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METHODOLOGICAL JOURNAL****MENTAL ENLIGHTENMENT SCIENTIFIC –
METHODOLOGICAL JOURNAL**<http://mentaljournal-jspu.uz/index.php/mesmj/index>**DEVELOPMENT OF PHYSICAL QUALITIES OF OLD
SCHOOLGIRLS BY MEANS OF NON-TRADITIONAL ACTIVITIES****Matluba Jalalovna Davurbaeva***Doctor of Philosophy (PhD)**State University of Physical Education and Sport of Uzbekistan**Chirchik, Uzbekistan**E-mail: matlubajalalovna@mail.ru***ABOUT ARTICLE**

Key words: Fitness, shaping, gymnastic exercises, physical qualities, volume of movements, anthropometry, physical fitness, motor training.

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Abstract: In the article the bases of general theoretical and methodical exercises for schoolgirls of 16-17 years old are developed, on the basis of the analysis of scientific and methodical literature it is defined that the programme "Formation of healthy waist" is directed on development of beautiful figure and general health improvement of an organism, and also preparation and organisation of the programme of non-traditional exercises., development of the programme "Formation of healthy back" for schoolgirls of 16-17 years old with the system of postisometric relaxation, Experimentally proving practical benefit of trainings for health, and also complex ef-exercises.

INTRODUCTION

The main purpose of our study is to determine the effectiveness of the formation programme "Healthy Back" in schoolchildren 16-17 years old, only athletes with high motor culture can easily and comfortably perform technically complex exercises. In this process we can evaluate the amplitude of movements, beauty, artistry and performance skills.

Rational planning and distribution of choreography means in the training process, effective development of special-motor and technical training of young gymnasts allows to gradually bring up plastic expressiveness of movements.

At the same time, the article is significantly related to the Decree of the President of the Republic of Uzbekistan dated 7 November 2016 № "Decree on measures to radically improve the system".

Presidential Decree No. PQ-414 of 3 November 2022 "On measures to further improve the system of training and scientific research in the field of physical education and sport", No. PQ-449 of 23 December 2022 "Measures for the further development of the sport of gymnastics" serve to implement the tasks defined in the Cabinet of Ministers Decision No. 118 of 13 February 2019 "On approval of the concept of physical education and mass sports development in the Republic of Uzbekistan in the period 2019-2023".

They will have to organise and carry out targeted work on the formation of a healthy lifestyle, the modern demands of the population, especially young people, for physical education and sport, fostering a sense of loyalty to the motherland, systematically organise work on the selection of talented young athletes, as well as the further development of physical education and sport in the Republic of Uzbekistan.

Purpose of the study: to determine the effectiveness of the programme of formation of "Healthy Back" in schoolchildren 16-17 years old.

Aim of the study: to develop a programme "Shaping a healthy back" for schoolgirls 16-17 years old with a system of postisometric relaxation, to build training on practical fitness.

The results of the study and their discussion:

Pedagogical observations were conducted from 25 September 2021 to June 2022 in general secondary school No. 47 of public education department of Gallaorol district of Jizzak province. 40 schoolgirls (16-17 years old) participated in the observations. The results of physical development were determined every two months.

The obtained anthropometric measurements (length mass, waist circumference) and body composition indicators (muscle mass, subcutaneous fat fibre) were entered into the computer.

According to the results, the computer shows the proportionality of the body and how much the figure corresponds to the figure model of a modern schoolgirl.

The researchers were divided into 2 groups: experimental and control. There were no differences in physical development and physical fitness between the groups involved in the study. It was conducted in all groups 3 times a week for 55 minutes.

Organisations, scientific and methodological recommendations of leading specialists in the field of theory and methodology of gymnastics were used in the process of comparative analysis.

The experimental group worked with the help of a specially designed programme. The aim of the experiment was to increase the performance and endurance of the group students, while independent work in the form of physical exercises was recommended to perform daily unstructured exercises (organised into complexes).

The 5 proposed complexes included 11 specially selected exercises, 8 of which were aimed at figure correction, 3 - at "postisometric relaxation".

The duration of the complex is 2 months, 8-10 training sessions are conducted during 1 month, physical development (anthropometric) and physical fitness (mobility and static endurance) are conducted every 2 months by means of control measurements.

At the beginning of the research, anthropometric measurements were carried out to determine practical utility, and the physical and motor fitness of the participants was studied. Analyses were based on the results obtained from the control trials.

Positive changes appeared during the experiment (Table 1). Changes occurred in all anthropometric aspects (except for hips).

Under the influence of the performed exercises and as a result of "Postisometric muscle relaxation" the weight of students in the experimental group decreased by 11.7 kg, and in the control group - by 6.9 kg. (Table 1). Big changes occurred in waist and hip dimensions. The index decreased to 19.7 and 15.3 cm in the experimental group and 16.8 and 11.9 cm in the control group.

It is known that those who are constantly engaged in shaping have their own model of beauty. The shaping model is business, slim shapes and a beautiful body (body fat content 16-24%). It is the best level of physical fitness. Table 1 shows that the body fat of the participants in the experimental group decreased by 14.8% by the end of training, which is significantly higher than in the control group (9.5%, at $R < 0.05$).

