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STUDY ON THE IMPORTANCE OF EXTRACURRICULAR SPORTS ACTIVITIES REGARDING THE DEVELOPMENT OF MOTOR QUALITIES IN PRIMARY SCHOOL CHILDREN

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Abstract: *In the age of modern and advanced technology, it is observed that sedentarism is characteristic to occupy a wide spectrum of the population from children to the elderly. As for children, they are no longer active when we talk about physical activity both during school hours, but especially in their free time. In this context, the school must encourage the active participation of students in physical activities during the classes included in the school curriculum and after, by offering an attractive variety of extracurricular sports aimed at motivating students, especially those in primary school.*

Key words: *extracurricular activities, handball, primary school*.

1. Introduction

Progress in the technical-scientific field is well known and appreciated, because it has a positive influence on the development of students, but at the same time significantly reduces their motor activity. Internationally, the issue of physical education and sports is frequently approached from several perspectives, which demonstrates a real interest in adapting the educational path to the developmental characteristics of each student [2]. At present, a student-centered education is required by implementing and applying a varied methodology, the traditional methods to be replaced with the modern ones by using a diversified palette of methods and means [4].

Within the educational process, the capitalization of the activities specific to physical education aims at facilitating the formation of motor skills in primary school students. At present, motor activities are underutilized. An example of this is the

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growing interest in active and conscious participation in physical education classes included in the curriculum, an interest that is increasingly diminished in higher education.

According to Iordan, D. A., Mocanu, M. D., et. al., [3] the aspects that lead to the appearance of posture problems are multiple, among which he mentions: the weight of the backpacks worn by the students during the primary and gymnasium cycles; long time in front of the TV and the computer as well as the use of the mobile phone in various positions that favor deformities of the spine from an early age [3].

Given the above, we consider it important to add to the two hours of physical education an optional hour, with specific sports game, because through team games can develop valuable skills and abilities, which can influence beneficially the long-term development of students. Physical education and sports are activities with an increased role in: strengthening health, harmonious physical development, and development of motor skills, intellectual and moral qualities. At the same time, it increases the ability to concentrate, by conditioning student's reflexes and improving coordination in all aspects, and last but not least, it brings order and discipline to the body movement and helps to develop a solid body posture.

The Handball game, nowadays, includes a new training methodology determined by its continuous evolution in recent years, which involves a particularization of the motor structure and the specific technical-tactical content at the level of all categories of athletes practicing this sport [6]. By implementing an optional minihandball discipline in the primary cycle, we consider that we bring a plus to the fulfillment of the specific objectives of the physical education discipline. Also, the game of mini-handball ensures favorable conditions on the one hand for the development of basic and specific motor qualities, on the other hand contributes to the development of mental processes and personality traits [7]. Starting from the idea that psychomotricity, unlike other motor qualities, are a game of mental and physical function [1], the game of minihandball contributes to the fulfillment of the specific objectives of psychomotor skills.

Physical education is an indispensable component of education, which aims at the harmonious and normal development of the body, strengthening health and cultivating physical qualities necessary for work, sports. It is the first kind of education that exerts its influence on the body.

Regarding the discipline of physical education and sports in the classes of the primary cycle of education, it has „an important role both in its positive influence on the process of development and fortification of the body and as a didactic tool aimed at fostering knowledge of children, adapting them more quickly to the new requirements schooling, classroom conjugation, and the formation of an active, well understood and assisted working climate. In primary school, physical education is a general instruction and education tool that uses physical exercise as the primary means of developing students' physical" [5].

2. Objectives

This study aims at the complex approach of using the means specific to the game of handball in physical education and sports

classes in order to develop motor skills in primary school students.

3. Material and Methods

For this study, 2 groups of students participated. The experiment group consisted of 20 students from Secondary School no. 1 Tulucești and the control group consisted of 20 students from Mihail Sadoveanu Secondary School Galați.

The subjects of the research were students from the primary cycle classes, more precisely the IV grade, aged between 9-10 years. For the experiment group, an optional discipline was implemented at the level of the minihandball school ("Little handball player"), which benefits from 3 hours of physical education and sports per week.

In order to carry out this study, a series of research methods were used: the study of specialized and interdisciplinary literature; the method of the pedagogical experiment; comparative method pedagogical observation method, statistical-mathematical method, tabular and graphical method.

