

## THE ROLE OF FOOTBALL IN THE DEVELOPMENT OF PRIMARY SCHOOL CHILDREN

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### Summary

Football is one of the most popular sports worldwide and an effective tool for the physical, social and cognitive development of children. The game of football, through its dynamic and accessible nature, offers children numerous opportunities for movement, collaboration and learning and is one of the most suitable sports activities, being easy to adapt, attractive and extremely beneficial for the overall development of the child. The article analyzes the benefits of playing football among primary school students (8–10 years old), highlighting the impact on basic motor skills, health, socialization and the development of emotional skills.

### Introduction

Playing football among primary school children is a complex and beneficial activity that combines physical, intellectual and socio-emotional development[3,8]. In the current context, characterized by sedentary lifestyle and prolonged exposure to technology, sport becomes a fundamental component for the healthy development of the child. Football, an accessible and attractive team sport, offers opportunities for varied movement, the development of cooperation and responsibility, while strengthening the intrinsic motivation for physical activity. This article analyzes the importance of playing football among primary school children, emphasizing the educational, motor and socio-emotional benefits, supported by recent scientific literature[4,7].

Contemporary education promotes the holistic development of the child, pursuing its formation from a cognitive, emotional, social and physical perspective. Football, through its playful and dynamic character, offers optimal contexts for learning through discovery. For children aged 8–10, this method is extremely effective, given the specifics of the concrete cognitive development stage[5,6].

On the football field, children actively use their thinking, make decisions, solve problems and plan their actions. In parallel, the game develops individual and collective responsibility, respect for rules and the ability to cooperate. Teachers can use football as an educational support, adapting exercises according to the level of students and promoting fundamental values such as fair play and discipline.

Motor development is one of the main advantages of playing soccer in childhood[1,2,9]. The age of 6–10 years is considered a critical period for the acquisition of fundamental motor skills, due to the high adaptability of the neuromuscular system. Soccer includes running, rapid changes of direction, jumping, sudden stops, accelerations and decelerations, contributing to the development of global motor skills. Numerous studies indicate that regular soccer programs lead to increases in reaction speed with values between 12–18%, dynamic coordination by 10–14% and balance by 9–11%. These acquisitions transfer to daily activities, playing an important role in preventing injuries and improving body control.

By its collective nature, football represents an excellent environment for the socio-emotional development of children[12]. Participation in sports activities involves interaction, cooperation, negotiation and conflict management. Football promotes the development of self-control of emotions, frustration management and adaptation to unforeseen situations. Children who play football develop emotional intelligence, learn to communicate effectively and form a positive self-image. Success in the game increases self-confidence, and difficulties become training opportunities. Belonging to a team provides a sense of identity and emotional security, contributing to the harmonious development of the child.

The health benefits are well supported by the literature. Football activities significantly increase cardiorespiratory fitness, develop muscle mass and contribute to a healthy body composition. Physical effort during the game frequently reaches 75–90% of maximum heart rate, an ideal level for developing aerobic endurance. In addition, football reduces the risk of childhood obesity and metabolic problems. Its constant practice leads to a decrease in fat mass and improved muscle tone, especially in the lower limbs. Intense physical activity stimulates cardiovascular health and contributes to a general state of well-being.

Modern football teaching methodology[10,11] emphasizes small-sided games, such as 3v3, 4v4 and 5v5. These are essential for young school-age children, as they offer a high number of individual actions, increase the intensity of effort and favor quick decisions. Small-sided games stimulate active learning, technical and tactical development, contributing to the formation of a game vision. Through

constant involvement, children develop their endurance, speed and ability to anticipate. In addition, small-sided games create a safe, motivating and adaptable learning environment.

Physical education teachers have a key role in implementing football as an educational activity. They must adapt teaching strategies to the level of children, promote active participation and integrate educational values into sports activities. A supportive school environment can transform football into an effective tool for developing communication, collaboration and critical thinking. Extracurricular activities and school competitions increase children's motivation and encourage them to adopt a healthy lifestyle.

