



SPECIFIC CHARACTERISTICS OF CHILDREN'S DEVELOPMENT DURING THE SCHOOL PERIOD

L.Romanova

Director of preschool educational organizations and retraining of
specialists and their training institute independent researcher
<https://doi.org/10.5281/zenodo.8116586>

ANNOTATION

When studying the age characteristics of children's development, special attention should be paid to age periods. A number of scientists have conducted research on dividing children into age groups. Among them, foreign scientists such as J. Plake (1896-1970), L. Kolberg, A. Vallon, R. Zazzo, G. Grimm, L. S. Vygotsky, L. I. Bojovich, D. B. Elkonin, A. Russian scientists such as A. Lyublinskaya, A. V. Petrovsky, Uzbek psychologists such as M. Vohidov, E. Goziev, S. A. Akhundzhanova, M. Sh. Rasulova, R. I. Sunnatova on the division of children's age into different age stages those who conducted scientific research. Based on these, children's age can be divided into the following stages.

Key words: *period of infancy, early childhood, preschool period, child's life, intensive development;*

- 1) period of infancy - from birth to 1 year;
- 2) early childhood period - from 1 to 3 years;
- 3) preschool period - from 3 to 7 years old;
- 4) junior school age period - from 7 to 11 years old;
- 5) children of high school age from 11 to 14 years;
- 6) children of primary school age - from 15 to 18 years old.

of a child, the period from infancy to school is considered the most important period.

The first 7 years of a child's life are characterized by intensive development of all organs and systems. A child is born with genetic biological characteristics, including typological characteristics of basic neural processes (strength, balance, and mobility). However, characteristics are only the basis of physical and mental development, and the determining factor in the first months of a child's life is the external environment and child upbringing.

Therefore, from the first days of a child's life, it is necessary to create conditions to ensure a healthy, positive emotional state of the child, as well as full physical and mental development.

In the first year of a child's life, the characteristics of his central nervous system consist of incomplete morphological structure and functional development of the cerebral cortex. The completion of these processes will take place in the following years under the influence of external and internal stimuli.

The development of higher nervous system activity is achieved on the basis of innate unconditioned reflexes (defense, protection, eating, feeding). In the first weeks of a child's life, conditioned reflex stimuli such as sight and hearing, as well as a wide variety of external stimuli, can be formed.

As the child grows, the formation of conditioned reflexes accelerates. If any external stimuli are used for a long time, in a certain consistency, as a result, a dynamic stereotyped response system is formed. When a child is raised correctly, many different stereotypes can be formed, which facilitates the perception of the external environment and increases the working capacity of nerve cells. For example, it is possible to form a stereotype for the daily routine, going to bed on time, and compulsively performing morning hygienic gymnastics after sleep. However, in order to change certain stereotypes (habits) of the child's nervous system, it is necessary to exercise carefully, depending on the change of conditions and age, while developing the ability to consciously perceive the environment in children. For example, taking into account the characteristics of movement development in the second year of a child's life, after children have mastered normal walking, it is necessary to include complicated walking (on a sidewalk, on a pole) in physical education activities. The child performs the given task easily, looks at the new movement with interest, as a result, movement skills improve not only during exercises, but also in everyday life.

Movement skills appear depending on the level of development and differentiation (growth) of the central nervous system. The emergence and strengthening of these functions are determined by both external and internal factors. I.M. Sechenov emphasizes that a newborn child should acquire a small amount of intensive movements in the field of skeletal muscles. All the so-called voluntary actions are formed during the child's life under external influences.

M.Yu. Kistyakovskaya found a certain consistency of communication between the analyzer of movement in children and another analyzer. In the second month of the child's life, a connection is established between the kinesthetic and vestibular analyzers, which is manifested in the movements of the child to raise and hold the head in different situations, such as when lying on his stomach with his back, when he is standing.

At this age, contact with the kinesthetic analyzer, which has receptors on the lips, oral mucosa, and hand skin, can also occur.

Children suck their fingers, raise their hands over their faces. From the end of 4 months to 5 months, they extend their hands to visible objects.

