The effect of the participatory learning method on creative thinking and learning to perform the football dribbling skill for students

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Abstract: The research and study included four chapters, where the researchers touched in the first chapter on scientific development and modern educational methods in skill learning, as well as the participatory learning method, as it is one of the modern educational methods, a method that is considered one of the teaching methods that aims to teach the student through the mediation of his colleagues. An effective role in developing the student’s skills in most educational aspects, knowing that this choice must be based on scientific foundations so that we can achieve the set goals, in addition to creative thinking and football skills. The chapter itself also included the research problem, which lies in identifying the effect of using Participatory learning method in creative thinking and learning to perform the skill of dribbling in football for students. In addition, the research aimed to prepare an educational curriculum in the method of participatory learning, to learn and perform the skill of dribbling in football for members of the research sample, as well as identifying the effect of the participatory learning method in creative thinking and learning to perform the skill of dribbling. Football for members of the research sample. The first chapter also included the research hypotheses, including that there are statistically significant differences between the averages of the two measurements (pre- and post-test) for the two research groups (control and experimental) in the level of creative thinking and skill performance (under study) and in favor of the post-test. The areas of The research, while the third chapter included the research methodology, its field procedures, the research community and its sample, and the mechanism for determining the tests used in the study, as well as the field procedures for research regarding homogeneity and equivalence of the individuals in the research sample. The tests used in the research and the scientific foundations for them were presented, as well as the pre-test, the educational curriculum, the method of its application, and the time period for its application as well. The post-test and the method of performing it similar to the pre-test were discussed, while in the fourth chapter the presentation of the results reached by the researcher was discussed. They were also presented in special tables for each group and analyzed and discussed scientifically. The research also included the fifth chapter, in which the most important conclusions reached were discussed. The researchers presented their experience, including that using the participatory learning method achieved a clear improvement in learning the skill of dribbling in football, as well as developing creative thinking for members of the research sample from the experimental group, as well as recommendations, including emphasizing the use of the participatory learning method in educational programs for learning basic football skills. The research also included the sources that the researchers used in their work, as well as the appendices for the research.

Keywords: Skill learning, Learning methods, Field procedures, Analysis, Participatory learning impact


1. Introduction

The world today is witnessing a great scientific revolution that has invaded all areas of life. It is certain that this revolution has produced a great development in the educational field, as it is one of the important fields in human life. This is represented by the emergence of modern and multiple methods and methods in the science of learning, and the participatory learning method is one of those educational methods. Which contributes significantly to supporting learning in general, and skill learning in particular. Therefore, using this method requires the teacher to have sufficient knowledge and knowledge of it in order to benefit from it fully and to keep pace with the great wave of scientific development, for the purpose of activating this method and using it in situations. Appropriate education, especially what is related to the mathematical aspect (skill learning). This will undoubtedly contribute to bringing about a change in the learning process and moving away from traditional methods of learning that depend primarily on the teacher. This change does not mean that students are left to learn on their own, but rather the teacher must remain the same. The leader in teaching them through the topics he refers to for learning. Likewise, the educational task is not limited to transferring information to the learner only, but it goes beyond that to making the learner the basic pillar of learning at all stages, and his ignorance is always in a state of readiness and activity to remain active during the lesson, all of that. The participatory method is now one of the important elements on which the educational process depends.

The participatory learning method, which is one of the teaching methods that involves teaching the student through his colleagues, has an effective role in developing the student’s skills in most educational aspects, noting that this choice must be based on scientific foundations so that we can achieve the set goals. The methods also have teaching plays a large and important role in developing the skill performance of group events and games, especially the game of football, which requires teaching methods that are compatible with the nature of its various basic skills, including the rolling skill, which is considered the basis of the skills through which the ball is moved on the field. It is also one of the skills scheduled to be studied in the curriculum. College of Physical Education and Sports Sciences.

The game of football is one of the games that has witnessed great development at the level of countries around the world and has spread rapidly because it contains various technical and tactical skills that are interesting to the viewer and can be considered one of the games that work to spread cooperation and unify efforts for the purpose of reaching the high sporting level. The basic skills in the game are Football serves as the backbone of this game and usually takes the longest practice time.

From the above, the importance of research and study lies in identifying the impact of the participatory learning method on creative thinking and learning to perform the football dribbling skill for students. This is what called the researchers to conduct this experimental study out of their desire to prepare educational units with the participatory learning method in the process of skill learning in football for the purpose of raising the level of Students achieve the best results.

