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**OPTIMIZING HANDBALL-SPECIFIC MEANS TO ACHIEVE THE
OBJECTIVES OF PHYSICAL EDUCATION AND SCHOOL SPORTS
AT THE 8th GRADE LEVEL**

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Abstract

Allocating short time to physical education classes in the curriculum, 2 hours per week, for students who do not have inclination and skills, and the short time given covers in a small way the accomplishment of physiological and psychomotor effects, which are necessary for students during school, because they are in a period of growth which extends throughout life. This research, which took place all through the school year during Physical Education and sports classes, shows the increase in motor and somatic indices, which confirms that the proposed means are effective and have led to an optimal development of students who were part of this experiment. Within research, the objectives of physical education are achieved through high indices of physical and motor development, the implementation of a wide range of basic and specific handball skills, the establishment of the habit of practicing physical exercises in students' spare time, the acquisition of new knowledge related to the organization and the progress of the game.

Introduction

Since the ancient period, there have been indications confirming the existence of exercising. Because very few documents have been discovered about the occupations of the people in ancient times, anthropology and archeology have brought to light information with remarks about some groups and peoples who lived close to primitivism until recently.

Being one of the means of physical education, the game of handball develops the acquisition of basic and specific motor skills in the human body, but it also enhances the information related to the technique and tactics specific to the game of handball [1-4].

Being an active discipline, it requires a great deal of mental and physical effort from its practitioners. Taking place in an organized, scientifically and

methodically developed environment and due to the positive parts of the physical and mental effort, it helps improving the physical and intellectual qualities, moral-volitional, but it also helps enhancing the health of those who practice it. For this, handball, as a component of physical education, is included in the curriculum of physical education courses, as a necessity, at the suggestion of specialists from the Ministry of Education, in schools throughout our country, from preparatory students where balls are introduced and mini-handball introductory games are made, to the 3rd and 4th grades, where the basic technical-tactical elements are tried to be implemented, through a wide range of exercises and training games. and all the way through the upper grades, when students reach adulthood [1,5-8].

This research should show that schoolchildren who play handball as a sport game in a setting organized during physical education class or at organized competitions, as well as in sports activities, can enjoy the rise of physical development but also indices superior morphological and functional, compared to some children about the same age, but who do not practice handball at school or in their free time.

Material-method

The aim of this paper is to validate a personal model recommended for the efficiency of handball teaching in the gymnasium cycle, by choosing the specific means of the handball game at this level, which have, as a finality, the accomplishment of the objectives in the physical education discipline. Systematizing the means of teaching handball in a didactic way, being able to be developed and improved, for me, it turns into a motivation to develop myself and to try to improve the approach of teaching at the gymnasium level.

In order to perform the experiment, the following methods were used by me: the analysis and study of bibliographic material, the observation, the pedagogical experiment, the measurement and statistical-mathematical processing of data, the method of graphical representation.

The actual objective of this paper, the research, took place between September 14 - November 6, 2020 and May 5 - June 18, 2021. Between the two specified periods, with the exception of three weeks, the courses were organized in an on-line system, because of the pandemic caused by the Covid-19 virus, and the three weeks in which students actually came to school were in February-March, when the weather conditions do not allow outdoor sports classes and our schools do not benefit of an optimal gym for preparing the game of handball.

The research was carried out on the sports field of the Horodniceni School, a field with a synthetic surface, which has the dimensions of 35x 14 meters. The field does not have the useful surface necessary for the game of handball; being

narrower, the field does not allow the use (as much as would be necessary) of the player playing in the extreme position.

Results

Following the research, the results obtained by the subjects were mathematically and statistically processed, in order to achieve an objective image of the values obtained. These tables helped us to analyze the data obtained by the subjects included in the research.

Table 1. Results at tests achieved by subjects

Name and surname	Shuttle run 5x10 m (s)	Standing long jump (m)	Ball throwing (m)	Endurance running, 800m girls, 1000 boys (s)	Complex test (s)
A.D.	16,99	1,22	12	4,20	16,05
A.P.M.	14,53	1,51	20	4,12	14,93
A.F.M.	13,42	1,90	21	4,50	14,11
C.A.	15,51	1,60	13	4,11	17,26
C.A.A.	16,62	1,58	21	4,45	15,64
C.B.V.	14,50	1,88	26	3,52	13,99
C.P.O.	14,05	1,72	23	4,20	14,25
C.R.C.	13,93	1,48	19	4,27	14,67
F.M.A.	17,35	1,35	11	4,10	18,24
G.I.V.	15,36	1,52	21	4,25	14,90
G.I.C.	13,81	1,67	18	3,58	14,05
H.B.E.	17,15	1,25	10	4,35	16,47
H.D.I.	16,02	1,43	20	4,27	16,84
I.A.	17,81	1,18	14	4,38	16,02
M.A.	14,99	1,33	30	4,42	15,93
N.I.I.	13,99	1,45	24	4,35	13,90
R.M.N.	14,87	1,51	15	4,53	14,78
U.A.N.	14,78	1,53	22	4,22	14,45
V.A.T.	14,17	1,66	15	3,35	14,11
V.R.I.	13,90	2,12	28	3,50	13,17
X	15,18	1,33	19,15	4,13	15,92
S	1,318	0,237	5,232	0,346	1,282
C.V. (%)	8,68	17,85	27,32	8,37	8,05