Movement analyzers develop rapidly in children of preschool age. Conditioned reflexes are formed quickly at this age, but are not immediately strengthened, and therefore the child's skills are initially unstable. The process of excitation in the cerebral cortex takes precedence over the process of inhibition. Formation of certain movement skills is carried out on the basis of exercises to strengthen conditioned reflexes.

In the second year of his life, the child acquires a complex form, begins to walk, and at the end of this age, he starts to run. From the age of 2-3, he begins to perform actions such as crawling and throwing. At this age, he tries to jump, and at the end of this age he will jump.

When the child reaches 3 years old, he acquires all the basic movements, he begins to use these movements in his free activities. During the age of 4-7 conditional connections are strengthened and improved during the educational process.

With an increase in the load on the muscles, the development of movement qualities and an increase in the level of physical fitness take place very intensively. This can be seen in the table in house q.

Age	Running speed		Standing long jump cm		Endurance (distance covered, m)	
	These are the additional ones	This flower- _ m aydyan - s	These are the additional ones	This flower- _ m aydyan - s	These are the additional ones	This flower- _ m aydyan - s
4th year A boy is a boy	2.6	2.9	79.3	62.5	740.6	463.1
She's a girl	2.9	3.0	72.3	60.3	620.2	377.7
5th year A boy is a boy	2.3	2.5	95.9	83.0	1502.0	601.3
She's a girl	2.3	2.5	93.3	73.9	1146.0	454.0
6th year A boy is a boy	2.2	2.3	104.0	88.8	1765.7	680.7
She's a girl	2.3	2.5	96.6	79.7	1249.3	659.1
7th year A boy is a boy	1.9	2.1	122.5	105.6	2387.2	937.4
Q trail child	1.9	2.2	120.9	103.7	1836.0	715.0

Age dynamics of physical fitness of children with different levels of physical activity

Physical development in primary and pre-school age is characterized by constant changes in key indicators such as height, body mass, head circumference, chest.

In the first year of a child's life, his height grows by about 25 cm. By the time a child reaches 5 years old, his height will double. In the first year of a child's life, the weight of a child's body increases three times, and after a year, its weight is almost the same, it increases by 2-2.5 kg per year, and at the age of 6-7, its weight doubles from the one-year-old.

The circumference of the chest also develops unevenly, especially in the first year of the child's life, it expands by 12-15 cm. During the entire pre-school period, the chest circumference expands approximately again.

The size of the chest circumference depends on the child's fitness, physical development and preparation (muscles, respiratory function, development of the cardiovascular system).

Changes in head circumference at early age are mainly determined by changes in brain mass. However, it should not be forgotten that there may be changes related to rickets in the skull.

The skeletal system in children is richer in connective tissue than in adults. That is why the child's bone is soft, flexible, not very strong, it quickly bends under the influence of external adverse factors and gets into the wrong shape.

From the age of 2-3, the bone tissue begins to have a plate structure. The transformation of the skeleton into bone takes place throughout childhood. The formation of physiological



curves of the spine in the neck, chest and back continues during the preschool period (when the child starts holding his head, lying on his back, sitting, walking).

The soft mass of the child's body skeleton is affected by the following influences that change its shape: incorrect position of the body when sitting, standing, lying down, a soft bed, furniture inconsistent with the proportions of the child's height and body.

Incorrect posture quickly becomes a habit in the child, the height is disturbed, it affects the blood circulation, breathing function negatively, the bones begin to grow incorrectly.

heel spurs begins in the first year of a child's life, and this process accelerates as soon as he starts walking. Therefore, parents should pay attention to choosing shoes (heels) suitable for children's feet .

In preschool children, the flexor muscles are not sufficiently developed and are very weak, so children often sit with their heads bent, their shoulders hunched , hunched, and their chests are sunken in. When a child reaches the age of five, the mass of muscles and leg muscles increases, and the working capacity of muscles also increases.

Static condition of muscles muscle tone is called Muscle tone is provided by impulses from the central nervous system .

In the first month of a child's life , the tone of the flexor muscles of the legs is superior to that of the writing muscles . Arm muscle tone usually doubles by 2.5-3 months, and leg muscle tone by 3-4 months.

