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A STUDY ON IMPROVING DEXTERITY IN EIGHTH-GRADE STUDENTS THROUGH SPECIFIC FOOTBALL GAME TECHNIQUES

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Abstract:

In the context of physical education and sports, the development of fundamental motor skills is a crucial aspect for students' harmonious growth and performance. Among these, dexterity holds a central place, being essential for a wide range of physical and sports activities. This study aims to investigate the effectiveness of using specific football game techniques to improve the dexterity level of seventh and eighth-grade students. Within this study, we applied a series of specific tests to an experimental group, aimed at evaluating the initial dexterity level and monitoring progress following the implementation of a program based on football game-specific exercises. The results obtained were analyzed and interpreted to highlight the impact of this approach on the development of students' motor skills. The research methods used in this study were: the study of specialized literature, the observation method, and the graphical and tabular method. This study makes an important contribution to understanding how sports activities, especially those specific to football, can be utilized in the school environment to achieve the motor development objectives of students. The results obtained encourage the continuation of research in this area and the further exploration of the long-term benefits of an integrated approach to physical education with elements from sports games such as football.

Introduction

Many consider football to be merely a simple activity of kicking a ball. This view is shared even by some specialists, who evaluate players solely based on their physical qualities. However, the reality is much more complex. Studies demonstrate that a professional football player has possession of the ball, on average, for only 3

minutes in a match. This statistic underscores the crucial importance of advanced individual technique and the ability to effectively capitalize on these short and decisive moments. At the same time, the 87 minutes during which the player does not have the ball at their feet are equally important.

Positioning, movement, marking, anticipation, and communication become essential factors for team success. A tactically intelligent player can significantly influence the outcome of a match even without possessing the ball. Modern football requires a complex combination of technical, tactical, physical, and mental skills. Overcoming the simplistic perception and appreciating the depth of this sport are essential to truly understand the beauty and complexity of football.[5,6]

Even a player with impeccable individual technique cannot reach their full potential if they lack tactical knowledge, both individual and collective. Contemporary football is a strategic sport, where success depends on the team's ability to coordinate and implement an effective tactical plan.[1]

Tactical planning is also essential. Strategies are adapted to each opponent but always based on the fundamental principles of the team's playing system. This system establishes clear roles for each player and each department, ensuring team cohesion and efficiency. Players must be able to control the rhythm of the game, accelerating or slowing down actions depending on the requirements of the moment.

At the middle school level, football is one of the four team sports included in the school curriculum, and its selection during physical education classes is made following discussions between the teacher and students. Although theoretically the choice is mutual, in practice the initiative often belongs to the students, a positive aspect that teachers encourage.[8,10]

In contrast to handball, volleyball, and basketball, which demand complex sports facilities, football can be played with minimal resources: a level field and makeshift goals. This accessibility renders it ideal for schools, particularly those in rural settings, which often lack suitable sports halls due to financial constraints.

Although infrastructure limitations may influence the planning of physical education classes, teachers can compensate with well-structured football programs that achieve curricular objectives. However, the practice of football in middle school must be based on solid pedagogical and didactic principles, going beyond superficial approaches.[7,10]

Football, as a physical education discipline, requires a rigorous pedagogical approach, similar to other sports in the middle school curriculum. It should not be reduced to simple competitions but should become an educational tool, cultivating values such as: conscientiousness, dedication, collaboration, appreciation, self-control, and fighting spirit.

Increasing the frequency of football classes in extracurricular activities (optional, sports clubs) and organizing inter-class or inter-school competitions, under the aegis of school sports associations, represents a strong impetus for attracting students to this sport and cultivating their talent, paving the way for performance football.[2,3]

Analyzing the structure of the physical education lesson, we observe that the development of dexterity and speed, essential motor qualities, is concentrated in the fourth stage. This stage of the lesson is optimal for developing these qualities, as the students' bodies are prepared in terms of excitability and motor skills.

The duration of approximately 5 minutes for this stage allows the use of attractive and moderately strenuous exercises that stimulate the development of dexterity. The main objective is to improve dexterity indices, necessary to cope with complex situations.[9]

The game of football holds a key position in the fifth segment of the physical education lesson, receiving focused attention throughout the learning module dedicated to team sports. During this 25-30 minute period, students are given the chance to learn, reinforce, refine, and test the technical skills appropriate for their age group. This development occurs through the implementation of diverse exercises and activities, which are closely aligned with the educational and instructional goals of the lesson.[4]

Methods - materials

The participants in the experiment were 12 eighth-grade students, both boys and girls, from Mitocu Dragomirnei-Suceava Middle School. The measurements were taken on the school's sports field.

