

## MECHANISMS FOR IMPROVING GYMNASTICS IN INCREASING THE PHYSICAL ACTIVITY OF CHILDREN IN PRESCHOOL EDUCATION

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**Annotation.** In this article, a research work on the increase in children's movement activity and physical development in preschool education institutions through rhythmic exercise based on preliminary gymnastic exercises is covered.

**Keywords:** Children 6-7 years old, primary gymnastics, rhythmic exercises, physical education, physical activity, physical training, physical quality.

### Introduction

In preschool education, the development of the child's physical development and active movement, a scientific approach to the development of the content and methods of the process of physical development, physical fitness, endurance, the formation of interest in sports from childhood, It is necessary to address important issues related to independent thinking, physical education and sports and taking the first steps in sports. One of the most important and urgent requirements in this area is the promotion of active movement, prevention of inactivity, children's health, among other important issues, such as the timely identification and timely elimination of factors that hinder the harmonious physical development of children.[3,4,8]

**Purpose of the study:** It consists in the development of an improved methodological program, consisting of a set of rhythmic exercises based on the initial Gymnastics, which is used in the physical education process of preschool organizations to increase the activity of children.

#### **Objectives of the study:**

- The study consists of studying the mechanisms of determining the level of development of physical activity in preschool children aged 6-7 years.

Improving the use of rhythmic exercises based on the primary Gymnastics, taking into account the age characteristics of children aged 6-7 years.

- Creation of generalized educational-methodical complexes on improvement of physical fitness, physical activity, activity of preschool children.
- Implementation of a special selection of Science in the curriculum of the direction of preschool education on improvement of the initial gymnastic exercises on the development of physical training indicators of preschool children.

**Object of research:** The process of physical education of children in preschool education.

**The subject of the study:** the process of applying a set of rhythmic exercises based on primary gymnastics to increase physical activity, physical fitness in the process of physical education in preschool children.

**Research methods:** literature review, questionnaire, anthropometry, somatoscopy, pedagogical test, pedagogical experiment, pedagogical observations, timing, shagometry, spirometry, pulsometry, mathematical and statistical methods. Tadqiqot natijasi va uning muhokamasi. The experimental program of gymnastics was a set of rhythmic exercises in various directions, consisting of exercises selected on the basis of analysis of scientific and methodological literature and data obtained in accordance with the age characteristics of preschool children. The sequence of exercises in the complex corresponded to the generally accepted three-part structure.[5,7]

The experimental-testing program is aimed at solving the main problems of physical education of preschool children.

In the bases of preschool education organizations, a comparative pedagogical experiment was conducted to determine and test the effectiveness of the experimental-test program methodology for improving the activity of children of preschool age with gymnastic-based exercises.[6,8]

The experiment was attended by children from pre-school educational organizations. Children aged 6-7 years consist of 120 people. (60 child experience-test group, 60 child-control group). All children underwent a preliminary medical examination and participated in training in the main group.

At the beginning of the experiment, a comparative analysis of the physical development and physical training of children of Experimental-Test and control groups was carried out. Somatoscopic control of children in experimental-test and control groups it was found that the majority of preschool-aged children in both groups have a tendency to various musculoskeletal disorders (17.5% in the control group, 16.5% in the experimental-test group).

Experience-a comparative analysis of the physical development indicators of children in the test and control groups showed that there are no significant differences

between them (Table 16).

A comparative analysis of the indicators of physical training of children in the experimental-test and control groups showed that no significant differences were observed between them in the results of all motion tests, except for cases of forward bending.

On the basis of a program consisting of a complex of gymnastic-based exercises in the experimental-test groups of physical education classes of preschool children, 30-minute classes were conducted three times a week for six months.

