## PHYSICAL EDUCATION AND SPORT

## IMPROVING THE PHYSICAL CONDITION OF PRIMARY SCHOOL CHILDREN BY MEANS OF SPORTS DANCES

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In recent years, sport dances continue to gain popularity among various groups, especially among children of primary school age. Children with pleasure attend dance groups, sections, optional classes, diligently learn the elements of various dances, acquire dancing skills and abilities. Sports dances have a positive effect on various mental processes, play an important role in the formation of a harmonious personality of the student, combine physical training and aesthetic creativity [4, p. 3-5; 5]. Dance develops strength and flexibility, improves physique, coordination of movements, promotes spontaneity and freedom of movement, increases mental activity and efficiency [5].

The availability and popularity of sport dances allows the widespread use of this sport in the system of physical education of primary school children [1; 2; 3; 8; 9].

In typical educational programs in the field of physical education, for children of primary school age, dance improvisation exercises are offered [6, p. 65], and some dance steps [7, p. 90].

Attending physical education classes is not enough to increase motor activity of schoolchildren. Therefore, it is important to consider the use of elements of sport dancing in various forms in the primary school daily routine for children of primary school age.

The purpose of the study is to scientifically substantiate the use of means of sports dances in physical education of primary school children to improve their physical condition.

Research methods: theoretical analysis and generalization of data of scientific and methodical literature, anthropometric methods, pedagogical testing, functional research methods, pedagogical experiment, methods of mathematical statistics.

The study was conducted on the basis of MEI (Municipal educational institution) School № 28, Dnipro. To form control and experimental groups,

[^0]children were divided into two groups of 14 girls and 14 boys each. The children who took part in the experiment had no health problems. During the experiment, the following indicators were investigated: level of physical development (indicators: body length, cm; body weight, kg; wrist dynamometry of the stronger hand, kg; strength index,\%); level of physical fitness (according to tests: «long jump from the place, cm»; «running for $30 \mathrm{~m}, \mathrm{~s} »$; «shuttle run 4 x 9 m , s»; «alternation of walking and running without taking into account time, m»; «torso tilt forward from a sitting position, cm»); level of functional state (VL, ml; HR, bpm; blood pressure, mmHg ; vital index, $\mathrm{ml} \cdot \mathrm{kg}^{-1}$; Robinson index, c.u; Rufier test, c.u.).

At the beginning of the experiment, no significant differences in the physical condition of primary school children in the control and experimental groups were observed ( $p>0.05$ ). Thus, in boys and girls 8-9 years of control and experimental groups, the average growth and body weight corresponded to the age norm. The average strength index showed that the level of flexor strength is below the age norm. Average indicators flexibility corresponded to the average level of development, average indicators endurance, speed and strength qualities and coordination corresponded to the level below the average. Indicators of the cardiovascular system corresponded to the age norm. The assessment of physical performance according to the Rufier index was «satisfactory», the Robinson index was below average, the functional state of the respiratory system according to the vital index was below average.

To improve the physical condition of students 8-9 years in the experimental group was proposed to use elements of sports dances in various forms in the daily routine of primary school, namely: music and dance minutes, music and dance breaks, dance morning gymnastics, dance classes. in the extended day group. Also in the experimental group was proposed the use of choreography, game technology, music and rhythmic training. The control group used the usual forms of work in the day mode with the use of general developmental exercises and motor games.

Thus, in the experimental group, gymnastics was performed daily 15 minutes before lessons. Gymnastics consisted of 6-8 exercises and included: a march accompanied by music, dance elements «Polka», «Jive», «Cha-Cha-Cha» and «Slow Waltz», which were performed at different tempos.

To prevent fatigue and restore mental performance in the experimental group, physical education minutes lasting 2-3 minutes were performed, during which 3-4 exercises were performed by the frontal method using musical instruments and musical accompaniment. The children were asked to perform elements of various dances - «Polka», «Cha-Cha-Cha», «Jive», «Slow

Waltz», to imitate and repeat the movements of the wings of birds, clumsy bears, fast foxes or hares.

To increase the efficiency of junior students of the experimental group, moving breaks were held with the use of various games accompanied by music, elements of sports dances, musical and rhythmic exercises.

During the homework in the experimental group, sports breaks were held, which lasted 3-5 minutes and consisted of 5-6 exercises: deep breathing exercises, hand exercises imitating the flight of birds or butterflies, relaxation exercises, steps to the side, forward or backward from the «Slow Waltz» dance, some figures and elements of the dance «Cha-cha-cha» or dance «Polka».

In the extended day group, sports dance classes were held for the experimental group.

To determine the impact of sports dancing on the physical condition of children of primary school age, we conducted a comparative analysis of indicators of physical development, physical and functional fitness of children 8-9 years before and after the experiment.