The research methods used in conducting the study are as follows: bibliographic study method, observation method, graphical and tabular method, testing method. To analize data were used desccriptive statistic.

Test descriptions ysed in the research were: shooting on goal with a moving ball; passing to the gymnastics bench; shooting on goal with a stationary ball; penalty kick; juggling (maintaining the ball in the air).

Results and discussion

The descriptive study took place throughout the 2024-2025 school year, during which two assessements were conducted.

At the first test, shooting on goal with a moving ball, were recorded following aspects: the experimental group showed greater progress (6 successful attempts) compared to the control group (4 successful attempts) regarding right foot strikes. The experimental group started with a slightly superior level (12 successful

attempts vs. 10) and maintained its advantage in the final test (18 vs. 14). The progress difference is more pronounced in the case of left foot strikes. The experimental group recorded a progress of 6 successful attempts, double the progress of the control group (3 successful attempts). The experimental group started with a slightly superior level (7 successful attempts vs. 6) and managed to significantly increase its advantage in the final test (13 vs. 9) (figures 1 and 2).

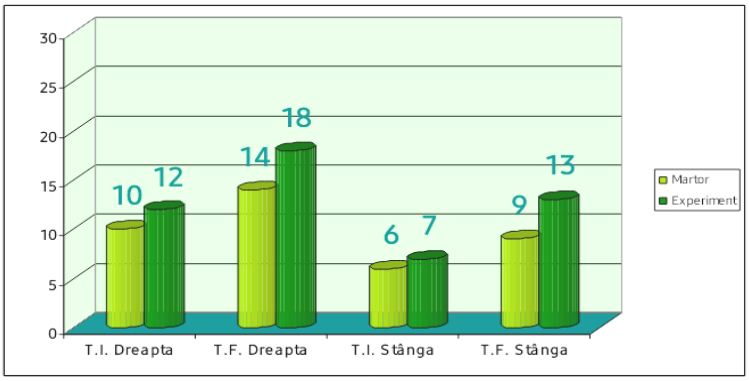

Fig. 1 Graph of the total number of successful attempts

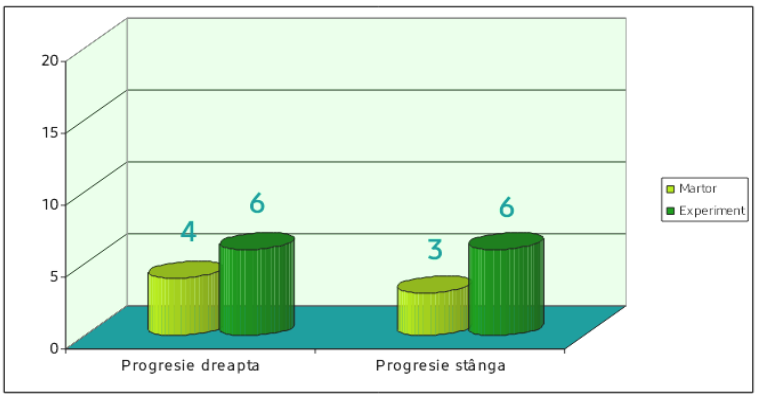

Fig.2 Graph of the progress achieved

In the second test (passes to the bench), both groups showed an improvement in right foot performance between the initial and final tests. The experimental group showed significantly greater progress (23 successful attempts) compared to the control group (9 successful attempts). Both groups started with a very close performance level (97 vs. 95 successful attempts), but the experimental group managed to achieve a significantly higher final result (118 vs. 106). The results suggest that the exercises applied to the experimental group had a more pronounced positive effect on improving passing to the gymnastics bench (figures 3 and 4).