1-2 Research problem:

Football is one of the competitive sports activities characterized by rapid, sudden, and variable motor and skill performance at the same time, which requires the ability to respond quickly during different match conditions, which is characterized by direct struggle between the two teams, in addition to being full of many situations and pressures that require a high level of mental abilities. Which depends on immediate thinking (at the same moment) to make a decision that reflects the player’s creativity in motor or skill performance, which requires high performance behavior from that player, especially because the match performance is fast and with high intensity, and therefore all of this requires the player to act on the field during the performance, which affects the performance. Performing this, the research problem lies in identifying the effect of using the participatory learning method on creative thinking and learning to perform the football dribbling skill for students (members of the research sample).

1-3 Research objectives: The research aims to:
1. Preparing an educational curriculum using a participatory learning method, to learn and perform the skill of dribbling in football for members of the research sample.
2. Identify the effect of the participatory learning method on creative thinking and learning to perform the football dribbling skill for members of the research sample.
3. Identify the difference between the control and experimental groups in creative thinking and learning to perform the rolling skill for members of the research sample.

1-4 Research hypotheses: The researcher assumes that:
1. There are statistically significant differences between the averages of the two measurements (pre- and post-test) for the two research groups (control and experimental) in the level of creative thinking and skill performance (under study) and in favor of the post-test.
2. There are differences between the means of the two post-measurements between the two research groups (experimental and control) in the level of creative thinking and skill performance (under study) and in favor of the experimental group.

1-5 Research areas:
1. Human field: First stage students, in the College of Physical Education and Sports Sciences - Al-Qadisiyah University.

2. Research methodology and field procedures

2-1-Research method:-
The researchers used the experimental method by designing two equal groups (experimental and control) to suit the nature of the research problem.

2-2-Research population and sample:
The researchers identified the research population, which is the students of the first stage / College of Physical Education and Sports Sciences - Al-Qadisiyah University for the academic year 2022-2023, and they number (148) students. The research sample was chosen by random method (lottery), and they are two divisions, and the number of sample members reached (40). students, and they were distributed into two groups (control and experimental), where the number of each group reached (20) students, after excluding the failing students, club players, and teachers, who numbered (8) students, before starting the educational curriculum, and thus the percentage of the sample reached (27.02% ) from the research community. The experimental group used the educational curriculum using the participatory learning method, and the control group used the method used by the subject professor.

2-3 Field research procedures:
2-3-1 Homogeneity and equality of individuals in the research sample:
2-3-1-1 Homogeneity of the members of the research sample:
The researchers conducted homogeneity for the members of one group in variables (height, weight, age) in order to reach a single and equal starting level for the research sample and to avoid variables that might affect the results of the study in terms of the individual differences that exist between the members of the research sample. This was done through the use of the skewness factor, where The value of the skewness coefficient in these variables was limited to (±1). As shown in Table (1)

<table>
<thead>
<tr>
<th>Table 1. Shows the new renewal of research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variables</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>
2-3-1-2 Equivalence for members of the research sample:

It is very important, before starting field work, that the two study groups must be equivalent, so that the researchers can later attribute the differences in test results to the experimental factor. Therefore, the two groups must be equivalent in terms of conditions and variables except for the (experimental variable) that affects the two groups [5], and thus parity between the two groups was carried out using the statistical parity method, where the value of (t) calculated between the results of the two groups in the skill test (under study) appeared to be less than its tabular value, and this indicates the randomness of the differences, and thus the two study groups are equivalent, and the table (2) This shows:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measurement unit</th>
<th>Control group</th>
<th>Experimental group</th>
<th>Calculated t value</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Football dribbling skill</td>
<td>Degree</td>
<td>3.69</td>
<td>0.71</td>
<td>3.36</td>
<td>0.53</td>
</tr>
</tbody>
</table>

The tabular value is (2,042) with a significance level of (0.05) and a degree of freedom (38).

Likewise, the equivalence of the two study groups was obtained with the creative thinking variable (under study) in the same way (statistical equivalence), as shown in Table (3).

Table 3. It shows the statistical parameters and T-values calculated for the control and experimental groups in the creative thinking scale

<table>
<thead>
<tr>
<th>Statistical features</th>
<th>Measurement unit</th>
<th>Control group</th>
<th>Experimental group</th>
<th>Calculated t value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Fluency</td>
<td>Degree</td>
<td>70.54</td>
<td>13.26</td>
<td>72.23</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Degree</td>
<td>40.42</td>
<td>10.04</td>
<td>41.97</td>
</tr>
<tr>
<td>Originality</td>
<td>Degree</td>
<td>3.23</td>
<td>1.02</td>
<td>3.49</td>
</tr>
</tbody>
</table>

Table (3) shows that the calculated (t) values for all creative thinking skills reached (1.82) for the fluency skill, (1.10) for the flexibility skill, and (1.24) for the originality skill. All of these values are smaller. From the tabular (t) value, it was shown that there was no significant difference between the experimental and control groups in the creative thinking test, which indicates the equality of the two groups in the students’ creative thinking.

