

# The Activity of an Educational Field by Means of Assisting in the Development the Speed Movement and Shooting Skill of Football For Youth

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## Abstract

The importance of the research lies in preparing an educational field in developing motor speed and football scoring skill for cubs, depending on the stock of motor abilities and skills that were learned in a previous period and which are prerequisites for motor learning and achieving good technical performance that secures a level of performance. The researchers decided to prepare an educational field by means of assisting in the development of kinematic speed and football scoring skill for cubs in order to reach the desired and intended achievement. The research objective : Preparing an educational field with assistive means to develop motor speed and soccer scoring skill for young players. The researchers used the experimental approach in solving the research problem, and on the research community, the research community was identified with young players of ages (13-14) years for the football school to foster the sporting talent in football for the Kotha district / Babil governorate, whose number is (22) players, and they were divided equally by the method, simple randomness. As for the most important conclusions, they were: The educational field contributed by means of assisting in the development of motor velocity and the skill of scoring football for young players.

**Keywords:** Development, Skill, Speed movement, Activity

## Introduction

The football game is one of the games that ranked first in the spread among the countries of the world because of its great popularity among the masses, as it includes a set of defensive and offensive skills, which must be mastered in performance <sup>1</sup>, including the skill (scoring) and each skill has a specific activity in the match and for the purpose of reaching the players For the best performance during the match, it is necessary to use specific exercises and introduce modern techniques that contribute to developing skills while linking them to specific exercises, by directing total attention to the stages of learning basic motor skills and following the steps of the correct motor learning <sup>2</sup> process in terms of starting with the easy and gradient to the difficult, which facilitates the process of skill performance, as the progression in performance from easy to difficult and building each exercise on the previous exercise correctly has many experiences For players, in order for the

learning period and effort to be less in the development of skill performance, which is related to the development of biological capabilities, including motor speed, which must be developed, since the skill under study needs a high degree of speed, which is mainly involved in skill performance, on this basis, the importance of research lies in preparing an educational field by means of assisting in the development of motor velocity and the skill of scoring football for cubs <sup>3</sup> depending on the stock of motor skills that have been learned in a previous period and which are prerequisites for motor learning and achieving good technical performance that secures a level of performance, accuracy and upgrading it to achieve the goal of learning, especially for age groups, as well as introducing the factor of suspense and excitement to the players by introducing similar cases to cases of play that may work and help in this purpose better than the usual methods <sup>4</sup>.

Therefore, through the experience of field researchers, they identified the problem of their research, which is the weakness in the performance of the scoring skill of the young players, and the level of scoring performance is not commensurate with the level required for this stage as the direct interest in scoring through skill exercises is not sufficient to reach high performance without paying attention to speed mobility and this is what the cubs' teams suffer, at least in our country <sup>5</sup>, and if there is interest in these variables, then it is random and includes training that does not distinguish between the important and most important dimensions and components of these variables. Therefore, the researchers decided to prepare an educational field by means of assisting in the development of kinematic speed and football scoring skill for cubs in order to reach the desired and intended achievement.

Consequently, the researchers set the goal of the research, which is to prepare an educational field with assistive means to develop motor speed and soccer scoring skill for young players. They also assumed that there was an effect of educational field by means of assisting in the development of motor speed and the skill of scoring football.

As for the fields of research, they were represented by the cubs players in the football school to nurture the athletic talent of the age groups in the Kuthi district / Babel governorate, and the time for conducting the experiment was from 9/11/9/2019 to 3/14/2020, as for the place of training and field experiments, the researchers chose the stadium and football halls in the Kutha district forum in Babylon governorate.

### **Research methodology and field procedures:**

#### **Research Methodology**

The approach is one of the important factors that the researcher follows to solve his problem and is chosen according to the nature of the problem to be studied, as the nature of the problem necessitates researchers to use the experimental approach because it is consistent with the nature of the research problem, and by designing the method of the two equivalent groups (experimental and control) with the pre and post-tests.

### **Community and sample research:**

The research community was identified with young players aged (13-14) years of the football school for the care of sports talents in football for the Kothi district / Babylon governorate, whose number is (22) players, and they were divided equally in a simple random way.

### **Devices, tools and means used in the research:**

#### **Means of data collection:**

- Arab and foreign sources and the internet.
- Personal interviews.
- Tests and measurements.
- Special forms for recording test results.

#### **Tools and devices used:**

- A legal football court with its accessories.
- Legal footballs, count (25).
- (Linen) tape measure, count (1).
- Adhesive tape.
- Medical scale number (1) Toshiba type.
- Hard disks (CD).
- Casio electronic stopwatch number (1).
- (1) laptop device type (HP).
- Colorful clothes.
- Number of signs (8).
- Camera (2) type (Sony).

