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STUDY ON THE IMPLEMENTATION OF THE BADMINTON GAME IN EXTRACURRICULAR ACTIVITIES AT GRADES V. AND VI.

PRODEA COSMIN[1]*, JOLDEŞ NICOLAE[2], POP IOAN-NELU[3]

ABSTRACT. The paper studies the impact of the implementation of the Badminton game extracurricular activities at secondary school level, and certain aspects relating to the benefits that the game of Badminton brings to the instructive- educational process. Thus, in addition to providing good health, the game of Badminton practiced in an appropriate manner by students at young ages, forms their team and competition spirit, strong characters and feelings of belonging to a community or idea, builds healthy moral values and creates elites. The idea is that Badminton proves to be one of the best ways to achieve the objectives of physical education and sport with regard to the development of the motor qualities of speed and skill. Even more, a constant interest of the students towards the game can be noticed. As a result, the game of Badminton is an alternative to the established sports, with a significant impact on the young generation.

Key words: *Gymnasium, Badminton, Extracurricular, Motor Qualities, Alternative.*

REZUMAT. ***Studiu privind implementarea jocului de badminton în activităţile extracurriculare la nivelul claselor a V-a şi a VI- a.*** Lucrarea urmăreşte impactul implementării jocului de badminton în activităţile extracurriculare la nivelul treptei gimnaziale, şi anume aspecte cu privire la beneficiile pe care jocul de badminton le aduce procesului instructiv- educativ. Astfel, pe lângă asigurarea unei stări bune de sănătate, jocul de badminton folosit în mod corespunzător de elevi, la vârste fragede, le formează acestora spirit de echipă şi competiţie, caractere puternice şi sentimente de apartenenţă la o comunitate sau idee,

[1] University of Babeş-Bolyai, Faculty of Psychology, Cluj-Napoca, Romania
[2] "Iuliu Haţieganu" Gymnasial School, Cluj-Napoca, Romania
[3] University of Babeş-Bolyai, Faculty of Physical Education and Sport, Cluj-Napoca, Romania
** Corresponding Author: prodeacosmin@gmail.com*

induce valori morale sănătoase şi creează elite. Ideea este că badmintonul se dovedeşte a fi o modalitate optimă de atingere a obiectivelor educaţiei fizice si sportului cu privire la dezvoltarea calităţilor motrice viteza şi îndemânarea. De asemenea se poate observa interesul susţinut al elevilor faţă de jocul de badminton. Ca urmare, jocul de badminton este o alternativă la sporturile consacrate, cu un impact major asupra tinerei generaţii.

Cuvinte cheie: *Gimnaziu, Badminton, Extracurricular, Calităţi Motrice, Alternativă.*

Introduction

The educational system in Romania is undergoing a period of essential transformations with the purpose of adjusting education to the international standards of developing the students' personality. Extracurricular activities and in particular sport activities support the improvement of the process of teaching and learning and also the acquisition by pupils of skills that are necessary for social inclusion.

The secondary school period creates the most favourable conditions for learning the Badminton game and for the acquisition of some actions related to sports discipline. Practiced at this age, the game of Badminton can be included in the vast system of physical education, both as an activity carried out in the form of the game, and al so as a sport branch.

The didactic technology focuses on the techniques used for reaching the instructive and educational aims, types of teacher and student organization in the lesson – principles, methods, activity types – material resources, the entire assemble of teacher – student interaction, aimed at conducting the educational activity in the best conditions (Marcu, 1989, p. 85).

Through the use of motor skills in badminton, in the form of physical exercise (running, jumping, hits with multilateral influences on the body), the educational objectives, which refer to the formation of a varied motor baggage and the improvement of motor qualities, are achieved. By its specificity, the game of Badminton requires in all of its forms special speed and increased skill, motor quality switch area easily acquired at the age of 11- 13 year sold, when the bases of the physiological substrate of these two qualities are developed, which would later be more difficultly influenced.

Badminton is a technical sport which requires very good eye-hand coordination, the psychological training having its own determinant role in performance achievement (Rus, 2008, p. 13).

Thus, my reason and purpose is that the game of Badminton, as a constantly designed and practiced activity, contributes to the development of the physical condition and motor power ability of the students.