### **Research methodology and organization**

The experiment involved 20 boys from the primary cycle, from the 3rd and 4th grades, from the Technological High School "Iorgu Vârnăv Liteanu" in Liteni town, Suceava county.

The research methods used in the research were the following: the method of bibliographic study, pedagogical observation, the method of pedagogical experiment (test method) and the statistical-mathematical method. 8 tests were applied, 4 of them for measuring motor skills and 4 for evaluating technical-tactical skills specific to football.

Measuring motor skills (speed, agility, explosive strength).

**Speed running (25m sprint)** - measures the speed of movement over a short distance. Description: the student lines up at the start, one awkward foot forward, the torso slightly bent. At the command "Start!", the student runs as fast as possible towards the finish line. The time is measured until the body completely crosses the finish line, two attempts, the best time is recorded.

**Standing Long Jump (leg explosive power)** - measures explosive power of the lower body.

Description: The student stands with their toes at the starting line, bends their knees, uses arm swing and jumps forward. The distance between the starting line and the heel closest to the start is measured, two attempts.

**Vertical Target Throw** - measures upper body and trunk strength.

Description: A one-handed throw above the shoulder, with a rubber ball, at a vertical target 0.5 m wide located 5-6 m away and 2 m wide; the number of successful attempts out of 5 repetitions is recorded.

**Illinois Agility Test (IAT)** - measures agility, speed of change of direction.

Description: the student starts lying on his stomach, palms under the shoulders. At "Start!", he gets up and runs the route between the markers according to the standard

map. The markers are placed in a straight line at a distance of 15m, 1.5m between them. One attempt only.

Evaluation of technical and tactical skills specific to football (dribbling, passing, shooting).

**Dribbling through markers** - evaluation of coordination, ball control and agility.

Description: the student starts with the ball attached to his foot, dribbles between the markers in a zigzag manner, without knocking down the markers, stops the ball on the finish line. Time is recorded, +1 second penalty for each marker reached, 6 markers arranged at a distance of 1.5m, two attempts.

**Passes to the target** (accuracy) - evaluates the accuracy of the passes.

Description: the student is 4–5 m away from a target marked with cones (a square with a side of 2 m), executes 10 passes to the target. 1 point is scored for each correct hit.

**Passes with the bench** - development of accuracy in short passes and the ability to pass over an obstacle.

Description: the student is 2 m away from a bench placed on the ground. Successive hits of the ball will be executed on the bench, maintaining a distance of 2 m for 20 seconds. Correctly executed passes will be counted.

**Shot on goal (accuracy)** - measures the accuracy of shots depending on the zone.

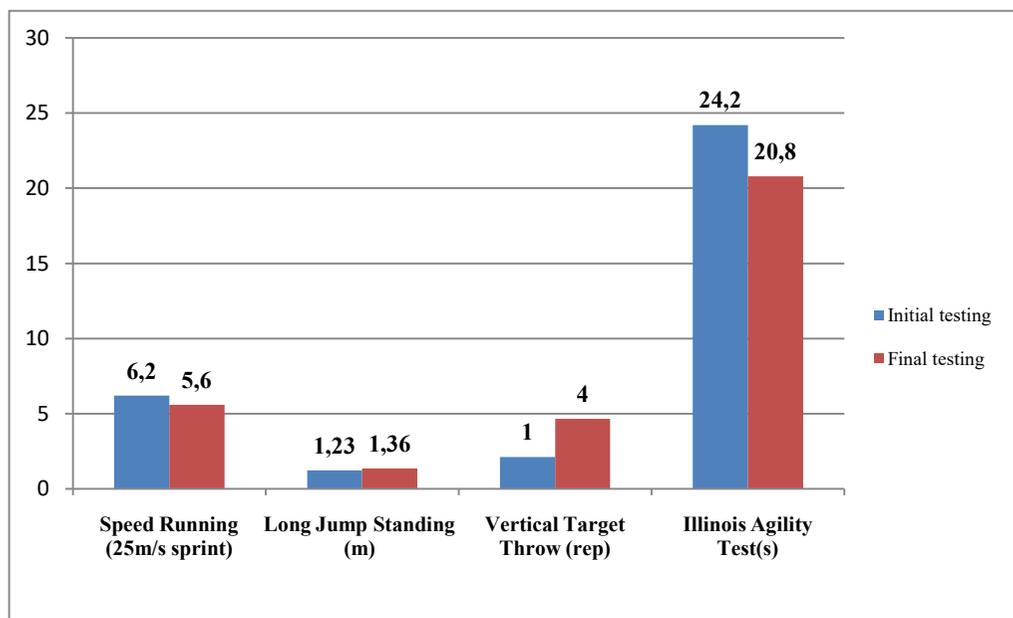
Description: the student has 6 shots (2 in each zone) towards a goal marked in 3 zones: top left, top right, center. Each area has a score (3p for corners, 1p for the center).

