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MOTRIC ACTIVITY - THE MAIN FACTOR IN PREVENTING SEDENTARY SCHOOLING IN 12-14 YEAR-OLD

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Abstract: *Considering that an adequate level of motricity for children aged 12-13 years is aimed at the level of development of motric skills and motric qualities, we have carried out a study of 40 pupils in gymnasium. After applying specific tests, we have obtained a number of relevant results that reflect the level of motricity of the subjects included in the research. The overall conclusion of this study was that in general the boys' motorcycle level was better than that of girls, the latter being more prone to sedentarism and the harmful effects of this type of behavior.*

Key words: *pupils, movement activity, sedentary.*

1. Introduction

At this stage, preoccupations for prevention and health of the younger generation are a major goal for parents, school and society. Unfortunately, between these three decision-makers, there is often no unitary and continuous vision of how this goal should be understood and fulfilled. It is worth mentioning that even in Romanian society the health of children is affected by a set of causes that are more or less conditioned on each other, especially those that are notably sedentary and inadequate nutrition. Referring to the effects of sedentarism, Delipovici I. [3, p.9] highlights an alarming statistic: ... "19.1% and 15.5% of boys and girls aged 14-15 are overweight and 5.7% and 2.4% are obese, central nervous system and cardiovascular, mentioning the need to intensify their motric activity in physical education lessons and out-of-school activities. It has also been established that adolescents of this age have certain functional disorders in the activity of organ systems, which become chronic diseases that affect the life and health of the adult."

Reiterating the idea of motric activity during physical education classes, I underline the formative character of this discipline by summarizing its objects: favoring harmonious growth processes, physical development, prevention and correction of posture deficiencies, development of motric skills, education of motric qualities, stimulating exercise independently, etc.

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As an eloquent indicator in the prevention of sedentarism is the level of education of motor skills and abilities, I will continue to refer to them. In this sense, we consider some conceptual delimitations necessary:

A. The motor qualities are defined as the qualities of the analyzed movements from the point of view of the individual's motor capacity [4].

B. The motricity skills "are acquired through multiple repetitions, resulting in the formation of temporal bonds, dynamic stereotypes and, as such, conditioned reflexes. Based on the physiological phenomenon of the connection between certain centers of the cerebral cortex "[2, p.66].

C. The ability to be motric refers to the potential of movement of an individual, has a complex determination in relation to: variety, number, quality of acts and actions [6], [8].

D. The motor activity is a set of acts and actions that are done consciously and systematically, with the specific purpose of achieving a certain result [8].

Sedentarism refers to a lifestyle characterized by lack of movement, static aspects and fixation in a stable place. Diseases determined and / or aggravated by sedentarism: metabolic disorders, obesity, cardiovascular disease, vertebral deformities, anxiety, etc.

It is very important that at this age pupils to be physically more active and that is all the more so now is the period in which the physiological potential of children allows the successful education of motric skills and motric qualities. Moreover, it is desirable that the exercise be properly dosed, as well as the degree of complexity according to your child's age.

It is recommended that children to perform moderate exercise (at least 60 minutes per day), participate in physical activity at least 15 minutes a day, avoid periods of inactivity greater than 2 hours per day.

Referring to the age range of 12-14 years, the following relevant changes relevant to this stage [9] can be briefly highlighted: Physical growth peak and organic changes, a higher level of cognitive process development, increasing gender gaps, increasing self-awareness, increasing relative autonomy and independence.

Popescu-Neveanu et al. [7] reveals that in this age stage the body of the children grows and gains specific features, a certain soul and grace for girls and the strength especially increased in boys. All physical transformations are accompanied by profound restructuring in terms of affectivity, intellectual activity and personality. All these aspects actually reveal the onset of biological and psychological maturation.

2. The Purpose and Organization of Research

Starting from the idea that some indices of motor skills and motor skills development will highlight pupils' motorcycle level, I considered it appropriate to specifically identify this level for children aged 12-14.