Objectives

a) To determine the impact of extracurricular activities on the development of the motor capacity of the students;
(b) The assessment of the degree of the physical development and technical preparation of pupils in classes V and VI;
(c) The development and application of the specific means system for developing the general motor capacity within the extracurricular Badminton classes.
(d) Theoretical and experimental argumentation by checking the efficiency of the extracurricular motor activities practiced in grades V and VI.
(e) To stimulate students to start practicing this sport at a level of performance.

Conditions (place, the groups of students and research stages)

The study was conducted within the framework of the extracurricular sport activities at the "Iuliu Hatieganu" School in Cluj-Napoca –a school with good facilities (28/15 m sports hall; 40/20 m handball court, two football courts with synthetic surface of 40/20 m each), appropriate for pursuing extracurricular sport activities.

The pedagogical experiment was conducted on a group of 64 students (boys and girls) in classes V and VI at" Iuliu Hatieganu" Secondary School in Cluj-Napoca. The work was carried out in two weekly meetings in the first and second semester, starting on 21st of September 2015 and up to 17th of June 2016 in the following steps:

- establishing the groups of students: the experimental group (E.G.) and the witness group (W.G.)
- carrying out the control tests
- the development of the experimental factor - action systems;
- establishing the data processing system and the criteria for the hypothesis in order to conduct the conclusions and recommendations.

Both the experimental group and the witness group are mixed groups of 32 students each. In the experimental group there are 16 boys (8 from Class V and 8 from Class VI) and 16 girls (8 from Class V and 8 from Class VI), and in the witness group there are 16 girls (8 from Class V and 8 from Class VI) and 16 boys (8 from Class V and 8 from Class VI).

The experiment was conducted with groups which had the same operating conditions for both the initial and the final test.

Initial tests were carried out in the period between 21 September and 19 October 2015, and the final ones took place in the period between 16 May and 17 June 2016.

The experiment was developed during a school year in which the methods required by the school curricula were used for the witness group, and the methods I had chosen for the achievement of the objectives for the experimental group.

The methods of research

In order to objectively achieve the content and the complex character of the motor activities within the framework of the extracurricular lessons organized with the students of grades V and VI, we have applied various methods of research through which we wanted to obtain the data on the impact of the Badminton game upon the development of the students' motor power ability.

The study of the bibliographic material available in the sports literature

I have studied the sports literature regarding the specific issues of physical education for students in secondary school, didactic research papers (curricula and publications) and I have also used the internet to research the most recent materials on scientific methods.

Pedagogical observation

The method of observation consisted in the permanent monitoring of the teaching activities both within the experimental group and the control group, through effective participation in the preparation, planning, design and conducting of the Badminton physical education and sport lessons. The method has been applied at all stages of research and the data obtained has allowed the formulation of conclusions regarding the organized extracurricular activity.

The test method.

The test is a measuring instrument, a scientific way of measuring certain phenomena, motor qualities, individual skills.

The statistics- arithmetic method

As a method of processing and interpreting the data collected during the research, statistics has established itself in recent decades, its knowledge becoming essential for any researcher and specialist.

The data collected from different groups allows certain appreciation of the value and the frequency with which they appear. The description of the group must be done based on objective data.

The arithmetic mean - is the most commonly used static indicator in the interpretation of the collected data and the one which is to beta ken into account in all future calculations. It also provides an accurate me a sure of the central tendency.

The examination methods used in the research

In order to highlight the level of motor development of the group of students, a study of performance we carried out in the first stage and the collected data provided an objective examination of the students with regards to motor development.

For both the initial and the final testing the following control tests were used:

1. Touch the boards
2. Moving with added steps in the 4 corners of their own field(4x4,5m)
3. The long and short serve

Methods used in the examination:

Lesson 1 - Date 21.09.2015 - 25.09.2015 for learning the stroke
Lesson 2 - Date 28.09.2015 - 02.10.2015 for learning movements
Lesson 3 - Date 05.10.2015 - 09.10.2015 for learning and consolidating the waiting position and move
Lesson 4 – Date 12.10.2015 - 30.10.2015 for learning the serve
Lesson 5 – Date 02.11.2015 - 13.11.2015 to consolidate the serve
Lesson 6 - Date 16.11.2015- 27.11.2015 for learning the low serve
Lesson 7 - Date 30.11.2015 - 11.12.2015 for consolidating the low serve
Lesson 8 - Date 14.12.2015 - 15.01.2016 for learning backhand low serve technique
Lesson 9 - Date 18.01.2016 - 29.01.2016 for consolidating backhand low serve technique
Lesson 10 - Date 01.02.2016 - 05.02.2016 for learning the forehand overhead stroke
Lesson 11- Date 15.02.2016 – 19.02.2016 for consolidating the forehand overhead stroke
Lesson 12 – Date 22.02.2016 - 04.03.2016 for learning the overhead smashes
Lesson 13- Date 07.03.2016- 18.03.2016 for consolidating the overhead smashes
Lesson 14 - Date 21.03.2016 - 25.03.2016 for learning the direct serve
Lesson 15 – Date 28.03.2016 - 08.04.2016 for consolidating the direct serve
Lesson 16 - Date 11.04.2016 - 15.04.2016 for learning the direct smashes
Lesson 17 – Date 18.04.2016 - 06.05.2016 for consolidating the direct smashes