#### **Field research procedures:**

### **Determine the tests for the skills studied:**

#### **First: the kinematic speed test:**

**Test name:** Running in place fifteen seconds: <sup>(1)</sup>

**The purpose of the test:** to measure kinematic velocity.

**Equipment:** stopwatch, high jump stand, elastic cord.

### Performance description:

The player is standing in front of the tied rubber rope in the two high jump legs, the height of the rope from the ground is equivalent to the height of the tester's knee when the half standing position (one thigh is parallel to the ground), and when the start signal is heard, the tester runs in the place at full speed so that the rope touches his

knees at all stages of the run in the place, the arbitrator calculates the number of steps taken by the laboratory in fifteen seconds (15 seconds), provided that the count is for the right foot only.

**Register :** The player records the number of times the right foot touches the ground at the scheduled time, as shown in figure 1.



Figure (1) shows the kinematic velocity test

### Second: Technical Performance Test for Football Scoring Skill

**Test name:** Scoring accurately at a divided target.

**The purpose of the test:** to measure the accuracy of scoring towards the goal.

**Tools :** (6) footballs, a tape to set the scoring area for the test, a football goal, a football field.

**Test procedures:** (6) soccer balls are placed on the penalty area line which is (18) yards from the goal and as shown in figure (2) between one ball and another (1 m), as the player stands behind the ball No. (1) and when the start signal is given to him, the player scores in the areas the marker in the test, according to its importance and difficulty, and sequentially one after the other until the sixth ball, and the shot is at foot.

- The test starts with ball (1) and ends with ball (6).

- The attempt is not considered correct if none of the three goals are scored from each side in addition to the middle goal.

**Register:** Three assessors, through the imaging display of the sample, evaluate the three attempts for each laboratory, and give them three marks for each evaluator, noting that the final evaluation score for each attempt is (10) scores, divided into the three skill sections, which are (3) degrees for the preparatory section, (5) degrees for the main section, and (2) two grades for the final section, after which the best grade for each assessor is chosen, and by extracting the arithmetic mean for the best three scores, the number of injuries that enter or touch the sides of the four goals set on each side and the middle of the goal are calculated, so that the scores of each of the six balls are calculated as follows: -

- 4 points for scoring in field No. (4).
- 3 marks for scoring in field No. (3).

- 2 points when scoring in field No. (2).
- 1 score and one when scoring in field No. (1).
- Zero when scoring failed.
- The player is given one try which contains six balls.
- The highest score a player gets is 24.

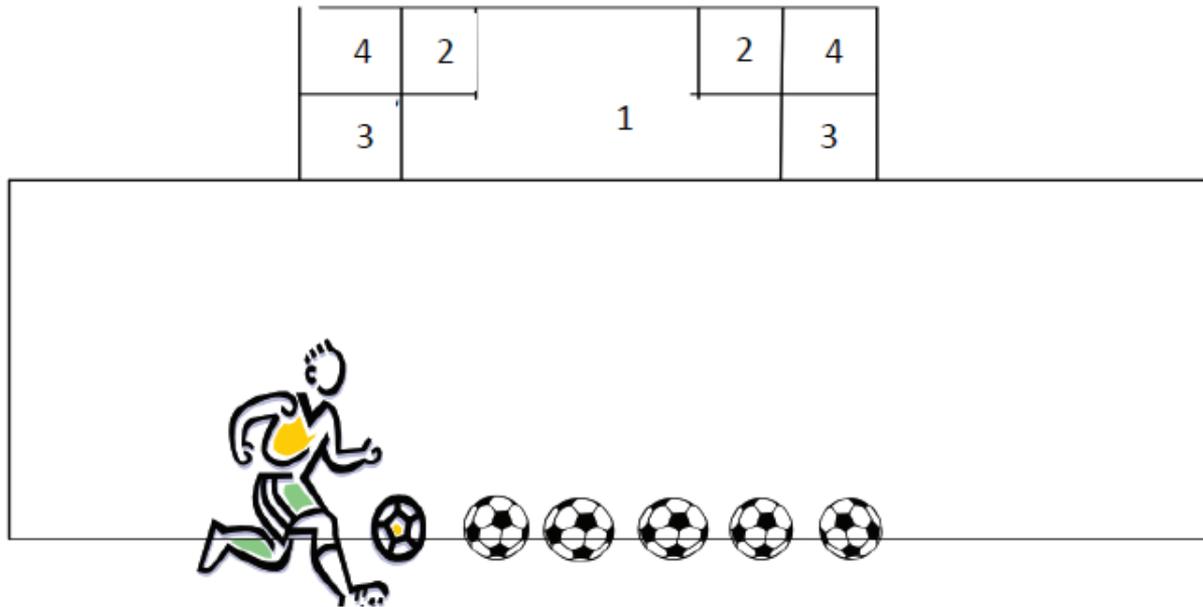


Figure (2) shows the scoring test towards a target divided into regions or areas.