2-4 Tools, devices and methods used in the research:

1. Observation.
2. Personal interviews
4. Creative thinking form
5. Testing and measurement
7. Stopwatch type (Smtwtfs).
8. DEL laptop.
9. A medical device to measure height and weight.
10. Legal football field.
11. Footballs (10)

2-5 Determine the variables of the study:
2-5-1 Determine the technical performance evaluation test (technique):

In order to determine the skill test for the skill (under study), the researchers reviewed many sources and previous literature, as well as some interviews conducted with experts and specialists. The researchers found that the process of evaluating skill performance and the way those skills are depicted during performance is extremely important. Thus, a special questionnaire form was prepared that included three skill tests (under study) for the purpose of identifying one test that is reliable during the process of evaluating the skill performance of members of the research sample in the rolling skill to evaluate technical performance (technique). This form was then presented to a number of experts and specialists (Appendix 1 The number of them is (12) experts, within the specializations of (football, tests and measurement), and then (rolling the ball between the five marks back and forth) was chosen, which was nominated by most of the experts and marking specialists, as it is the most appropriate for evaluating the performance of the skill studied, as shown in Table No. 4).

Table 4. Shows the percentages of experts choosing the rolling test

<table>
<thead>
<tr>
<th>Skill</th>
<th>Tests</th>
<th>Experts number</th>
<th>Chi-square</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Suitable</td>
<td>Unsuitable</td>
<td></td>
</tr>
<tr>
<td>Dribbling</td>
<td>Rolling the ball between the blocks back and forth for a distance of 27 metres</td>
<td>1</td>
<td>11</td>
<td>8.333</td>
</tr>
<tr>
<td></td>
<td>Roll the ball between the five blocks back and forth for a distance of 20 metres</td>
<td>12</td>
<td>0</td>
<td>12.000</td>
</tr>
<tr>
<td></td>
<td>Rolling alternately back and forth with the right foot and back with the left foot for a distance of (36) m</td>
<td>3</td>
<td>9</td>
<td>3.000</td>
</tr>
</tbody>
</table>

2-5-2 Determine the measure of creative thinking:

In order to choose the measure of creative thinking (under study), the researchers reviewed many sources related to measures of creative thinking. The researchers found that the best and most widely used of these measures for the research sample is the (Sayyed Khairallah, 1974) measure. Therefore, the researchers developed the aforementioned measure on A questionnaire was formed and distributed to a group of people with experience and specialization in sports psychology, measurement, and evaluation. After that, the researchers concluded that there was an agreement rate (90%) on the validity of the scale and its suitability for the research sample.

2-6 Description of the tests used in the research:-

2-6-1- The first test: rolling the ball between the five poles back and forth. [4]
Test objective: To measure the accuracy of performing the rolling skill.
 Necessary tools: legal football, electronic stopwatch, five markers.
Performance specifications: - Test area layout.
- The student stands with the ball and is behind the starting line, and when the start signal is given, the tested student runs with the ball with his foot between the five marks back and forth, as in Figure (4).
Registration: Two consecutive attempts are given to each student, and the evaluator gives a score for the best attempt. -Time is calculated to the nearest (1/10) of a second.

2-6-1-1 Scientific foundations of the test:
**Honesty:**
The researchers obtained apparent validity, as the test was presented to a group of experts and specialists to express their observations and opinions on it and to determine its ability to achieve the purpose for which it was developed. The experts agreed on the validity of the test, and the test obtained a high agreement rate, as shown in Table (5).

<table>
<thead>
<tr>
<th>Skills</th>
<th>Agree</th>
<th>Disagree</th>
<th>Percentage</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performing the football dribbling skill</td>
<td>11</td>
<td>0</td>
<td>100%</td>
<td>Sig.</td>
</tr>
</tbody>
</table>

**Consistency:**
The reliability coefficient was calculated by applying the test and re-applying it by finding the correlation between the results of applying the first and second test after re-applying the test to the exploratory sample (7 days) after applying the first test, and then the simple correlation coefficient (Pearson) was calculated between the results of the two tests. The results of the first and second tests appeared as shown in Table (6).