After the experiment, children in the experimental group showed a significant improvement in wrist dynamometry and strength index ( $p<0.05$ ). According to the indicators of physical fitness in the children of the experimental group, there was a significant improvement in all tests ( $\mathrm{p}<0.05$ ). Significant changes occurred according to the tests: «tilt of the torso forward from a sitting position, cm» - in boys - by 27.44\% (p <0.05), in girls - by $30.59 \%$ ( $\mathrm{p}<0.05$ ) and «Alternation of walking and running without taking into account time, m» - for boys - by 17.07\% ( $\mathrm{p}<0.05$ ), for girls - by 13.34\% ( $\mathrm{p}<0.05$ ). In children of the control group significant improvements were observed on the test «torso tilt forward from a sitting position, cm» - in boys by $11.47 \%$ ( $<0.05$ ); in girls - by $11.49 \%$ ( $<0.05$ ). Positive but unreliable changes were also observed in other tests. Capabilities and reserves of the cardiovascular system according to the Robinson index in children of the experimental group after the experiment corresponded to the average level. Significant changes also took place in terms of workability performance: in the experimental group its indicators improved - in boys - by 30.24\% ( $\mathrm{p}<0.05$ ), in girls - by 25.15\% ( $\mathrm{p}<0.05$ ); in the control group - in boys by $12.08 \%$ ( $p<0.05$ ), in girls - by $7.88 \%$ ( $p<0.05$ ).

The use of elements of sports dances in various forms in the daily routine of primary school, namely: music and dance minutes, music and dance breaks, dance morning gymnastics and sports dances in the group for an extended day, helps to improve the physical condition of primary school children.

## References:

1. Viljchkovsjka A. (2014) Zastosuvannja muzyky na urokakh fizychnoji kuljtury (z dosvidu poljsjkykh zaghaljnoosvitnikh shkil) [Application of music in physical education lessons (from the experience of Polish secondary schools)]. Visnyk Chernighivsjkogho nacionaljnogho pedaghoghichnogho universytetu. Ser.: Pedaghoghichni nauky. Fizychne vykhovannja ta sport, no. 118(1), pp. 50-53.
2. Ljebjedjeva V. (2013) Khoreoghrafija na urokakh fizychnoji kuljtury jak zasib formuvannja estetychnoji kuljtury molodshykh shkoljariv [Choreography in physical education lessons as a means of forming the aesthetic culture of primary school children]. Nova pedaghoghichna dumka, no. 4, pp. 145-146.
3. Moskalenko N.V., Demidova O.M. (2016) Sportyvni tanci dlja ditej: innovacijni pidkhody [Sports dances for children: innovative approaches]. Dnipro: Innovacija. (in Ukrainian)
4. Root Z.Ya. (2006) Tantsy v nachal'noy shkole [Dancing in primary school]. Moscow: Ayr press. (in Russian)
5. Tereshenko N.V. (2017) Baljni tanci, jak sportyvno-estetychna dijaljnistj ta pedaghoghichnyj proces. Osoblyvosti roboty khoreoghrafa v suchasnomu sociokuljturnomu prostori [Ballroom dancing as a sports and aesthetic activity and pedagogical process. Features of the choreographer's work in the modern sociocultural space]. Proceedings of the II Mizhnarodna naukovo-praktychna konferencija (Ukraine, Kyiv, 19 May 2017) (eds. Nechytajlo V.S.), Kyiv: NAKKKiM, pp. 201-204.
6. Typova osvitnja proghrama, rozroblena pid kerivnyctvom Shyjana R.B. 3-4 klas [The Typical educational program developed under the guidance of Shiyan R.B. 3-4 class]. Available at: https://mon.gov.ua/storage/app/media/zagalna\ serednya/ programy-1-4-klas/2020/11/20/Shiyana.pdf
7. Typova osvitnja proghrama, rozroblena pid kerivnyctvom Savchenko O.Ja. 3-4 klas [The Typical educational program developed under the guidance of Savchenko O.Ya. 3-4 class]. Available at: https://mon.gov.ua/storage/app/media/ zagalna\%20serednya/programy-1-4-klas/2020/11/20/Savchenko.pdf
8. Baek M., K. Andrew R. Richards and James Ressler (2015) Advantages of introducing a dance unit in the journal of physical education for physical and sports teachers. Vol. 28, pp. 43-45. Available at: https://experts.illinois.edu/en/publications/ benefits-of-implementing-a-dance-unit-in-physical-education
9. Krimler S., Meyer W., Martin E. van Sluys, E.M.F., Andersen L.B., Martin B.V. (2011) The impact of school interventions on physical activity and fitness in children and adolescents: a review of reviews and systematic updates. British Journal of Sports Medicine, no. 45(11), pp. 923-930.

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