

# DEVELOPMENT MEANS AND TECHNIQUES AND MOTOR EVALUATION OF THE PRESCHOLAR AND LITTLE SCHOLAR CHILDREN

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## **Abstract**

**Purpose.** It is unanimously recognized the fact that the motor activity at the level of the pre-scholar and little scholar education must be improved, proved being the fact that lately we noticed an acute lack of information concerning the data gathering that points out the biomotor and psycho-motor potential of the children framed in the age interval of 5-8, respectively from the preparation groups and the 1<sup>st</sup> grades. We believe that after a rigorous evaluation of the motor development of the children from this age segment we can contribute to the elaboration of certain didactic strategies adequate to the instructive-educative process and for this age category; for this purpose we will analyze how the motor activity in school is being developed at the 1<sup>st</sup> grades and during kindergarten.

**Methods.** At the base of this research were the following methods: the bibliographic study method, the observation method (transversal and experimental), the research method, the questionnaire method, the statistic method.

**Results.** The gathered data have been processed through the statistical-mathematical method and after their interpretation we consider that it is imposed an update of the data from the national test of children that were in this age category in order to know the actual level of the biomotor development and helps us to interfere with programs of optimizing the biomotor potential.

**Conclusions.** As a conclusion of the obtained results we can say that the biomotor potential is framed in the medium limits and even sub-medium of the normal reported at the reference values of the population correspondent to the age level at which our study is referring.

**Key words:** potential, didactic strategies, children

## **Purpose**

Motor capacity represents a particularity of movement that is translated through all the changes and transformations that take place in the organism. The motor development is an adaptation process of the human being, in its ontogenic evolution, at the internal and external factors, through movement. We consider that this complex process is a stage one, with intransitive stages happening one from the other, with a fixed order, formed of 4 steps: increase, development, maturity, ageing. The motor development is seen also “as a progressive learning process of the motor skills during the first steps of life, in childhood and adolescence” [Nan, I. D., 2009]. The bio-psycho-motor development in the age interval of 5-8 is part of a step called by the specialists “the golden age of childhood” and is characterized by accumulations on all plans and it is considered being a true “explosion” psycho-motor in the overall development of the child. The age interval at which we are referring is part of the step of affirmation of the personality and self-awareness. The motor activity of the children of this age is organized systematically and contains the following forms: the motor activity in the scholar regime of 2-3 hours per week, the sport activity that has as purpose the

initiation in a sport branch that is being developed in the sport clubs frame, the recovery activity for children with physical deficiencies in schools and kindergartens with a special program and in medical physical culture centers with a motor activity of free time in parks, game places specially made, in the house etc.

Focalizing on the early education is of a special importance neglecting the development process in this stage will increase the risk of lately appearance of different disabilities or learning difficulties. Of the multidimensional formation quality at a pre-scholar age will depend on the quality of learning activity in the following education steps (primary cycle). The volume represents a useful instrument in realizing the educational actions specific to the pre-scholar children from the training age (5-8), being able to be used as a didactic material in the discovery process and stimulation of the aptitudes and their interests. The followed objectives are distributed on different curriculum areas and have in mind the acquirement of the competences necessary to the successful integration in the scholar learning activity. An important chapter is the psycho-motor education that is referring to the laterality, the body scheme, the perceptive-motor structures of form,

color, size, space and time. To have in mind that the human motor activity, especially in the case of children must be subordinate to the age particularities, knowing them is a basic condition for engaging the children in the motor activities. At the age of 5 the specialists from the domain consider that the physical education can be started with care, its utility being obvious by acquiring certain automatisms that will allow certain correct executions, without any waste of energy

After the study of the education plan we notice that it is given the possibility to educators to add at the age interval of 5-7 an hour each day of activities from the psycho-motor domain and at the level of the 1<sup>st</sup> grade the possibility to program 2-3 hours per week of physical education.

The main objective of our study was represented by the elaboration and eventually the improvement of the didactic strategies in the motor development process also new methods of evaluation on the age segment of 5-8.