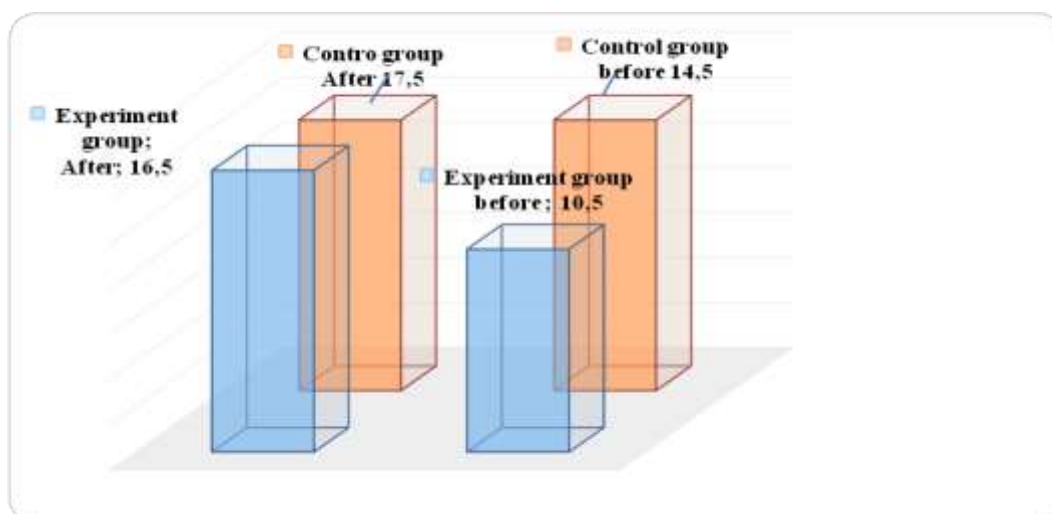
Those in the control group during this time were engaged in a traditional physical education program for the Organization of preschool education (the duration and time of training are similar).

The motor intensity of physical education training in the experimental group was from 60-65% to 75-87%, lower in the control group and 50-68%, depending on the type of tasks and activities.

The experiment was carried out in the test group with the method of controlling the load during the training session on the methodology, as well as the method of controlling the heart rate.

The effectiveness of the proposed method was assessed by comparing the indicators of physical development and physical training, as well as data on the dynamics of incidence at the beginning and after the experiment of children of the experimental-test and control groups.

Review the results of the experiment. 1. After the experiment, the results of somatoscopic examination of children in the experimental and control groups showed that the number of children with a predisposition to diseases of the musculoskeletal system in the control group decreased from 17.5% to 14.5%, and in the experimental group from 16.5% to 10.5% (figure 20).



1-picture. Analysis of children who have a predisposition to diseases of the musculoskeletal system in children in control and experimental groups at the beginning and end of the experiment.

Before the beginning of the experiment, the children of the test and control groups did not differ significantly in the indicators of physical development and the results of physical training (tables 1).

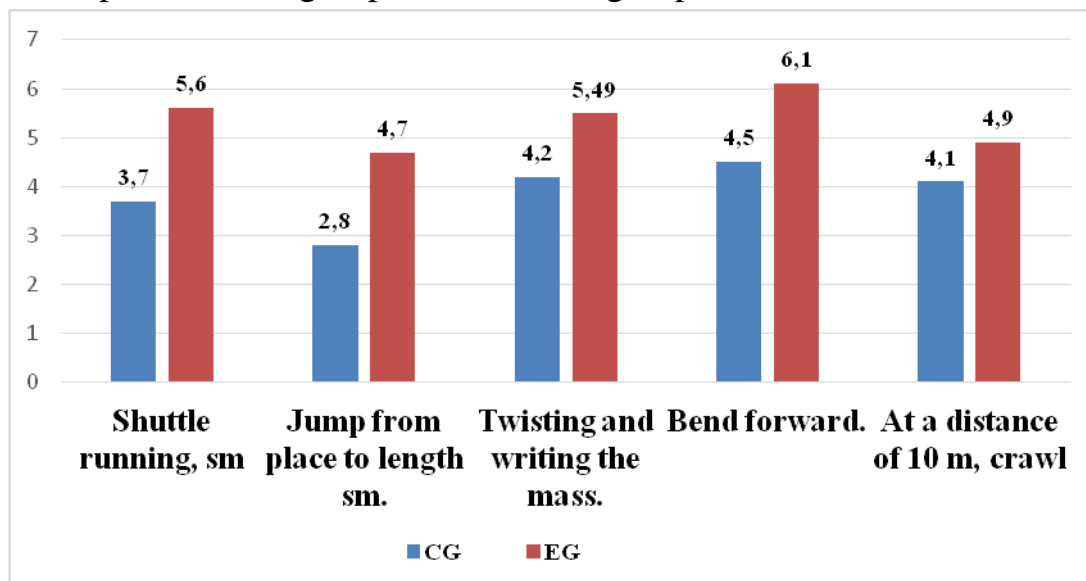
1-table.