Lesson 18 – Date 09.05.2016 - 13.05.2016 for learning the right smash serve
Lesson 19 - Date 16.05.2016 – 27.05.2016 for consolidating the right smash serve
Lesson 20 - Date 06.06.2016 – 17.06.2016 for the consolidating the right strokes

The exercises commonly used during the lessons were the following:

- Placing the racket in a string plane parallel with the ground position, in the open palm, with spread fingers, along the diagonal from the thumb root to the hipotenar area of the palm and flexing the fingers;
- Performing the flexing and extension from the fist articulation, with the racket in hand (the forearm and the racket must form an angle of about 135°);
- Performing the flexing and extension, combined with the pronation and supination of the forearm;
- Performing successive hits with alternate change of the grip;
- Adopting the (high) ready position during the game;
- Going from this position to a lower one; running on the court, turning to the teacher at signal and adopting the correct ready position;
- Vertically hitting the shuttlecock while walking and slowly running;
- Mimicking the serve without a racket;
- With the suspended shuttlecock: performing the actual hit. The focus will be on synchronizing the weight transfers on the front leg, with action of the left arm and the right arm;
- Letting the shuttlecock fall freely and performing the serve.
- Vertically sending the shuttlecock, with a low left strike.
- Performing the stroke with a partner, at a distance of 2-3 m, increasing to 5-7 m.
- Holding the shuttlecock suspended at chest level with the left hand; the retracted arm with the racket hits the shuttlecock; the strike must be executed by the extension of the elbow and fist articulation;
- Vertical strikes of the shuttlecock, at chest level;
- Practicing this strike with a partner at a 2-3 m distance;
- The suspended positioning of a shuttlecock or another object and striking it with arm extension for developing the correct evaluation of the hitting point;
- Performing the same strike with a partner, above the head. The focus is on using the grip for the right strike and not the chest one;
- Practicing the low left strike, with a partner, at small distances;
- Performing the low left strike, while taking a step forward or sideways;
- Performing sending the ball to a paper basket by direct strike. After consistent successful strikes, the distance to the basket will be constantly increased.
- Performing a backhand and sending the shuttlecock in a basket. After consistent successful strikes, the distance to the basket will be constantly increased.
- Returns to the partner situated in their field, at a small or big distance, without a net.

- Returns to the partner situated in their field, at a small or big distance, over the net.
- Returns to the partner situated in their field, with different strikes: smash, lob, stop, net shot.
- Returns to the partner situated in their field, with different strikes: smash, lob, stop, net shot, in different directions: back and forth, parallel with the baseline or the diagonal of the field (in cross).
- Theme games: the points are earned in specific conditions (after a lob, a smash etc.)

Results

TEST 1. THE DYNAMICS OF THE RESULTS RECORDED AND STATISTICAL AVERAGE OF THE BOYS AND GIRLS GROUPS IN THE EXAMINATION "REACH THE PLATES "

Table 1. The arithmetic means (initial and final testing) of the sample" reach the plates", boys and girls grades V and VI experimental and control groups

Girls / Group	E (a V-a) M (a V-a)	T.I.=11.15 T.I.=11.25	T.F.=10.82 T.F.=11.13
	E (a VI-a) M (a VI-a)	T.I.=10.78 T.I.=10.89	T.F.=10.44 T.F.=10.83
Boys / Group	E (a V-a) M (a V-a)	T.I.=11.03 T.I.=11.08	T.F.=10.63 T.F.=10.98
	E (a VI-a) M (a VI-a)	T.I.=10.34 T.I.=10.46	T.F.=9.98 T.F.=10.40