Discussions

The 5x10 meter shuttle run is the control test in the National Assessment System, which allows us to test the students' speed running over shorter distances, the length of the sports field not allowing me to use the 50-meter speed test. The performance of the tested students increased by 0.37 second. Not all 20 students made progress, 4 of them had a slight decrease in the time spent during the control test, but it should be noted that the difference in such a speed test can be made by some details that may seem insignificant, such as the adhesion of the sole of the running shoes, the moisture of the synthetic turf or the reference taken by the subjects during the evaluation (figure 1).

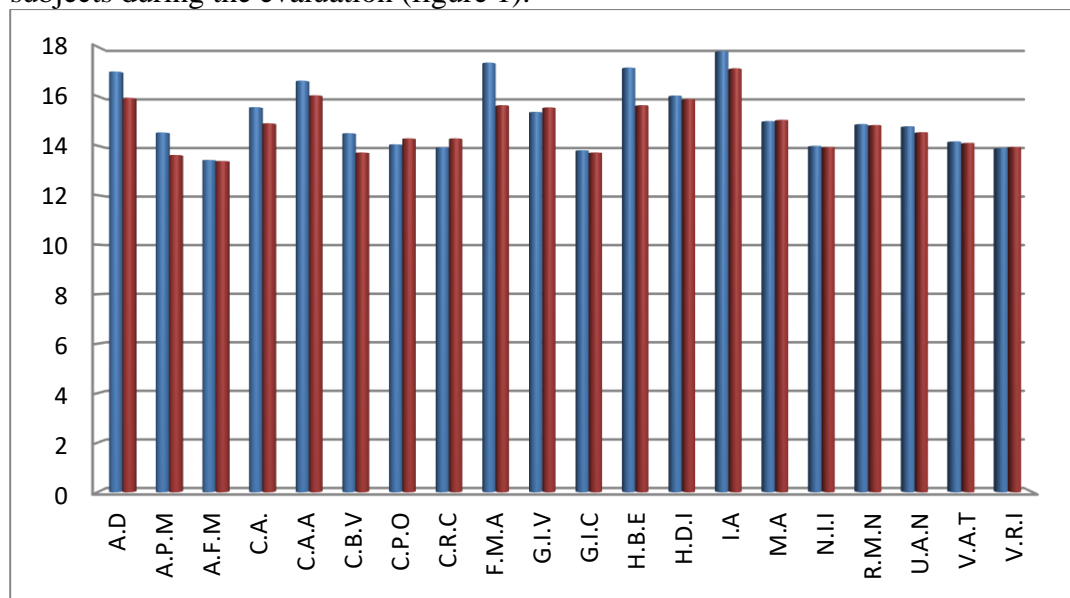


Figure 1. Shuttle run 5x10 meters

The standing long jump is a test of the National Assessment System that allows us to measure the force developed by the leg muscles, it is a test of explosion and coordination of all muscle groups of the performer. The final test of the target group recorded a progress of 0.26 meters jump, which is an obvious increase in the results of the group (figure 2).