The present research is an observational study, targeting 40 pupils of 12-13 years (20 girls, 20 boys) from 2 schools in the city of Brasov. These students were tested with the help of motricity tests that were applied once. The data obtained were compared with reference values from the specialty literature.

3. Materials and Methods

In order to adequately identify the level of motricity of the students included in the research we used several tests grouped in three categories as follows [1, p. 43-80], [5, p. 25-44], [11]:

→For muscular strength:

- Pushups - Procedure: The test is performed from the support position on the arms and legs (back straight, extended legs) on a horizontal surface. Bend the arms until the support surface is touched with the chest, then stretch the arms and return to their original position. Record the maximum number of repeats executed with continuity at the rate of each subject.
- Lifting the trunk from the back 30 seconds - Required materials: gym mat, stopwatch, fixed scale. Procedure: The student will sit on a gym mat, in the seated position, with the knees close, bent at 90 degrees, the soles fully supported on the ground and hands at the nape. It will move to the dorsal position on the mattress, then return to the original position, leading the elbows forward until they reach the knees. At the examiner's signal, the pupil will execute as many trunks / 30 seconds as possible. Record the number of correct tests performed by the subjects.
- Long jump from the spot - Required Materials: Centimeter / Tape for Measurement, Marking Tape, Roulette. Procedure: To achieve a proper jump in length, the pupil will be positioned with the tip of the legs at the starting line (marked on the ground) in the standing position, with the feet parallel and forward, having a distance of approx. 8 - 10 cm between them. The pupil will perform a single moaning motion (standing, lifting on the tips, moving the arms upward, followed by the lower limb flexion, simultaneously with the arms moving backwards, forward as long as possible with the arm, from back to forth). Upon contact with the ground, the student will only have to land on the ground without touching the ground with his hands, keeping his balance in this position (squatting, with the arms facing forward).

→For speed and resistance:

- Running 50 m - Required materials: marking tape, stopwatch. Procedure: Students are placed at the starting line in the top start position and run in the free running, the set distance. The length of time required for a student to travel this distance from the time of the rear leg movement to the start and until the finish line passes is timed.
- Running 600 m - Required materials: stopwatch. Procedure: The distance will travel to the athletics track once. Turning the run-in running is considered abandonment. The result is expressed in minutes and seconds.

For all the tests of force and running, I also used some values from the literature as standards [10] to highlight the level of pupils involved in the research.

→Motric structure (handball game). The student starts the center of the court, walks to the right / left (optional), takes the ball, executes multiple dribbles and throws to the gate from the running. There are notes for the overall execution from 1 to 10 and the following criteria are considered: the correctness of the execution of the technical procedures, the execution speed, the strength and the precision of the finalization process.

3. Research Results

Table 1

The comparative situation on indices of the strength of the pupils included in the research

Control samples	Pupils	Average arithmetic values		Differences between standard values and subjects
		Standard values	Research subjects	
Pushups (x)	boys	10	9	-1
	girls	6	4	-2
Long jump from the spot (cm)	boys	163	165	+2
	girls	143	137	-6
Lifting the trunk from the back 30 " (x)	boys	20	21	+1
	girls	19	20	+1

Table 2

The comparative situation on indices of speed and resistance of the pupils included in the research

Control samples	Pupils	Average arithmetic values		Differences between standard values and subjects
		Standard values	Research subjects	
Running 50 m (seconds)	boys	8,3	8,2	+0,1
	girls	9,1	9,7	-0,6
Running 600 m (minutes)	boys	3,20	3,17	+0,03
	girls	3,40	3,50	-0,10