Preschool group (6-7) age control (according to the traditional program) and dynamics of change during pedagogical research in experimental (Experimental program) groups (n = 60).

Test	guruh	Tajrib boshi			Tajriba oxiri			Absol yut farqi	Nisbi y farqi, %	$t_{cr}$	P
		$\bar{X}$	$\sigma$	V, %	$\bar{X}$	$\sigma$	V, %				
Shuttle running, sm	CG	11,15	1,43	12,83	10,81	0,91	8,42	-0,34	-3,05	1,55	>0,05
	EG	11,22	1,45	12,92	10,63	0,9	8,47	-0,59	-5,26	2,68	<0,01
Jump from place to length sm.	CG	101,9 5	12,5 6	12,32	106,3 3	10,9	10,2 5	4,38	4,30	2,04	<0,05
	EG	103,2 7	12,7 3	12,33	110,6 1	11,1 6	10,0 9	7,34	7,11	3,36	<0,00 1
Twisting and writing the mass.	CG	10,12	7,41	10,41	10,32	0,84	11,3 3	6,23	4,37	2,14	>0,05
	EG	10,15	8,35	11,3	13,45	0,98	13,5 4	6,85	7,13	4,52	<0,01
Bend forward.	CG	2,59	0,51	19,69	2,73	0,46	16,8 5	0,14	5,41	1,58	>0,05
	EG	2,65	0,52	19,62	4,61	0,45	15,6 3	0,23	8,68	2,59	<0,01
At a distance of 10 m, crawl.	CG	7,61	0,98	12,88	7,29	0,93	12,7 6	-0,32	-4,20	1,83	<0,05
	EG	7,65	0,99	12,94	7,01	0,84	11,6 5	-0,44	-5,75	2,63	<0,01

During the experiment, an analysis of the action activity indicators of children of test and control groups (n = 60).

Note: TG – experience-test group; NG - control group.



2-picture. Experience during the experiment-the dynamics of relative growth of the action activity indicators of children in the test and control groups ( %,  $n = 60$ ).

After the experiment, a unilateral reliable change in physical development indicators was observed in both groups (Figure 2). Thus, the increased load did not have a negative effect on the children's organism.

The complex tools and methods used in the experimental-testing program of exercises based on gymnastic elements were suitable for the capabilities of the organism of children of a certain age (this is also confirmed by the results of pedagogical observations and pulsometry data).

A comparative analysis of the indicators that characterize the physical training of children in the control group showed that no significant changes were observed in the results of any control exercises at the beginning and after the experiment (Table 1).

This is because the classes in the traditional physical education program for a preschool institution are mainly aimed at developing certain amount of mobility skills and do not contribute to the development of physical training.

The results of pedagogical observations showed that rhythmic exercises in the experimental-testing program, based on the elements of gymnastics, help to form a constant interest in the process of performing physical exercises in children.

