навички, надаються знання з фізичної культури, зміцнюється фундамент здоров'я та формуються фізичні якості, необхідні для успішної участі в різноманітних формах рухової активності. Шляхом порівняння стану розвитку фізичних якостей спортсменів контрольної та експериментальної груп на початку та після експерименту визначалась ефективність застосування модифікованого комплексу у навчально-тренувальному процесі на заняттях зі спортивних танців. Під фізичними якостями розуміють вроджені морфофункціональні характеристики, які забезпечують можливість фізичної активності та обґрунтованої рухової діяльності людини. Серед основних фізичних якостей виділяють силу, швидкість, витривалість, гнучкість та координаційні здібності.

Ключові слова: юні спортсмени, спортивні танці, фізичні якості, модифікований комплекс.

Formulation of the problem. For many years, a variety of dance choreography has been one of the most favorite forms of leisure for people around the world. Competitions and festivals of ballroom dance from the European and Latin American programs are widespread, which are held today as competitive sports both in Ukraine and abroad. Therefore, the interest of children and their parents in sports dancing is now actively developing, which contributes to strengthening health, restoration of work capacity and rehabilitation.

Modern trends in sports dances consist in the constant complication of competitive choreography, mainly due to the increase of technically complex figures and elements. This cannot be done without an appropriate level of development of physical qualities and optimal physical training. At the stage of preliminary basic training, it is necessary to have an appropriate level of physical and functional fitness of young athletes. However, without systematic improvement and development of physical qualities, the level of physical fitness may decrease over time, which will negatively affect the assimilation and performance of sports techniques, [2-4].

Analysis of literary sources. Leading scientists in the field of modern methods of sports training, such as Kashevsky O., Osadtsiv T., have proven that teaching children aged 9-11 years sports dances is one of the ways of modern humanistic education, which strengthens the connection between sports and art, [5, 13, 14].

Sports dances are a unique synthesis of dance art and sports. Due to their diversity, they successfully affect the musculoskeletal system of the child, help to strengthen the correct posture, support coordination and flexibility, develop emotional, sensory and creative aspects, contribute to the strengthening of health and restoration of working capacity, and also allow the development of physical abilities. All-round development of the personality involves a harmonious combination of mental, physical, moral, aesthetic and labor education, unity of consciousness and behavior, [8, 9, 13, 14].

Leading specialists in numerical studies pay considerable attention to the search for new methods of training in sports dances. Basically, scientific works are devoted to solving issues related to increasing the level of physical, technical and psychological preparedness of athletes of different age categories and at different stages of long-term training in sports dances. In the works of Demidova O., Kaluzhna O., Osadtsiv T., Trakalyuk T. and others, problems of improving physical training are revealed, [4; 12-14; 16]; Hrycyshyna T., Jala T., Koshelev S., many foreign authors, such as Alex Moore, Guy Howard, Walter Laird, Mark Sietas, Natalie Ambrose, and others, problems of technical training, [1-3; 6; 7; 10; 11; 15; 17]. In the training manuals of Horbenko O., Lysenko A., and Osadtsiv T., a description of the technical execution of the content of basic figures, elements and competitive dance programs of Latin American and European sports dance programs is given, [8; 9; 14].

Presentation of the main research material. The purpose of the research: to determine ways to improve the methodology of developing the physical qualities of athletes aged 9-11 years in sports dances at the preliminary basic training stage in the system of modern sports training.

In accordance with the set purpose, the following tasks of the research were defined:

- 1. To conduct an analysis of the scientific and methodical literature on the methodology of developing the physical qualities of young athletes in sports dances at the preliminary basic training stage.
- 2. To identify the main components of the methodology for the development of physical qualities of young athletes in sports dancing at the preliminary basic training stage.
- 3. To check the effectiveness of the application of the modified complex for the development of physical qualities of young athletes in sports dances at the preliminary basic training stage.

The research was conducted on the basis of the "Stolytsia" Ballroom Sport Dance School (Kharkiv).

An experimental (12 boys and 13 girls) and a control (12 boys and 11 girls) groups of children aged 9-11 were formed to conduct the pedagogical experiment.

The research was carried out in the period from October 2022 to December 2023.

In the process of solving the set tasks, the following research methods were used: theoretical analysis and generalization of scientific, methodological and special literature; pedagogical observation; pedagogical testing; pedagogical experiment; methods of mathematical statistics.