## **Results and their interpretation**

Two stages of testing were administered in the research. The initial testing was carried out at the beginning of the 2024–2025 school year, in September, and the final testing took place at the end of May. Following the application of the initial assessment, the group involved in the experiment carried out specific intervention activities that generated significant progress in its evolution.

Therefore, the results obtained in the final testing are superior to the first tests. Discussing the first test for measuring motor skills, speed running (25m sprint) evaluates the speed of movement, an essential component of basic motor qualities. At the ages of 8–10, speed develops rapidly due to neuromuscular plasticity, which is why its measurement provides relevant information about the level of motor maturation. It can be seen in Figure 1. at the initial testing, we have an arithmetic mean of 6.2 sec, and at the final testing 5.6 sec with a significant difference of 6 sec.

The standing long jump is one of the most widely used tests for the evaluation of explosive strength, coordination and segmental control. In the primary cycle, the standing jump allows the assessment of the level of development of the lower kinetic chain, the impulse capacity and the synchronization of arm and leg movements. The results obtained for this indicator indicate an increase of 13cm from one test to another (Fig.1.).



**Fig. 1. Comparative analysis of the results obtained in the motor skills tests**

The vertical target throwing test aims to assess precision, eye-hand coordination and segmental control within a throwing-type motor gesture. At the ages of 8–10, these components represent essential milestones in the development of fine and global motor skills. In this test, at the initial testing, the success of primary school students is at the level of the insufficient grade according to the National Evaluation System in Physical Education and Sports. Starting from one success or not even one, we reach an average equal to 4 which leads us to progress, obtaining the Very Good grade (Fig. 1.).

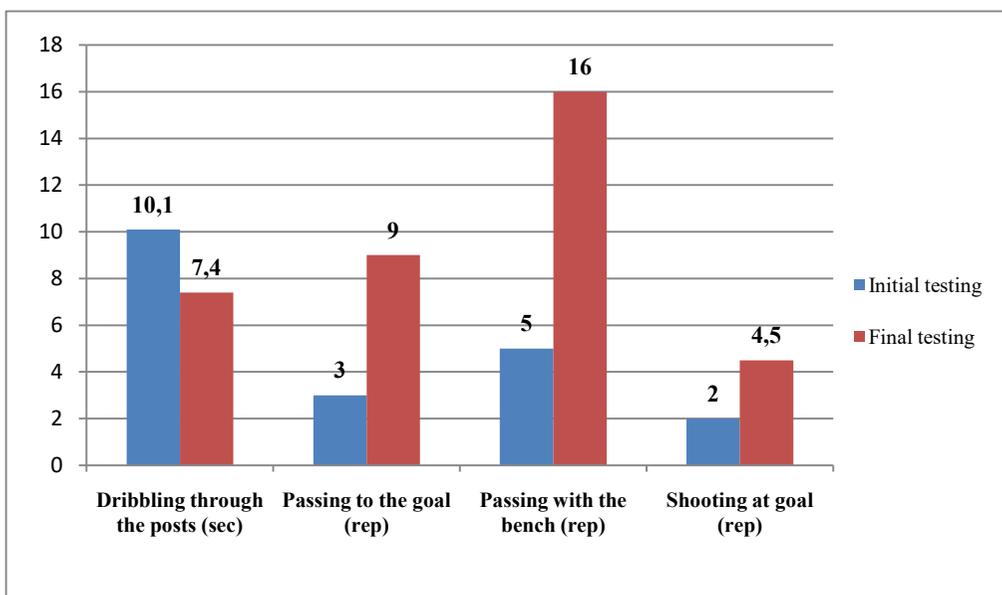
The IAT is a complex test that measures agility, i.e. the ability to quickly change direction and speed of movement. For children in the primary cycle, the test provides information about the development of coordination, reaction speed, balance and spatial orientation. Although more demanding than the other tests, the IAT is valuable because it analyzes integrated components of motor skills and highlights the

