RESEARCH ARTICLE

The Effect of Inside and Outside the Circle Strategy on Learning the Skills of Handling and Scoring in Football for Students

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ABSTRACT

The importance of the research is evident in that it is a scientific attempt to use a modern strategy (strategy inside and outside the circle), which the researchers believe has a positive impact on learning some basic football skills for students, including the skills of handling and scoring and saving time and effort.

The research aimed to identify the effect of a strategy inside and outside the circle in learning the skills of handling and scoring in football for students. The research sample was chosen, represented by fourth-grade middle school students at Al-Khwarizmi Preparatory Boys' School-Thi-Qar Governorate for the academic year 2023-2024 AD. The researchers used the experimental method with two experimental groups. And the female officer.

The most important conclusions were the superiority of the experimental group, which applied a strategy inside and outside the circle, over the control group, which applied the method used in learning the skills of handling and scoring in football for students.

INTRODUCTION TO RESEARCH

Introduction and the importance of the research:

The tremendous scientific revolution that the world witnessed during the first years of the twenty-first century brought great development to all fields of science and various knowledge, and the mathematical field is one of these fields that includes diverse sciences and knowledge, and teaching methods are one of these sciences that have received a large share of development. By harnessing various knowledge, other sciences, strategies and modern methods to bring about change for the better in society, this development was the result of the accumulation of experiences, research and studies carried out by many scientists and researchers in the field of teaching methods and motor learning to supplement this science in the best ways, which was focused in its entirety on developing Performing the learner's motor skills in a way that serves the motor path of the sporting event.

Modern strategies have emerged in learning, including the inside and outside the circle strategy, which is one of the active learning strategies whose application mechanism includes a new type of image of the educational unit's output, which gives the learner a greater role in the educational process, as well as making the educational environment more interesting and exciting with the idea of the strategy that On the basis of making learners exchange ideas and discuss them through bilateral work and in an innovative way, its mechanism also encourages working with others and
developing thinking and decision-making skills, and these matters and characteristics are the basic building block that the learner needs.

The football event is one of the activities that consists of several basic skills, which the teacher is required to teach and communicate to the learners and develop them well in order to raise their skill performance, and this is through the use of appropriate and appropriate strategies and methods, which are consistent or consistent with the nature and inclinations of the learners. And their desires, and bring them to a level of mastery and a high level of efficiency and effectiveness to reach the goals to be achieved, and since the process of improving these skills and then the game, and reaching its performance to the best level is what the teacher seeks, this requires finding educational alternatives that are compatible with the multiple skills of football. Football, and from here the importance of the research is evident in that it is a scientific attempt to use a modern strategy (strategy inside and outside the circle), which the researchers believe has a positive effect and advances the level of learning faster in learning some basic football skills for students, especially the skills of handling and scoring.

**Research problem:**

Through the work of the researchers and their observation of most of the physical education lessons in some schools in the governorate, they noticed that the educational environment in most schools is an environment that is not encouraging and does not stimulate the student's motivation to learn. They also noticed that the basic skills in football, especially the skills of handling and scoring, are developing, but not in a way that is compatible with The rapid development of the game, and this may be due to the failure to use strategies that are appropriate to the large number of learners, which increases the burden of the educational process on the teacher in terms of following up on each student and correcting the errors that accompany the skill performance that he performs. The teacher’s reliance on learning strategies and methods that depend on the teacher and makes The role of the learner is a passive recipient of information, so it has become necessary to search for strategies and teaching methods based on scientific foundations in order to achieve the desired goals of the educational and teaching process, and lead to activating the role of the learner and his positive self-effort in confronting and treating the problems that he may face, and thus leading to raising the skill level. Football for students, and as a reaction that occurred in the teaching or learning environment, in accordance with modern trends, which prompted the researchers to use a strategy inside and outside the circle, and to know its effect on the handling and scoring skills in football for students, in the hope of bringing about a positive change, and the desire of the researchers to provide a scientific addition. I am humbled by the lack of research that has addressed these topics.

**Research objectives:**

1- Identifying the effect of the strategy inside and outside the circle in learning the skills of handling and scoring in football for students.

2- Identifying the advantage of the control and experimental groups in the results of post-tests in learning the skills of handling and scoring in football for students.

**Research hypothesis:**

1- The strategy inside and outside the circle has a positive impact on learning the skills of handling and scoring in football for students.