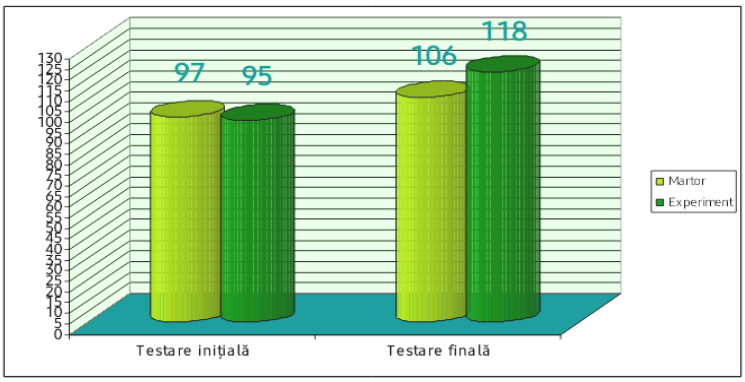

Fig.3 Graph of the total number of successful attempts

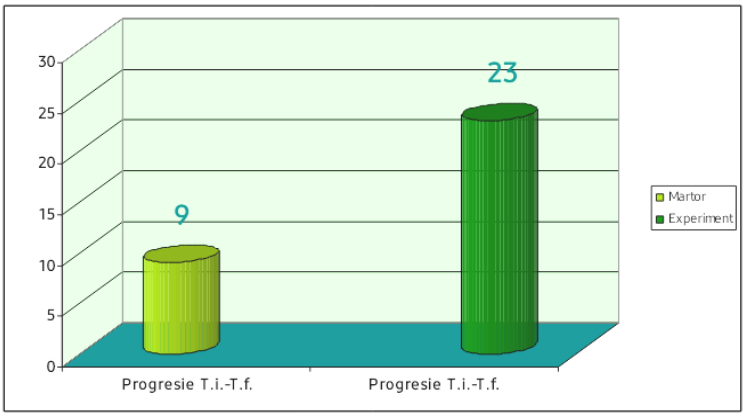

Fig.4 Graph of the progress achieved

At the 'Shooting at goal with a static ball' test, we observe that both groups recorded an improvement in performance with both the right and left foot between the initial and final tests. The experimental group showed greater progress (8 successful attempts) compared to the control group (4 successful attempts) regarding right foot strikes. Although it started with a slightly lower level (19 successful attempts vs. 21), it managed to obtain a superior final result (27 vs. 25). The progress difference is much more pronounced in the case of left foot strikes. The experimental group recorded a progress of 6 successful attempts, while the control group had a progress of only 1 successful attempt. The experimental group started with a lower level (7 successful attempts vs. 9), but managed to significantly surpass the performance of the control group in the final test (13 vs. 10). Therefore, the results indicate progress in the experimental group (figures 5 and 6).