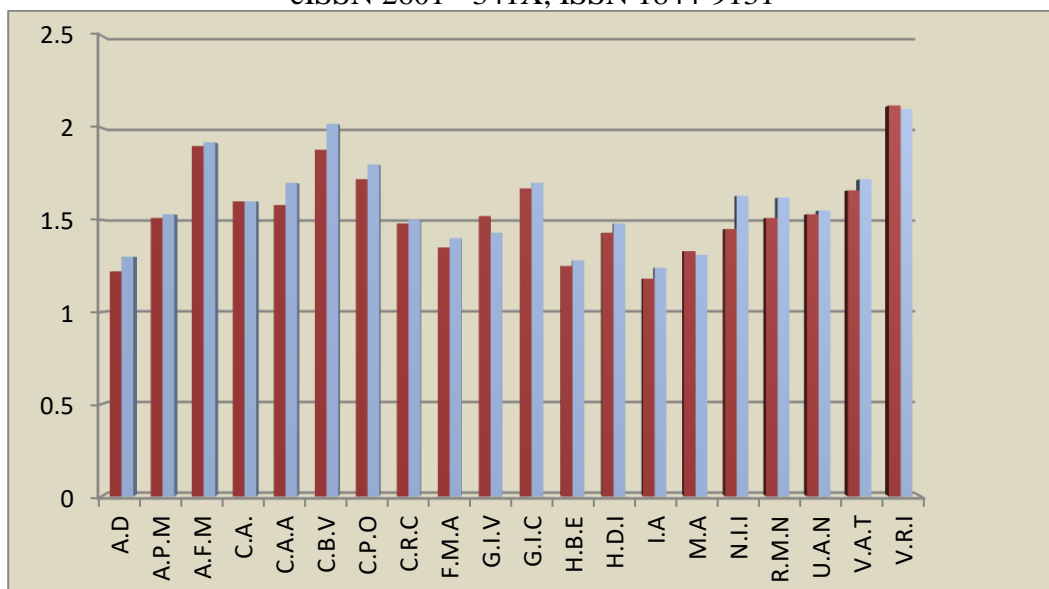


Figure 2. Standing long jump

Throwing the handball at a distance is a test run, used in specific handball training, at sports clubs and schools, it is used to test strength in the upper limbs and beyond. Subjects had an average progress of 2.70 meters between the initial and final tests. The most obvious progress was the 2 students, they improved their throws by 9 meters each, the last of them, throwing the ball at 33 meters (figure 3).

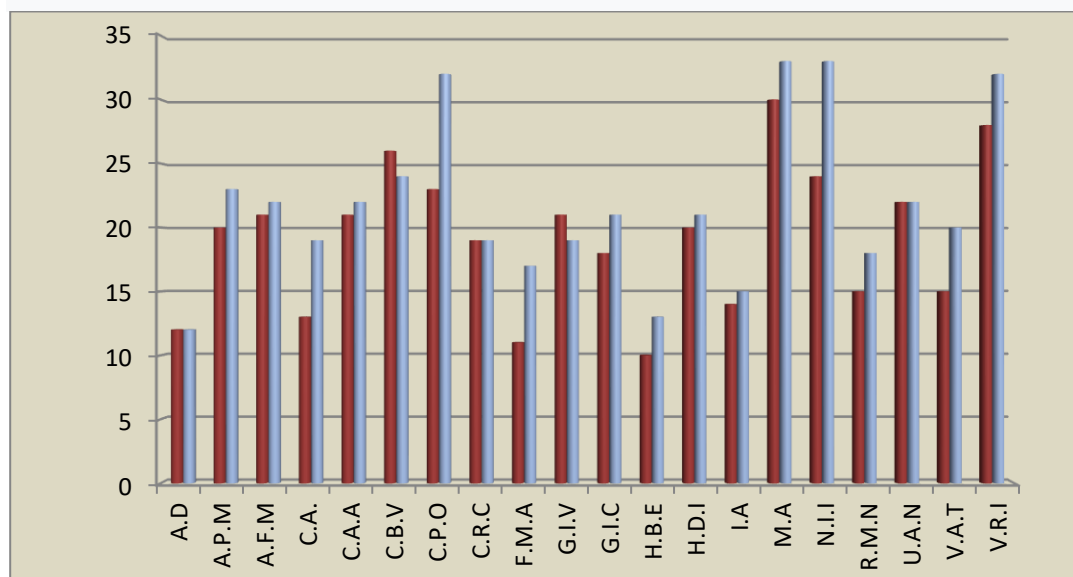


Figure 3. Ball throwing

Running 800 meters for girls and 1000 meters for boys, is the endurance test used in the National Assessment System for students of grades VII and VIII, but also of other higher classes. Along with speed running, endurance running is the most widely used assessment test in school physical education, not being loved by many of today's current students. Class students progressed by 15 seconds. In this test the improvement of the results between the two tests was visible (figure 4).