<table>
<thead>
<tr>
<th>Skills</th>
<th>Stability coefficient</th>
<th>Sig.</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performing the football dribbling skill</td>
<td>0.890</td>
<td>0.021</td>
<td>Sig.</td>
</tr>
</tbody>
</table>

**Objectivity:**
The objectivity coefficient was calculated by finding the correlation between the results of two judgments. The value of the correlation coefficient was high between the results of the two judgments, confirming that the test has high objectivity. It is clear to us from Table (7) that the value of the correlation coefficient between the results of the two judgments reached (0.931) and a significant level. Less than (0.05), which confirms the objectivity of the test.

<table>
<thead>
<tr>
<th>Skills</th>
<th>Correlation coefficient</th>
<th>Sig.</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performing the football dribbling skill</td>
<td>0.845</td>
<td>0.03</td>
<td>Sig.</td>
</tr>
</tbody>
</table>

**2-6-2 Creative thinking scale:**
The purpose of the scale: to test the ability to think creatively part One
Mention as many uses as possible that you consider to be unusual uses (that is, that your colleagues do not think about) for the following things and which you think make these things more useful and important.

A) Tin can
1. _______________________________ —
2. _______________________________ —

Do not turn the page until given permission
Time (5) minutes

b) The chair
1. _______________________________ —
2. _______________________________ —

Do not turn the page until given permission
Time (5) minutes
The second part
What happens if the system of things changes in the way that will be mentioned later? Try to think of as many answers as possible that your colleagues do not think of.

a) What would happen if a person understood the language of birds and animals?
1. ——
2. ——
Do not turn the page until given permission

Time (5) minutes

b) What happens if the ground is dug so that the hole appears on the other side?
1. ——
2. ——
Do not turn the page until given permission

the third part

A) If you are appointed responsible for disbursing money in the school store of which you are a member and one of the club members tries to make colleagues think that you are dishonest, what do you do?
1. ——
2. ——
Do not turn the page until given permission

Time (5) minutes

b) If all schools did not exist at all (or were even cancelled), what would you do to become educated?
1. ——
2. ——
Do not turn the page until given permission

part Four

Think of two or more ways to make the following ordinary things better. Do not worry about whether the change you propose can be implemented now or not. You should also not suggest something that is currently being used to make something better.

a) Bicycle (or wheel)
1. ——
2. ——
Do not turn the page until given permission

Time (5) minutes

b) Ink pen
1. ——
2. ——
Do not turn the page until given permission

Time (5) minutes

part Five

Form from the letters of each of the following words as many words as possible that have an understandable meaning (for example: (Read) consists of the letters Q, R, and A. Other words can form from these letters, such as (Iraq) (Decided). It is possible for the same letters to be used more than once in one word.

Follow the same method in the following words, forming as many words as possible that have an understandable meaning:

A) Democracy:
1. ——
2. ——
Do not turn the page until given permission

Time (5) minutes

b) Kirkuk:
In order to verify the scientific foundations of the aforementioned scale, the researchers obtained the validity of the scale by presenting it to a group of experts and specialists who agreed on its suitability for the individuals in the research sample, as well as its ability to measure what it was developed for. Thus, content validity was obtained, which is one of the types of validity. The stability of the scale was also obtained by applying it to (10) students from the research community and from outside the research sample, and after (10 days) the scale was re-applied to the same previous sample, and using the simple Pearson correlation coefficient, the calculated (t) value appeared (0.89) which is a high correlation coefficient (significant) indicating the stability of the scale.

2.7 Field research procedures:
2.7-1 Exploratory experiments:
To obtain sound results, the researcher must conduct exploratory experiments on a sample of his research community, and before carrying out his main procedures, with the aim of testing the research methods and tools. Therefore, the researchers proceeded to conduct two exploratory experiments, as follows:

2.7-1-1 The first exploratory experiment (for the skills test):
The researchers conducted the first exploratory experiment on Tuesday (December 6, 2022) at ten o’clock in the morning on a sample of students, where the number was (13) students. The researchers supervised the performance of the rolling skill test (under study).

2.7-1-2 The second exploratory experiment:
The researchers conducted a second exploratory experiment on members of the same sample of the first exploratory experiment on Wednesday, 12/7/2022, where the two researchers conducted a second exploratory experiment, the aim of which was to train on the process of conducting filming of the skills test (under study). This experiment was conducted on (13) Students from the research community were on the football field at the College of Physical Education and Sports Sciences - Al-Qadisiyah University, and the skill test used in the study was applied, as well as verifying the location of the video cameras for the studied skill. The aim of this experiment was also to identify the errors, negatives, and obstacles that might encounter the researchers in the main experiment, and to know the time required for the tests, as well as to know the researchers’ needs during the work.