The experiment had a positive effect on students' movements during training exercises (size and body composition, spine position), the exercises are performed easily. Execution of exercises is better, technical level is higher. In the process of training there is a sense of satisfaction from the work done. By increasing the range of motion, the mobility of the spine also increases.

The indicators in Table 2 show that the level of spinal joint mobility in the main group of schoolgirls significantly differed from the indicators of the similar control group and was higher ($R < 0.05$), except for the tests of spinal motion in the neck area "Tilt of the head forward" was not specified due to non-detectability ($R < 0.5$). This situation is due to the lack of time allocated to the lesson, where the programme of exercises "Postisometric relaxation" is performed in a small volume.

Statistical muscle endurance is determined by the position of the muscle corset. How many back muscles are able to support the spine. Such a group of exercises limits the violation of the anatomico-physiological function of the spine, prevents such diseases as osteochondrosis, lordosis, kyphosis, scoliosis.

At the end of the study (Table 2), the experimental group had statistical endurance performance (mean 5.3 ± 0.55) points and the control group (mean 3.0 ± 0.68) points. The difference in the performance of female students in the experimental group is significantly higher.

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Table 1**Anthropometric indicators of female students before and after the study.**

	Before the experiment		After the experiment	
	Control group	Experimental group	Control group	Experimental group
Body weight (kg)	75.5 ± 2.2 V =3.1 %	74.5 ± 3.8 V=4.8 %	68.6 ± 2.8 V=4.6 %	62.8 ± 3.8 V=5.7%
Fat %	43.4 ± 2.8 V=6.5 %	46.2 ± 4.8 V=10.3 %	33.9 ± 3.2 V=9.4 %	31.4 ± 2.5 V=8%
Waist(sm)	85.5 ± 3.9 V=4.6 %	83.0 ± 4.7 V=5.6 %	68.7 ± 4.7 V=6.8 %	63.3 ± 3.0 V=4.7 %
Buttock(sm)	63.0 ± 3.2 V=5.0 %	66.2 ± 3.1 V=5.0 %	56.3 ± 3.2 V=5.6 %	58.5 ± 2.5 V=4.3 %

Table 2**Indicators of action readiness of the control and experimental group of schoolgirls before and after the study.**

Indicators		Before the experiment		After the experiment		
		Control group	Experimental group	Control group	Experimental group	
Throat part	Head down	0.5 ± 0.3 V=60.0 %	0.5 ± 0.3 V = 60.0 %	2.1 ± 0.1 V= 12.0 %	2.9 ± 0.1 V= 3.4 %	
	Turn to side	0.7 ± 0.2 V= 28.5 %	0.7 ± 0.2 V= 28. %	1.7 ± 0.5 V= 9.0 %	2.9 ± 0.1 V= 3.4 %	
Determination of the flexibility of the spine	Bends	Stand forward	0.8 ± 0.5 V= 2.5 %	0.9 ± 0.2 V= 22.2 %	3.5 ± 0.3 V= 8.5 %	6.5 ± 0.8 V= 12.3 %
		Sit down	1.6 ± 0.9 V=56.2 %	1.6 ± 0.5 V=31.3 %	2.6 ± 0.7 V=26.9 %	6.0 ± 0.2 V=3.3 %
		To the side	1.1 ± 0.6 V=54.5 %	1.1 ± 0.1 V= 9%	1.5 ± 0.3 V= 20.0 %	4.6 ± 0.3 V= 6.5 %

Static endurance of the back muscles	2.6 ± 0.6 V= 23.0 %	2.7 ± 0.2 V= 7.4%	5.6 ± 0.3 V=5.4 %	8.0 ± 0.1 V=1.3 %
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CONCLUSION

1. Analysis of training practice and data of special literature shows that when working with schoolgirls in gymnastics many non-traditional types of training and different directions are used for the purpose of figure correction and increasing the mobility of the spine.

2. The pedagogical research conducted shows that the health promotion programme has a positive effect on participants' mobility readiness and level of physical development and, most importantly, increases spinal mobility.

3. According to the Lassegue test - the ability to determine the level of movement in the spine according to the control exercises "standing", "bending forward" on the anthropometric length of the posterior-upper layer of the spine (5.6 points). and "sitting with bending forward" (4.4 points) the flexibility of the participants in the experimental group showed the height of the level of the

According to the results of the study (Table 2), the experimental group showed an increase in mean scores (5.3±0.55) points, the control group - (3.0±0.68) points, the main group showed significantly higher scores.

This fact was confirmed by the programme of formative exercises "Healthy Back" and the system of post-isometric relaxation, which confirmed its effective effect on the participants.

4. Statistical endurance of muscles depends on the state of the muscle corset, the ability of the back muscles to hold the spine. Such a group of exercises does not allow disturbing the physiological and anatomical function of the spine and is a prevention of scoliosis, kyphosis, lordosis and osteochondrosis.

According to the results of the study (Table 2), the experimental group showed an increase in mean scores (5.3±0.55) points, the control group - (3.0±0.68) points, the main group showed significantly higher scores.

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