In order to improve the physical qualities of young athletes engaged in sports dancing, together with sports dance coaches, physical culture teachers and physical training specialists, a modified complex of motor actions was developed, which in terms of structure and character of muscle efforts correspond to dance movements. These actions contribute to the development of dancing qualities and improve athletes' key skills such as a sense of rhythm, coordination of movements, flexibility and accuracy of movements. These activities are the first step in the research program that is considered fundamental to teaching the dance movements in Table 1.

Content of dance figures and movement actions for the development of physical qualities

Physical qualities Physical qualities and physiological Acceptable figures Movement actions and dancing skills features Natural Spin Turn (Waltz, Raising the body on the toes of Feeling the rhythm The accuracy of the muscle feeling Quickstep) the foot Natural Spin Turn (Waltz, The accuracy of muscle effort, Balance on the toes of one foot endurance to static tension Quickstep) Steps on toes, heels, with rolls Endurance Impetus Turn (Waltz, Quickstep) on the outside and inside of the Endurance to static voltage foot Walks (Tango) Deep squatting Power endurance Basic Movement (Samba) Jumping up from a deep squat Explosive strength Deep lunges forward and to the Impetus Turn (Waltz, Quickstep) Strength endurance of muscles Physical strength Open Hip Twist (Cha Cha Cha) Static endurance of the muscles of Circular hip movements Rock Turn (Tango) the hip joint. Impetus Turn (Waltz, Quickstep) Circular movements of the upper Flexibility Flexibility and power endurance Reverse Turn (Samba) Three Step Turn (Samba) Multidirectional movements of Hand movement coordination. American Spin Turn (Jive) Coordination the hands with turns Accuracy of the linear rangefinder Rolling off the Arm (Samba, Jive) Multidirectional hand movements Coordination abilities, strength and

Table 1

	Continuous Circular Hip Twist (Cha Cha Cha)	with trunk connection	mobility of nervous processes
	•	Flexion and extension of the arms in the supine position	Strength endurance of the muscles of the shoulder joint
	Impetus Turn (Waltz, Quickstep) Forward Link (Tango)	Circular head movements, head tilts	Coordination abilities, flexibility

The educational and training process of the athletes in the experimental group is based on the principle of a step-by-step approach to the presentation of educational material, which helps to increase the understanding of the content of the modified complex.

The content of the sports dance training complex is a sequence of procedures at the training stage of a branched structure, each training module of which includes three key units: information transfer, performance of operations with feedback and control.

Sports dances of European program (Waltz, Tango and Quickstep) and Latin American program (Cha Cha, Samba and Jive) of classification level of difficulty E-class are selected as the main components of the complex of classes.

The key elements are motor actions, dance movements and control.

When the dance movements are successfully performed, the group is provided with a new block of training information, if the accuracy of the performance is not achieved, additional modules are offered. Additional modules in the complex of classes are individual consultations and homework, which are aimed at improving initial skills in Fig. 1.

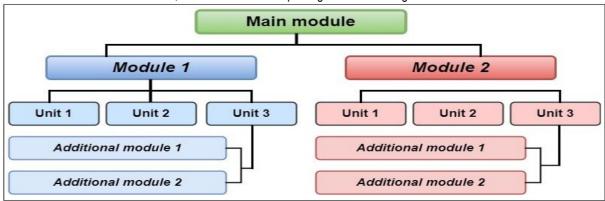


Fig. 1 The content of the segment of the sports dance training complex

This complex was used in the experimental group as part of the main part of the classes, including the explanation of the elements of dance movements and practical training of skills. When planning classes with the use of physical exercises, aimed at the development of coordination abilities, the accuracy of muscle-joint sensation and muscle effort, the need for preliminary performance of endurance exercises was taken into account.

Based on the results of the pedagogical experiment, it can be concluded that young athletes at the preliminary basic training stage, who took part in classes using a modified complex of sports dance classes, namely the content of movement actions, experienced significant improvements (P<0.05) in indicators strength, endurance, flexibility, as well as speed and strength qualities and coordination abilities in all tests, compared to the control group. In addition, in the young athletes of the experimental group, there was a significant improvement (P<0.05) in the indicators of the Respiratory System, such as The Lung Vital Capacity and the Vital index. The indicators of the Rufe sample also significantly improved (P<0.05) in both the young athletes of the Experimental and Control groups, as shown in Fig. 2.

