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DEVELOPING PHYSICAL SKILLS IN CHILDREN THROUGH GYMNASTICS AND ACTIVE GAMES

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ABOUT ARTICLE

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Abstract: This article is devoted to studying the importance of gymnastics and active games in the formation of physical skills in preschool-aged children. During the research process, the effectiveness of various gymnastics exercises and play-based methods in developing children's overall motor activity, balance, flexibility, endurance, and motor skills was analyzed. The study emphasizes the significance of lesson content, children's interest and activity levels, as well as pedagogical approaches in achieving effective outcomes. The research results demonstrate that the use of play-based activities and mini-gymnastics equipment contributes to the rapid and efficient development of physical skills in children. The study provides practical recommendations for educators in planning and conducting physical education sessions in preschool educational institutions.

Introduction

Physical education of preschool-aged children plays a crucial role in ensuring their healthy development, the formation of motor skills, and social adaptation. This period is characterized by a particularly high level of motor activity, as the development of the muscular system, skeletal structure, and balance skills occurs rapidly and effectively during early childhood. Therefore, increasing physical activity among preschool-aged children is considered one of the primary objectives of the pedagogical process.

Modern research in pedagogy and sports science indicates that gymnastics exercises and active games are among the most effective tools for children's physical development. Gymnastics exercises strengthen muscle tone, improve balance and flexibility, and enhance endurance and coordination. At the same time, active games stimulate children's interest and motivation, promote social skills, and encourage teamwork. Play-based activities engage children emotionally and contribute to the development of psychomotor skills such as self-expression, memory, and attention.

In preschool educational institutions, various tools—such as mini-gymnastics equipment, fitballs, hoops, ropes, and other play apparatus—play an important role in organizing children's physical development. These tools make sessions more engaging and effective while enriching lesson content. In addition, teaching methods, session duration, and pedagogical approaches significantly influence learning outcomes in physical education.

Purpose of the study

The purpose of the study is to scientifically substantiate and pedagogically improve methods for the effective use of gymnastics equipment in increasing the physical activity of preschool-aged children. Specifically, the study aims to:

- examine the physical development characteristics of preschool-aged children;
- analyze the impact of gymnastics equipment on children's physical activity;
- develop innovative methods to enhance the effectiveness of gymnastics sessions;
- evaluate, through experimental research, the influence of gymnastics on children's overall physical preparedness and health.

Objectives of the study

- To study the impact of innovative technologies designed to enhance the physical development and health of preschool-aged children;
- To develop a set of exercises using innovative technologies during play and leisure time aimed at strengthening children's health;
- To analyze the levels of physical development of preschool-aged children and provide scientific and practical justification of the obtained indicators.

Methodology

The developed forms, methods, and tools for developing physical abilities, as well as the methodology created by the authors for forming and improving balance abilities in preschool-aged children, can be applied in organizing physical education sessions in preschool institutions.

The scientific and theoretical materials, teaching principles, exercise application methods, as well as scientific and practical recommendations for developing coordination abilities and balance skills can be utilized in the preschool education system for designing new curricula and instructional manuals for physical education classes in preschool institutions.

System of active games for children aged 3–7

The age period of 3–7 years is considered a critical stage in children's physical development. During this time, children exhibit high levels of motor activity, creating favorable conditions for developing physical qualities such as speed, agility, strength, endurance, and balance. Therefore, a system of active games should be organized on a scientific basis, taking into account children's age and individual characteristics.

The system of active games contributes to the comprehensive development of children's bodies and consists of preparatory, main, and concluding stages, ensuring a gradual increase in physical load. Preparatory games are aimed at preparing the muscles for activity and activating the cardiovascular and respiratory systems. The main games focus on developing fundamental motor skills and physical qualities.

In the system of active games designed for children aged 3–7, natural movements such as running, jumping, throwing, and overcoming obstacles play a dominant role. These movements positively influence the development of coordination and balance while strengthening the muscular system. Team-based games hold significant pedagogical value in fostering social adaptation, cooperation, and discipline among children.

