

The Effect of an Educational Field to Develop Motor Coordination and Control Skill for Football Cubs

Aban Abdul Kareem Mezher*, Diaan Gaber Mohammed and
Amjad Abd Ali Abdaoun

Abstract--- *The objectives of the research is to identify the effect of the field to develop motor compatibility and control skill for the Cubs in soccer, and the researcher used the experimental approach to design the two equivalent groups (control and experimental) for the research sample of (20) players for the season 2018-2019, and the researcher prepared an educational field and the researcher used the researcher The tools and devices appropriate for the research, and the researcher conducted an exploratory experiment to ensure the safety of the devices and tools, and a researcher performed the Pretests, in addition to implementing special exercises for motor compatibility and the skill of controlling football through the field prepared in advance for a period of (8) weeks, at the rate of (3) Units per week, then Or the researcher conducted a meta-tests and data processing and presentation and statistical analysis and concluded that the effectiveness of the researcher's consensus motor and educational field as well as the researcher recommends the use of the educational field during the educational units for players to develop football skills other.*

Keywords--- *Educational Field, Motor Coordination and Skill.*

I. INTRODUCTION

Reaching the distinguished level of athlete in any sporting event or game must have rules and principles that help in achieving it, most notably the multiplicity of duties and activities that are used in the context of education and preparation to achieve the optimal level. And the game of football is one of these sporting events that receive increasing attention from all developed and developing countries, from all ages and races of all kinds. This is what made the owners of experience, specialization and those working in the field of the game, always thinking of finding the best methods and methods that work on its development and refining the talents of players to reach the highest levels.

The field of educational play is an important educational method that has been used to develop the player's skill and mobility capabilities, as well as the use of assistive devices and tools. And kinetic compatibility or as it is called in some (streamlined) sources, which is one of the important variables of the interconnected parts of the body during skill performance, which is a process coupled with the nervous system to regulate the work of the forces. The control skill is also considered one of the basic skills in terms of interconnecting the work of the internal forces with the external forces, which play an important role in especially offensive situations.1

From this standpoint, the importance of this research came in preparing a modern field of play that contains

Aban Abdul Kareem Mezher, University of Babylon, College of Physical Education and Sports Science, Iraq. E-mail: aban667@gmail.com
Diaa Gaber Mohammed, University of Babylon, College of Physical Education and Sports Science, Iraq.
Amjad Abd Ali Abdaoun, University of Babylon, College of Physical Education and Sports Science, Iraq.*

exercises, equipment, tools and aids to develop compatibility, kinematics and skill, soccer control for young people. The use of various means and tools in the process of education and training has the greatest impact in the development and upgrading of the level of players in terms of mind and skill as the process of developing performance becomes more effective and interesting for players.²

And because the researcher is a former player and a coach currently, he noticed the lack of interest in the use of modern innovative methods and methods by coaches based on this age group (cubs), as the level of basic football skills does not match the level required for this age group as the interest in the skill is controlling a ball. The foot is not of a sufficient level to reach the ideal performance, and if it finds interest, it is random and disorganized that includes training that does not distinguish between dimensions and components. Which shows weakness in the skill of controlling football, which is the process of learning and mastering it is of utmost importance when teaching age groups, so the researcher decided to study this problem by preparing an educational field that includes (physical - skill) exercises that the researcher assumes will work to develop motor compatibility and Football control skill using this special educational field to develop these variables.³

Research Objective

- Prepare an educational field to develop motor compatibility, mobility, and skill control for footballers.

Research Hypotheses

- There is a positive effect of using the educational field in the development of motor compatibility and skill to control soccer cubs.
- There are significant differences between the control and experimental groups in favor of the experimental group in developing motor compatibility and the skill of controlling football for the cubs.

Research Fields

- The human field: Cubs Al-Zawraa Sports Club Academy in Babil Governorate, ages (10-12) years, for the 2018-2019 season.
- Temporal field: for the period from 2/11/2018 to 25/1/2019.
- Spatial field: Housing Youth Forum in Babil Governorate.

II. RESEARCH METHODOLOGY AND FIELD PROCEDURES

Research Methodology

The researchers used the experimental method using the two groups' equivalence method, as it suits the nature of the problem and its objectives. As "experimental research is one of the types of scientific research through which the relationship between research variables can be measured".⁴

Research Community

The researchers identified the research community in the Al-Zawraa Sports Club Academy in Babil Governorate, the Cubs category for ages (10-12) years, who numbered (25) players, the researcher chose a random sample of (20) players, representing a percentage of (80%) of the original community. And he randomly divided them into two

groups (experimental and control) and in the manner of even and odd numbers by (10) players in each group for the sports season 2018-2019.

