MORPHO-FUNCTIONAL AND PSYCHOLOGICAL CHARACTERISTICS
OF PRIMARY SCHOOL PUPILS AND ESSENTIAL ASPECTS OF THE
DEVELOPMENT OF DRIVING SKILLS AT THIS AGE

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Abstract
This article focuses on those teachers involved in the educational system of primary school pupils some aspects of improving driving skills and essential aspects of morpho-functional and psychological features of primary school pupils.
From the biological point of view, the development of young age learners is not homogenous, marking periods of faster or slower development.

Keywords: physical education and sport, driving capabilities, morpho-functional features and mental.


1. Introduction
This article focuses on those teachers involved in the educational system of primary school pupils some aspects of improving driving skills and essential aspects of morpho-functional and psychological features of primary school pupils.

2. Morpho-Functional and Psychological Characteristics of Primary School Pupils
From the biological point of view, the development of young age learners is not homogenous, marking periods of faster or slower development.

The height of the pupils presents an upgrade, not homogenous evolution, marking a boom in the third grade. This change appears earlier at girls, since the second grade, thanks to the development of inferior members. The weight represents an upgrade, not homogenous evolution too, noticing a larger growth in the third grade. The bones develop faster than the muscular system, having in their structure a great quantity in their cartilaginous texture, fact that determines their weak resistance at great demands, even their distortions if favorable factors occur. The soldered frame can suffer negative influence, this imposes the respect of some requests concerning the physical effort, especially at girls. Thanks to some deficiencies in the deposition of calcium salts, positions during the sitting in the desks, the wrong carriage of different weights in hands, at this age, kyphosis and lordosis can appear the round back etc.

Fact is favored by the underdeveloped of the muscular fibers, the muscular texture is rich in water, the extensor musculature is less developed than the flexor one, this is a possible explanation of the children’s intention of sitting in a light kyphosis position. The joint system becomes stronger especially at the age of 8-9 years old, but insufficient, presenting instability aspects.
The muscular system develops, reaching 27.2% in the body weight, the members musculature being weaker developed than that of the trunk. One can notice that great performance develops at the same time with the somatic aspects, the body proves a better and even better exertion adaption. The children blood circulation is three times greater than the adults’. The cardiac frequency is about 90 heartbeats a minute.

Due to the low level of development of the nervous centers that adjusts the heart activity, this presents a sharp instability.

The respiratory function is underdeveloped, too, lungs crammed in a small chest box, flattened, all these factors cause a growth of the amplitude of the breathing movements during the efforts periods, leading to the displacement of the diaphragm.

The respiratory frequency marks 30 breathes a minute, coming closer to 25 breathes, hardly at the age of 12 years. The chest perimeter marks continuous growth from a year to another, both at boys and girls, the chest elasticity presents higher values at girls. Each year brings both qualitative and quantitative modifications. Therefore, the development process is not linear, homogenous, regular, rising, but has a slower or a faster development rhythm, the child does not have a chronological age, but a biological and mental ages that do not often correspond to the number of the years spent from the birth.

The physical development of the child of 6-10 years realizes under the strong influence of the complex environment created through the school entrance. The logic memory of the 6-7 years old pupil takes place the intuitive memory. This ability of processing, reproduction, fixation, active storage improves, repeating systematically, about the age of 9 months.

At this age, this memory is tightly connected with the visual memory. The young learner has a weak self-control capacity during the learning process. The imagination is active, oriented to simple, concrete objects, the reproduction and the creative imagination. The development of the sensory capacity takes shapes in the growing of the sensitivity, the visual capacity, the space orientation and the time perception.

The affective life of the school child acquires gradually a greater sensitivity and balance, the actions are determined by the necessity that begins being replaced by the pleasure, modifying the activity motivation. The unconscious reasons that support the children’s activities are well-known, the difficulties encountered to master the emotional states, in order to control the gestures and the actions, the difficulties to adapt to life community.

Taking into account that at this age, the game plays an important role in the child life, the teacher should deal with the use as a main means of school physical education. The contents should be directed to the development and the widening of the group relationships, the education of qualities, the training of skills and habits of moral behaviour, the widening of the reasons sphere and the children’s necessities.

The perseverance, patience, courage, initiative, subordination of the individual interests, modesty, the obedience of the rules established in the group must be the main objectives, in connection with this, the driving games will be selected, requests for their fulfilment will be established. The selected exercises
ought to contribute to the development of the analytical character of perception, to the benevolent direction of the observation and attention, to the development of the driving memory, next to its role in the harmonious development from the physical point of view.

Correctly conceived and achieved, applied trials, accompanied by race elements can contribute to the development of imagination, a flexible thinking, to the enrichment of the representations and notions, to the encouragement of the independence and initiative.

Self mastery, discipline, will, effort capacity are weakly developed at this age, but through games with rules and more strict exigents, font and formation exercises, duration runs, can favour their development.

So, a lot of objective and subjective factors are to be taken into account, tied to the growth process and morpho-functional and psychic phenomena of the pupils. In this way, one ought to pay a particular attention to the rate between the growth rhythm and the muscular volume, disturbances between the functional balance, instable psychic state, various concerns with different interests, intellectual mobility, powers of nervous and physical concentration of the pupils.