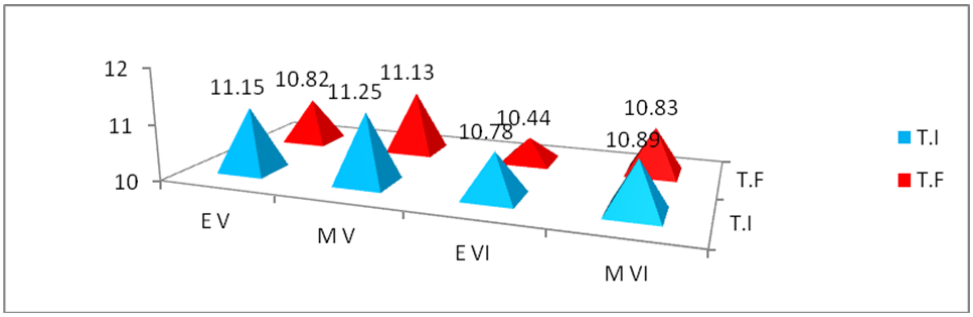

Figure 1. The arithmetic means (initial testing and final testing), groups of girls classes V and VI (experimental and control groups) for the "reach the plates" test

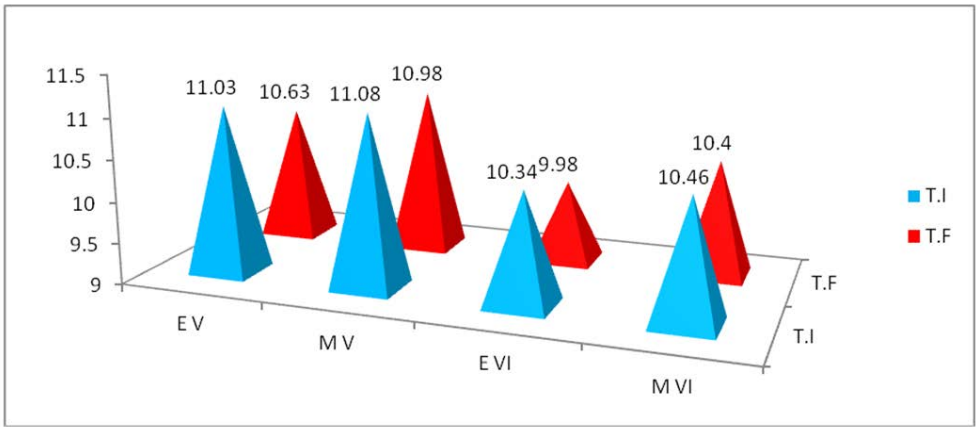

Figure 2. The arithmetic means (initial testing and final testing), groups of boys grades V and VI (experimental and control groups) for the "reach the plates" test

TEST 2. THE DYNAMICS OF THE RECORDED RESULTS AND STATISTICAL AVERAGES OF GROUPS OF BOYS AND GIRLS IN THE TEST WITH STEPS "MOVEMENTIN THE FOUR CORNERS OF THE COURT(S) OF BADMINTON"(4X 4.45 M).

THE RESULT IS RECORDED IN SECONDS AND TENTHS.

Table 2. Arithmetic means (initial and final testing) of the test with steps" Movement in the four corners of the court(s) of Badminton"(4x 4.45 m) girls and boys classes of V and VI experimental and control groups

Girls / Group	E (a V-a)	T.I.=14.21		T.F.=13.89
	M (a V-a)	T.I.=14.28		T.F.=14.21
	E (a VI-a)	T.I.=14.02		T.F.=13.67
	M (a VI-a)	T.I.=14.17		T.F.=14.09
Boys / Group	E (a V-a)	T.I.=13.36		T.F.=12.95
	M (a V-a)	T.I.=13.47		T.F.=13.36
	E (a VI-a)	T.I.=13.07		T.F.=12.57
	M (a VI-a)	T.I.=13.21		T.F.=13.09