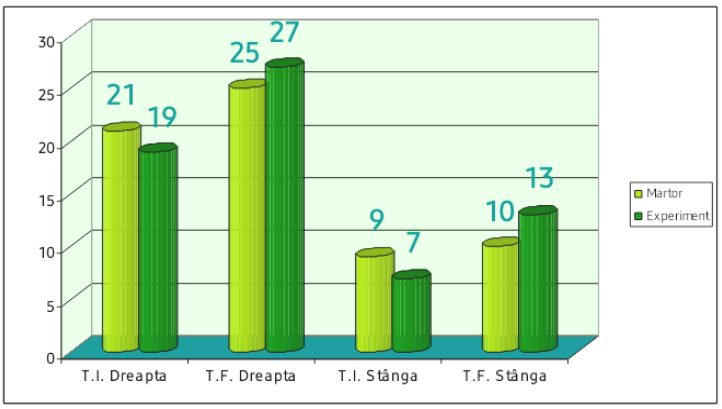

Fig.5 Graph of the total number of successful attempts

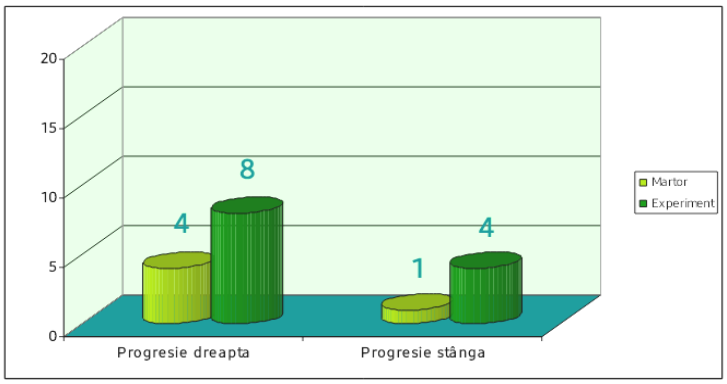

Fig 6**.** Graph of the progress achieved

At penalty kicks test, both groups recorded an improvement in performance with both the right and left foot between the initial and final tests. The experimental group showed significantly greater progress (9 successful attempts) compared to the control group (4 successful attempts) regarding right foot strikes. Although it started with a lower level (22 successful attempts vs. 27), it managed to equal the performance of the control group in the final test (31 vs. 31). The experimental group recorded greater progress (5 successful attempts) compared to the control group (3 successful attempts) in the case of left foot strikes. The experimental group started with a lower level (10 successful attempts vs. 12), but managed to reach the same performance level in the final test (15 vs. 15). Therefore, the experimental group managed to compensate for the initial performance differences and reach or equal the level of the control group in the final test (figures 7 and 8).

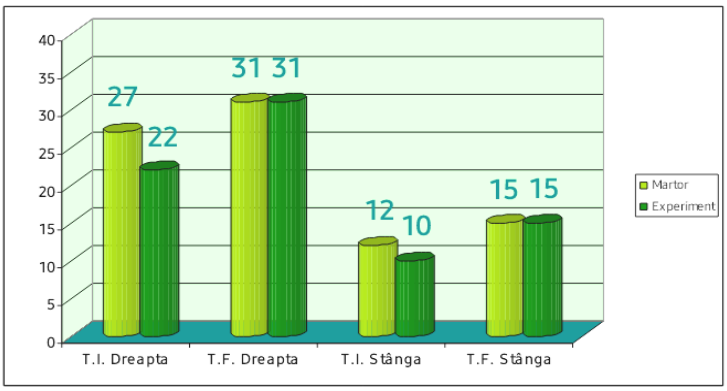

Fig.7 Graph of the total number of successful attempts

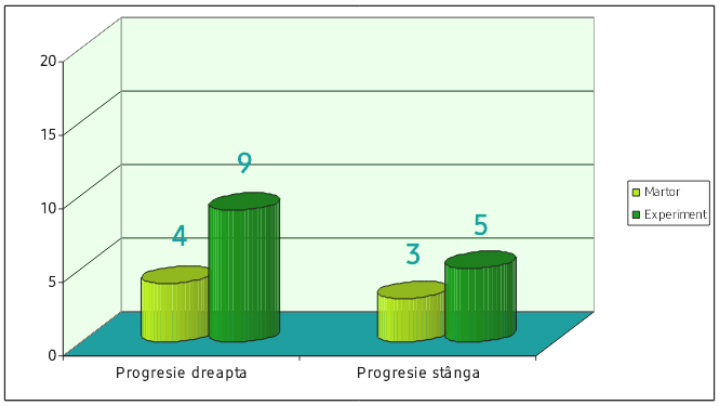

Fig 8. Graph of the progress achieved

From the graphs 9 and 10, it is evident that the experimental group showed significantly greater progress (19 successful attempts) compared to the control group (9 successful attempts) in right-foot juggling. Although it started with a slightly lower level (72 successful attempts vs. 76), it managed to achieve a superior final result (91 vs. 85). The difference in progress is even more pronounced in the case of left-foot juggling. The experimental group recorded a progress of 13 successful attempts, compared to the control group's progress of 8 successful attempts. The experimental group started with a slightly lower level (52 successful attempts vs. 55), but managed to surpass the performance of the control group in the final test (65 vs. 63). The greater progress recorded by the experimental group indicates an increased effectiveness of the specific exercises applied.

