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### METHODOLOGY FOR DEVELOPING PHYSICAL ACTIVITY IN PRESCHOOL CHILDREN

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#### ABOUT ARTICLE

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**Kalit so'zlar:** maktabgacha yoshdagi bolalar, jismoniy faollik, gimnastika jihozlari, harakat rivojlanishi, muvozanat, mushak tonusi.

**Ключевые слова:** дети дошкольного возраста, физическая активность, гимнастическое оборудование, двигательное развитие, равновесие, мышечный тонус.

**Abstract.** This study examines the role of gymnastics equipment in enhancing the physical activity of preschool children. During the research, methods for developing children's motor skills, muscle tone, balance, and coordination were analyzed through various gymnastics tools and play exercises. The results indicate that regular gymnastics exercises and the use of appropriate

equipment significantly increase children's physical activity and have a positive impact on their overall development. This research provides methodological recommendations for improving the effectiveness of physical education in preschool institutions.

**Annotatsiya:** Ushbu tadqiqot maktabgacha yoshdagi bolalarning jismoniy faolligini oshirishda gimnastika jihozlarining rolini o'rganadi. Tadqiqot jarayonida turli gimnastika vositalari va o'yin mashqlari orqali bolalarning harakat ko'nikmalari, mushak tonusi, muvozanati va muvofiqlashtirish qobiliyatini rivojlantirish usullari tahlil qilindi. Natijalar shuni ko'rsatadiki, muntazam gimnastika mashqlari va mos jihozlardan foydalanish bolalarning jismoniy faolligini sezilarli darajada oshiradi hamda ularning umumiy rivojlanishiga ijobiy ta'sir ko'rsatadi. Ushbu tadqiqot maktabgacha ta'lim muassasalarida jismoniy tarbiya samaradorligini oshirish bo'yicha metodik tavsiyalar beradi.

**Аннотация:** Настоящее исследование рассматривает роль гимнастического оборудования в повышении физической активности детей дошкольного возраста. В ходе исследования анализировались методы развития двигательных навыков, мышечного тонуса, равновесия и координации у детей с использованием различных гимнастических снарядов и игровых упражнений. Результаты показывают, что регулярные гимнастические занятия и применение соответствующего оборудования значительно увеличивают физическую активность детей и оказывают положительное влияние на их общее развитие. Исследование предоставляет методические рекомендации по повышению эффективности физического воспитания в дошкольных учреждениях.

## INTRODUCTION

In the field of preschool education, based on the *State Requirements for the Development of Children of Early and Preschool Age* and the “*Ilk Qadam*” State Curriculum, as well as the new Law on Preschool Education, opportunities have been created to organize educational activities for children with special needs, strengthen cooperation with parents, and implement educational and upbringing processes based on a competency-based approach in teaching preschool children.

In order to address such pressing tasks, including improving the professional competencies of physical education instructors working within the preschool education system, it became necessary to develop educational manuals and programs, which determined the objectives of the present study.

Physical education also contributes to the development of social skills among children. Similar approaches are increasingly being implemented in other countries as well. For example, the impact of physical activity on children’s health has become one of the key topics attracting the attention of scientific research and medical professionals worldwide. According to studies conducted by the World Health Organization, children’s physical activity plays an important role in ensuring long-term health and in preventing obesity, cardiovascular diseases, and other health disorders. In particular, increasing physical activity in preschool-aged children contributes significantly to strengthening their physical and mental health.

## METHODOLOGY.

Modern pedagogy and educational methodologies offer various innovative approaches and methods to enhance the impact of physical activity on children’s development. Exercise sessions conducted using gymnastics tools promote the development of children’s motor skills, strengthen their social competencies, and facilitate the integration of physical activity into daily life. Physical activity in preschool-aged children plays a crucial role in their overall development, healthy growth, and the formation of movement coordination. During this age period, children grow rapidly, muscle tone and motor abilities develop, and habits of psychological and social activity are formed. Physical activity is a key factor in developing children’s motor abilities, balance, and coordination, as well as in fostering independent thinking, concentration, and social skills.

### **Scientific novelty of the study**

The scientific novelty of the study is as follows:

Levels of lag in the development of physical growth, physical preparedness, and balance maintenance abilities (low, medium, and high) in preschool-aged children were identified;

A set of special exercises aimed at improving children's static and dynamic balance was developed, and age-appropriate normative indicators were established;

For the first time, it was determined using a simple method that low physical activity in preschool-aged children leads to insufficient development of balance and coordination abilities;

New, simple, and practical control exercises were developed to assess physical preparedness in children with poorly developed balance abilities;

A simple methodological approach combining frontal, group-based, and individual training sessions was developed for working with children who have weak balance and coordination abilities.

