

The Annals of the “Ștefan cel Mare” University of Suceava.
Physical Education and Sport Section. The Science and Art of Movement
eISSN 2601 - 341X, ISSN 1844-9131 Volum XV issue 2/ 2022
**STUDY ON THE DEVELOPMENT OF MOTOR SKILLS IN STUDENTS
THROUGH BADMINTON**

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Keywords: skill, motor, students, middle school, badminton

Abstract: The development of students' motor skills has been a permanent concern of physical education and sport specialists, and has been continuously optimised over the years. In the proposed study we started from the premise that by applying the specific means of badminton game to the experimental class, the level of motor skills development can increase compared to the control class. The study was carried out at the "Al. I. Cuza " in Fălticeni, Suceava town, in the period September-December 2022. The students participating in the study were from classes a- V, both girls and boys. The aim of the research is to select the most effective means of badminton to develop the motor skills of the students under study in physical education and sports lessons. In secondary school students, the exercises specific to the game of badminton and the game itself allow the development of their motor and mental skills.

Introduction: In the literature, badminton is a sport that can be played by all ages. It can be a performance sport, a leisure sport, or practiced as a means of physical education in schools, etc. In the performance sport of badminton” it is important for a to keep his or her attention level at a maximum level during the game, to think about the next move in order to to quickly complete a move (long pass), to turn to the starting point and move towards different positions” [4]. Following the study in relation to the practice of badminton, it was concluded that its involvement "can lead to improvement in all areas, the most studied being those related to physical health, especially in terms of improving heart and lung function and developing basic physical skills" [1]. Author Tony Grice confirms that the game of badminton is a popular game around the world. It can be played in groups and at different levels of training by both boys and girls. This game can be played in the gym and outdoors, both in a competitive and recreational form [9]. Knowing the elements that make up the game of badminton and how to play it are the first notions that the physical education teacher must convey to students even at a young age. Badminton is played in pairs, on a flat court of different sizes, depending on the conditions of the hall or sports ground. In order for the game to achieve its aim,

it is necessary to "systematise the technical elements according to their importance" [6] and "by hitting the butterfly, which is the object of the game, a series of mechanisms and laws from both biomechanics and physics intervene" [6]. Some specialists consider that "the main emotional satisfaction of students is obtained through playing sports games, it is necessary for the teacher to carry out a series of measures that lead to awareness" [3], thus the social component, not only emotional, "has strengthened its role in the definition and expression of physical education and sport" [7]. In their doctoral thesis, the authors concluded "that at national level there is an urgent need for a solid point of view on the methodology of badminton teaching, considering that without a scientifically based teaching methodology the instructional process becomes ineffective, even more so in the case of badminton, whose complexity requires a wide range of knowledge" [2]. The authors of the article believe that "the learning processes in the BST module developed can provide new learning opportunities, learning experiences through teaching and facilitation activities to encourage improvement learning outcomes of badminton skills in physical education classes" [8]. Another study confirms that "In current badminton teaching, the distribution of the teaching content of student skills is relatively random, there is no complete scientific hierarchical skill grading system, and the teaching process does not follow the principle of gradual progression"[5]. In conclusion, a study shows that "Physical education is an integral part of the high school curriculum, contributing to the holistic development of students, and badminton is a sport of particular interest at this level" [10].

Material-method: The study was carried out at "Al. I. Cuza" in Fălticeni, Suceava county, in the period September-December 2022. The students participating in the study were from classes a- V, both girls and boys. The aim of the research is to select the most effective means of badminton to develop the motor skills of the students under study. For this purpose, we chose two 5th grade classes, a control class and an experimental class. As for the experimental class, we applied in the physical education and sport lessons, those means specific to the game of badminton necessary for the development of motor skills, and in the control class we applied means specific to physical education and sport. Hypothesis of the work: it is assumed that by applying means specific to the game of badminton to the experimental class, the level of development of motor skills can increase compared to the control class. Research methods used: bibliographic study method, observation method, experimental method, mathematical-statistical method, graphical method. The proposed tests were for the assessment of students' moral skills to determine their development. Below we present some of the exercises used in physical education and sport lessons specific to badminton in the experimental class: Students will sit in semi-squat position, performing a slight forward lunge, followed by jumping between 6-8 repetitions, with changing legs,