2- The experimental group, which implemented a strategy inside and outside the circle, had an advantage in the post-tests in learning the skills of handling and scoring in football for students.
Research areas:

**Human field:** Fourth grade students at Al-Khwarizmi Preparatory Boys’ School - Thi-Qar Governorate for the academic year 2023/2024 AD

**Temporal scope:** for the period from 12/2/2023 until 2/10/2024 AD.

**Spatial field:** The games arena in Al-Khwarizmi Preparatory School for Boys.

**Definition of terms:**

Inside and outside the circle strategy: It is defined as “a cooperative learning strategy that relies on two groups of students who form two different circles to exchange information” (7:2).

**RESEARCH METHODOLOGY AND FIELD PROCEDURES**

**Research methodology:**

The researchers used the experimental method with two equal groups (control and experimental) to suit the nature and objectives of this study.

**The research community and its sample:**

The researchers defined their research population as the fourth-grade students in Al-Khwarizmi Preparatory Boys’ School - Thi-Qar Governorate for the academic year 2023-2024 AD, who numbered (113) students distributed among (3) classes (A, B, C), and after conducting homogeneity and equivalence, the researchers They conducted their field experiment on a sample consisting of (40) students representing Divisions (A and C), with (20) students from each division. The percentage of the sample from the community of origin was equal to (35.39%), and by a random lottery method, Division (A) was chosen as a group. An experimental group to implement a strategy inside and outside the department, and Section (C) is a control group that implements the method used by the subject teacher. As for Section (B), the researchers conducted an exploratory experiment on it, and the researchers excluded a number of sample members, namely students who failed, those with medical disabilities, and students who practice football. The researchers conducted homogeneity and equivalence of the research sample using the coefficient of variation and the t-test for linked samples, and Tables (1, 2) show this.

**Table 1: Shows the arithmetic means, standard deviations, and coefficient of variation in terms of (age, height, mass)**

<table>
<thead>
<tr>
<th>Coefficient of variation (Z)%</th>
<th>standard deviation (Y)</th>
<th>Arithmetic mean (x)</th>
<th>Measuring Unit</th>
<th>Processors Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.558</td>
<td>4.846</td>
<td>189.438</td>
<td>Month</td>
<td>age</td>
</tr>
<tr>
<td>3.474</td>
<td>6.042</td>
<td>173.881</td>
<td>Cm</td>
<td>height</td>
</tr>
<tr>
<td>6.587</td>
<td>4.337</td>
<td>65.836</td>
<td>Kg</td>
<td>mass</td>
</tr>
</tbody>
</table>

All values of the coefficient of variation were less than 30%, which indicates homogeneity of the sample in the above variables

**Table 2: Shows the equality of the two research groups in the variables of the skill self and the skills of handling and scoring in football**

<table>
<thead>
<tr>
<th>Statistical significance</th>
<th>Significance level</th>
<th>Calculated t value*</th>
<th>Experimental group</th>
<th>Control group</th>
<th>Processors</th>
</tr>
</thead>
</table>

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It is clear from Table (2) that the value of (t) calculated for all the research variables has a significance level greater than (0.05), which indicates the presence of non-significant differences, and this means that the two groups are equivalent in the research variables.

Means of collecting information

Methods of data collection:

Arab and foreign sources - the Internet - tests and measurement, questionnaire.

Tools and devices used:

Dell laptop - measuring tape - medical scale - whistle - electronic stopwatch - footballs - colored tape - signs.

Identifying some basic football skills and determine the test for each skill under study:

The basic skills in football that are the subject of the study were determined according to the vocabulary of the curriculum prescribed by the Directorate of School Sports Activity in Thi-Qar Governorate for the academic year 2023-2024 AD, and the basic skills are (handling and scoring). Then the research required conducting tests for each skill under study, which was chosen through... Benefiting from the literature of previous studies, it was presented to a number of experienced and specialized people and their approval was 100%. This is what achieves the apparent validity of the tests. Although the tests are used in the Arab and Iraqi environment and their scientific coefficients are verified and reliable, the two researchers conducted an exploratory experiment on a sample. Other than the research sample and from the community of origin, they are (10) students from Division (B), to verify the stability of the tests by applying and re-applying the tests, as well as ensuring their objectivity by appointing two arbitrators to record the scores of the tests and then finding the correlation coefficient between them, and the correlation coefficients were high. This achieves stability and objectivity, and Table (3) shows this.

