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CHARACTERISTICS OF GYMNASTICS TRAINING FOR PRESCHOOL-AGED CHILDREN

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ABOUT ARTICLE

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Abstract: The article is dedicated to improving the physical fitness of children aged 3-7 who engage in sports gymnastics at the sports and recreational training stage. The age characteristics of preschool children and the methods of developing basic physical qualities - strength, flexibility, coordination, and endurance - are considered. The effectiveness of a comprehensive and safe approach to organizing training aimed at the harmonious development and health improvement of young gymnasts has been demonstrated.

Introduction. The content of the sports-health stage involves introducing children to basic sport gymnastics, selecting and preparing talented children to master the sports training program in gymnastics, engaging them in gymnastics activities, strengthening boys' health based on their individual capabilities, forming motivation, and improving their psychological and physical development. All of these are considered among the most important issues today. Developing children's interest in sports training – that is, their engagement in sports – throughout their entire lives is essential. Whether children continue doing sports later in life, maintain good physical condition, achieve positive social and emotional development, and acquire moral values and volitional qualities largely depends on the role of sport. [1; 2; 3]

To achieve this, coaches must be knowledgeable about the specific developmental characteristics of different childhood stages. Coaches working with youth should guide children toward a future in sports, whether professionally or recreationally. [4; 5; 6]

The long-term sports training process begins with the sports-health stage, which focuses on comprehensive physical development, mastering basic gymnastics techniques, and implementing physical-health and educational activities. According to a number of scholars and specialists, it is necessary to develop new research directions and introduce modern technologies into practice.

Currently, education within the long-term sports-health stage is carried out based on general methodological principles. However, in practice, sports-health groups for boys aged 3–7 often lack scientifically grounded training programs, methodologies, and technologies.

Research Objective.

To improve the physical preparedness of 3–7-year-old children engaged in sport gymnastics at the sports-health preparation stage.

Research Tasks.

To determine the initial physical preparedness of 3–7-year-old children and to develop a set of specially directed exercises;

To scientifically justify the set of exercises used in training sessions through research.

Research Methods.

Analysis of scientific-methodological literature, pedagogical observation, pedagogical experiment, testing of physical abilities, and methods of mathematical statistics.

Research Results and Discussion.

According to several scholars [1, 2, 3, 4], the theory of observation-based teaching is considered effective in teaching preschool-aged children basic and small motor skills. They emphasize that as children become biologically capable of mastering certain behaviors, the following should be carried out to develop new skills in them:

1. Following the actions of others;
2. Forming a mental image of the action;
3. Imitating the action;
4. Engaging in the actions;
5. Motivation to repeat the actions.

Children must be willing and motivated to develop these skills in order to be ready for sufficient capabilities and to become competent in movement skills [1,2,3,4].

The tasks of gymnastics define its content, that is, the exercises selected for preschool gymnastics must allow these tasks to be achieved. Gymnastics exercises should correspond to the physical and psychological developmental characteristics of preschool children.

It should also be taken into account that preschool children have limited muscular working capacity. When the same movements are repeated many times, children lose interest and become tired quickly. Gymnastics exercises for preschoolers are relatively simple and are divided into dynamic and static exercises. Movements involving the body's motion in space belong to dynamic exercises. When performing them, the muscles repeatedly tense and relax, therefore dynamic exercises are considered more effective for developing children's locomotor system.

Static exercises involve prolonged tension of muscle groups in a fixed position. During their performance, blood circulation and respiratory function become strained, and fatigue occurs faster [3,5,6]. Static exercises (such as handstands, headstands, supports, etc.) are mainly aimed at developing significant muscular strength. They are not suitable for preschool children's physical capabilities and therefore are not used in kindergarten gymnastics classes.

For preschool-aged children, exercises that develop agility and coordination are considered effective. At this age, strength is developed through crawling, climbing, squatting and standing movements, moving various objects (medicine balls, gym benches), and exercises performed in pairs. This is because preschoolers perceive movement as a whole and find it difficult to break it down into separate components. Therefore, gymnastics for them should be built around movements involving large muscle groups (jumping, squatting, bending, climbing, etc.). However, one should not avoid exercises that require some differentiation of movements. It is advisable to offer exercises for specific body parts, muscle groups, and joints (walking on tiptoes, moving small objects with the toes, picking up sticks with the toes, turning the head, bends, squeezing and extending the fingers, etc.).

For preschool-aged children, exercises that include frequent short breaks and relaxation periods are very beneficial, as they help regulate physical load effectively.