Main experience:

**Pre- tests:**

After completing the exploratory experiment and making sure of it, the researchers applied the main experiment by applying tests and metrics to the research community, and the pre-tests were conducted on Sunday 17/12/2019.

**Preparing and implementing the educational field with auxiliary means:**

The researchers prepared an educational field with aids, depending on personal experience, and the application of the educational field by means of assistance was started on the experimental group on Sunday, 22/12/2020.

**Details of the educational field are as follows:**

- The duration of the implementation of the

educational field assistance is (6) weeks.

- The number of educational units per week is three educational units on Saturday, Monday and Wednesday of each week.

- The total number of educational units is (18) units.

- The time for the educational unit is (90) minutes.

- The time for the main section of the educational unit is (60) minutes.

- The vocabulary of the educational field for the experimental group was implemented through the educational units within the main section of the educational unit, and it was implemented by the team coach (Fadhel Braissem Shair) with the help of the assistant work team and under the direct supervision of the researcher.

- Researchers in the educational field have taken into consideration the following: -

1- Diversity of exercises and educational situations to prevent the state of boredom and boredom that may affect members of the experimental group.

2- The gradient from easy to difficult in implementing the educational field.

3- The aim of implementing the educational field was to develop the skills of dribbling and scoring football for the young players.

4- The members of the control group followed the training method followed by the coach of the same team, and the number of the same educational units and the time of the educational unit as well.

#### Post-test:

The researchers, with the help of the assistant work staff, conducted the post tests for the research sample

after completing the educational field application on Wednesday (19/2/2020), as the researcher took into account the same circumstances in which the pre-tests were conducted in terms of the sequence of tests..

#### Statistical Methods Used:

- Mean.
- Median.
- Std. Deviation.
- (T) test for cross-linked samples.
- (T) test for independent samples.

Presentation, analysis and discussion of results:

**Presenting and discussing the results of the pre and post tests for the control and experimental groups for the variables under discussion:**

**Presenting the results of the pre and post tests for the control group for the searched variables:**

**Table (1) shows the arithmetic mean, standard deviations, the calculated value (t) for correlated samples, the level of test significance, and the meanness of the difference for the pre and post- tests of the control group for the investigated variables.**

Variables	Measuring unit	Pre-test		Post-test		Value (T) Calculated	Level sig	Type sig
		Mean	Std. Deviation	Mean	Std. Deviation			
Kinematic velocity	Number	39.181	1.167	40.454	1.035	9.037	0.000	Sig
Technical performance of the shooting	Degree	6.363	0.809	7.272	0.904	3.194	0.010	Sig

**Presenting the results of the pre and post tests for the experimental group of the studied variables:**

**Table (2) shows the arithmetic means, standard deviations, the calculated value of (t) for the correlated samples, the level of test significance, and the means of the difference for the pre and post tests for the experimental group of the investigated variables.**

Variables	Measuring unit	Pre-test		Post-test		Value (T) Calculated	Level sig	Type sig
		Mean	Std. Deviation	Mean	Std. Deviation			
Kinematic velocity	Number	39.909	1.221	41.636	0.809	8.859	0.000	Sig
Technical performance of the shooting	Degree	6.272	0.904	8.272	0.786	10.488	0.000	Sig

**Presentation of the results of (post-post) tests for the control and experimental groups for the searched variables.**

**Table (3) shows the calculated value of (t) for the independent samples, the level of test significance, and the significant differences between the test results (post-post) for the control and experimental groups of the investigated variables.**

Variables	Measuring unit	Control		Experimental		Value (T) Calculated	Level sig	Type sig
		Mean	Std. Deviation	Mean	Std. Deviation			
Kinematic velocity	Number	40.454	1.035	41.636	0.809	2.982	0.007	Sig
Technical performance of the shooting	Degree	7.272	0.904	8.272	0.786	2.767	0.012	Sig

### Discuss the Results

Through the results presented in tables (1 and 2), which showed the presence of significant differences between the pre and post- tests of the researched skills and in favor of the post tests, for both the control and experimental groups, the researchers attribute the reason for these differences in relation to the control group, to the dependence of the members of this group on repetition of exercises to carry out the motor duties required of them during the educational units, which led to their enjoyment of good amounts of the skills discussed (dribbling and scoring) and this is what is

followed and known in the educational units , in addition to their regularity in implementing and applying these exercises, this is consistent with what (Nahida Abd Zaid) mentioned, that repetition is a “semi-typical process without a noticeable change in the motor responses”<sup>(2)</sup>, In addition, researchers attributed the reason for these differences in relation to the control group to the method of the trainer that he followed in implementing the educational curriculum and that it contained exercises that played a fundamental role in developing those skills and using it for diversification and the change in appropriate exercises and the number of repetitions

commensurate with the level of each exercise, which was of great importance. In making the significant difference, as the trainer should give the largest possible number of repetitions when performing any exercise to develop the required character or skill <sup>(3)</sup>.

