

# METHODS OF DEVELOPMENT OF PHYSICAL QUALITIES IN GYMNASTICS FOR 5-7 YEARS OLD"

GULHAYO KHOLBOYEVNA

Doctoral student of Samarkand State University

NAZAROVA DILNOZA

SamDU Masters, Samarkand Uzbekistan

ibroimova89@bk.ru

## ABSTRACT:

This article is devoted to the topic "Modern approaches to the development of physical qualities in rhythmic gymnastics", the topic is studied in depth, the process of teaching young rhythmic gymnasts to perform exercises with the object is analyzed. The research work is enriched with a series of exercises and a special set of exercises for mastering exercise techniques. The developed recommendation was recommended to coaches of rhythmic gymnastics in its implementation and applied in the educational process.

**KEYWORDS:** gymnastics, special exercises, belt, physical quality, exercise, flexibility.

## RELEVANCE OF THE TOPIC:

As the head of our state noted, no matter what goals we set for ourselves, no matter what great deeds we strive to achieve, on the basis of all our noble deeds, on the basis of all our virtues, we must bring up our children as well-rounded human beings. The dream is to bring up a generation that is second to none in the world [1,].

Among such important and far-sighted activities is the promotion of the theoretical foundations of a healthy lifestyle among all segments of the population, especially youth and adolescents, the development of the younger generation. One of the priority tasks is to support in all ways the effective use of the opportunities created for interested sports [1,3]. In this regard, one of the most pressing

issues today is the development of young girls as healthy mothers and people with high morale.

## THE PURPOSE OF THE STUDY:

Development of methods for the initial training of young girls in rhythmic gymnastics, exercises that develop their physical qualities, exercises with objects. Develop a set of exercises for young gymnasts, the development of the optimal sequence of work with the device for the formation of basic skills of working with the belt and determine its effectiveness experimentally.

## RESEARCH METHODS:

The following research methods were used in solving the tasks:

1. Includes methods of study and analysis of data in the scientific and methodological literature, pedagogical observations, pedagogical control tests, mathematical and statistical methods.

The control group was conducted according to the traditional program. In the experimental group's training, integration and use of exercises in the review and analysis of videos of participation of famous gymnasts in competitions were used.

## RESEARCH RESULTS AND DISCUSSIONS:

At the beginning and end of the experiment, the performance of gymnasts of both groups of girls on a set of special exercises and exercises with a ribbon was evaluated in

points, and the dynamics of changes in their arithmetic mean during the pedagogical experiment was determined (Table 2). In addition, the dynamics of changes in the qualities of flexibility, speed, strength, balance, agility, which characterize the physical fitness of gymnasts, were studied. Also, the statistical reliability of changes in the arithmetic mean of the above-mentioned indicators during the pedagogical study for girls in the experimental and control group of gymnasts met the critical criteria of the law of student distribution (arithmetic mean, standard deviation and degree of freedom using the magnitudes of) and calculated on the basis of the dependence on the established degree of freedom.

Table 1. Preliminary results of special physical training of rhythmic gymnasts (experimental group)

Physical qualities	At the beginning of the experiment
	$\bar{X} \pm \sigma$
Flexibility	7,14±1,51
Speed	7,21±1,60
Power	7,46±1,66
Balance	7,66±1,55
Agility	7,51±1,47
General	7,40 ± 0,22

Methods of applying exercises that have a combined effect on special physical and technical training. It should be noted that these features must be taken into account in the development of joint-acting physical training competitive exercises. Rhythmic gymnasts should be included in the training process a specialized set of exercises for exercises performed with objects. In the next stage, our rhythmic gymnasts were divided into experimental and control groups. Taking into account the results, the level of preparation of the girls of the experimental and control group gymnasts did not differ statistically from each other.

During the pedagogical experiment, the experimental group took an individual approach to the work with objects and a set of exercises by the girls gymnasts. At the same time, in the training of the girls of the experimental group, great attention was paid to general physical training. The following special exercises were used in the development of the physical qualities of the girls of the experimental group.

An example of an exercise set.

I – I.c. standing on shovels

1. opening the legs to the twine position.

2. I.c.

II – I.c. leaning on the number, the second leg to the chip. 1-8. lift the leg to the side, 140°

9-16. with the other foot.

III – I.c. transverse twine, arms above.

IV – I.c. in the supine position, feet above.

1-4. lower both legs to the left.

5-8. I.c.

9-16. to the right itself.

V – I.c. upward (arched) movement of arms and legs in a supine position.

VI – I.c. lying down, one foot 45°.

1-8. moving with the other foot.