3. General aspects of the improvement of the resistance at children between 6-9 years

Bringmann’s researches show the fact that physical weekly education classes and especially the extracurricular classes lead to the improvement of pupils’ resistance as well as the improvement of the psycho-driving performance. The capacity of resistance to the tiredness represents an essential condition for the efficiency of all the forms and the training methods. The children’s and the teenagers’ organism presents a great capacity of adaptation to the aerobic effort, idea that was sustained by Robinson’s researches that showed the fact concerning that children of 5-12 years reaches v0max in the first seconds of a maximum effort, while adults get the value of 29-35% v0max for the same effort type.

As a conclusion, from the cardio-respiratory and metabolic point of view, young children are able for aerob training, but, on the contrary, the anaerob capacity is reduced.

The aerob training, at this age, does not address only to the development of the aerob capacity, but has a beneficial effect on the anaerob capacity, too.

The resistance training, at this age, must aim aerob tasks of slower intensity, jogging rhythm, or of anaerob tasks, but short ones, of 3-5 minutes/20-30 metres.

The anaerob resistance tasks should not be excluded, but the rules must be obeyed.

In BarOr’s researches (1991), the anaerob capacity of a 8 years boy is about 40-50% of a 14 years one, about 60-70%. The pulse behaviour of a child is different from that of an adult, the maximum values of an adult of 20-30 years, reaches 200 pulses a minutes, on the contrary, the young children’s pulses exceeded this value, without being considered a pathological reaction. The duration runs in a constant rhythm are favored to those of maximal and undermaximal intensity rhythm changes, intermediary and final sprints, because child needs a longer periods of renewal. (Wasmund- Nowacki).
Van Aaken, cited by Weineck, stated that ‘it is not the distance that harms, but the rhythm.’ During the training, runs that widen the distances between 600-1200 meters are forbidden, because they need an aerob effort, instead, runs on a duration of 600-1200 minutes, in a moderate rhythm, are allowed, instead runs that are allowed for 5-20 minutes in a moderate rhythm.

Some researchers propose a growth of 10% of the distances after two training sessions and a progressive growth of the duration of 5-20 minutes (after Zwinger, Gurtler et Kibittel 1973).

The selection of the means and training methods ought to correspond to the psycho-physical demands of the children and the activity during the classes should be funny.

4. General aspects concerning the improvement of the force of children of 6-9 years old

The importance of the improvement of the force of the young age pupils is emerged from many reasons such as:

Bone tissue and muscular support apparatus is weakly developed and as a consequence, in the second school years of posture deficiencies (lordose, kyphosis, curvature) increases about 70%, still in the second school years the percentage of fat children increases at the same time with the growth of the fat tissue, the decrease of the general driving capacities of the children, the general force, the speed and the general resistance. Once the improvement of the force of the children, movements are more dynamic, more harmonious and more precise.

According to Weineck, the training method for the development of the force at this age must be based on dynamic exercises, focusing on the couple development: force-speed.

Many researches in the field showed that the youngers’ period is more favorable to the development of the force in the speed regime. For instance, a study discloses that a training a week, using the circuit method, for 8 weeks, led to considerable improvements of the force under all its aspects. In the circuit method, the following dosage is imposed: 20 seconds working, break, 40 seconds. The training in the circuit, all types of tractions, sprinters organised under the game, brings a considerable contribution for the force development.

5. General aspects concerning the improvement of the speed at children of 6-9 years old

At the young school age, execution speed of the movement, as well as the speed reaction improves constantly thanks to the growth process, the physical development, the articular mobility grade and the muscular development. The period before puberty is favourable to the development of the speed and of the force-speed couple. The training of this age children need more attention from the part of the mentor teacher, the means and the methods must adapt to the physical and psycho kids' possibilities, having a ludic character; the training programs must not be based on exercises that aimed at the improvement of the speed reaction and acceleration, but must require kids more from the nervous and neuro-muscular point of view.
6. General aspects concerning the improvement of the mobility at children of 6-9 years old

Mobility is the quality that allows the execution of larger movements at the level of different joints and the joint complexes (kinematic chains). At the young age, the vertebrae touches a maximum mobility, instead the mobility in coxofemural joints is reduced.(removal of the legs- abduction). From this cause, streching exercises are recommended for the improvement of the mobility in the respective articulations. Along time, I noticed deficiencies in the sportsmen’s training program, neglecting the children’s development of the mobility, this matter will cause a lack of the so much needed mobility during the fence springs/height jumpers. At this age, the articulary mobility is very good, its processing in the purpose of the improvement and maintaining at broader parameters assures an amplitude and a very good control of the relaxation during the run.

7. General aspects concerning the improvement of the coordination qualities at children of 6-9 years old

In the sport practice, on can notice general coordination qualities, developed as an utility training that gathers way in different life situations, health and sports and qualities of specific coordination of a certain proof or sports discipline. At the young age until 8-9 years old, the focus ic on thoroughgoing study process of driving learning, to realize a precise and stable gestures range. Between 8-10 years, one can assure an intessive development of driving coordination that allows an improvement of reaction capacity.

8. Conclusions

One should take into account the morpho-functional and psychic characteristics of the pupils in order to improve the driving capacities. Thus, in order to improve the resistance, children before puberty should be able for the aerob training; in order to improve the force, the circuit training is recommended, in order to develop the speed and the speed-force couple, the means and the methods will have a ludic character, requiring from the children a more nervous and neuro-muscular effort, in order to improve the mobility, the streching exercises are recommended to improve articulations. It should focus on the driving learning.

Proposals: The educational process must not be realized at random, but on the base of the knowledge and verified studies and accepted by specialists in the field, to obtain best results from students.

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