As for the experimental group, the researchers attribute the reason for the significant difference between the pre and post tests and the superiority of the post tests to the application and implementation of the members of this group the educational field prepared by the researchers and which contained auxiliary means, as the auxiliary means have a great role in a process that improves the technical, physical and mental aspects, as exercises and educational activities were developed and selected that were compatible with the nature of the sample, and this was evident in most of the results of the post-test, and that the educational field that I applied to the members of this group used to include auxiliary tools, including (notches, rings, ground ladder, barriers, balance balls), as these tools help learners to acquire and improve the skills that are to be learned and thus the player can improve the level of his motor aspects Thus learning technical skills quickly and masterfully, this is what (Mahmoud Al-Rubaie) confirmed that “assistive devices and tools work to improve and accelerate the learning process when learners learn mathematical skills because of their positive effects for their contribution to the learning process with less time and effort for its contribution to the integration of the educational and training unit to implement the curriculum designed to raise the level of the learner” <sup>(4)</sup>.

In addition, when developing exercises in the educational field, researchers have taken into consideration the organization and the principle of gradual difficulty in these exercises, “The educational curriculum inevitably leads to an improvement in the level if it is built on a scientific basis in organizing the education process. The choice of exercises with graded difficulty takes into account individual teams and the use of educational aids under the supervision of a specialist under good educational conditions in terms of place, time and tools used” <sup>(5)</sup>.

The researchers also suggest the reason why the experimental group members outperformed the control group members in speed movement tests (shooting) as

a result of the effect of the educational field, which was a combination of physical and movement exercises and their combination with skill exercises and most of the exercises were used by means of assistance, as they were inspired by the actual situations of competition, the researchers believe that it has an effective effect on the development of the motor velocity of the two legs related to the basic skills of football for the members of the experimental group because (the auxiliary means make the player able to address deficiencies, especially those whose leg movements are slow and increase the effectiveness of the training unit) <sup>(6)</sup>, therefore, it is imperative for workers and specialists in the field of football to pay attention to the training tools and methods that will raise the level of their players physically, mobility and skillfully, and thus researchers see that the use of leg movements that are characterized by speed will help the player to master the main stages of performing motor skills more effectively, the researchers also believe that the educational field that included a set of exercises and educational situations prepared by the researchers and that their application in educational units was effective as its aim was to improve and raise the level of technical skills, (Muhammad Al-Haila) asserts that “when the exercises and educational situations are implemented effectively, the general performance of the learners improves a lot and then enables them to gain an additional benefit, which is the development of new learning on how to learn skills”<sup>(7)</sup>. (Wajih Mahjoub) states, “Exercises and educational situations are of great importance in general and special physical preparation and skill preparation if they are for beginners or higher levels”<sup>(8)</sup>.

The researchers were also keen to mix motor and skill exercises in the educational field, as they had a great role in generating additional strength for the working muscles and accelerating the movement of body parts, which led to an increase in the physical and kinetic aspects, and this is what (Essam Abdel-Khaleq) indicated: “The motor performance of the skill depends On special physical and motor abilities”<sup>(9)</sup>, the researchers also take into consideration when preparing the educational field, first relying on physical and motor abilities according to the practitioner’s sporting activity, which is the game of football, focused, through educational situations, activities and educational exercises, on developing joint movement and increasing

the degree of flexibility thereof, as well as the elasticity of the muscles, tendons and ligaments surrounding them, according to what the nature of the game requires, in addition to the speed of motor performance, also depend, secondly, on giving exercises that maintain the level of movement response reached by the players and the kinetic compatibility because its neglect leads to a gradual loss, which will negatively affect the level of skill performance in general, and this requires that the planning of educational curricula be inclusive of all physical and motor abilities and overlapping with each other.

### Conclusions

Based on the research results that have been reached within the limits of the research community, the following conclusions were reached:

- The educational field contributed by means of assisting in the development of movement speed and soccer scoring skill for the young players
- The duration of the independent variable, represented by the number of teaching units, was appropriate for developing the skill of scoring football..

### Recommendations

In light of the conclusions reached by the researcher that proved the effectiveness of using the educational field, researchers recommend: -

- Researchers recommend adopting the educational field with aids as basic data when learning young soccer players..
- Conducting similar studies on different activities and age groups.

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**Conflict of Interest:** None to declare.

**Ethical Clearance:** All experimental protocols were approved and all experiments were carried out accordance with approved guidelines.

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