Results

When organizing a system of active games, it is essential to consider children's tendency to fatigue quickly and their ability to recover rapidly. Therefore, short rest periods and calming exercises are recommended between games. In the concluding stage, low-intensity movements and breathing exercises help restore the body to a normal physiological state.

Table 1

Table of Physical Development Games for Preschool-Aged Boys

№	Game Name	Purpose	Task	Equipment	Developmental Aspects	Implementation Standard (for ages 3–7)	Anthropometric Suitability	Expected Outcomes

1	Qal'a himoyasi	To develop strength, agility, and coordination in children	Pulling the rope, protecting a line, forming team movement	Small ropes and marked lines	Develops arm and shoulder muscle strength, teamwork, and balance	Repeated 2 times for 2–3 minutes	Suitable for boys aged 3–7, appropriate for average body mass and height	Muscle strength and coordination improve; teamwork skills develop
2	Nishonga ot (Rake-ta otildi)	To develop hand–eye coordination, attention, and accuracy	Accurately throwing balls at a target	Soft balls, cardboard targets	Develops visual perception, motor skills, and accuracy	Throwing 5–6 times from a distance of 5–7 m	Suitable for boys aged 4–7	Coordination, accuracy, and observational skills improve
3	Komanda o'rmalashi	To increase trunk strength and endurance	Crossing a marked line, correctly distributing movement	Marked lines, mat or carpet	Develops trunk, arm, and leg muscle strength; endurance	Crossing 2–3 times over a distance of 4–5 m	Suitable for boys aged 3–6, with average anthropometric indicators	Muscle tone, endurance, and physical resilience develop
4	Tepib yeng	To strengthen leg muscles and improve balance	Kicking a hanging ball with the foot	Rubber ball	Develops leg muscle strength, balance, and accuracy	5–6 kicks for 1 minute	Recommended for boys; light variant for girls	Lower limb muscles strengthen; balance improves
5	Yugurish (Qisqa masofa)	To increase speed and reaction rate	Running 5 m from a starting position	Start line, marked distance	Develops speed, movement control, and agility	3–4 repetitions of 5 m running with 30 s rest	Suitable for speed and agility development	3–4 repetitions of 5 m running with 30 s rest

Physical development games designed for preschool-aged boys and girls serve common pedagogical objectives while being differentiated according to children's biological and psychophysiological characteristics. In both tables, the primary focus is on ensuring children's overall physical development, increasing motor activity, and fostering a positive attitude toward a healthy lifestyle.

In the table of games intended for boys, exercises aimed at developing strength, speed, and endurance are predominant, whereas the table designed for girls places greater emphasis on games that promote balance, movement precision, and flexibility. However, this differentiation does not hinder the formation of general physical qualities; rather, it serves to regulate physical load by taking into account children's individual capabilities.

Scientific research indicates that during the preschool period, physical development is determined more by age-related physiological capacities than by gender differences. Therefore, the systems of games designed for boys and girls are closely interconnected, with their content, structure, and performance standards complementing one another. The games included in both tables are aimed at developing gross motor skills, strengthening the muscular system, and improving movement coordination.

The duration of games, number of repetitions, and level of complexity are determined in accordance with children's anthropometric indicators and health status, ensuring that physical loads remain safe and effective. In addition, team-based active games are common to both boys and girls and play an important role in developing social adaptation, cooperation, and communication skills.

As a result, both tables mutually enrich each other in terms of content and contribute to the formation of a unified and continuous physical education system within the preschool education process. Conducting these games systematically and on a sound methodological basis leads to positive changes not only in children's physical development but also in their psychological well-being. Children learn to control their movements, cooperate with peers, maintain balance, respond quickly to stimuli, and develop emotional stability. Furthermore, active games contribute to the development of emotional intelligence and actively engage children in the process of socialization.