### **Development of physical activity in children based on play activities**

In the process of developing physical activity in preschool-aged children, play activity emerges as a leading pedagogical tool, as it meets children's natural need for movement in accordance with their psychophysiological characteristics. Through play activities, the development of both gross and fine motor skills is activated, and motor experience is formed in a consistent and systematic manner. Each stage of motor development is directly related to age-specific anatomical and functional changes, and therefore the content and complexity of gymnastics exercises applied in this process should be selected on a scientifically grounded basis.

## **RESULTS.**

Gymnastics exercises organized on the basis of play not only activate children's motor activity but also contribute to the development of physical qualities such as coordination, balance maintenance, agility, and dexterity. Moreover, when gymnastics exercises are provided sequentially in accordance with the stages of motor development, children's movement skills are formed in a stable and conscious manner. As a result, the close pedagogical interconnection between play activity, stages of motor development, and gymnastics exercises ensures the comprehensive and effective development of physical activity in preschool-aged children.

In addition, gymnastics exercises applied during play activities enhance children's abilities to perceive, perform, and control movements, thereby ensuring conscious regulation of motor activity. This, in turn, increases the effectiveness of motor development in harmony with the maturation processes of the central nervous system during the preschool period. The integrated organization of play and gymnastics exercises fosters stable motivation for physical activity in children and contributes to the development of a positive

attitude toward a healthy lifestyle. Consequently, gymnastics exercises based on play activities serve as an important pedagogical mechanism for ensuring the comprehensive physical development of preschool-aged children within the preschool education process.

**Table 1**

**STAGES OF MOTOR DEVELOPMENT IN PRESCHOOL-AGED CHILDREN AND CHARACTERISTICS OF GYMNASTICS EXERCISES**

AGE	KEY DIRECTION OF MOTOR DEVELOPMENT	CHARACTERISTICS OF EXERCISES
3-4	Gross motor skills, balance	Simplified rhythmic games
5-6	Coordination, strength, control	More active movements, precision
6-7	Complex movements, speed	Complex role-based and synchronized exercises

At each age stage, a child's neuromuscular system, vestibular apparatus, and psychomotor activity develop at different rates. Therefore, gymnastics exercises should be provided with age-appropriate levels of complexity:

- **3-4 years** — the period of mastering basic movements;
- **5-6 years** — the period of movement control and precision;
- **6-7 years** — the period of integrating complex movements and developing speed.

In the theory of physical education, this principle is referred to as the “**principle of staged development.**”

The age of **3-4 years** represents one of the most fundamental stages of motor development. During this period, children actively acquire movements performed with large muscle groups, such as walking, the initial forms of running, simple jumping, arm rotations, and trunk bending—typical gross motor actions. Since the nervous system is not yet fully mature, movements are generally slow, imprecise, and formed primarily through repeated practice. For this reason, simplified rhythmic games, light movements performed to music, and balance-oriented exercises (such as standing on one foot and walking along a straight line) are particularly appropriate for this age group. These exercises help develop balance abilities, body awareness, and the initial skills of movement control. The play-based format stimulates children's interest and naturally accelerates motor development.

At the age of **5-6 years**, children demonstrate rapid development of muscular strength, postural stability, and the ability to control movements. They

are better able to remember movement sequences and are ready to perform more complex tasks. At this stage, coordination-enhancing exercises—such as tasks involving a ball, run–stop–turn elements, short relay activities, and numbered movement sequences (e.g., jumping on “one,” bending on “two”)—are particularly effective. Movement precision and rapid control also develop during this period. Therefore, exercises increasingly involve active movements, including jumping through hoops, running along marked lines, and accurately placing or throwing objects. Such activities strengthen spatial perception, muscular strength, and coordination. This stage also promotes the development of thinking speed, reaction time, and sensorimotor adaptation.

By the age of **6–7 years**, children enter a phase of highly active maturation of the motor system. They are capable of performing multiple movements simultaneously, planning movement sequences, and completing physical tasks more rapidly. Consequently, complex role-based and synchronized exercises are especially appropriate for this age group.

Complex role-based exercises (movement activities based on a storyline, such as imitating birds, forest games, or role-playing characters) enhance creative thinking, sequencing of movements, memory, attention, and executive functions. Performing movements within a role also supports children’s social and emotional development. Synchronized exercises (moving in rhythm as a group, marching, or synchronized movements to music) contribute to a high level of coordination, rhythm perception, rapid reaction, and precise muscular control. Such exercises accelerate the process of movement automation and physically prepare children for school readiness.