4. Results and Discussions

Table 1

Centralization of the result obtained at the initial and final tests

	Initial tests				Final tests			
	Control group (n=20)		*Experimental group (n=20)*		*Control group (n=20)*		*Experimental group (n=20)*	
	M±DS	CV (%)	M±DS	CV (%)	M±DS	CV (%)	M±DS	CV (%)
Running speed 25 m (sec)	5,81±0,23	4,05	5,67±0,21	3,81	5,64±0,22	4,00	5,42±0,22	4,09
Long jump from the spot	140,55±12,15	8,65	143,3±6,67	16,28	147,3±11,07	7,52	148,60±11,8	7,95
Throwing the ball	14,23±2,82	19,87	15,74±3,29	20,95	16,88±3,02	17,9	18,09±3,5	19,44
Crunches 30" (number of repetitions)	14,70±1,78	12,11	16,60±2,85	17,19	16,45±1,60	9,76	19,30±2,55	13,25
Rope jumps (number of repetitions)	14,00±2,22	15,89	14,90±1,88	12,68	16,05±2,11	13,17	17,60±2,32	13,22

n-number of subjects; *M*-average; *DS*-standard deviation; *CV*-variability coefficient

In the 25 m distance running test the arithmetic mean obtained by the control group was 5.81 seconds the initial test compared to the value of 5.64 seconds at the final test, while the difference between the two arithmetic means of was 0.71. The standard deviation has values of 0.23 at the initial test compared to 0.22 at the final test, while at the coefficient of variability values of 4.05% were obtained at the initial test and 4.00% at the final test, which demonstrates that in this test the degree of homogeneity is high. Regarding the experiment group, the

average obtained by it at the initial test is 5.67 seconds, compared to the value of 5.42 seconds at the final test, while the difference between the two arithmetic means was 0.25 seconds. The standard deviation has values of 0.21 at the initial test compared to 0.22 at the final test, while at the coefficient of variability values of 3.81% were obtained at the initial test and 4.09% at the final test, which demonstrates that in this test the degree of homogeneity is high (figure 1).

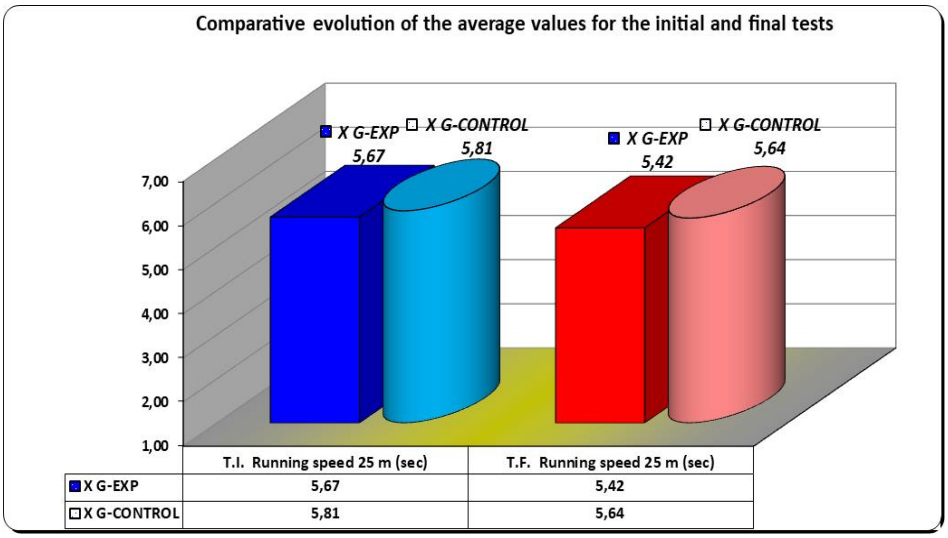

Fig. 1. *Running speed 25 m*

In the long jump test the arithmetic mean obtained by the control group was 140.55 cm at the initial test compared to the value of 147.3 cm at the final test, while the difference between the two arithmetic means was 6.75 cm. The standard deviation has values of 12.15 at the initial test compared to 11.07 at the final test, while at the coefficient of variability values of 8.65% were obtained at the initial test and 7.52% at the final test, specifying that there is a high degree of homogeneity. The experiment group in the same test obtained the following values: at the initial test the arithmetic mean was 143.30 cm; at the final test the arithmetic mean was 148.60 cm and the difference between the two arithmetic means was 5.3 cm. The standard deviation has values of 6.67 at the initial test compared to 11.8 at the final test, while at the coefficient of variability values of 16.28% were obtained, which indicates an average degree of homogeneity at the initial test and 7, 95% at the final test, stating that there is a high degree of homogeneity (figure 2).

