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HARMONIOUS PHYSICAL DEVELOPMENT STUDY OF FIRST GRADE PUPILS

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Abstract. *The harmony of the physical body development of human beings and working constantly since antiquity, became part of the educational ideal in Greece (KALOSKAGATHON - Nice man and good) or the Roman baths. (Mens sana in corpore sano - Juvenal). In this study we aimed to accomplish finding harmonious physical development of students in preparatory class at Secondary School No. 16 in Bucharest.*

Objectives of the study is to determine the factors that influence the physical, cognitive and psycho social development of 6-7 years pupils.

The methods used in this study are: the literature, teaching observation, measurement method, statistical and mathematical methods of data processing and interpretation.

Observations and measurements carried out proves that the psychological and physical development of students are below the required values corresponding to their age which shows lack of physical activity practice by not participating actively in physical education lessons and the lack of games and recreational activities in free time.

In a study conducted we have concluded that the introduction of three hours of physical education, as required by law, it is imperative that all pupils benefit from a harmonious physical development. Moreover families and schools are responsible for pupils' participation in physical activity, especially in the form of age-specific play.

Keywords: *pupil, sports activities, game, physical development.*

Introduction.

Physical education is a component of general education, integrated with intellectual education, moral education, aesthetic and technical-vocational education. Among these components are - logically - interdependence, mutual relations, they form a whole system. Physical education can influence the intellectual sphere of personality, but also other spheres (especially moral and aesthetic). The main meaning of the relationship under those components is physical education to the other and not vice versa (Prodea, C., 2014)

According to Bronikovki, M., (2010) the variety of activities, forms and methods of providing basic motor skills (running, jumping, throwing or grips) and the extent contexts must strengthen the educational process and to help young people to proceed interests in physical education in the future.

Physical education, as a component part of the general concept of education, has always assumed as a priority objective "to ensure the harmonious evolution of physical development", especially the younger generation. A harmoniously developed body provides the optimal material support for the evolution and efficient manifestation of all the functions of the body and gives the person an aesthetic aspect that offers many advantages (and appreciations) in social relation.

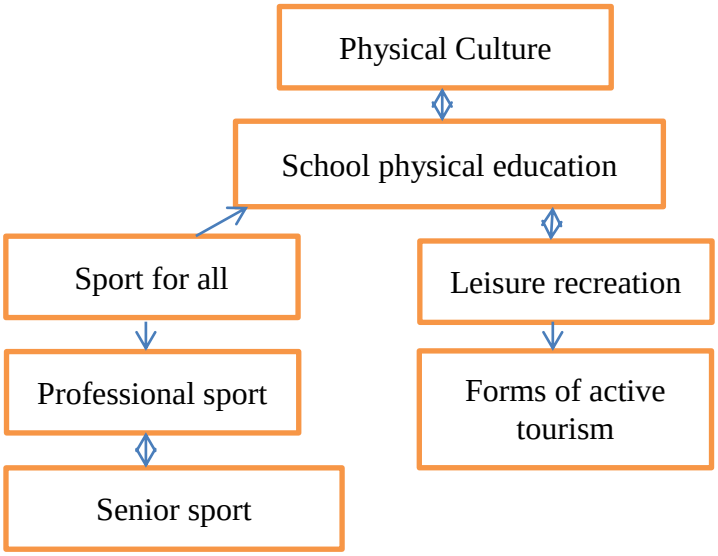

Fig. 1. The way in which physical education influences future choices (Bronikovki, M., 2010, p. 9)

Due to the modern society that is characterized by a high technological development, the importance of physical effort in daily activities has directed people towards sedentarism, which, combined with food excess and daily stress, jeopardizes the biological, psychological, sociological and cultural evolution of the individual.

European Commission (2014) on Public Health, reports that in Europe today, six of the seven major risk factors for premature death: blood pressure, cholesterol, index of body weight, inadequate intake of fruit and vegetables, lack of physical activity and excessive alcohol consumption, related to our diet and movement.

Action Plan for 2014-2020 includes six years of complex phenomena that will require long-term approach that will brings important changes.

Table 1. Key areas of action recommended by the European Union (European Commission, pg.11; 2014)

No.	Field of action
1	Supporting a healthy lifestyle from birth
2	Promote healthier environments, especially in schools and pre-schools;
3	Make the healthy option the easier option;
4	Restrict marketing and advertising to children;
5	Inform and empower families;
6	Encourage physical activity;
7	Monitor and evaluate;
8	Increase research.