Means, Tools and Devices Used in the Research

- To survey the opinions of experts and specialists.
- Arab and foreign sources and references.
- Personal interviews.
- Questionnaire forms.
- Football control test.
- Devices and tools used:
 - Legal soccer field.
 - Football control test.
 - Legal soccer field.
 - 20 footballs.
 - Stopwatch number (2).
 - Suppressing the number (20).
 - Colorful rings count (12).
 - A medical scale for measuring weight.
 - 50m linen tape measure.
 - Sony camera.
 - CD for shooting.
 - Electronic calculator type (Dell).

Field Research Procedures

The researchers determined the variables of the research, the type of compatibility of the football, and how it is related to the skill of controlling football, after presenting it to the experts.

Determine the Tests Used in the Research

In the field of defining tests and measuring and for the purpose of identifying the best tests, the researcher used the scientific sources and references as well as presenting them to the experts for the purpose of determining the most appropriate motor compatibility tests and the skill of controlling football for young people.

Motor Compatibility Test

The purpose of the test: to measure compatibility between the eye and the man.

Tools: stop watch, chalk, draw (8) numbered circles, each with a diameter of (60) cm, numbered circles.

Performance specifications: The laboratory stands in circle No. (1) upon hearing the signal, bouncing with feet together to circle No. (2) and so on until the circle No. (8) in a sequence.

Recording: records the laboratory's transition time to cross the circles.

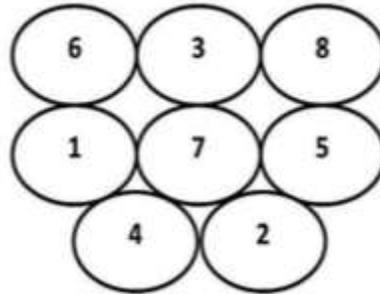


Figure 1: Shows the Kinetic Compatibility Test

Ball Control Test (Ball Bouncing)

The objective of the test: Free ball control test for a period of (30 seconds).

The purpose of the test: to measure the control of the ball in the air in all parts of the body except the arms.

Used equipment's :Specific space to perform the test.

Performance specifications: Upon instructing the examiner, the player throws the ball with his hands and then begins controlling the ball with the foot so that the ball does not fall to the ground, and the number of times the ball is hit in (30) seconds and the player loses once for every ball touch of the Earth.

Test Instructions

- Perform the ball control according to the specified area, and if the player passes the space and the ball is in his possession, he will not record the number of iterations that he made until he returns to the test area.
- In case the ball falls inside or outside the specified area, the attempt does not end.

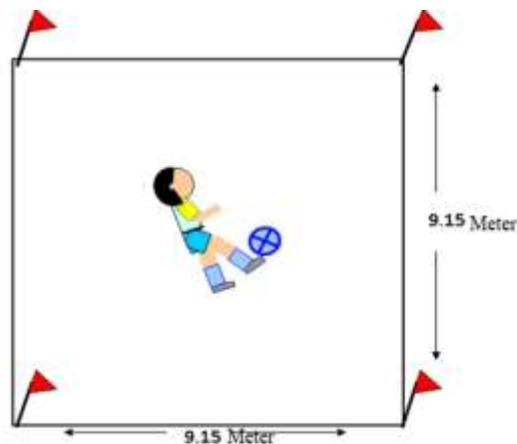


Figure 2: Shows the Control Test

Pilot Study

The researchers conducted the pilot study on 10/15/2018 at four o'clock in the afternoon on Saturday and on a sample of 5 players from the Al-Zawraa Sports Club Academy who are (14) years old to see the suitability and validity of the tools for the test.

Scientific Foundations of the Tests

A scientific evaluation of the tests was carried out before starting the process of implementing the main experiment in order to determine its sincerity, consistency and its position according to its application to the survey sample, and below details of these tests.

Sincerity of the test: In order to confirm the veracity of the test, the researcher used the content honesty through a questionnaire and distributed it to a group of experts and specialists in the field of physical education and football to solicit their opinions.

Stability of the test: In order to confirm the validity of the test, the researcher used the mid-split method.

Test Objectivity: The researcher computed the test objectivity by finding the correlation coefficient of Spearman Brown for two arbitrators, after statistically treating them.

Table 1: Shows the Scientific Foundations of the Tests

Tests	Validity	Coefficient of stability	Objective coefficient
Motor compatibility	88%	90%	93%
The control	85%	91%	89%

Pre Tests

The researchers conducted the Pretests on Saturday, 1/1/2018, at nine in the morning, for the motor compatibility test and the soccer skill of the youth football.

Equivalence of the Sample

Pretests for the research sample were conducted on Saturday, 1 November 2018, at nine o'clock in the morning and at the Stadium of Youth Housing Forum in the Babil Governorate Center.