In children of the first age, muscle tone at rest decreases under the influence of massage and gymnastics . As the age of the child increases, there is an increase in the tone of the back and abdominal muscles. This situation is related to the term acceleration.

The term acceleration was first proposed in 1935 by the German physician R. Koch, which means acceleration in Latin.

The concept of acceleration includes acceleration of growth and development in children and adolescents, somewhat early onset of puberty, faster development of sensory mechanisms: vision, hearing, smell, taste, somatic (muscle) systems compared to previous generations.

The acceleration of growth and development that occurred in the last century was also seen in children of preschool age. Children of this age are anatomically and functionally larger than their previous peers. If 50 years ago children aged 3 to 7 years grew by 22.7 cm, 10 years ago children of the same age grew by 27.1 cm.

The turning of baby teeth into permanent teeth is also happening earlier, for example, a few decades ago, the eruption of permanent teeth corresponded to 6 years and 2 months - 6 years and 4 months, but now 40% of 5-year-old children have 1-4 permanent teeth. The child's heart rate has also changed. However, despite the acceleration, the functional - both mental and physical capabilities of children of preschool age are higher than the target.

In the first year of a child's life, his cardiovascular system undergoes major morphological and functional changes. Heart mass in 3-4-year-old children is 70.8 g. up to 92.3 g in 6-7 year olds. reaches up to, as a result of which the heart's contractility and work capacity increase.

The amount of breathing decreases with age, at the end of the first year of a child's life it is 30-35 per minute, at the end of the third year it is 25-30, and at the age of 4-7 it is 26-22. The passage of age also ensures the growth of children's ability to work. The ability to work without interruption reaches from 10 to 25-30 minutes.



In the period from 3 to 7 years, the third, fifth and seventh years of the child's life are distinguished, at this time not only quantitative growth, but also a radical reconstruction of functions occurs.

Protecting the child's life and strengthening his health, improving physical development, improving body functions, increasing his resistance to various diseases and resistance to various diseases, increasing his resistance to adverse environmental conditions (low and high temperature of water and air, exposure to sunlight) through training, as well as it is also important to increase their overall working capacity.

Taking into account the characteristics of the development of the child's organism, the tasks of health care are as follows:

to help the correct and timely hardening of bones , the formation of spinal curves, the development of heel arches, the strengthening of the joint-ligament apparatus;

development of body parts (proportions) in correct proportions, helping to regulate bone growth and mass;

development of all muscle groups (body, leg, arm and shoulder girdle, paw, fingers, heel, neck, eye, internal organs, cardiovascular, respiratory and other muscles);

focus on the development of the more weakly developed flexor muscle group;

to help improve the functioning of the cardiovascular and respiratory systems, increase blood flow to the heart, improve its contraction rhythm and develop the ability to adapt to sudden changes in load;

increase chest mobility, deep breathing, stability of its rhythm, help increase lung capacity, improve nasal breathing;

helping internal organs (digestion, excretion, etc.) to work properly;

support the correct development of the thermoregulatory function;

improving the activity of the central nervous system, arousal and inhibition, alternation of their mobility processes, as well as helping to improve the movement analyzer, sensory organs.

It should be noted that due to the plasticity of children's nervous system, movement skills are formed in them relatively easily. Children use many of them (crawling, walking, running, skiing, cycling...) as a means of daily movement.

References:

- 1.Atoev A.Q. "May your child be perfect" T., "Ibn Sino" 1990 .
- 2.Leonteva N.N., Marinova K.V. Anatomy and physiology of a child's organism. - M.: Prosveshchenie, 1999.
- 3.Sharipova D.J., Semenova L.M. Hygienic upbringing of babies . T. Teacher: 1997.
- 4.Ф.Р. Валиева Ensuring continuity in the training of future professionals in the education system.// European Journal of Research and Reflection in Educational Sciences/ Volume 7 Number 6, 2019. ISSN 2056-5852
- 5.Ф.Р. Валиева, Ш.Курбонов Continuity in the education system // Wschodnioeuropejskie // East european science journal 12(52)2019 45-52. 2020