2.8 Pretests:
The pre-test was conducted on Sunday, December 11, 2022, by conducting two educational units (introductory) in which the aforementioned skill was presented to the members of the research sample. At the end of the second unit, the pre-tests were conducted by photographing the sample members’ performance of the studied skill, and thus The research sample was photographed (preliminarily) by presenting the performance of the skill by the subject teacher to the members of the research sample. The researchers fixed the conditions and method of conducting the test in order to achieve the same conditions when conducting the post-tests, and the pre-test of the skill (under study) was performed as follows:
First: Installing cameras in appropriate places in a way that allows the skill to be clearly seen.
Second: Arranging the members of the research sample and each group according to the sequence of numbers they carry from (1 – 20).
Third: Explaining the skill in detail before the sample is administered the test.
Fourth: Applying the performance of the studied skill so that sample members can understand it.
Fifthly, before the student began performing the skill, he was photographed holding his own identification number.
Sixth: The performance was filmed according to the conditions and specifications specified for each test and presented to the experts.
After photographing all the sample members (pre-test), the two researchers transferred the photography to a CD for use in subsequent research procedures, as it was stored in the form of special files entitled (Pre-test).
After that, the photography was shown to experts and specialists in the field of football to evaluate the skill performance using a special form to evaluate the performance (of the research sample) of the two groups (control and experimental) in skill performance.

The creative thinking scale forms were also distributed to members of the research sample and to the two groups (control and experimental) on the day following the skills test, which is Monday 12/12/2022, and the test was conducted in the classrooms of the College of Physical Education and Sports Sciences at Al-Qadisiyah University.

2-9 Educational curriculum:
The researchers applied the educational curriculum (in the participatory learning method) prepared by the researchers to the research sample (the experimental group) in order to achieve the research objectives and reach the results. The work began on Tuesday, 12/13/2022, and continued until Thursday, 12/22/2022. The implementation took place on the day following the skills test, which is Monday 12/12/2022, and the test was conducted in the classrooms of the College of Physical Education and Sports Sciences at Al-Qadisiyah University.

The experimental group’s work was determined at the beginning of the educational section of the lesson, and the curriculum was applied in the following steps:

- Introduction: After explaining the activity by the teacher and presenting it (and performing the exercises in front of the students), the students must monitor this carefully.
- Group work: The students are divided into groups, so that each group consists of (1-2) when performing the exercises. As for the exercises that require more than two students, one or more students are added in order to carry out the exercise, and the students continue to be evaluated in exchange among themselves, while continuing to perform the exercises. Exercise sequentially
- After the exercises are performed collectively, individual exercises are given to each student and they are performed regularly.
- Feedback: Each student provides his colleague in the same group with a copy of the recorded notes about the performance that he recorded in order to give each student responsibility for observing and repeating his colleague’s performance.
- Group evaluation is carried out according to what is stated in the performance sheet by the teacher.

2-10 Posttests:
After completing the application of the educational curriculum, the researchers conducted the post-test for the rolling skill (under study) on Sunday, 12/25/2022, according to what was done in the pre-test, and the post-test for the creative thinking scale was also conducted on the next day, that is, Monday, 26/12/2022, in the same classrooms and in the same manner as the pre-test.

2-11 - Statistical methods:
The researcher used the statistical package (SPSS).

3. Presentation, analysis and discussion of the results:

3-1 Presentation, analysis and discussion of the results of the pre- and post-tests of the football dribbling skill for members of the experimental group.

Table 8. It shows the arithmetic means, standard deviations, and the (t) value calculated for the skill (under study) between the tests (pre- and post-tests) for the experimental group.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measurement unit</th>
<th>Pre test</th>
<th>Post test</th>
<th>Calculated t value</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Football dribbling skill</td>
<td>Degree</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>6.15</td>
</tr>
</tbody>
</table>
Tabular value = 2.09 at degree of freedom (19) and significance level (0.05)

Table (8) shows the arithmetic means, standard deviations, and (t) value between the results of the pre- and post-tests for the football dribbling skill tests for members of the research sample (experimental group). The arithmetic mean reached (3.36) and the standard deviation (0.53) for the pre-test. In the post-test, the arithmetic mean reached (5.48) with a standard deviation of (1.40), while the calculated (t) value reached (6.15), which is greater than the tabulated (t) value of (2.09) at a degree of freedom (19) and a level Significance (0.05): This indicates that there is a significant difference between the two tests and in favor of the post-test.