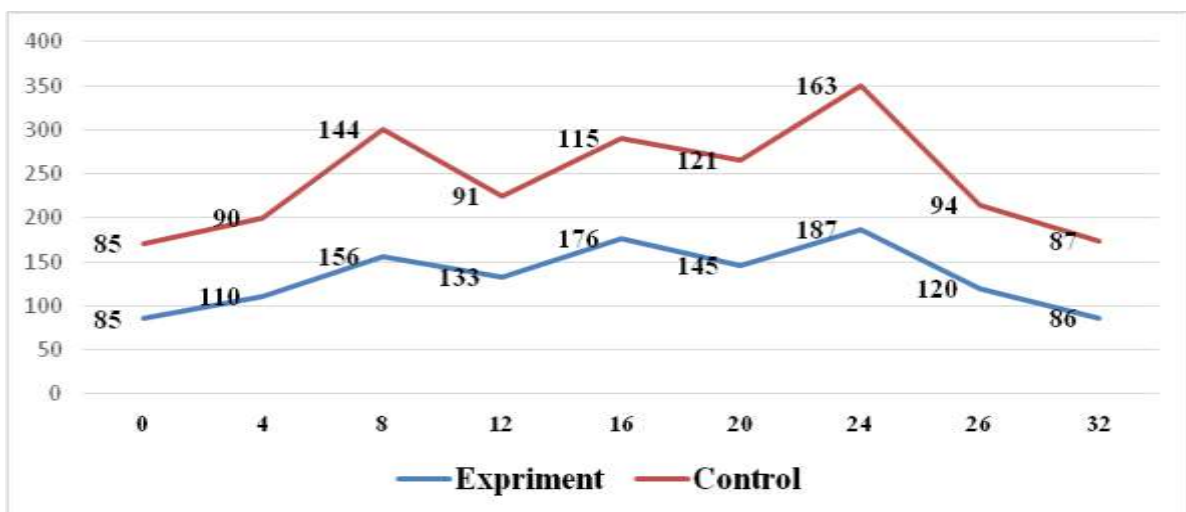
This is also confirmed by the results of a survey conducted with the children of the experimental-testing group after the experiment. After the experiment, the children began to prefer physical education classes during their stay in the pre-school educational

organization, put the first or second place as a favorite activity choice.

Pulsometry data showed that when the training was conducted on an experimental basis, the load on all parts of the training was consistent with the recommendations of the “primary step” program and state requirements for the age of the children. Analysis of the dynamics of heart rate in the training of Experimental-Test and control groups, showed a more positive educational effect on the children's body compared to the training in the control group of physical exercises in the experimental-test group (Figure 3). Thus, pulsometry data confirm the effectiveness of the experimental-test method.

The study of data on the dynamics of the disease showed that at the beginning of the experiment, the control of children was 18,4% in the group, and the experiment was 17,9% in the group.

Thus, in the process of pedagogical experiment, the hypothesis put forward at the beginning of the study was fully confirmed.



*3-picture. Control and experience dynamics of heart rate in physical education training in groups.*

The use of the initial gymnastic-based program in the practice of physical education of preschool children, taking into account the age characteristics of preschool children, allowed to increase the effectiveness of the physical education process and positively affected the dynamics of the health and physical condition of children.

**In conclusion**, compared to the traditional physical education program, the experimental program included the motor intensity of training (75-87 %) and the load shiddati (the heart rate in the main part was from 87 to 187 beats per minute);

-selection of means and methods of physical education was taken into account the

age characteristics of children aged 6-7 years.

-A good and statistically reliable positive change in the results of the experimental group in relation to the results shown by the children in the control group carried out pedagogical experience proves the effectiveness of experimental methods for the development of children's Mobility Activity and physical quality.

Changes in statistical reliability ( $p < 0.05$  and higher) of test results were found:

- Shuttle running - from 11.22 s to 10.61 s;
- Jump from standing to length - from 103,27 CM to 110,61 sm;
- Twisting the mass from 13.11 to 26.05.
- 10 meters of crawl space - from 7,65 to 7,01 seconds;
- Forward bending - increased from 2,65 CM to 4,61 sm.

The implementation of the program, which was first developed on gymnastics, helped reduce the incidence of preschool children by an average of 12,5 percent.

The use of the initial form of gymnastics is an effective means of harnessing the interest of preschool children in physical exercises (84 percent of children preferred to put physical education classes in the first or second place during their time in preschool organizations).

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