VII – I.c. sitting, hands up

1-4. leaning on a transverse twine.

5-8. I.c.

VIII – I.c. legs bent to the side and leaning

1-7. retreat

8. d.h.

IX – I.c. lie on your back.

1-7. lifting the waist and pelvis with the help of heels and shovels.

8. I.c.

The exercises performed on the tape are divided into three main groups.

1-group. Upward jerking movements and rotations:

2-group. Throws.

The latter types are suitable for modern exercises performed on the tape. Small rotations can be single, multiple rotations can

be snake tracks and spirals, which are performed in conjunction with hand and wrist movements. [10] Depending on the shape of the belt, throwing movements are divided into: (tape opened, folded, wrapped), grips (from the date, end, beginning), directions (up, forward-side-up, back-up), height (high, medium, low), types of hanging (from the end of the handle, from the base, from the belt). As a rule, the belt in the hands of the gymnast must be in constant motion. These conditions are not only traditional, but also technical. Spiral, snake-shaped movements in a continuous sequence ensure that the tape is in a constant state of extension [6]

At the beginning of the pedagogical experiment, there was no statistically significant difference between the performance of athletes in the control and experimental groups on all exercises performed with the tape ( $t_{st}$  value less than 1.41 and therefore  $R < 0.05$ ). At the same time, the statistical characteristics of the performance of this exercise are better than in previous exercises (standard deviation values range from 0.43 to 0.97 and the coefficient of variation varies from 4.89 to 11.67). It should be noted that

During the pedagogical experiment, it was found that both the control group and the experimental group improved the performance of exercises performed with the tape. Only the increase in the changes in the control group relative to the corresponding arithmetic mean at the beginning of the experiment ( $t_{st}$  values less than 1.84 and  $R < 0.05$ ) was statistically unreliable.

In the experimental group, it was found that the increase in the performance of these exercises (especially in the exercise of rotating the belt (left and right hand) with the same amplitude,  $t_{st}$  (6.81) was statistically significant ( $R < 0.001$ ).

At the end of the pedagogical experiment, the statistical characteristics of the results of the control and experimental groups in the exercises performed with the belt were relatively improved (standard deviation values range from 0.28 to 0.81 and correlation coefficient values from 2.91 to 9.57). therefore, the values at the end are between the arithmetic mean values ( $t_{st}$  (2.58 and  $R < 0.05$ ; 3.56 and  $R < 0.01$  and for the remaining exercises  $t_{st} > 4.33$  and  $R < 0.001$ ) reliable statistical differences were observed.

Table 2. Comparison of the results of rhythmic gymnasts in the experimental and control groups on the control exercises performed with the tape

t/ r	Experimental group						Control group					
	At the beginning of the experiment		At the end of the experiment		$t_{st}$	P	At the beginning of the experiment		At the end of the experiment		$t_{st}$	P
	$\bar{X}$	$\sigma$	$\bar{X}$	$\sigma$			$\bar{X}$	$\sigma$	$\bar{X}$	$\sigma$		
1	8,69	0,46	9,63	0,38	5,63	< 0,001	8,73	0,43	8,86	0,59	1,68	> 0,05
2	8,48	0,61	9,62	0,4	5,05	< 0,001	8,34	0,74	8,63	0,69	1,84	> 0,05
3	8,4	0,54	9,68	0,36	6,05	< 0,001	8,31	0,67	8,47	0,67	1,46	> 0,05
4	8,63	0,53	9,83	0,17	6,81	< 0,001	8,48	0,7	8,59	0,74	1,16	> 0,05
5	8,44	0,39	9,49	0,46	5,89	< 0,001	8,28	0,66	8,51	0,83	1,56	> 0,05
Total	42,64	1,34	48,2 5	1,26 1	4,46	< 0,001	42,14	1,92	43,06	1,68	1,30	> 0,05

Note: 1-belt movement in different shapes, 2-belt movement with balance, 3-belt shot up in a single vertical plane, 4-belt (left and right hand) rotation of the same amplitude, 5 - The values of throwing the tape back and forth and returning the tape from the position where it touched the other end of the carpet (from 7.69 to 8.38 for the exercise, and 39.48 and 40 for the sum of the results of the exercise) , 0), the standard deviation (oscillating in the range of

0.41 to 1.03) and the correlation coefficient (oscillating in the range of 5.12 to 12.26) were found to be very close to each other, and at the beginning of this study the athletes of both groups indicators are almost the same. Therefore, the difference between these indicators at the beginning of the study was statistically unreliable ( $t_{st} < 1.79$  and  $R > 0.05$  for all five exercises and their sum).