It is noted in Table (8) for the experimental group that there are significant differences between the results of the pre- and post-tests for the research sample of the experimental group and in favor of the post-test. This is due to the fact that the experimental group followed an educational curriculum prepared by the researcher in the process of learning the skill (under study). This became clear when the level of performance of the members of the research sample in the studied skill improved, and this was clear through the results of the post-tests for this skill. The researchers attribute the reason for this development in skill performance to the effect of the educational curriculum prepared in the participatory learning style in learning the skill of dribbling in football, as the This method had a significant impact on improving the level of learners’ skill performance, and the participatory learning method contributed significantly to developing the cognitive awareness of learning the studied skill among members of the research sample from the experimental group. This was done through harmony between the teacher and the learner and group and individual work, as this It gives the learner an active role during the educational process and achieves the discovery of good skill performance, which leads to achieving a good level of performance of the skills to be learned. That is, the use of the participatory learning method has undoubtedly led to an increase in the motivation of the members of the experimental group to learn, which is one of the important methods in teaching knowledge. Scientific research, which seeks at the same time to improve students’ educational skills and develop their performance by dividing students into several groups and establishing a social characteristic among them, such as cooperation, harmony, exchanging opinions, and reducing the state of fear among students. This is consistent with what [2] emphasized that “Paying attention to the learner, making him the focus of the educational process and the center of activity, respecting his opinions and abilities, and showering him with kindness, acceptance, and encouragement is an essential factor that helps learning.”

3-2 Presentation, analysis and discussion of the results of the pre- and post-tests of football dribbling skill for members of the control group

Table 9. It shows the arithmetic means, standard deviations, and the (t) value calculated for the skills (under study) between the tests (pre- and post-tests) for the control group.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measurement unit</th>
<th>Pre test Mean</th>
<th>Pre test SD</th>
<th>Post test Mean</th>
<th>Post test SD</th>
<th>Calculated t value</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Football dribbling skill</td>
<td>Degree</td>
<td>3.69</td>
<td>0.71</td>
<td>4.68</td>
<td>0.86</td>
<td>4.51</td>
<td>Sig</td>
</tr>
</tbody>
</table>

* Tabulated value = 2.09 at degree of freedom (19) and significance level (0.05)

Table (9) shows the arithmetic means, standard deviations, and (t) value between the results of the pre- and post-tests for the football dribbling skill tests for members of the research sample (the control group). The arithmetic mean reached (3.69) and the standard deviation (0.71) for the pre-test. In the post-test, the arithmetic mean reached (4.68) with a standard deviation of (0.86), while the calculated (t) value reached (4.51), which is greater than the tabulated (t) value of (2.09) at a degree of freedom (19) and a level Significance (0.05): This indicates that there is a significant difference between the two tests and in favor of the post-test. The researchers attribute the reason for this to the educational curriculum followed by the subject teacher, the commitment of the research sample members (the control group) to attendance and continuous training during lectures, and the educational curriculum containing correctly selected exercises with correct...
repetitions that are consistent with the level and ability of the sample members. Learning and practicing the skill within a specific motor task leads to increase experience and bring about an improvement in skill performance, therefore, practice is the most important variable in the learning process for complex and even simple skills. Shalash [9] states that skill progress is achieved through practice, repetition, and the absence of errors, and this is done through the learner’s correct performance under supervision. The teacher: This is one of the main steps followed in teaching motor skills. The researchers also attribute the reason for these differences to the style of the teacher’s role in organizing the educational units to which the students were exposed, which was characterized by clarity and what was required of the students to achieve, so as to ensure that the student acquired good skill performance to achieve a good result, which led to a clear development in their performance, and this is what was indicated. [7] “If educational objectives are clear and defined in light of specific behavior or performance levels, they will be meaningful and effective.”

3-3 Presentation and analysis of the results of the post-tests for the two research groups (control and experimental) and discussion:

3-3-1 Display and analyze the results of the skills tests (under study) and the results of the T test (under study) between the post tests for the control and experimental groups:

In order for the researchers to be able to identify the differences in the results of the posttests when the research sample was allocated to the two groups (control and experimental) in the technical performance of the skill (under study) posttest, the researchers used the t-test for independent samples, as shown in Table (10).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measurement unit</th>
<th>Control group</th>
<th>Experimental group</th>
<th>Calculated t value</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Football dribbling skill</td>
<td>Degree</td>
<td>5.84</td>
<td>4.68</td>
<td>2.16</td>
<td>Sig.</td>
</tr>
</tbody>
</table>

* Tabulated value = 2.02 at degree of freedom (38) and significance level (0.05)

It is clear from Table (10) that there is a clear discrepancy in the results of the post-test of football dribbling skill for the experimental and control groups. The arithmetic mean of the post-test for the experimental group was (5.48) with a standard deviation of (1.40), while the arithmetic mean of the post-test for the control group was (4.68) with a standard deviation of (0.86). As for the calculated (t) value, it reached (2.16), which is greater than the tabulated (t) value of (2.02) at a degree of freedom (38) and a significance level (0.05). This indicates that there are significant differences between the results of the two post-tests for the two groups (experimental and control) and in favor of the experimental group.