Physical activity plays a vital role in maintaining a healthy lifestyle. The benefits of physical activity are well documented and include a reduced risk of cardiovascular disease, some cancers and type 2 diabetes as well as improvements in musculoskeletal health and weight control. There is also a growing body of evidence to suggest a positive association between physical activity and mental health, psychological development and cognitive processes.

Therefore, physical education, from the earliest age, in addition to "shape" the physical development of children, must and capacitive means, knowledge and techniques of independent power over his body, forming them gradually absolutely necessary " attitude of responsibility towards its own health and development ", which is, in fact, one of the finals of the current education in Romania (Dragomir, 2000).

Focus needs to be directed towards giving families the best opportunities to be physically active throughout the day, either during school, at home or when travelling between the two. Physical activity should be encouraged as an everyday occurrence for families and not just for the weekend. This may include provision of cycle paths, pavements and adequate spaces for active play. Efforts are also needed to engage all family members, local communities and schools and kindergartens in promoting activity in children and young people. It is important to monitor the health status and behaviors of children and young people in relation to nutrition and physical activity in order to develop and direct targeted action. (Monitoring provisions for physical activity levels and policies, based on 23 indicators are included in the 2013 Council Recommendation on HEPA- The Strategy for Europe on Nutrition, Overweight and Obesity-related Health).

Physical development. According Donos, A., (2017), development of human body care, from a functional perspective, all the processes, mechanisms of adaptation and training undergone by continuously and within biological parameters imposed by the environment and human activities; physical, mental and intellectual. Psychomotor activity is an integral part of the educational process conducted in school physical education class and includes topics accessible to the characteristics of older students in coping with success objectives.

Exercise contributes to the harmonious physical development and is valued by many forms of manifestation, helping to combat sedentary, the excess weight, creating a conscious attitude towards own body, developing motor skills and functional skills training for health and harmonious development body. With the increasing quality of living conditions, poor diet and sedentary presence caused an alarming increase of obesity at ages increasingly smaller. Children are attracted to computer games, tablet, phone or television, not out in the open to make moving and this leads to some changes, namely: lack of movement of the body leads to decreases in muscle strength, changes due to incorrect posture and the state extended upright, isolation, lack of child consequence of social interactions.

Practicing psychomotor activities are not only a consumer of energy and an occasion of fun for children, but also a way of maintaining general health, protection against excessive weight and intellectually successful. The researchers found that physical activity improves cognitive skills in children, facilitating better school performance. One of the objectives of physical education and sport is the prevention of physical deficiencies that can be done by maintaining the health of children and body by increasing resistance to environmental factors, ensuring harmony physical development. Physical development involves two categories of indices:

1. somatic indices / morphological
- body height,
- body weight,

➢ perimeters and diameters of the body at certain levels,

➢ body segment length, etc.;

2. Shows the functional / physiological: heart rate, respiratory rate, vital capacity / respiration, blood pressure, etc.

The physical body is determined by hereditary and environmental factors (natural, environmental and social) which is calculated based on the national average anthropometric values.

Based on data provided by the Institute of Hygiene and Public Health in collaboration with the Ministry of Health and Ministry of National Education, physical education teacher will be able to compare individual values and averages class values, the values determined as normal nationally or internationally. As terms of reference for Primary present:

Table 1. Indices of physical development of children in Romania urban (boys)

Age	Height	Weight	Chest perimeter
6 years	114,6±5,2	20,3±2,8	56,7±3,0
7 years	121,5±5,6	22,9±3,4	58,8±3,4

Table 2 Indices of physical development of children in Romania urban (girls)

Age	Height	Weight	Chest perimeter
6 years	114,3±5,3	20,0±2,9	55.6±3,2
7 years	120,7±5,5	22,0±3,5	57,4±3,7

With these points of comparison, physical education teacher can switch to measuring group or class of children. Organization of study we suggested that during 2016-2017 was conducted a study in physical education lessons at Secondary School no. 16, Bucharest. The school has a good material base consists of a gymnasium and a multipurpose field, which enabled us we can run in good conditions to proposed measurements.

The research hypothesis. The finding in physical education class level of physical development of students will provide an opportunity to correct and complete the disadvantageous situation in terms of harmonious physical development. The purpose of the study is the efficient means of physical education lesson for optimal physical development.

The objectives of the study are correct and harmonious physical development, age and functional somatic indices optimizing, improving trophic and muscular tonicity, obtaining and maintaining a proper body attitude, prevention attitudes and physical deficiencies. The sample of students were measured and on which it was oriented experiment consists of students of two classes I, total of 50 pupils.