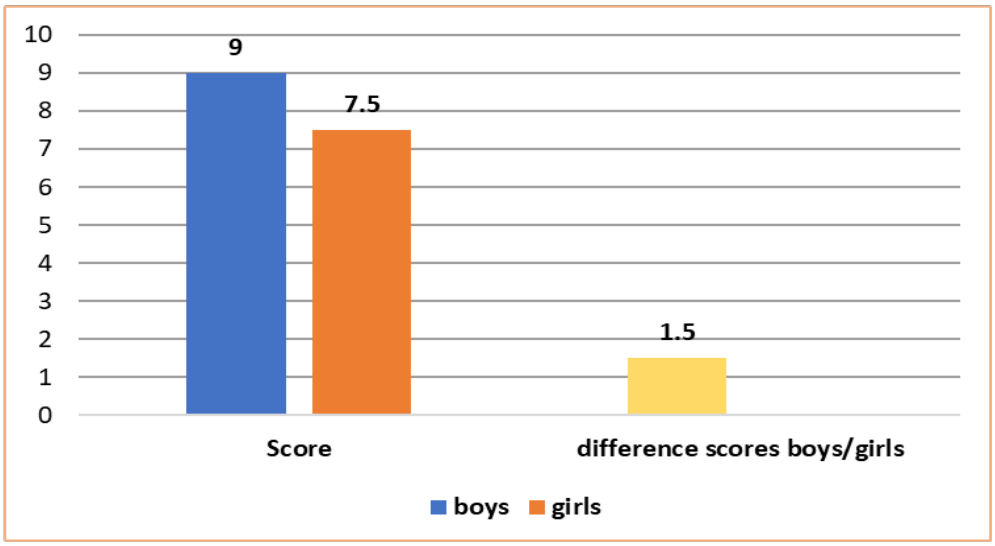

Chart 1. *The scores for specific motricity structure for handball*

From the analysis of the results obtained with the reference ones, it can be noticed that there is a non-uniform dynamic in the three samples aimed at evaluating the strength. There is a negative difference of -1 (boys), -2 girls at floats and -6 for girls for long jump from the spot. Positive aspects of research subjects (+1 repeat) are highlighted as a mean value to the sample lifting the trunk from the back 30".

From sample analysis running 50 m, a better average value is found with +0,1 for boys compared to standard values and for girls there is a gap of 0,6. It can be seen that the girls have achieved a value with -10 against the standard value for running 600 m. The boys have obtained an average value of 0,03 times better than the comparative ones.

The results obtained at the specific handball game structure reveal the fact that the boys scored 9 (the maximum possible score was 10), and the girls achieved an average score of 7.5.

4. Conclusions

In terms of motric quality education for strength, it can be concluded that, in general, the level of development is an average for students in research. From the comparative analysis with the reference values we notice that there are small differences in plus or minus. The worst differences in the negative were recorded at the long jump from the spot for girls.

In terms of running (speed and strength), the boys have obtained better values than girls, but the average shocks are relatively close to the benchmarks.

More significant differences are revealed in the motricity structure of the handball game. average was 9 for boys, which can be qualified as good and for girls 7.5 - appreciated as a medium, satisfactory, but not praiseful. The motric structure was not a complex one, so the expectations were also a bit higher for the girls.

By making a general analysis of the results obtained from samples between girls and boys by comparison with the standard values for each gender, it can be stated that the level of physical training of the girls is much weaker, the trend towards sedentarism being more obvious to girls. It is possible, that indeed the chosen samples not to be the most attractive in terms of motion structures or the affective component of motor act, but it is a question of why girls of this age have achieved such low scores. This aspect is in a contradiction, since at this age the girls have an increased concern about how they look. I think that pupils should be encouraged (if appropriate) to maintain a good look and weight by moving not just through diet - here I am referring to avoiding starvation or adopting a nutritionally low diet.

In the present case, I recommend teachers to find effective pedagogical solutions for involving children in movement activities, especially girls, so that the effects of these solutions to go beyond the school and pupils to practice independently physical exercises both as a pleasant way to spend free time and to effectively combat sedentarism with all its negative consequences in the medium and long term.

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