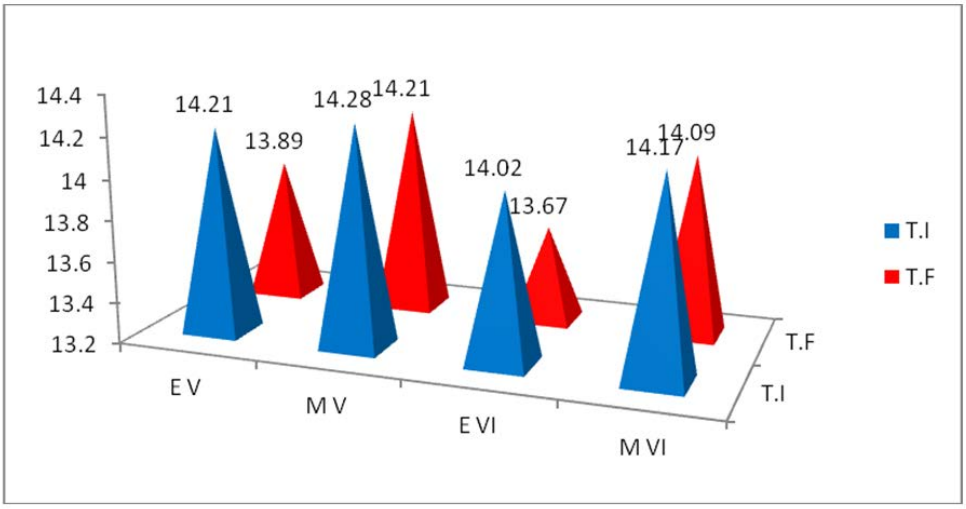

Figure 3. Arithmetic means (initial testing and final testing) for the groups of girls at the "(added steps) movement in the four corners of the Badminton court" test (4x 4.45 m)

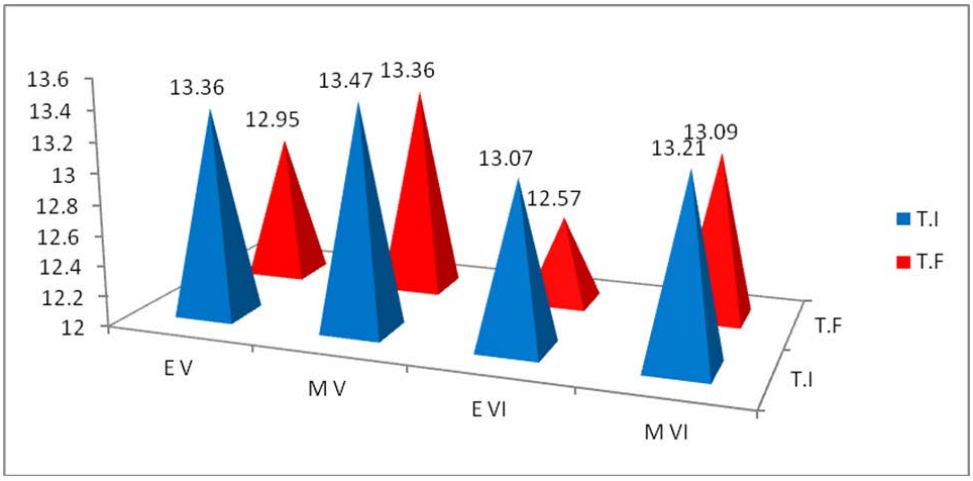

Figure 4. Arithmetic means (initial testing and final testing) for the groups of boys at the "(added steps) movement in the four corners of the Badminton court" test (4x 4.45 m)

TEST 3. THE DYNAMICS OF THE RESULTS RECORDED AND STATISTICAL AVERAGES OF GROUPS OF BOYS AND GIRLS IN THE LONG AND SHORT SERVE TEST".

Table 3. arithmetic means (initial and final testing) of the" Long and short serve test" boys and girls classes V and VI experimental and control groups

Girls / Group			Long Service	Short Service		Long Service	Short Service
	E (a V-a)	T.I.=	1.25	1.75	T.F.=	3	3.5
	M (a V-a)	T.I.=	1.12	1.50	T.F.=	1.62	1.87
	E (a VI-a)	T.I.=	1.37	1.87	T.F.=	3.37	3.75
	M (a VI-a)	T.I.=	1.12	1.62	T.F.=	1.5	1.87
Boys / Group	E (a V-a)	T.I.=	1.12	1.5	T.F.=	3.12	3.75
	M (a V-a)	T.I.=	1	1.37	T.F.=	1.75	1.75
	E (a VI-a)	T.I.=	1.25	1.62	T.F.=	3.5	4
	M (a VI-a)	T.I.=	1.12	1.37	T.F.=	1.75	1.75