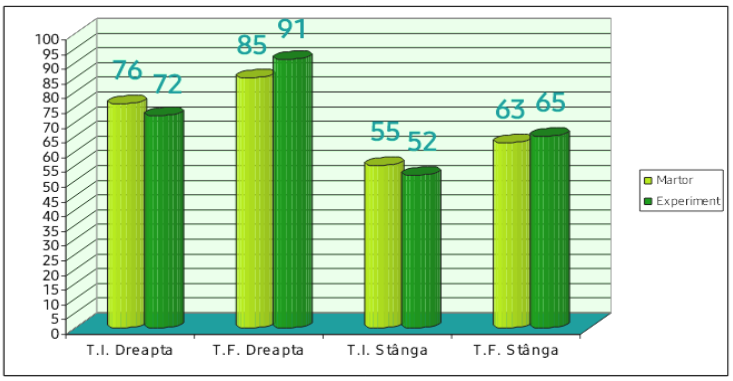

Fig.9 Graph of the total number of successful attempts

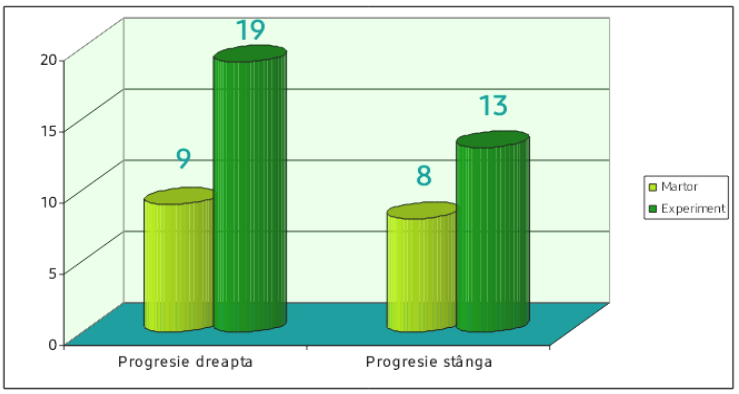

Fig 10**.** Graph of the progress achieved

Conclusions

In conclusion, the results of this study clearly demonstrate the effectiveness of using football-specific exercises in improving the dexterity level of eighth-grade students. By implementing an intervention program based on football-adapted exercises, a significant improvement in the performance of the experimental group was observed in the specific dexterity assessment tests.

Specifically, the progress recorded in the shooting at goal with a moving ball and passing to the gymnastics bench tests suggests a more pronounced development of coordination, precision, body control, and the ability to perform specific technical movements in dynamic conditions. These results indicate that integrating football-specific exercises into the physical education program can be an effective and motivating method for developing dexterity in this age group.

The study highlights the potential of football as a valuable tool in the motor development process of students, providing a practical and attractive approach to improving fundamental skills. The results obtained justify the recommendation of systematically including football-specific exercises in physical education activities

for eighth-grade students, to stimulate the harmonious development of dexterity and provide a solid foundation for active participation and performance in various sports activities.

Finally, this study makes an important contribution to understanding how sports activities, especially those specific to football, can be utilized in the school environment to achieve the motor development objectives of students. The results obtained encourage the continuation of research in this area and the further exploration of the long-term benefits of an integrated approach to physical education with elements from sports games such as football.

References:

[1] IONESCU, G. (2018). Impactul antrenamentului sportiv asupra coordonării motorii la elevii de gimnaziu. Revista de Educație Fizică și Sport,

[2] POPESCU, R., & Vasilescu, L. (2020). Fotbalul ca mijloc de dezvoltare a abilităților bilaterale la tineri. Jurnalul Românesc de Kinetoterapie

[3] SĂNDULESCU, E.; GEORGESCU, D. (2021). " Utilizarea exercițiilor de fotbal pentru dezvoltarea coordonării bilaterale la elevii de gimnaziu. Studii și Cercetări în Educația Fizică, 15(3)

[4] ȘTIRBU, I., C., Formarea deprinderilor sportive la elevii de gimnaziu utilizând jocurile de mișcare, Editura PIM, Iași, 2007

[5] GROSU, B., M., Fotbal, Editura Universității „Ștefan cel Mare", Suceava, 2014

[6] BADEA, A. (2017). Dezvoltarea abilităților motorii la copii prin fotbal. Editura Universitară, București

[7] LEUCIUC, F.,V., (2015). Fitness, Editura Universității „Ștefan cel Mare", Suceava,

[8] GROSU, B. M.; Popescu, R. (2020). Strategii de antrenament pentru îmbunătățirea coordonării bilaterale la elevii de gimnaziu. Studii și Cercetări în Educația Fizică

[9] GROSU, B. M. (2019). Dezvoltarea abilităților motorii la copii și adolescent prin activități sportive. Editura Didactică și Pedagogică, București.

[10] TĂNASE, C. (2015). Metodologia predării fotbalului în școli. Editura Universității, Cluj-Napoca.