<table>
<thead>
<tr>
<th>Officer</th>
<th>Stability Coefficient</th>
<th>Objectivity Coefficient</th>
<th>S</th>
<th>اسم الاختبار</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling</td>
<td>0.85</td>
<td>0.96</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Scoring</td>
<td>0.83</td>
<td>0.94</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Significant at a significance level < (0.05) and in front of the degree of freedom (8).

Test specifications:

Handling skill test:

- Test name: Test of handling accuracy in three circles drawn on the ground at a distance of (20) meters (213:3).

- Purpose of the test: to measure average handling accuracy.

- Necessary tools: A specific area to conduct the test, (5) balls, a measuring tape, and Bork.
- **Procedures**: Three overlapping circles are drawn, with diameters respectively (2m, 4m, 6m) and degrees are given to them respectively (6, 4, 2) degrees, where the center of the circles is the point of distance between the starting line and the three circles, which are at a distance of (20) m.

- **Registration**: - The player is given (5) consecutive attempts.
  The number of scores the player obtained from the five attempts is calculated.
  The highest score a player gets is 30.

- **General instructions**: - The attempt is considered a failure if the ball falls outside the circles.
  - If the ball falls on the circle line, the next score is given, and according to the sequence of circles (5, 3, 1).

**Scoring skill test**:

**Test name**: Accurately aiming at a divided target (80:1).

**Purpose of the test**: to measure the accuracy of aiming at the target.

**Necessary tools**: 6 soccer balls, tape to mark the scoring area for the test, soccer goal, soccer field.

**Procedures**: (6) footballs are placed on the penalty area line, which is (18) yards away from the goal, between one ball and another (1 m). The player stands behind ball number (1), and when the start signal is given to him, the player scores in the areas indicated in the test and in accordance with its importance and difficulty, in a sequential manner, one after the other, until the sixth ball, and the shot is directed at the foot.

- The test begins with ball number (1) and ends with ball (6).
- The attempt is not considered valid if none of the three goals from each side, in addition to the middle goal, are scored.

**Scoring**: The number of injuries that enter or touch the sides of the four goals specified on each side and the middle of the goal is calculated, so that the scores for each of the six balls are calculated as follows:

- 4 marks when scoring in field no. (4) - 3 marks when scoring in field no. (3).
- 2 marks for scoring in field no. (2) - 1 mark for scoring in field (1).
- Zero for a failed goal - The tester is given one attempt, which includes six balls.
- The highest score a player gets is (24) degrees.

**Field research procedures**:

**Pretests**:

The researchers conducted pre-tests on the main research sample on Tuesday, 12/19/2023 AD, on the Al-Khwarizmi Preparatory School playground for boys, in the presence of the subject teacher and the assistant work team.

**The main experiment**:

After the researchers determined all the requirements for the main experiment by specifying the skill tests, and after conducting the exploratory experiment and benefiting from it in organizing the work and preparing for the main experiment, the researchers gave an introductory educational unit to the two research groups, the purpose of which is to give prior education to the student to identify the nature of the skill to be learned as well as to achieve The objectives that require the researchers...
to build the educational situations that the students will go through during the implementation of the researched strategy, and based on this:

The main experiment began on Thursday, 12/28/2023, and ended on Tuesday, 1/30/2024.

- The number of educational units during the educational curriculum is (10) educational units, at a rate of two educational units per week.

The duration of the educational unit is (45) minutes. The educational unit for the experimental group included the following:

**The preparatory section:** Its duration is (10) minutes, and it includes administrative aspects (taking absences and preparing tools), and giving a set of exercises to prepare the body parts for the requirements of the main section (warm-up).

**The main section:** It is (30) minutes long and aims to learn some of the basic football skills under study. It consists of two parts:

**The educational part:** Its duration is (10) minutes, and it includes an explanation of the skill and the correct method of performance, along with presenting it to the students by the subject teacher. The teacher explains, displays and clarifies the skill by applying a mechanism and strategic steps inside and outside the circle that stipulates dividing the students into two groups of students, where each group contains two inner and outer circles, meaning that each group consists of five opposite pairs of students, with the students of the outer circle facing inward, meaning that each student from the inner circle faces another student from the outer circle, and the five students who The inner circle students are the ones who carry the cards that contain the questions and the typical answer about the skill that was explained and presented by the teacher. The time for each question and answer is one minute, after which the teacher blows his whistle so that the outer circle students turn clockwise to receive questions from his other colleague. From the inner circle, and so on until the student completes five different questions, and after completion, they switch between the circles. The students of the outer circle enter and the students of the inner circle leave to ask the same questions.