Table 2

Physical Development Games for Preschool-Aged Girls

No.	Game Name	Purpose	Task	Equipment	Developmental Aspects	Implementation Standard (for ages 3–7)	Anthropometric Suitability	Expected Outcomes

1	Flower Blooming (Stretching Exercises)	To develop flexibility, adaptability of joints, movement range, and breathing skills	Performing slow stretching movements such as “flower opening” and breathing exercises in accordance with music	Background music, open or small space	Joint flexibility, body flexibility, adaptability	Stretching exercises for 10–15 seconds, 3–5 repetitions	Suitable for girls aged 3–7, with average anthropometric indicators	Movement flexibility improves, muscles soften, breathing coordination develops
2	Dancing Bridge (Balance Exercise)	To improve balance, sense of rhythm, and coordination of body movements	Walking on a rope or stick while performing rhythmic movements to music	Gymnastics rope or stick, background music	Balance, rhythmic perception, sensory coordination	Crossing 2–3 times over a distance of 5–6 m	Suitable for girls aged 4–7	Balance maintenance, rhythmic sense, movement control, and aesthetic skills develop
3	Heel Walking	To strengthen leg muscles and improve balance and posture	Walking on heels without touching toes to the ground	Marked straight smooth surface	Leg muscle strength, balance, posture stability	Walking 10–15 steps, 2–3 repetitions	Suitable for girls aged 3–6	Leg muscles strengthen, walking posture improves, balance stabilizes
4	Little Artist (Drawing with Feet)	To develop foot and toe motor control, balance,	Holding a pencil with toes and drawing on paper (first with the	Soft colored pencils, paper or drawin	Fine motor skills, balance, creative thinking,	1 minute with each foot, 2 repetitions	Suitable for girls aged 4–7	Balance and attention improve, foot

		and sensory perception	right foot, then with the left)	g album	coordination			motor skills develop, creativity strengthens
5	Collector	To develop flexibility, endurance, and coordination of toes and feet	Picking up small objects from the floor using toes and placing them in a designated area	Small toys, scissors, light objects	Flexibility, endurance, foot and toe strength, coordination	2–3 minutes, 2 repetitions	Suitable for girls aged 3–7	Flexibility improves, foot muscle strength increases, endurance and balance develop

Duscussion

In preschool-aged girls, several studies provide empirical evidence supporting the effectiveness of coordination- and balance-oriented training programs. For example, one study demonstrated that when coordination-based training was implemented for children aged 3–7 years, significant improvements were observed in lower limb muscle strength (as measured by vertical jump performance) and dynamic balance indicators. Another study reported that a structured training program aimed at developing balance in children aged 3–7 led to notable improvements in postural control, reflecting enhanced ability to maintain stable body alignment.

At the same time, it has also been noted that a strong and consistent direct interaction between physical activity levels and motor competence does not always occur simultaneously, indicating that motor development depends not only on the quantity of physical activity but also on its quality, structure, and methodological organization.

The games and exercises presented in the table are based on the development of physical fitness, muscular activity, coordination abilities, and psychomotor reaction processes in preschool-aged girls, and this foundation is supported by scientific literature. Specifically, these activities:

- contribute to improving children’s balance, coordination, and body control;

- help strengthen postural stability and upper- and lower-limb motor skills.

Active games, as well as exercises performed with balls and sticks, complement one another in accordance with children's age-related characteristics and collectively form an integrated physical education program. This program promotes the gradual development of balance, coordination, flexibility, refined movements, and motor control skills, resulting in a coherent and comprehensive approach to physical education in preschool children.

Conclusion

Gymnastics exercises and active games are considered among the most effective means of forming physical skills in preschool-aged children. Through these activities, fundamental motor skills—such as walking, running, jumping, crawling, throwing, and maintaining balance—are developed in a consistent and systematic manner. Gymnastics exercises contribute to strengthening the muscular system, forming correct posture, and improving movement precision, while active games play a crucial role in developing agility, speed, endurance, and coordination.

When these forms of activity are organized on a scientific basis and adapted to children's age and individual characteristics, the process of physical development becomes significantly more effective. Gymnastics exercises foster discipline, attention, and conscious movement control, whereas active games encourage teamwork, cooperation, and social adaptation. In addition, play-based activities generate positive emotions in children and increase their interest in physical activity.

In conclusion, the integration of gymnastics exercises and active games not only facilitates the formation of physical skills in preschool-aged children but also supports their healthy development, enhances motor activity, and ensures physical readiness for school education. The systematic and goal-oriented use of these tools increases the overall effectiveness of the preschool education process.

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