Wawryków Agata, Korabiusz Katarzyna, Stecko Monika, Harasimowicz Joanna, Harasimowicz Pawel. Assessment of preschool and pre-school children. Journal of Education, Health and Sport. 2019;9(6):404-406. eISNN 2391-8306. http://dx.doi.org/10.5281/zenodo.3253451 http://ojs.ukw.edu.pl/index.php/johs/article/view/7050

The journal has had 7 points in Ministry of Science and Higher Education parametric evaluation. Part B item 1223 (26/01/2017). 1223 Journal of Education, Health and Sport eISSN 2391-8306 7

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The authors declare that there is no conflict of interests regarding the publication of this paper.

Received: 05.05.2019. Revised: 25.05.2019. Accepted: 24.06.2019.

# Assessment of preschool and pre-school children

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### **Abstract**

Physical activity is the natural, physiological need of the child, which at the same time determines its proper development. In the pre-school period there is a golden age of motoriness, ie the time when the child acquires new skills the fastest, but also a great improvement in the precision and complexity of motor activities. The overall change has a positive effect on the improvement of motor skills. The Modified Wroclaw Physical Fitness Test should be used to assess the motor skills of children in pre-school and school age. The Wrocław Test was characterized briefly. Research has shown that motor efficiency of children is significantly worse than individuals in the same age from 20 years ago.

Keywords: children

#### Introduction

The pre-school period is the time when the child acquires the most new motor skills, but also improves already acquired ones. At this stage of life there is a noticeable increase in efficiency in large motor skills, which requires coordination of movements of large parts of the body and in the field of small motor skills, in which we expect improvement of small parts, especially improvement of precision hand movements. With age, the kindergarten grows intensely and increases its weight. The development of the child's psychomotor efficiency takes place in two directions. On the one hand, it is the improvement of posture and locomotion movements, ie running, walking, jumping and climbing. On the other hand, the development of manipulative movements based on the ability to use objects and tools of everyday use. About 5 years old, the child achieves the so-called "Pre-school balance". This period is called the golden period. If a pre-school child is subjected to systematic exercises consistent with its natural development and interests, it can achieve a high level of physical fitness. The end of the pre-school period is the stage when we can improve the forms of performing activities and when it is necessary to require from the child that what he performs is certain, smooth and free [1].

#### **Motor skills**

The motor abilities of a preschooler and a child of school age differ significantly. Children in school age show much better coordination as well as mastery of manual and locomotion movements. A clear difference can be seen in the way you run. In pre-school children the pace of the run is very variable, the child also shows constant changes in the direction of movement. With age, these skills become less inaccurate. During the school period, a characteristic feature is the numerous additional movements during the course of another movement task. The set moves are often chaotic, gradually becoming more and more accurate. This age is also characterized by a great ease of learning new motor habits and a constant need for movement, hence a significant increase in speed, power and agility is observed in children [2].

#### Assessment of motor skills of children

When assessing the overall development of children, the most attention is paid to the proper physical development. Overall efficiency largely determines the proper functioning respiratory, cardiovascular and skeletal systems. The motor development of children allows you to be fully physically active and to practice different sports. Children show an increased ability to absorb new, more complex coordination complexes. Equally important in children are factors such as: the physiology of the child, the structure of his body (development of the skeleton, muscles, height, correct body proportions, the appropriate BMI) and his mental condition.

The basic criteria for assessing the degree of motor fitness of children are: speed, jumping, muscular strength and endurance. These criteria are assigned to two groups - speed and jumping are considered to be comprehensive, while muscular strength and endurance are included in the group of fitness abilities.

## **Wroclaw Physical Fitness Test**

One of the most popular tests to assess motor performance is Modified Wrocław Physical Fitness Test. It consists of four attempts:

• Strength (ie the attempt to throw a medicine ball) - the distance of the throw from the head with a medicine ball weighing 1 kg was evaluated. The examined child stood at a slight apart, moving his toes to the designated starting line, then had to throw the ball from the head as far as possible. Each child had to make two test kicks and three correct ones. Their distance was

measured to the nearest 10 cm. As far as the measure of strength is taken the largest distance the child has made a throw in one of three attempts.

- Power test (ie long jump from the place) the distance of the long jump from the place with the reflection of the oboe was evaluated. Each child performed one trial and three grades. The length of the jumps was measured with an accuracy of 1 cm. The measure of power was the length of the farthest stroke.
- Speed test (ie running at 20 m) the time obtained during running on a distance of 20 m was assessed. Each child performed the test twice, running singly. The test time was measured with an accuracy of 0.1 s. The time of the test was the measure of the speed of the child.
- Agility test (ie agility run) agility was assessed on the basis of the time obtained during a  $4 \times 5$  m swinging run with the block being moved. The distance between them was 20 cm. The examined child performed the test twice. Time was measured with an accuracy of 0.1 s. A better test time was taken as the measure of agility.

## **Summary**

The research conducted on a group of five-year-old children using the above-mentioned tests indicates that the level of motor skills of the examined children is unsatisfactory [3]. The Wrocław Physical Fitness Test was also used in studies by Bolach E. et al. [1], in which they showed that children aged 3 to 5 significantly differed physical fitness from children in the same age range from 22 years ago.

One of the main tests to check the level of physical fitness of children in school age is the International Physical Fitness Test (MTSF). They put on a test such tests as: running on 50m, long jump from the place, running on 600m, hand strength, overhang on bent arms, 4x10m gear, sitting down and lying on the torso. A study carried out by Popowczak M. et al. [5] showed that in the group of examined children reaction speed and spatial orientation correlate with the largest number of components physical fitness.

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