At ages 3–7, children mainly perform movements that they use in their daily lives; however, these movements are still undeveloped, imprecise, and insufficiently coordinated. For preschoolers, the gradual qualitative and quantitative development of movement skills is characteristic. Gymnastics exercises for preschool-aged children help form simple knowledge and skills based on the most basic movements. Children learn to perform movements in general form. At the same time, considering the developmental requirements of this age, they demonstrate a general unity in their movements.

For example, children aged 3–4 are expected to stand correctly, keep their heads up, and perform natural arm movements. At this age, the movements may still be inaccurate and lack rhythm and coordination; such deviations are not considered mistakes in the younger group. For children aged 5–6, the requirements for walking are entirely different: they should take precise, rhythmic steps with proper coordination, good posture, and so on.

Preschool gymnastics includes many exercises that help develop correct posture. This is naturally related to the children's age characteristics, the relative softness of their skeletal system, and the formation of the natural curves of the spinal column.

This diversity makes gymnastics exercises useful and appropriate for all age groups in kindergartens. For each age, it is possible to select simple exercises that correspond to specific pedagogical objectives and that can be improved through different games and tasks.

Gymnastics in kindergartens is conducted in various organizational forms:

1. During physical education classes;
2. In morning gymnastics;
3. In active (movement) games;
4. In children's independent physical activities;
5. During active recreation, sports festivals, etc.

Basic gymnastics exercises may be performed to or accompanied by music. Children learn to perform movements in a single rhythm corresponding to the musical tempo. The character of the music adds different qualities to children's movements. Children learn to adapt their movements according to the musical accompaniment. It is advisable to conduct walking, running, jumping, and simple ball exercises accompanied by music. However, balance exercises, throwing for distance or accuracy, long and high jumps, and climbing movements should not be performed with music, as they are more complex and require individual execution speed and concentration. Music restricts these types of movements.

In senior groups, it is recommended to perform general developmental exercises with musical accompaniment. Such exercises may only be done to music after children have thoroughly mastered the exercises and can perform them freely. In this case, exercises for the arms, squatting, bending, and turning are quite suitable. Exercises with equipment and simple movements such as walking and running can also be included in musical movement games.

The expert evaluation method was used to determine the technical preparedness of 3–7-year-old boys participating in the scientific research. The execution of control exercises was assessed by qualified first-category gymnastics judges during specially organized tests based

on a specially developed evaluation form. A panel of three experts evaluated the quality of performing acrobatic technical elements, exercises on the parallel bars, and support exercises.

To assess the effectiveness of mastering the content of the sports-health preparation stage for 3–7-year-old boys engaged in artistic gymnastics, control norms for technical preparedness based on the Standard Training Program for “Sport Gymnastics” were applied in both the control and experimental groups.

Each exercise was performed twice on the mat or apparatus while demonstrating the required body position. The total maximum score was 5 points, and the best attempt was recorded.

Deductions for technical errors were applied as follows:

- 0.1 point — slight knee bending, incomplete pointing of the toes, bending of the arms;
- 0.3 point — holding the required position for less than 3 seconds, incorrect posture, significant bending of the arms and legs, no toe point;
- 0.5 point — gross bending of the arms and legs, failure to hold the required position;
- 1 point — falling or inability to perform the required position.

The results of the expert evaluation were recorded in a special protocol, statistically processed, analyzed, and summarized.

The experimental study to determine the effectiveness of the content of the sports-health preparation stage for 3–7-year-old boys in sport gymnastics was conducted at the Tashkent City Gymnastics Center from August 1, 2025, to December 23, 2025 (over 5 months). A total of 45 boys participated.

The developed content of the sports-health preparation stage for 3–7-year-old boys engaged in gymnastics was implemented. During its implementation, the following were carried out: theoretical and pedagogical principles of the sports-health preparation stage were developed; the structure and content of this stage were defined; a formative pedagogical experiment was organized and conducted; and to determine the effectiveness of the proposed program, the physical preparedness indicators of boys in the control and experimental groups were analyzed before and after the experiment.

Research results and discussion. In each age group (3–4, 5–6, 6–7), the initial level of boys’ physical abilities was assessed, and control and experimental groups were formed.

Before starting the training process, a test was conducted to determine the initial level of physical preparedness in each age group (Figure 1).

(Figure 1).