**The Practical part:** Its duration is (20) minutes. The exercises are performed according to a strategy inside and outside the circle.

After the student in the outer circle answers the question, he immediately performs the exercise and returns to his place after finishing. When all the students in the outer circle finish performing the exercises, the teacher blows his whistle to change, so that the student who was in place T1 moves to T2, and so on until the students in the outer circle perform all the exercises. The exercises are then swapped between circles, where students from the inner circle are swapped with students from the outer circle.

**The closing section:** It is (5) minutes long, and in it relaxation and calming exercises are given or a small game, and the best group is praised, then a salute is given and the group leaves.

As for the control group, they implemented the educational curriculum according to the established method.

**Post-tests:**

The post-tests were conducted on Wednesday, January 31, 2024 AD. The researchers made sure that the conditions were similar to the pre-tests in terms of location, time, and the presence of the assistant work team, under the direct supervision of the researcher. The same steps were used in the pre-test.

**Statistical methods:**
The researchers used the statistical program (SPSS) to extract statistical results according to the following statistical laws: arithmetic mean - standard deviation - coefficient of variation - (t) for linked samples - (t) for independent samples.

PRESENTATION, ANALYSIS AND DISCUSSION OF THE RESULTS

Presentation and analysis of the results for the experimental and control groups:

Table 4: It shows the arithmetic means, standard deviations, and the calculated (t) value for the pre- and post-tests for the two groups.

<table>
<thead>
<tr>
<th>Significance Type</th>
<th>Significance level</th>
<th>Calculated (t) Value</th>
<th>Posttests</th>
<th>Pretests</th>
<th>Processors the group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant</td>
<td>0.000</td>
<td>11.901</td>
<td>1.316</td>
<td>7.950</td>
<td>Handling (Degree)</td>
</tr>
<tr>
<td>Significant</td>
<td>0.000</td>
<td>11.899</td>
<td>2.632</td>
<td>18.250</td>
<td>Scoring (Degree)</td>
</tr>
<tr>
<td>Significant</td>
<td>0.000</td>
<td>7.594</td>
<td>1.598</td>
<td>6.350</td>
<td>Handling (Degree)</td>
</tr>
<tr>
<td>Significant</td>
<td>0.000</td>
<td>6.959</td>
<td>3.528</td>
<td>14.583</td>
<td>Scoring (Degree)</td>
</tr>
</tbody>
</table>

Table 4 shows the arithmetic means, standard deviations, and the value of (t) calculated between the results of the pre- and post-tests in the skills of handling and scoring in soccer for students for the experimental and control groups. The results presented in the table showed that the value of the level of significance calculated in the tests for the two groups is less than the value of the level of significance (0.05), which indicates that there are statistically significant differences between the pre- and post-tests, in favor of the post-tests for the two groups.

Presentation and analysis of the results of the post-tests for the experimental and control groups:

Table 5: Shows the arithmetic means, standard deviations, and the calculated (t) value for the post-tests for the control and experimental groups.

<table>
<thead>
<tr>
<th>Statistical significance</th>
<th>Significance level</th>
<th>Calculated (t) Value</th>
<th>Control group</th>
<th>Experimental group</th>
<th>Processors Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant</td>
<td>0.001</td>
<td>3.455</td>
<td>1.598</td>
<td>6.350</td>
<td>Handling (Degree)</td>
</tr>
<tr>
<td>Significant</td>
<td>0.009</td>
<td>2.889</td>
<td>3.528</td>
<td>14.583</td>
<td>Scoring (Degree)</td>
</tr>
</tbody>
</table>

* Significant at a significance level < (0.05) and in front of a degree of freedom (19).

* Significant at a significance level < (0.05) and in front of the degree of freedom (38).
Table 5 shows the arithmetic means, standard deviations, and the calculated (t) value between the results of the post-tests in the handling and scoring skills in soccer for the students and for the experimental and control groups. The results presented in the table showed that the value of the significance level calculated in the skill tests is less than the value of the significance level (0.05), which indicates that there are statistically significant differences between the post-tests of the two groups and in favor of the experimental group.