Through Table (10) we see that there are clear significant differences between the test results for the studied skill and for the two research groups (control and experimental) in the post-test and in favor of the experimental group, as the researchers believe that the difference that occurred in the level of evaluation of skill performance in football in the post-test of the rolling skill (Under study) is due to the use of the collaborative learning method during the organization and preparation of educational units, which was appropriate to the level of abilities and inclinations of the members of the research sample. In addition, it worked in an effective way to take into account the individual differences among them, and at the same time it also worked to arouse their enthusiasm towards learning and help them to Creative thinking for learning, which ultimately led to quality teaching, and this is what Mustafa Badran [11] emphasized, stating that using the participatory learning method enables the teacher to meet the individual differences among the learners and give each of them the experiences that suit them, which increases their positivity, arouses their enthusiasm, and helps them. It encourages positive thinking and ultimately leads to quality teaching.

The researchers also attribute that the reason for the superiority of the experimental group members is that the collaborative learning method, which divides the skill into steps in an organized and sequential
manner, which helps the student to focus attention, understand each part of the skill, and learn it easily, and this is consistent with what was indicated by [8] that dividing the educational situation leads to increasing the chances of success and reducing the wrong response, which leads to avoiding the learner’s negativity and increasing his positive participation in gaining experience.

3-3-2 Presentation of the results of the post-test (for creative thinking) between the experimental group and the control group.

Table 11. It shows the arithmetic means, standard deviations, and t-value for the post-tests in the creative thinking test for the control and experimental groups.

<table>
<thead>
<tr>
<th>Statistical features</th>
<th>Measurement unit</th>
<th>Control group</th>
<th>Experimental group</th>
<th>Calculated t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creative thinking</td>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>Fluency</td>
<td>Degree</td>
<td>80.81</td>
<td>8.49</td>
<td>72.78</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Degree</td>
<td>48.5</td>
<td>7.89</td>
<td>43.75</td>
</tr>
<tr>
<td>originality</td>
<td>Degree</td>
<td>6.69</td>
<td>2.86</td>
<td>4.53</td>
</tr>
</tbody>
</table>

*Tabular value = (2.05) at significance level (0.05)*

Table (11) shows that there are clear differences between the means of the two post-measurements between the results of the two groups (control and experimental) in the creative thinking test and in favor of the experimental group, as the calculated (t) values reached (4.75, 4.21, 3.52), which is greater than Its tabular values are (2.05).

The researchers believe that the reason for the superiority of the experimental group over the control group in the results of the creative thinking test, whose educational units worked in a participatory learning method, is that the specificity of the participatory learning method is that it helped the members of the research sample (the experimental group) to develop their critical and creative ideas, and also at the same time. It works to develop the students’ tendencies and desires towards participation and empathy with their peers. All of this works to stimulate the mental processes of the learners themselves through what this method includes of using a group of mental processes (such as perception, thinking, visualization) and others, and thus leads to the growth of an immediate thinking process in them of complete awareness. The parts of the skill are a result of the learner’s thinking during the learning process about the details of the movement and thus realizing the complete movement. This is consistent with the opinion of (Annan, 2004, 56) who emphasizes that “perception plays an important role in solving the problems facing the student who needs to always be aware of the elements of the situation he faces.” So that he can always overcome changing circumstances and that correct thinking only occurs after a correct understanding of all parts of the educational situation.”

The researchers also believe that, in the collaborative learning method, the student develops all positive thinking processes in every educational situation without interruption in them, and the students’ continuation of learning in this method led to an increase in the growth of the mental processes that the students acquired, which increased the development of their creative thinking to practice mental processes. Compared to the method used by the teacher, this is confirmed by [6]: “Our basic ambition to distinguish the most creative people or to raise their creative performances is based on mental preparations.”

The researchers also believe that the educational units used in the collaborative learning method work to develop the cognitive aspect and also increase the feeling among the members of the research sample of
self-confidence, freedom, cooperation and competition among themselves, especially the low-level students, and to join their good peers and reach the good level, as this method pushes for a balance between cooperation between individuals and competition for both the individual and the group, and thus provided opportunities for each student to express on his own the ideas inside him about how to perform and move according to his level, which appears in his creative movement response that he arrived at with his own efforts, relying on himself with the previous experiences and capabilities he possesses so that he can adapt to the situations. The new educational approach and relying on oneself in thinking, and this is what [1] indicated in the same context that “the development of creativity lies in its teaching and learning if the appropriate environmental conditions are created that help in developing creative thinking.”