*Table* 2

**PHYSICAL EXERCISES AND COORDINATION DEVELOPMENT FOR CHILDREN**

<b>№</b>	<b>Exercise Name</b>	<b>Equipment</b>	<b>Description</b>	<b>Exercise Duration</b>
1	Rolling the ball forward	Soft ball	The child rolls the ball forward and backward while sitting. Arm and chest muscles are engaged.	Rolling for <b>30 seconds</b>
2	Circling with a stick	Light gymnastics stick	The child holds the stick and slowly rotates it. Arm and shoulder muscles are activated.	<b>5 rotations</b>

3	Twisting and holding the ball	Soft ball	The child twists the ball with both hands and holds it. Coordination is developed.	<b>5 twists</b>
4	Bending with a stick	Stick	The child holds the stick overhead and bends to the sides and forward. Back and abdominal muscles are engaged.	<b>6 side and forward bends</b>
5	Rotating the ball between the legs	Soft ball	The ball is rotated between the legs and held in one position. Motor skills are developed.	Rotation for <b>1 minute</b>
6	Side walking with a stick	Stick	The child holds the stick and walks sideways along a line. Balance and coordination are developed.	Walking for <b>2 minutes</b>

### DISCUSSION.

This set of exercises is aimed at the step-by-step development of both gross and fine motor skills in preschool-aged children and is designed with consideration of age-specific anatomical and physiological characteristics of the child's body. In particular, exercises such as rolling a ball forward and backward while sitting and rotating a stick actively engage the muscles of the arms, shoulders, and chest, increase the range of motion, and enhance freedom and coordination of upper-limb movements.

Exercises involving twisting and holding the ball as well as rotating the ball between the legs contribute significantly to the development of coordination, movement control, bilateral motor interaction, and sustained attention. During the performance of these exercises, children learn to execute movements consciously, perceive movement trajectories, and regulate their actions, which strengthens sensorimotor connections and improves neuromuscular coordination.

At the same time, exercises such as bending with a stick and side-by-side walking play an important role in developing balance abilities, maintaining body stability, strengthening the muscles of the back and abdomen, and improving overall motor development. These exercises stimulate the vestibular system and contribute positively to posture formation and body alignment in children.

Overall, the use of simple equipment such as balls and gymnastics sticks in this exercise program promotes the development of coordinated arm and leg movements, balance, general and fine motor skills, strengthens the musculoskeletal system, and helps children acquire the ability to perform movements in a controlled, conscious, and safe manner.

### **CONCLUSION.**

The methodology for developing physical activity in preschool-aged children plays a fundamental role in ensuring their healthy physical growth, functional development, and the formation of stable motor skills. At this stage of ontogenesis, physical activity serves not only as a means of strengthening health but also as an important factor influencing psychomotor development, emotional well-being, and social adaptation. The findings of the present study confirm that a scientifically grounded and systematically organized approach to physical education significantly enhances the overall development of preschool children.

Organizing physical activity sessions in a play-based and age-appropriate format increases children's motivation to participate in movement activities and creates a positive emotional background during exercises. Such an approach allows children to engage in physical activity naturally and willingly, without experiencing excessive physical or psychological strain. The harmonious integration of play and gymnastics exercises ensures the balanced development of both gross and fine motor skills, which is essential for mastering complex movements in later stages of development.

The use of simple, accessible, and safe equipment, such as balls and gymnastics sticks, has proven to be highly effective in developing key physical qualities, including coordination, balance, strength, agility, and movement precision. These tools facilitate the activation of various muscle groups, stimulate the vestibular apparatus, and promote the development of sensorimotor coordination. As a result, children acquire the ability to consciously control their movements, maintain balance, and perform coordinated actions with greater accuracy. Regular and systematic implementation of physical exercises contributes to the strengthening of the musculoskeletal system, the formation of correct posture, and the development of stable movement habits. Moreover, consistent physical activity positively affects children's cardiovascular and respiratory systems, enhances overall endurance, and supports long-term health outcomes. From a pedagogical perspective, such activities foster discipline, attention, perseverance, and the ability to follow instructions, which are essential skills for school readiness.

In summary, the development of physical activity in preschool-aged children requires a comprehensive, systematic, and developmentally appropriate approach that combines play-based methods, gymnastics exercises, and simple equipment. The methodology presented in this study provides a solid foundation for enhancing physical preparedness, motor competence, and overall well-being in children. Its implementation in preschool education settings can significantly improve the quality of physical education programs and ensure effective preparation of children for subsequent stages of education, particularly formal schooling.

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