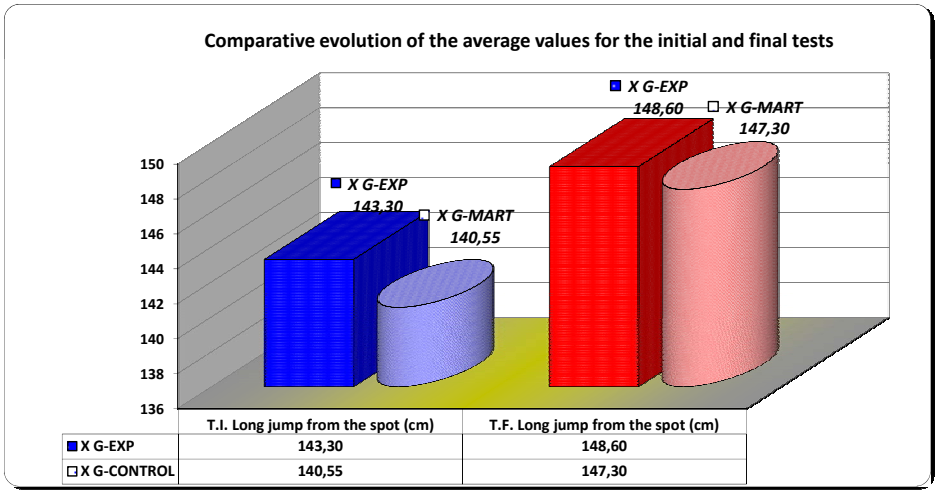

Fig. 2. *Long jump from the spot*

At the ball throwing test, the control group obtained at the initial test the arithmetic mean of 14.23 m and at the final test 16.88 m, the difference between the two arithmetic means being 2.65 m. The standard deviation has values of 2, 82 in the initial test compared to 3.02 in the final test, while in the coefficient of variability values of 19.87% were obtained in the initial test and 17.90% in the final test, which indicates that there is a degree homogeneity medium. In the same tests, the experiment group obtained at the initial test the arithmetic mean of 15.74 m and at the final test 18.09 m, the difference between the two arithmetic means being 2.35 m. Regarding the standard deviation, it has values 3.29 at the initial test and 3.51 at the final test, while the coefficient of variability indicates the non-existence of homogeneity at the initial test (20.95%) while the final test indicates an average degree of homogeneity (19.44 %) (figure 3).

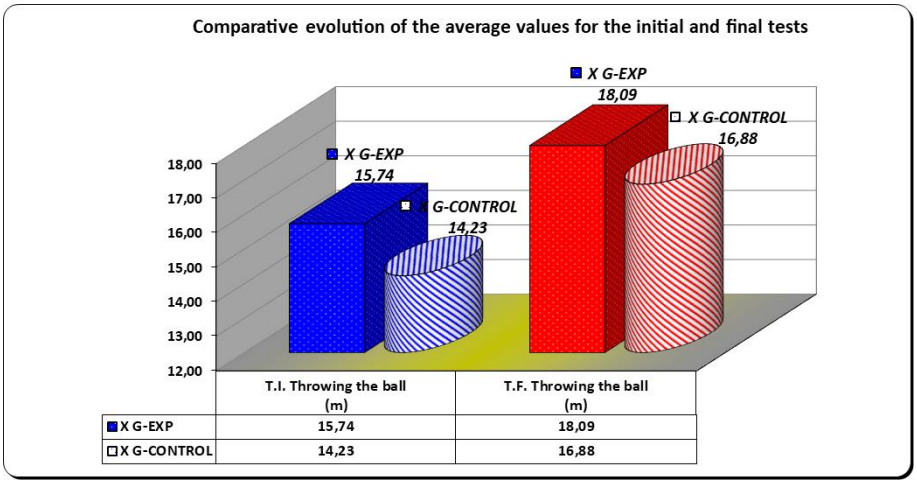

Fig. 3. *Throwing the ball*

In the test specific to the assessment of abdominal strength, the control group obtained at the initial test the arithmetic mean of 14.70 numbers of repetitions and at the final test 16.45 number of repetitions, the difference between the two arithmetic averages being 1.75 numbers of repetitions. The standard deviation has values of 1.78 at the initial test compared to 1.60 at the final test, while at the coefficient of variability values of 12.11% were obtained at the initial test and 9.76% at the final test, which indicates that there is a high degree of homogeneity. In the same tests, the experiment group obtained at the initial test the arithmetic mean of 16.60 numbers of repetitions and at the final test 19.30 number of repetitions, the difference between the two arithmetic means being 2.7 numbers of repetitions. Regarding the standard deviation, it has values of 2.85 in the initial test and 2.55 in the final test, while the coefficient of variability indicates an average degree of homogeneity both in the initial test (17.19%) and at the final test (13.25%) (figure 4).