Finally, the researchers attribute that there is an additional reason for the superiority of the experimental group in creative thinking to the nature of the program in a collaborative learning style, which increased the principle of motivation among the members of the research sample, and thus worked to develop their creative thinking, especially those with a weak level among them, so that the teacher works to stimulate their motivation towards achievement and correcting their mistakes, and because motivation is important in the physical and mental effort of the creative student, and this is what was confirmed by [3] that “internal motivation plays a decisive role in the process of creativity as it starts from within a drawn goal that shows the desire to search, feel happiness and knowledge in discovering Reality and giving good ideas.”

4. Conclusions and recommendations:

4-1- Conclusions: - In light of the results reached by the researchers and through their field experience, the researchers reached the following conclusions:

1. The use of the participatory learning method has achieved a clear improvement in learning the skill of dribbling in football, as well as developing creative thinking for members of the research sample from the experimental group.
2. The educational curriculum prepared using the participatory learning method helped increase educational situations similar to the game situation, which helped students provide real responses.
3. The students’ application of the skill they learned using the participatory learning method helped enhance their self-confidence and gave them positive attitudes towards learning.

5. Recommendations:

Based on the conclusions reached by the researchers, the researchers made the following recommendations:

1. Emphasizing the use of the participatory learning method in educational programs for learning basic football skills.
2. Ensure that educational units contain questions that help students increase their thinking and creativity.
3. The necessity of holding workshops and seminars for physical education coaches and teachers on the importance of using modern educational methods, which can help coaches and teachers be creative in skills education in particular.
4. Emphasis on conducting research using the participatory learning method on other samples and other skills using different games.

6. Ethics approval

The Institutional Ethical Committee (IEC) of University of AQED, Iraq, approved the study.

7. Financial support and sponsorship

self-funded

Appendix(1)
Table 12. Shows the names of experts and specialists who determined the skill test (under study)

<table>
<thead>
<tr>
<th>Scientific title</th>
<th>Expert name</th>
<th>Exact specialization</th>
<th>Workplace</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Prof. Dr.</td>
<td>Salam Jabar Saheb</td>
<td>Al-Qadisiyah University - College of Physical Education and Sports Sciences</td>
</tr>
<tr>
<td>2</td>
<td>Prof. Dr.</td>
<td>Habib Shaker Jabr</td>
<td>Al-Muthanna University - College of Physical Education and Sports Sciences</td>
</tr>
<tr>
<td>3</td>
<td>Prof. Dr.</td>
<td>Mohammed Matar Arak</td>
<td>Al-Muthanna University - College of Physical Education and Sports Sciences</td>
</tr>
<tr>
<td>4</td>
<td>Prof. Dr.</td>
<td>Raafat Abdul Mahdi</td>
<td>Al-Qadisiyah University - College of Physical Education and Sports Sciences</td>
</tr>
<tr>
<td>5</td>
<td>Prof. Dr.</td>
<td>Alaa Jabbar Abboud</td>
<td>Al-Qadisiyah University - College of Biotechnology</td>
</tr>
<tr>
<td>6</td>
<td>Prof. Dr.</td>
<td>Haider Karim Saeed</td>
<td>Al-Qadisiyah University - College of Physical Education and Sports Sciences</td>
</tr>
<tr>
<td>7</td>
<td>Prof. Dr.</td>
<td>Kamel Malyoukh Hussein</td>
<td>Al-Muthanna University - College of Physical Education and Sports Sciences</td>
</tr>
<tr>
<td>8</td>
<td>Prof. Dr.</td>
<td>Majed Abdel Hamid cry</td>
<td>Al-Qadisiyah University - College of Physical Education and Sports Sciences</td>
</tr>
<tr>
<td>9</td>
<td>Assoc. prof. Dr.</td>
<td>Imad Odeh Gouda</td>
<td>Al-Qadisiyah University - College of Physical Education and Sports Sciences</td>
</tr>
<tr>
<td>10</td>
<td>Assoc. prof. Dr.</td>
<td>Watheq Mohammed Abdullah</td>
<td>Al-Qadisiyah University - College of Physical Education and Sports Sciences</td>
</tr>
<tr>
<td>11</td>
<td>Assistant. prof</td>
<td>Ali Yacoub Youssef</td>
<td>Al-Qadisiyah University - College of Physical Education and Sports Sciences</td>
</tr>
<tr>
<td>12</td>
<td>Assistant. prof</td>
<td>Ahmed Rahim Ali</td>
<td>Al-Muthanna University - College of Physical Education and Sports Sciences</td>
</tr>
</tbody>
</table>

Conflicts of Interest: There are no conflicts of interest.

References


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