dosing 2x; students in semi-squat position with knees apart, perform a quick lunge to the side, shifting weight onto the leg of the lunge, dosing 8-10x; students in fundamental position with badminton racket in right hand, subsequently change racket to left hand, repeat 8-10 times; other exercise - alternating play at the wall, with alternating change of grip; students are seated in pairs, at a distance of about 7-9 m hitting the butterfly between the two students, dosing 2x, students seated in a row with racket in hand at a distance of 5-6 m from a suspended circle, will try to hit the butterfly through the circle, 5-8x.

Results and Discussions: The charts give a broad picture of the final results obtained in the evaluation tests on the statistical indicators we considered the most relevant in our study: (arithmetic mean, standard deviation, coefficient of variability, max, min, median).

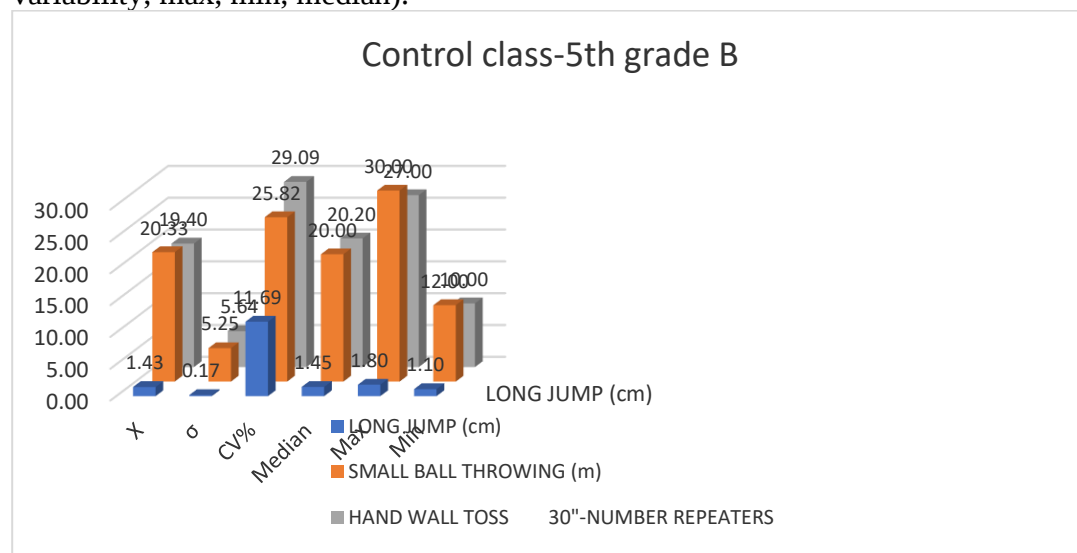


Diagram no.1

It can be seen in diagram no.1 in the experimental class an average of 1.43 m in the Long Jump test, in the Small Ball Throwing test an average of 20.33 m, and in the Hand Wall Toss test there is an average of 19.40 m.