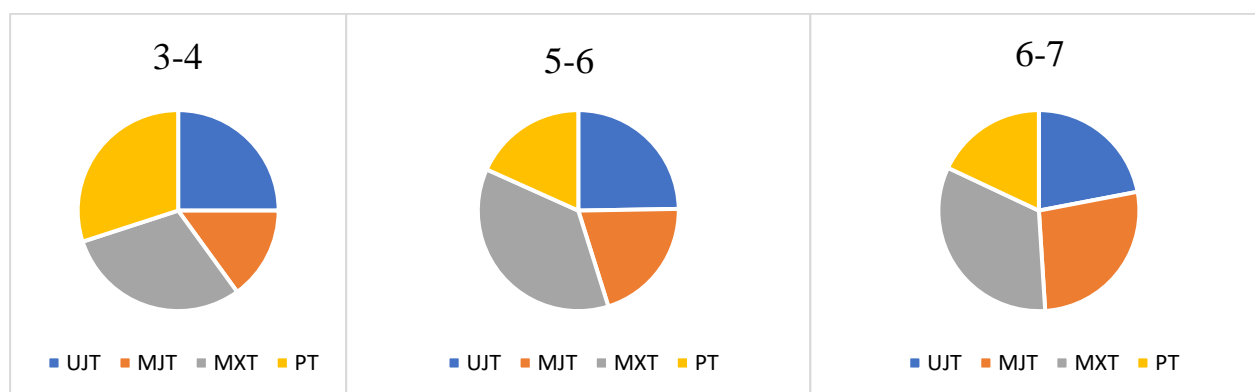


Figure 1. Structure of the annual cycle of physical education for children aged 4–7 years

The psychophysical development of children predetermined conducting the lessons in a game format. Using the game method was aimed at developing both general and specific skills in sport gymnastics. In the learning process, the main focus was on elements forming specific exercises: various movements in a stationary position, swings, acrobatic exercises, and special coordination exercises, which later allow the mastery of more complex coordination exercises. Thus, children first learn the characteristics and requirements of sport gymnastics and the movement school — accuracy, adopting the necessary initial rules, and following the movement trajectory.

To assess children's physical preparedness, tests and evaluation scales proposed by A. B. Lagutin and G. M. Mikhallina were used and converted to a 10-point system. The results of the initial research showed a low level of baseline physical preparedness in children (Table 1). For the experiment, children in each age group were divided into experimental and control groups, each consisting of 15 participants.

Table 1. Results of the initial study on children's physical preparedness

Tests Groups	Lying prone on the floor with elbows bent (number of repetitions))	Hanging on the gymnastics wall, raising straight legs to a right angle (number of repetitions)	Shuttle run over 3×10 m (seconds)	Standing long jump (cm)	Flexibility: splits, bridge (in points), out of 3 points
3-4 years old					
TG, n=15	5,5±0,45	3,2±0,34	17,1±0,58	31,1±5,7	1,5±0,3
NG, n=15	6,1±0,53	2,8±0,51	18,0±0,26	30,4±8,0	1,5±0,3
R	>0,05	>0,05	>0,05	>0,05	>0,05
5-6 years old					
TG, n=15	8,5±0,35	5,1±0,24	15,3±0,28	46,1±2,7	1,3±0,3

NG, n=15	9,1±0,55	5,8±0,31	14,5±0,21	45,4±4,0	1,3±0,4
R	>0,05	>0,05	>0,05	>0,05	>0,05
6-7 years old					
TG, n=15	16,5±0,45	7,1±0,28	12,5±0,18	56,1±6,7	1,1±0,3
NG, n=15	17,1±0,35	6,8±0,37	11,5±0,25	54,7±8,0	1,1±0,4
R	>0,05	>0,05	>0,05	>0,05	>0,05

As seen in Table 1, the initial level of physical preparedness in the pre-experiment groups leaves no doubt, as there are no significant differences according to the following quantitative indicators.

2nd Table

Program for Developing Motor Skills in Children Aged 3–7 Years

Nº	Tools
1	Development of joint mobility
2	Basic acrobatic exercises
3	Support exercises
4	Swinging exercises
5	Jumps on the trampoline

Thus, in the process of adapting the training of 4–7-year-old boys to the designed content of the sports-health stage in sport gymnastics, it was demonstrated that taking into full account the participants' psychophysiological characteristics ensures the effectiveness and potential of their targeted development.