**Research hypothesis:** If we would have a didactic strategy in the motor development process doubled by the new evaluation methods we will make possible the identification and anticipation of the motor development level also a bio-motor development according to the age parameters at pre-scholar and little scholar children.

### Methods

In the made study have been used the experimental method, transversal, the documentary and comparative analysis of the developed activity and of the measured somatic parameters, the research method and the statistic-mathematical method. The research method has been used in the purpose to know the parents', educators, teachers' attitude in what concerns the motor activity of children.

The research has been developed across 2 years, aiming the pre-scholar groups and scholars from which my own child has taken part, fact that made me easier the direct access at the parents' approach, the children and the didactic staff in charge. The target groups are the ones from which I gathered information about the motor activity of the children from the Kindergarten no.1 the prep. Group from Ploiesti and the collective of the 1<sup>st</sup> grade D from the Sf. Friday School. I measured, tested from a bio-motor point of view, and observed the children in the play ground, trips, backpacking, at the physical education classes. In choosing the

measured parameters an important role was played by the bibliographic study of specialty, inspiring myself from the papers that have treated these problems over time, especially from the book of Professor Focşeneanu entitled: "The bio-motor potential at pre-scholars" 1979. (A.Focşeneanu, V. Paraschiv, A. Nicu, 1981).

The somatic measurements have been made on a number of 80 children with age of 5 to 8. The tests contained 3 anthrop-motor measurements represented by the waist [height from standing]; body weight, bust and motor tasks that have aimed measuring the détente of the inferior and superior limbs through the vertical jump and throwing the ball from standing, the movement speed by running on 20 m, the general skill, through the run to and fro with a transport of a small object, the articular mobility, from stranding, bending the trunk, testing the abdominal and back musculature.

### Results

The gathered data have been processed through statistic-mathematical methods, calculating the following parameters: the arithmetic means on ages, demixtat, standard deviation, the variability coefficient. I interpreted comparatively the results of the somatic measurements and in this way I noticed that at all measure parameters, higher medium values, at 8 years in comparison with the national tests. Similar situation we encounter at the age group 5-7. The proportionality index values are close to the national test values. We notice an increase of the mean of the body weight even hyper-ponderals at the age of 6-8 with an alarming level at the 1<sup>st</sup> grade. The somatic measurements show in the following manner:

Children with ages of 6-8 from a somatic point of view are more developed than the children from the year 1990 but with weight problems until hyper-weight. The girls between 6-8 have a higher height and a bust comparative with the girls of the year 1990. With all these there are not obvious differences of the means values, at all measured parameters, both at girls and boys at the age groups of 5-6, between the 2 generations.

Due to nutrition, sedentariness, the lack of sport bases, of parks for children, of the lack of education concerning movement in general, we consider highly necessary a new test at a national level that will show us the bio-motor state of our children.

The results of the motor measurements and their interpretation in comparison made us think seriously, I noticed that we have beautiful

children, intelligent, but weaker from a motor point of view, the means results obtained by them at the motor tests especially the general skills are under the means of the generations of the 1990. After the questionnaires from parents, a percentage of 68% have answered positive at the above questions, 20% have answered – no, 12% maybe. I present a part of the questions set of the questionnaire applied to parents:

1. Do you consider that it would be benefic for your child to make each day one hour of sport , motor activity in an organized frame?
2. The lack of sport bases, the fields for different motor activities, roller-skates track, football field, basketball, volleyball is the cause for your children not doing sport?
3. Do you believe that the scholar program, the lack of free time determine the children not to make sport?

### Conclusions

The obtained information during the study and reported at the publications from 1990 concerning the bio-motor potential of pre-scholar children and little scholar have generated the following conclusions:

1. Children cannot satisfy their need of movement due to the weak conditions from parks, the lack of sport bases from Ploiesti, the lack of interest and neglecting towards the sport in general of the local authorities.
2. Parents' mentality that prefer any other activity than the physical one, from lack of time, education, space, equipment.
3. The lack of training, the fear of accidents, the lack of material equipment with which the kindergarten are facing, transform the classes of physical education in diverse activities but that do not reach their purpose for which this discipline is in the scholar program.
4. The bio-motor development of the children from the age category of 5-8 is framed in the medium limits of the normal reported to the reference values of the population from this age interval. We strongly believe necessary the update of these measurements and making didactic strategies in the sense of forming a physical culture, reaching certain objectives, acknowledging certain motor knowledge, attitudes and finally reaching certain competences.