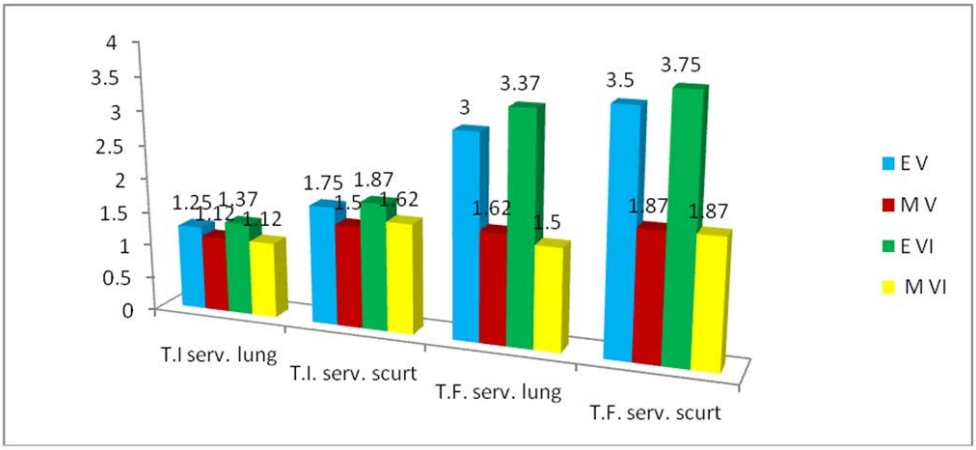

Figure 5. The arithmetic means (initial testing and final testing), groups of girls in the "long and short serve" test

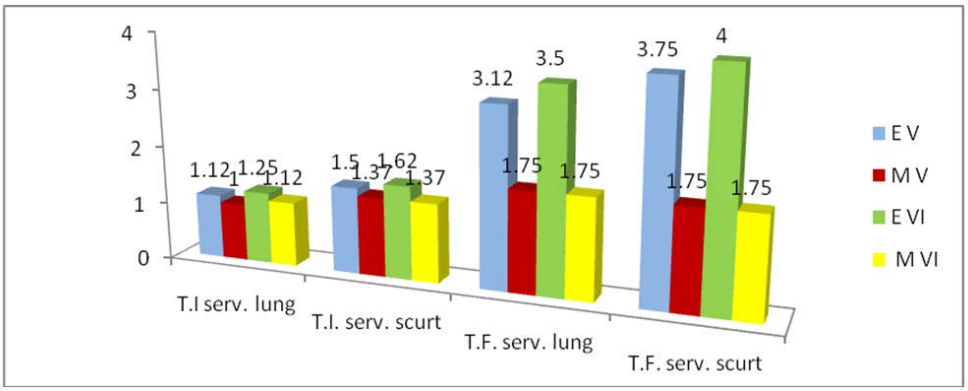

Figure 6. The arithmetic means (initial testing and final testing), groups of boys in the "long and short serve" test

Conclusions

The purpose of the study in this scientific method paper has been to observe the impact of the Badminton game within the framework of extracurricular activities as a form of learning in a non-formal and relaxing manner, with a major role in the development of the motor qualities, but also from a psychosocial point of view.

During the physical education hours, more precisely at the end of them, when the students were requested feedback on the impact of physical education lessons, I have surveyed their interest in playing Badminton, initially perceived as being easy, fun and not requiring sustained physical effort. Groups of students were formed, eager to practice this sport in extracurricular activities carried out in the course of a school year (September to June) with a frequency of 2x/week, 60-minute training sessions, using the school equipment.

We have created a series of tests (3 in number) applied under the same conditions to both the witness group and the experimental group and I found that the performance of the experimental group was significantly better than the one of the witness group (according to the tables).

To my great satisfaction, the frequency of pupils in these activities was more than 90%, as students displayed joy in playing Badminton, while also manifesting interest in the knowledge of the theoretical aspects of this game. As a result of the application of the final tests (May/June) the experimental group obtained significantly better results compared to the witness group (according to the graphs).

The benefits that the game of Badminton brings to the educational process and to the harmonious development of the students are multiple. Thus, in addition to providing good health, the game of Badminton used in an appropriate manner at young ages develops team spirit and competition, strong characters and the feeling of belonging to a community or idea, builds healthy moral values and creates elites. I would first suggest that physical education teachers promote the Badminton game among students and parents and include the game on the list of optional subjects, and last but not least - encourage students to participate in national and international competitions.

The idea is that Badminton proves to be one of the best ways of achieving the objectives of physical education makes it, in conclusion, an alternative to the established sports with a major impact on the young generation.

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