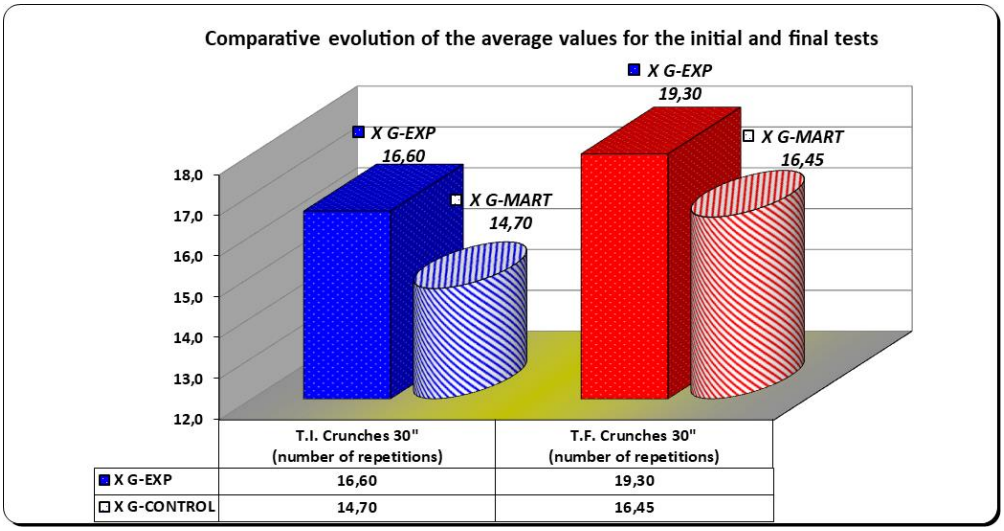

Fig. 4. *Crunches 30"*

At the rope jumps test the arithmetic mean obtained by the control group was 14,00 number of repetitions at the initial test compared to the value of 16.05 number of repetitions at the final test, while the difference between the two arithmetic means was 2.05 number of repetitions. The standard deviation has values of 2.22 at the initial test compared to 2.11 at the final test, while at the coefficient of variability values of 15.89% were obtained at the initial test and 13.17% at the final test, specifying that there is an average degree of homogeneity. The experiment group in the same test obtained the following values: at the initial testing the arithmetic mean was 14.90 numbers of repetitions; at the final test the arithmetic mean was 17.60 numbers of repetitions and the difference between the two arithmetic means was 3.51 numbers of repetitions. The standard deviation has values of 1.88 at the initial test compared to 2.32 at the

final test, while at the coefficient of variability values of 12.68% were obtained at the initial test and 13.22% at the final test, respectively, stating that there is an average degree of homogeneity at the group level (figure 5).

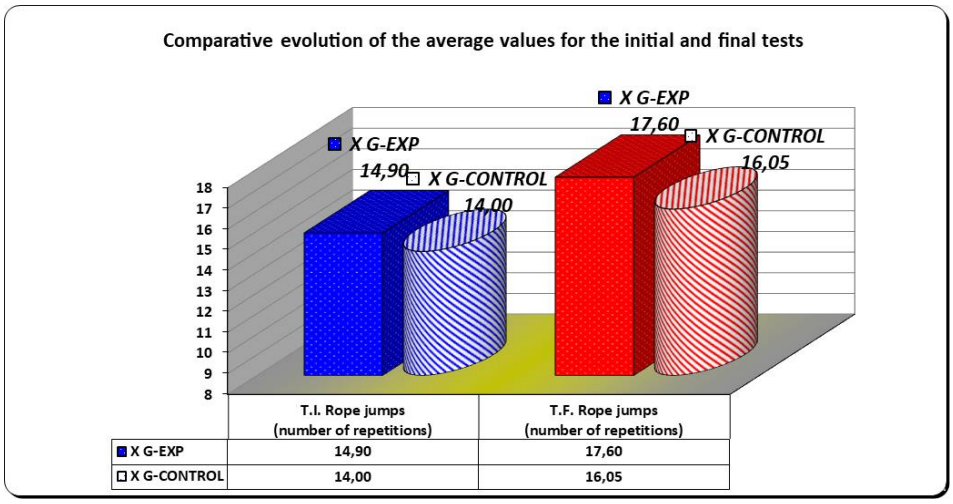

Fig. 5. *Rope jumps*

5. Conclusions

The stage of the primary cycle of education is an important stage in terms of sensory, functional, motor and why not intellectual improvement. We believe that general education should have as its central point of interest, physical education. This must become a systematic and important discipline in the educational process, involving intensive and emotional physical education classes at least three times a week. This model will have as a positive effect, the significant reduction of the negative aspects related to the harmonious physical development (deficiencies of the spine, but also obesity). It will also increase students' interest in motor activities and further education, thus ensuring the sustainability of skills and preparation for life, increasing motor skills needed by students, improving motor skills, strengthening health and training sustainable cognitive skills because they they are involved in the game of handball by using the multitude of means specific to technique and tactics.

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