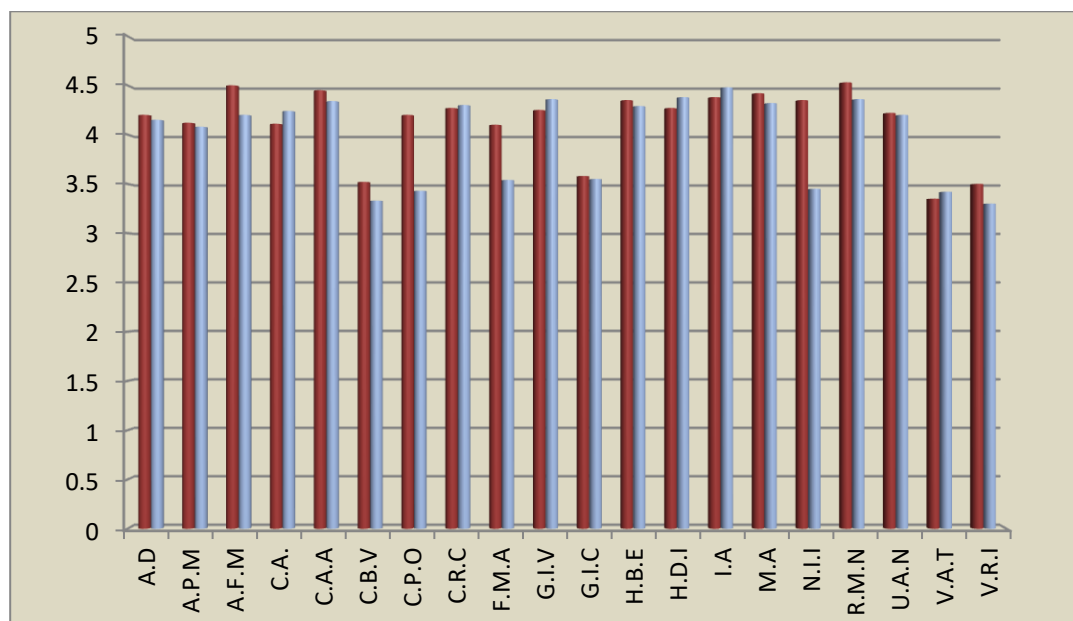


Figure 4. Endurance running

The complex test is an adapted and simplified test from the specific assessment of high school level handball players. This is a test that requires the subjects' speed, coordination, endurance, skill in handling the handball. The target group had an execution time improvement of 1.15 seconds compared to the initial test (figure 5).

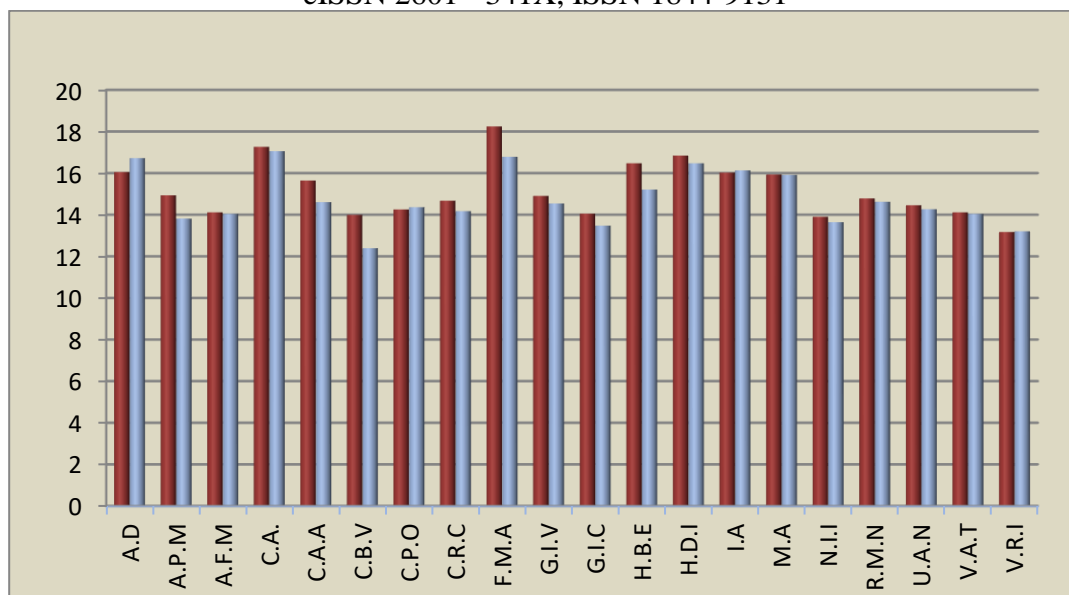


Figure 5. Complex test

The results obtained in our study confirm that handball it is an important discipline that contribute to the achieving of the specific objectives of the physical education in school [9-13]. Also subjects with very good specific skills could included in school team for competition or to practice handball at performance level where efficiency is important in order to achieve competitional objectives [14-20].

Conclusions

This research, which took place all through the school year during Physical Education and sports classes, shows the increase in motor and somatic indices, which confirms that the proposed means are effective and have led to an optimal development of students who were part of this experiment.

The fact that superior results were obtained by developing the motor qualities represented by the chosen tests, shows us that the activities well prepared in time, with specific means, were well- chosen, and handball as a sport has a wide range of these means.

Through this research, the objectives of physical education are achieved through high indices of physical and motor development, the implementation of a wide range of basic and specific handball skills, the establishment of the habit of practicing physical exercises in students' free time, the acquisition of new knowledge related to the organization and the progress of the game.

This experiment proves to us, once again, that, if we give time to sports activities in an organized setting, and the children are involved and eager to develop, the results will, obviously, get better and better.

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