Measurements consisted of somatic and functional measurements: overall attitude of the body height (m) Weight (kg) scale (cm). Attitude is tracking global body visible physical deficiencies. We followed the following aspects:

➢ position of the head and neck: if they are on the same vertical trunk; If there are previous or lateral inclination.

➢ shoulder and upper limb position: the listing of the notes or the back of the shoulder; skewness of the shoulders or upper limbs.

➢ position of the spine: the appearance curves in all areas: cifotic attitude, lordotic attitude scoliosis attitude.

➢ basin position: if it is tilted sideways.

➢ position of the lower limbs asymmetry lower limb segments; possibility of lime or valgus knee.

➢ foot position: if abducted or adducted; the plantar arch (normal, reduced, exaggerated).

Height Measurement aims to establish the height of the pupils.

Body weight measurement aims to establish pupils' body weight and is achieved by weighing. The span measures the opening of the upper limbs. The amplitude measures the upper limb opening. The distance between the two digital points from the left upper limb and the upper right leg is measured.

Analysis of results. Regarding somatic and functional measurements: the overall body attitude, height (m), weight (kg), scale (cm), the following results were obtained: the appreciation of the overall body attitude made it possible to identify physical deficiencies for each pupil.

In boys, the situation of the overall body's attitude is as follows: a pupil has the position of the legs in adduction, two pupils have the position of the lateral inclined basin, two students have an asymmetry of the legs, two pupils have a cifotic attitude (Scheuerman disease), and a pupil has lordosis.

In girls, the situation of the overall body's attitude is as follows: a student has an asymmetry in the shoulder position, a pupil has a lordosis attitude and three pupils have scoliosis, a pupil has an asymmetry of the legs, a pupil has the position of the legs in the adduction.

No.	Head and neck position		Position of shoulders and upper limbs		Position of the spine			Basin position	Lower limb position		Foot position	
	On the same vertical with the trunk	Previous or lateral inclinations	Shoulder or lateral shoulder inclinations	Shoulder or upper limb asymmetry	Scheuerman disease	Lordosis	Scoliosis	Slanted laterally	Asymmetry of lower limb segments	Knee in Var. 0 Valg X	Abdus or Addus	Planetary bolt: normal reduced exaggerate

Fig. 1 Data measuring overall attitude of the body (model)

Table 1. The measurements taken from the group of boys (age 7)

No.	Height (cm)	Weight (kg)	Amplitude (cm)
1	120	21	112
2	110	23	1 16
3	130	30	1 15
4	121	25	126
5	131	33	137
6	110	21	116
7	115	22	121
8	125	32	130
9	127	32	133
10	119	21	126
11	133	27	37

Tabel 2. Measurement values for girls (age 7)

No.	Height (cm)	Weight(kg)	Amplitude (cm)
1	125	23	13
2	130	24	15
3	127	28	33
4	123	28	18
5	124	21	33
6	111	20	17
7	122	36	27
8	122	29	27
9	117	21	23
10	124	23	28

The human body is uniform in composition, operation and its development. Under natural mutual conditionality of its organs and systems, it exists, functions and develops as a whole such that progress in one direction is desired in a particular dependent on progress in other directions. Measurements and observations made in the study proves that registered parameters are generally consistent with the natural development of the student's age, tuning in the global attitude and some deformations. They were brought to the attention of family and physical education teacher for any corrections.

Observations and measurements carried out proves that the psychological and physical development of students are below the required values corresponding to their age which shows lack of physical activity practice by not participating actively in physical education lessons and the lack of games and recreational activities at leisure.

Conclusions. Compared indices physical development of children in Romania, data from the Institute of Hygiene and Public Health proportionality exists in the relationship between height and weight and between measurable indices of pupils.

To maintain an optimal muscle tone may:

- Improved muscle trophism and tonicity;
- Maintaining a proper body attitudes, both in static motor acts and in dynamic ones;
- Prevent attitudes and physical deficiencies;
- Correct all attitudes of physical impairments and physical disabilities.

Exercise performed work on the development of prophylactic physical sense, preventive and therapeutic. In physical education lessons they affect the physical body and students is a top priority, whereby complex and systematic acts.

The introduction of three hours of physical education, as required by law, it is imperative that all pupils benefit from a harmonious physical development. Families and schools are responsible for pupils participation in physical activity, especially in the form of age-specific game.

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