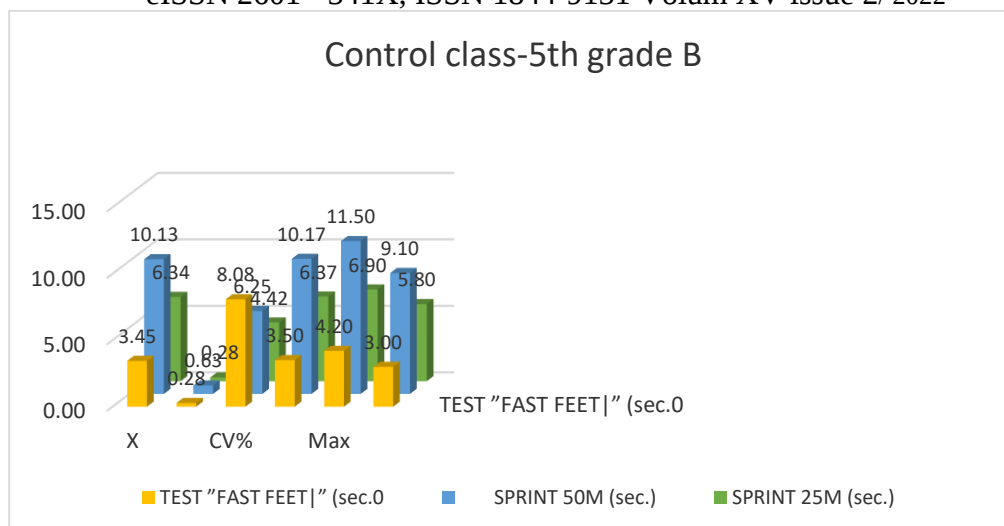


Diagram no.2

In diagram no. 2 you can see an average of the experimental class of 3.45 sec. in the Fast Feet test, in the 50m Sprint test there is an average of 10.13 sec, and in the 25m Sprint test the average is 6.34 sec.

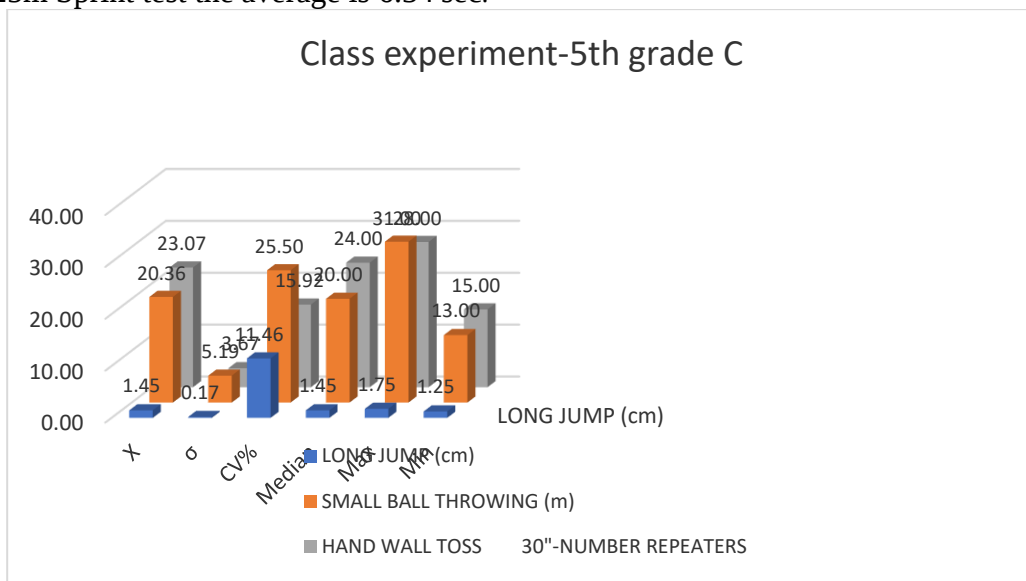


Diagram no.3

In diagram no. 3 it can be seen a control class average of 1.45 m in the Long Jump test, in the Small Ball Throwing test there is an average of 20.36 m and in the Hand Wall Toss test an average of 23.07 m.