ability of students to combine speed with movement control in a precise path. We start from a value equal to 24.2 sec at the initial testing and record a value of 20.8 sec, 3.4 sec less, which indicates that the means used for this test were efficient.

It can be seen in Figure 2. at the initial testing, the specific test for the football game, dribbling between the posts, we have an average of 10.1 sec while at the final testing we record 7.4 sec. This test assesses the ball driving skills, general dynamic coordination and the ability to control the ball in conditions of rapid change of direction. At the ages of 8–10, dribbling represents a relevant indicator of the development of fine motor skills specific to football, spatial orientation and balance in movement. The test also has diagnostic value, as it highlights both the technical level and the ability to adapt to rhythm and route.

A test that shows us the level of accuracy in hitting the ball is the passes to the target, which in the initial testing has an average of 3 repetitions, progressing to 9 repetitions in the final testing. The pass to the target measures the precision of the execution of the passing technique, the control of the foot-ball movement and the child's ability to regulate the force and direction of the shot.

In the primary cycle, this test reflects the development of the motor scheme and the learning of the mechanisms of correct ball transmission, and following the final testing we find a major difference with the first testing. At the same time, it highlights cognitive elements such as anticipation, effort regulation and goal orientation.



**Fig. 2. Comparative analysis of the results obtained in the tests for technical and tactical skills specific to football**

Another test to determine the level of ball striking is bench passes. For 8–10 year old students, this is a useful test because it requires automating the passing technique and develops the ability to maintain continuity of play, a fundamental element in the training of a football player. The pace of execution reflects neuro-motor maturation and efficiency in handling the ball. The results obtained in the initial test are 5 repetitions, and in the final test 16 repetitions. The bench passes test evaluates not only the accuracy of execution, but also the ability to control the ball after the rebound, involving coordination, reaction speed and rhythm.

Shooting in different areas of the goal allows us to identify technical progress and the ability to apply the correct gesture under simplified task conditions. The test aims to evaluate the hitting force, directional accuracy and general shooting technique (support, balance, hitting). In the primary cycle, shooting at goal represents one of the most intuitive and motivating activities, being associated with the development of lower limb strength, intersegmental coordination and finishing control. Out of 5 attempts by each student, we find a value equal to 2 successes in the initial testing, while in the final testing we obtain a performance equal to 4.5 successes.

## **Conclusions**

Football is a complex activity with multiple benefits for primary school children. It stimulates motor, socio-emotional and cognitive development, providing a learning environment adapted to the child's needs. Due to its accessible and attractive nature, football can become an essential component of modern physical education, contributing to the formation of an active, healthy and responsible generation.

Following the results obtained by the students involved in the research, it can be noted that the means used led to progress, achieving the objectives of this experiment.

The game of football is a complex educational tool, combining physical, cognitive and socio-emotional development. The systematic introduction of this sport into the activities of primary school students contributes to the formation of a healthy and active lifestyle, while reinforcing values such as respect, cooperation and responsibility.

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