**DISCUSSION OF THE RESULTS**

Table 4 shows the development of the experimental and control groups in learning the skills of handling and scoring in football for students. The researchers attribute this development and differences among the students of the two groups to several factors and reasons, including the repetitive attempts that suit the students and their level of abilities and the time period when applying the educational curriculum, which showed this development. Which is a natural result of the presence of varying differences between the two groups and according to their influence on the curriculum, strategy or method used, as the integrity of the educational curriculum and its inclusion of scientifically selected exercises are appropriate to the level of the learners and the content of the lesson and stimulate the motivations of the learners on the basis of correct practice, and this was confirmed by both Lamia Al-Diwan Hussein Farhan (2017) said, “The curriculum is one of the important and main axes in the educational and pedagogical process, and it is the effective means and successful way to achieve the goals of education in the least time and effort and at the lowest costs” (14:5), as the goal that these educational curricula seek is through practice and repetition. The learning process is to develop and improve the level of performance, by following scientific foundations studied when designing it, to bring the learner to a good level of performance of the skill to be learned, and the goal of skill learning is for the learner to acquire a set of skills and capabilities that enable him to achieve a good level of performance of the skill to be learned, as well as Repeat and repetition enable the learner to master the skill and perform it better, because repeated practice in learning the skills and repeating them correctly helps in performing them correctly (13:7).

The researchers believe that it is a natural result in the learning process that there is progress in learning and development for both groups as long as the teacher follows a curriculum according to a strategy or educational method based on scientific foundations to achieve the goals of the educational unit through explanation, presentation, and emphasis on correct performance and repeating it until performance is consolidated, with emphasis. On feedback that increases motivation towards learning. Learning coupled with continuous feedback from the teacher or teacher leads to positive effects in the learning process, and this is confirmed by Schmide & Wrisberge (2000) “that feedback increases individuals' energy and motivation and enhances correct performance.” And avoid wrong performance” (282:8).

As shown in Table (5), the experimental group outperformed the control group in the students’ football handling and scoring skills. The researchers attribute the reason for the superiority of the experimental group students to the effectiveness of the strategy inside and outside the circle through which the educational curriculum was implemented, as the strategy inside and outside the circle had a role. It is clear in the preparation of many factors in the educational environment, which adopted the ideas of the constructivist theory of learning because of the knowledge that the learner acquires, which serves as a basis for drawing the performance map for each of the two skills, as Haya Al-Mazrou indicates that “the psychological and philosophical origins of the form of a strategy inside and outside the circle are due to the theory.” Constructivism because the learner intends to formulate ideas and place them in a circular framework, which makes it easier to recall them easily and smoothly. This applies to what the proponents of this theory call for, namely the need for the learner to practice learning himself. This can also be traced back to Ozbel’s theory of meaningful learning, in which the learner intends to connect scientific information and putting it in its correct place. Many studies have
indicated that learning is meaningful in a strategy inside and outside the circle that helps the learner quickly and easily access the stored information and recall it” (13:6).

Abdullah and Suleiman state, “Skill learning using an inside-and-out-of-circle strategy is linked to George Miller’s research in psychology on short-term memory, as the effective collection of information in one organized and arranged form contributes to reducing the pressure of details, and the learner can find relationships between ideas and increase learning.” As for the topic of pictures and drawings in the figure, it is due to visual perception research, which found that humans remember information better when pictures are used and employed” (486:4).

CONCLUSIONS AND RECOMMENDATIONS

Conclusions:
1- The strategy inside and outside the circle and the method used have a positive impact on learning the skills of handling and scoring in football for students.
2- The experimental group, which applied the strategy inside and outside the circle, outperformed the control group, which applied the method used in learning the skills of handling and scoring in football for students.
3- Learning according to a strategy inside and outside the circle worked to attract students’ attention and increased their motivation and interest in learning.

Recommendations:
1- The necessity of using a strategy inside and outside the circle in learning the skills of handling and scoring in football for students.
2- The need to take into account individual differences among learners to choose the most appropriate strategies and models of education to achieve the desired purpose of raising the level of learning, improving skill performance, and increasing the effectiveness of the educational process.
3- The need to emphasize conducting similar studies using a strategy inside and outside the circle and in other team or individual games.

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