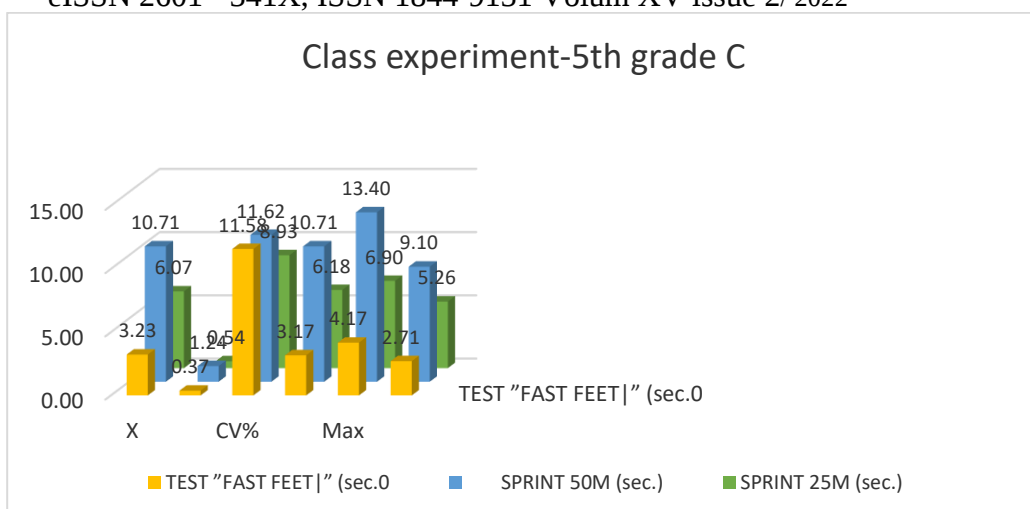


Diagrama nr.4

In diagram no.4 it can be seen an average of the control class in the Fast Feet test of 3.23 sec, in the 50m Sprint test 10.71 sec, and in the 25m Sprint test the average is 6.07 sec.

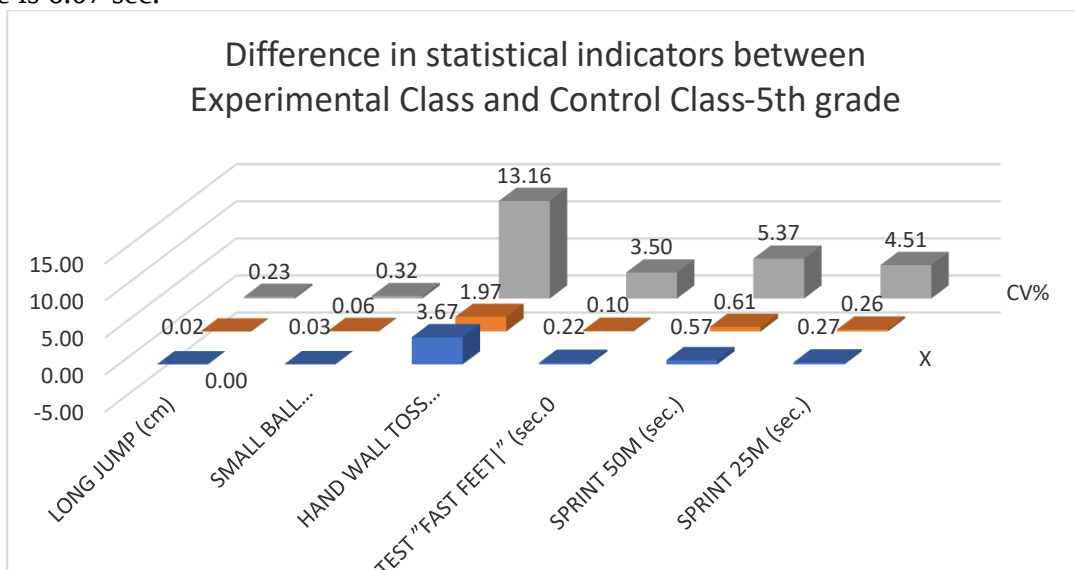


Diagram no.5

It can be seen that the motor skills assessment revealed the evolution of the students of the experimental class in five out of six assessment tests compared to the control class, from the perspective of motor skills. The difference in the mean between the two classes under study are illustrated in diagram number 5.

Conclusions: In the school curriculum, badminton is an alternative sports discipline. In grade 5 students, the exercises specific to badminton and the game

itself allow the development of motor and mental skills. The progress obtained in the evaluation tests in terms of the difference of the average is presented as follows: the experimental class in the Long Jump test had a progress of 0.02 cm, in the Small Ball throwing test of 0.03 cm, in the Hand Wall Toss test of 3.67, in the Fast Feet test of 0.22 sec, and in the 25 m Sprint test of 0.27 sec. compared to the control class. In the 50m Sprint test progress was 0.57 sec. in the control class compared to the experimental class.

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