Forming a physical culture must have in mind:

- the harmonious physical development, the strengthening and habituation of the organism in what concerns the resistance capacity formation.
- cultivating the necessity of motor activities.
- developing the motor qualities (skill, speed, resistance, strength).
- developing the interest towards the physical exercises and forming the habit to practice them systematically.

Forming certain correct habits of hygiene.

- forming a correct posture, space orientation skills.
- the profilaxion of the plate foot, of equilibrium sense and movement coordination.
- the development of the fine musculature, of the skill to realize the oculo-motor coordination in free space and on a piece of paper.

The formation of personality behaviors of the child of 5-8 years contains also the formation of the premises of the learning activities.

In the structure of the learning activity as components it is pointed out the instructive tasks, the learning actions, the control and self-control actions. According to them, we witness the following objectives of the learning activity formation:

- the child's capacity to action according to a model.
- the child's attitude towards the mature as towards mentor (person that knows and can teach him interesting things).
- the operation capacity with general representations, schemes, images etc.
- the voluntary character of the psychic activity.
- the interest towards the way to action.
- perceiving the colleagues as partners in the game and learning activity.

We propose the following reference objectives:

1. the general physic development and the increase of the resistance capacity of organism.
  2. the multilateral, correct and harmonious physical development of the organism.
- the increase of the organism's capacity to resist at the physical effort.
  - the formation practice skills of the physical exercises combined with the hardening procedures.
  - the formation of the correct posture and of the orientation skills in space
  - the formation and perfecting of the basic motor skills and with an applicative character (developing the general motor capacity).

- insuring a correct walk and the continuous development of the perception and giving back capacity of the shifting rhythms.
- enlarging the running techniques variation.
- building the landing techniques at different jump exercises.
- optimizing and coordinating the throwing technique with catching procedures.
- continuous development of the general coordination capacity and of the skill to apply the crawling, climbing exercises in different conditions.
- perfecting the body capacity to maintain the equilibrium in different positions and movement. We propose to assimilate the following motor knowledge and to reach the competences from below at the end of the primary cycle:
- walking forms and varieties, running depending on the created conditions.
- mastering the execution technique of the jump, throwing, catching the ball, climbing and scale forms.
- dynamic games, sport relay race and applying them in different conditions, situations.
- front exercises, formation.
- the elementary rules of personal and social hygiene, of behavior across the physical education activity.

*Competences*

Motor performance:

- speed run at 20m – 5,4 sec. girls; 5,2 sec. boys;
- shuttle run (2x10 m) – 7,6 sec.girls; 7,3 sec. boys; general coordination (skill);
- resistance run: distance: girls – 450 – 460 m; boys – 480 – 530 m; time: girls – 3,0 – 3,2 min; boys – 3,0 – 3,3 min;
- jump in length from standing: 60 cm girls; 70 cm boys;
- throwing the ball at distance: girls – 8m – 7,5 m; boys – 11 m- 10,5 m;

Of a great interest we consider the formation of a positive attitude towards the Physical Education and Sport discipline expressed through:

- the manifestation of the interest towards the systematic practice of the physical exercises.
- expressing the representations about the use of the physical education activities, of the hygiene rules, of the hardening forms and of the positive (benefic) influence over the growing organism.
- the appreciation and motivation of personal behavior actions, of the colleagues during the physical education activities and, especially, of game. Expressing friendship feeling, esteem, helping each other, initiative motivation in different activity forms (especially of game).
- expressing the esthetic feelings and motivation in practicing the physical exercises, the correct appreciation of the postural posture of the ones around us.

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