Table 1. During the study, experimental and control groups compared the statistical results of physical training of rhythmic gymnasts

Exercise name	Experimental group				Control group			
	At the beginning of the experiment	At the end of the experiment	$t_{st}$	P	At the beginning of the experiment	At the end of the experiment	$t_{st}$	P
	$\bar{X} \pm \sigma$	$\bar{X} \pm \sigma$			$\bar{X} \pm \sigma$	$\bar{X} \pm \sigma$		
Flexibility	7,14±1,51	9,36±1,22	2,66	< 0,05	7,19±1,71	8,11±1,27	1,56	> 0,05
Speed	7,21±1,60	9,42±1,34	2,47	< 0,05	7,27±1,78	8,03±1,39	1,34	> 0,05
Power	7,46±1,66	9,54±1,38	2,31	< 0,05	7,51±1,85	8,31±1,43	1,33	> 0,05
Balance	7,66±1,55	9,63±1,36	2,36	< 0,05	7,88±1,96	8,41±1,42	1,04	> 0,05
Agility	7,51±1,47	9,41±1,25	2,48	< 0,05	7,58±1,73	8,17±1,31	1,23	> 0,05
General	7,40 ± 0,22	9,47 ± 0,11			7,49 ± 0,27	8,21 ± 0,15		

At the end of the study, the statistical characteristics of the indicators (standard deviation values (between 1.22 and 1.43) were significantly reduced, and the arithmetic mean of the physical indicators of these control and experimental groups (3 out of 5)  $t_{st}$  for flexibility (2.20;  $t_{st}$  for speed (2.12;  $t_{st}$  for agility (2.13 even if the values of 2.13 are close to the value of the table of significance level (2.07))  $R < 0.05$ )) The remaining two are the changes for strength ( $t_{st}$  (1.93) and equilibrium ( $t_{st}$  (1.95)) at the significance level of 0.05 ( $t_{st}$  (2.07)). observed to be close.

From the above, we can conclude that gymnastics is an effective tool for functional and hormonal development. Thus, based on the

dynamics of change in the performance of young rhythmic gymnasts during the experiment, it is possible to conclude that the performance of special exercises, exercises with objects in the recommended way will lead to better results, as well as with special exercises, objects. The method used to teach the exercises to be performed has led to statistically significant changes, and the application of the above set of exercises and gymnasts in exercises performed with objects (ribbons) leads to a positive result.

Changes in the parameters of physical fitness (flexibility, speed, strength, balance, agility) of rhythmic gymnasts during the study (from 25.3% to 31.09% in terms of qualities

and a total of 28.07%) were compared with the control group ( in terms of qualities from 6.7% to 12.8% and in general and 9.6%). Accordingly, the calculated Student Critical Criteria criterion  $t_{st}$  values of 1.56 and less in the control group, i.e.,  $R > 0.05$ , is unreliable at the significance level, and for the results of the experimental group girls,  $t_{st}$  (between 2.31 and 2.66; It was found that there was a reliable change in the significance levels  $R < 0.05$  and 0.05.

#### REFERENCES:

- 1) Together we will build a free and prosperous, democratic state of Uzbekistan. Sh.M. Mirziyoyev. - Tashkent: Uzbekistan, 2016.
- 2) Concept for the Development of Physical Education and Mass Sports 2019 13 February
- 3) "On the establishment of the Fund for the Development of Children's Sports in Uzbekistan" I.A. Karimov Newspaper Xalq So'zi.- 2002 y. October 24.
- 4) Achilov A.M. Akramov J.A. Goncharova O.V. Textbook "Education of children's physical qualities." T .: Uzbekistan, 2004. 5 p.
- 5) Eshtaev A.K. Methodical manual of gymnastics / A.K. Eshtayev Tashkent 2015-424 p.
- 6) Haydarov B.T. Methodical manual on methods of conducting gymnastics in MTT / A.K. Eshtayev, B.T. Haydarov, G. X. Ibroimova-Samdu 2019-98 p.
- 7) Eshtaev A.K. Theoretical bases of gymnastics. T .: O`zDJTI, 2010..
- 8) Petrov P. Methods of teaching gymnastics in school textbook M, 2008
- 9) Sushko G.K. Gymnastics and methods of ego training TDPU, 2008 g11. Shlemin 8.A.M., Brikin A.T. Gymnastics: Tashkent, O'qituvchi, 1987 (in Uzbek).
- 10) I.V.Viner Usmanova, Ye.S.Kryuchek, Ye.N.Medvedeva, R.N.Terexina. Platonov V.N. The system of preparation of sportsmen in Olympic sports. Kiev. 2004. 808 p .;