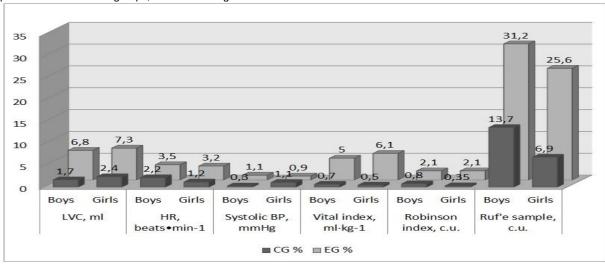


Fig. 2 Indicators of the functional condition of athletes of the Control group (CG) and Experimental group (EG)

Conclusions. The influence of sports dance classes on the development of physical qualities of young athletes at the preliminary basic training stage has been experimentally confirmed. The improvement of the results in the experimental group compared to the results of the control group was determined, which confirms the effectiveness of the use of the modified complex in the educational and training process of sports dance athletes.

The perspective of further research: In the future, it is planned to use the modified complex and its implementation in the educational and training process of athletes in sports dances at the specialized basic training stage.

References

- 1. Howard Guy (2014). Technique of Ballroom Dancing. Basic principles: 6th edition [trans. from English Y. Pin, 2nd edition]. London Kyiv. 32 p. [In Ukrainian].
- 2. Hrytsyshyn T.R. (2007). Technical training of athletes-dancers on the basis of diving exercises and supporting points of figures of the STUDENT program: abstract of the dissertation of the candidate of sciences in physical education and sports. LDUFK, Lviv. 25 p. [In Ukrainian].
- 3. Jala T.R. (2000). Reference points in the study of basic figures and elements in sports dances. Young sports science of Ukraine: a collection of scientific articles. Lviv: LDIFK. P. 215-254. [In Ukrainian].
- 4. Kaluzhna O.M. (2014). Improving the physical training of athletes at the preliminary basic training stage in sports dances: dissertation of the candidate of sciences in physical education and sports: 24.00.11. LDUFK, Kyiv. 336 p. [In Ukrainian].
- 5. Kashevsky O.V. (2013). Modern ballroom dance: a study guide. Lutsk: Lesya Ukrainka Eastern European National University. 208 p. [In Ukrainian].
 - 6. Kosheley S.M. (2019), Biomechanics of sports dances, Kharkiy: FOP Brovin O.V., [b. i,1, 61 p. [In Ukrainian].
- 7. Laird Walter (2014). The Laird Technique of Latin Dancing. Basic provisions and principles: 7th edition [trans. from English Y. Pin]. London. 52 p. [In Ukrainian].
- 8. Lysenko A.O., Horbenko O.V. (2020). Sports dances (European program): a study guide. Kharkiv: FOP O. Brovin. 344 p. [In Ukrainian].
- 9. Lysenko A.O., Horbenko O.V. (2021). Sports dances (Latin American program): a study guide. Kharkiv: FOP O. Brovin. 442 p. [In Ukrainian].
- 10. Moore Alex (2004). Ballroom dances: [trans. from English S. Bardin]. Astrel Publishing LLC, Mykolaiv. 319 p.: illustrations. [In Ukrainian].
 - 11. Moore Alex. The Alex Moore Ballroom Dancing (2001). New York: Taylor&Francis. 308 p. [In English].
- 12. Moskalenko N.V., Demidova O.M. (2016). Sport's dances for children: innovative approaches [text]: monograph. Dnipro: Innovation. 198 p. [In Ukrainian].
- 13. Osadtsiv T.P. (2014). Control of technical and physical fitness of athletes at the preliminary basic training stage in sports dances: dissertation of the candidate of sciences in physical education and sports: 24.00.01. LDUFK, Lviv. 207 p. [In I krainian]
- 14. Osadtsiv T.P. (2016). Peculiarities of training dancers at the preliminary basic training stage / Sports science of Ukraine. No. 1 (71). P. 50-54. [In Ukrainian].
 - 15. SAMBA / M. Sietas, N. Ambroz (and other). Roma: WDSF, (2013). 213 p. [In English].
- 16. Trakalyuk T.O. (2020). Improving the physical training of qualified dancers based on the development of a differentiated program for the development of movement qualities: abstract of the dissertation of the candidate of sciences in physical education and sports: 24.00.01, NUFESU, Kyiv. 25 p. [In Ukrainian].
 - 17. WALTZ / M. Sietas, N. Ambroz (and other). Roma: WDSF, (2013), 139 p. [In English].

DOI: https://doi.org/10.31392/UDU-nc.series15.2024.7(180).48

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METHODS OF DEVELOPING FLEXIBILITY, COORDINATION, AND ENDURANCE IN PHYSICAL EDUCATION CLASSES

In physical culture, there are many physical qualities that play an important role in the development and maintenance of human health. They include characteristics such as strength, endurance, flexibility, coordination and much more. In this lecture we