3rd Table

Distribution of Sports-Health Stage Activities for 5–6-Year-Old Children in Their First Year of Training (45 minutes, 3 times per week)

Tools	soat	VIII	IX	X	XI	XII	I	II	III	IV	V	VI
Flexibility exercises	22	90	90	90	90	90	90	90	90	90	90	90
Swinging exercises	11	45	45	45	45	45	45	45	45	45	45	45
Support exercises	22	90	90	90	90	90	90	90	90	90	90	90
Acrobatic exercises	22	90	90	90	90	90	90	90	90	90	90	90
Active (movement) games	22	90	90	90	90	90	90	90	90	90	90	90
Development of physical abilities	22	90	90	90	90	90	90	90	90	90	90	90
Trampoline jumps	11	45	45	45	45	45	45	45	45	45	45	45
Total	132	540	540	540	540	540	540	540	540	540	540	540

Table 4.

Distribution of Sports-Health Stage Activities for 6–7-Year-Old Children in Their First Year of Training (60 minutes, 3 times per week)

Tools	soat	VIII	IX	X	XI	XII	I	II	III	IV	V	VI
Flexibility exercises	30	135	135	135	135	90	90	90	135	135	135	135
Swinging exercises	13	45	45	45	45	45	90	90	45	45	45	45
Support exercises	30	135	135	135	135	90	90	90	135	135	135	135

Acrobatic exercises	30	135	135	135	135	90	90	90	135	135	135	135
Active (movement) games	30	135	135	135	135	90	90	90	135	135	135	135
Development of physical abilities	30	135	135	135	135	90	90	90	135	135	135	135
Trampoline jumps	13	45	45	45	45	90	45	90	45	45	45	45
Total	176	765	765	765	765	585	585	630	765	765	765	765

Table 5.

Normative Indicators of Physical Preparedness of Groups After the Experiment

Tests	Lying prone on the floor with elbows bent (number of repetitions)	Hanging on the gymnastics wall, raising straight legs to a right angle (number of repetitions))	Shuttle run over 3×10 m (seconds)	Standing long jump (cm)	Flexibility: splits, bridge (scored out of 3 points)
Groups					
3-4-years old					
TG, n=15	10,5±2	8,3±3	11,3±0,48	43,1±1,5	0,3±0,1
NG, n=15	8,5±5	7,3±2	14,0±0,66	40,7±6,0	0,5±0,3
R	<0,05	<0,05	<0,05	<0,05	<0,05
5-6-years old					
TG, n=15	13,3±1	10,3±2	10,3±0,22	56,6±4,4	0,3±0,3
NG, n=15	12,3±2	9,3±1	13,1±0,71	55,7±3,1	0,8±0,1
R	<0,05	<0,05	<0,05	<0,05	<0,05
6-7-years old					
TG, n=15	24,5±4	15,3±2	10,1±0,8	66,7±5,1	0,1±0,3
NG, n=15	21,3±0,35	12,3±3	10,7±0,45	64,4±4,0	0,5±0,4
R	<0,05	<0,05	<0,05	<0,05	<0,05

Thus, in the process of adapting the training of 3–7-year-old boys to the designed content of the sports-health stage in sport gymnastics, it was demonstrated that comprehensive consideration of the participants' psychophysiological characteristics ensures the effectiveness and potential of their targeted development.

Objective data on significant differences in the pace and quality of mastering educational material during the sports-health stage with 3–6-year-old boys provide evidence of the priority and prospects of this approach. The proposed content is aimed at the comprehensive development of physical and motor abilities.

The diversity of gymnastics tools, the use of game-based training methods, and the application of loads adapted to children's age and individual characteristics contributed to the successful achievement of health improvement and comprehensive physical development objectives.

To optimize the training of 3–7-year-old boys in the sports-health stage, it is necessary to strictly regulate the content of the lessons, taking into account the age-specific and psychophysiological characteristics of the children.

In this scientific study, the scientifically grounded and experimentally tested content of the sports-health stage for 3–7-year-old boys may serve as a primary reference for defining lesson tools, methods, organizational forms, volume of training loads, and criteria for evaluating participant performance.

Conclusion. Research indicates that if preschool education is properly organized, it forms an integrated system that promotes physical and cognitive development, as well as health strengthening. Rational planning of physical exercises accelerates children's physical development, enhances speech, expands the functional capacities of physiological systems, and increases both work efficiency and resistance to illness.

Studying children's individuality requires a differentiated approach, meaning that scientifically grounded programs must be tailored to the developmental level of each child. Proper organization of lessons in the sports-health stage facilitates the formation of fundamental skills in sport gymnastics and ensures active engagement, thereby contributing to the upbringing of a healthy and comprehensively developed generation.

Lessons conducted in sport gymnastics with 3–7-year-old boys are aimed at the comprehensive development of their physical abilities. Key methods include attention-enhancing games, active movement games, swinging, support, and acrobatic exercises. The effectiveness of the training process is ensured through structured lesson organization and regulated training loads.

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