Table 2: Shows the Equivalence of the Two Research Groups

Tests	Experimental group		Control group		Mann-Whitney value*	Statistical significance
	median	SD	median	SD		
Motor compatibility	8.85	1.11	9.78	1.225	52	No sig.
The control	18	1.5	19	2	38	No sig.

*The value of Mann-Whitney is when the sample size is (20) and under the significance level (0.05).

Post-Test

The researchers conducted the post-test on Friday, 5/11/2019 at 4:00 pm.

Statistical Means

The researchers used the statistical bag (SPSS).

III. RESULTS AND DISCUSSIONS

Table 3: Show the Median and the Quartile Deviation of the Pre- and Post-Tests, the Calculated Value Wilcoxon, and their Statistical Significance for the Results of the Tests in Question (Control Group) are Below the Significance Level of (0.05)

Statistical parameters		Pretest		Posttest		Value of Wilcoxon	Statistical significance
Tests	Units	median	SD	median	SD		
Motor compatibility	Second	9.78	1.225	8.72	1.04	3	Sig.
The control	Rep.*Sec.	19	2	19.5	1.5	0	Sig.

For the pre and posttests and for the total of the tests under discussion (kinetic compatibility - control) and for the control group, we find that the results of the kinetic compatibility test and in the pre-test achieved a median of (9.78 second) and a spring deviation of (1.11), but in the post test and for the same skill the median reached (8.72 second) and with a spring deviation of (1.01) below the significance level (0.05) and degree of freedom (9). While we find that the results of the control test and in the pre-test achieved an average of (19 times) and a spring deviation of (1.5), As for the post-test and for the same skill, the median reached (19.5) with a spring deviation of (0,988) below the significance level (0.05) The degree of freedom (9).

Table 4: Show the Median and the Quartile Deviation of the Pre- and Post-Tests, the Calculated Value and COXIN, and their Statistical Significance for the Results of the Tests under Investigation (the Experimental Group) are Shown below the Significance Level of (0.05)

Statistical parameters		Pretest		Posttest		Value of Wilcoxon	Statistical significance
Tests	Units	median	SD	median	SD		
Motor compatibility	Second	8.85	1.11	8.23	1.01	3	Sig.
The control	Rep.*Sec.	18	1.5	19	1	0	Sig.

By looking at Table (4), which shows the median and the quartile deviation of the pre and post tests and the total of the tests under discussion (kinetic compatibility - control) and the experimental group, we find that the results of the kinematic test and in the pre-test achieved an average of (8.85 second) and a spring deviation of (1.11). As for the post-test and the same skill, the median reached (8.23 second) and with a spring deviation of (1.01) below the significance level (0.05) and the degree of freedom (9).

We find that the results of the control test and in the pre-test achieved an average of (18) and a spring deviation of (1.5). As for the post-test and the same skill, the median reached (19) and with a spring deviation of (1) under the level of significance (0.05) and the degree of freedom (9).

Through what was presented in Table (3) and (4), which shows the existence of significant differences with statistical significance and in favor of the post-test of the control and experimental groups, whereas for the control group, the researcher attributes the reason for this to the commitment of the players to the curriculum units prepared by the coach for the skills that It included the vocabulary of special exercises in the football school, which helped to develop the level of players through appropriate repetitions "in addition to that training is the main factor in the learner's interaction with skill.7

The post tests of the kinematic compatibility between the control and the experimental groups and for the benefit of the experimental, and the researcher attributes this development to the effectiveness of the exercises that helped

the experimental group in the development of the kinetic compatibility between (the eye and the man), which is one of the important motor abilities that must provide it in performing basic football skills, especially control skill, are the common denominator in most events and sports.⁸

As for the experimental group, the researcher attributes the reason for the significant differences between the pre and post exams and in favor of posttest in the development of the football control skill to introduce these exercises and auxiliary tools and the players interact positively with them during the educational units and their response to all the requirements of the motor performance required of them,⁹ as well as its important role in the evolution of the experience gained by the players from the educational units for compatibility exercises and the skill of biography in football, as well as these exercises led to the diversity of its forms and uses to the development of accuracy of performance, as well as the researcher attributes the reason for this development to the use of the coach. Various auxiliary tools during educational units, which was an important role in the development of motor compatibility and control skill, to increase the learner's excitement, diversification must be made in the methods and tools used that make the learning process clearer and easier.¹⁰

IV. CONCLUSIONS

1. The effectiveness of special exercises to develop the ability of motor accommodation.
2. Entering special exercises during educational units for players to develop the skill of controlling football.
3. The experimental group achieved significant differences in motor ability and control skill in football.
4. The training curriculum used by the coach achieved significant differences in the ability of compatibility and the skill of controlling the football of the youths.

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