THE EFFECT OF (M.U.R.D.E.R) STRATEGY ON LEARNING THE TECHNICAL PERFORMANCE OF THE STUDENTS’ TRIPLE JUMP EFFECTIVENESS

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ABSTRACT

The purpose of this paper is to preparing educational units using the strategy (M.U.R.D.E.R) and knowing its influence on the technical performance of the students’ triple jump effectiveness. The researchers used the experimental method for the two groups, the control and the experimental, with the pre- and post-test due to its suitability to the objectives and nature of the research and the problem to be solved, which is one of the most successful and best-used approaches because the results are extracted through experiment. The research community was determined by students of the second stage in the College of Physical Education and Sports Sciences in Holy Kerbala, who numbered (110) students. The researchers chose the main sample, which was represented by the students of the second stage, which numbered (28) students, and they were divided into two groups, experimental and control (14) students for each group, by lottery method and by random method, and thus the percentage of the research sample is (25.45%). (10) Students were taken for the purpose of the exploratory experiment. The researchers concluded that the strategy (M.U.R.D.E.R) and the strategy used by the teacher had clear effectiveness in increasing the students’ ability to learn the technical performance of the triple jump. Also, the strategy (M.U.R.D.E.R) showed a clear and significant development for the experimental group members in learning the technical performance of the triple jump effectiveness.

I. INTRODUCTION:

There is no doubt that scientific progress in various fields of life is a form of scientific research and experiments, which have resulted in results in the interest of all mankind. As a result, all sciences have developed, including the sciences of physical education in all its branches. In light of the great progress that has occurred recently, it has become necessary to move away from the traditional methods that depend entirely on the teacher (the trainer), and to move to more advanced strategies to reach the learner to high levels of performance (1). The (M.U.R.D.E.R) strategy is one of the most important strategies that depend on the constructivist theory, and it is a teaching-learning strategy used to organize and teach the content of the material with the aim of helping learners to modify their perceptions and make a clear change in their performance. The technical performance of the triple jump, which is one of the athletics activities taught in the faculties of physical education and sports sciences for the second stage.

II. RESEARCH PROBLEM:

Through the experience of researchers in the field of teaching methods and athletics, they noticed that there is a difficulty in learning the technical performance of the triple jump for students because of its many stages and because of its rapid performance by linking its stages one by one, which causes confusion among students about performance, and for the purpose of using everything that would improve learning outcomes and achieve the desired benefit, we must use modern teaching strategies that will help in the learning process. A modern cognitive learning strategy was used in the sports field that invests students’ abilities to the greatest extent possible, so the researchers decided to use this strategy and try to know its impact on the technical performance of the effectiveness Triple jump for students.
III. RESEARCH OBJECTIVE:

- Identifying the priority of influence between the strategy (M.U.R.D.E.R) and the method used in the technical performance of the effectiveness of the triple jump for students in the post-tests.

Research hypotheses:

- The strategy (M.U.R.D.E.R) has a positive effect on the technical performance of the students' triple jump effectiveness.
- There is a preference in effect for the (M.U.R.D.E.R) strategy (the experimental group) in the technical performance of the effectiveness of the triple jump for students compared to the method used (the control group) in the post-tests.

Research fields:

- Human field: second-year students in the College of Physical Education and Sports Sciences at the University of Kerbala for the academic year (2020-2021).
- Spatial field: the external arena in the College of Physical Education and Sports Sciences at the University of Kerbala.

IV. RESEARCH METHODOLOGY AND FIELD PROCEDURES:

Research Methodology:

The researchers used the experimental method for the two groups, the control and the experimental, with the pre- and post-test due to its suitability to the objectives and nature of the research and the problem to be solved.

V. COMMUNITY AND SAMPLE RESEARCH:

The research community was determined by students of the second stage in the College of Physical Education and Sports Sciences in Holy Kerbala, who numbered (110) students. The researchers chose the main sample, which was represented by the students of the second stage, which numbered (28) students, and they were divided into two groups, experimental and control (14) students for each group, by lottery method and by random method, and thus the percentage of the research sample is (25.45%). (10) Students were taken for the purpose of the pilot experiment.

Homogeneity of the sample and the equivalence of the two research groups:

Sample homogeneity:

Before starting the implementation of the educational units of the (M.U.R.D.E.R) strategy, and in order to control the variables that affect the accuracy of the research results, the researchers resorted to verifying the homogeneity of the research sample in the variables related to morphological measurements (height - mass - age - training age), and as shows in Table (1).

Table (1) shows the homogeneity of the research sample members in the variables (age, mass, height, training age).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measuring unit</th>
<th>Degrees of freedom between groups</th>
<th>Degrees of freedom within groups</th>
<th>Levin value for the arithmetic mean</th>
<th>Level sig</th>
<th>Type sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>Cm</td>
<td>1</td>
<td>26</td>
<td>0.352</td>
<td>0.558</td>
<td>Non sig</td>
</tr>
<tr>
<td>Mass</td>
<td>Kg</td>
<td>1</td>
<td>26</td>
<td>0.398</td>
<td>0.534</td>
<td>Non sig</td>
</tr>
<tr>
<td>Age</td>
<td>Year</td>
<td>1</td>
<td>26</td>
<td>0.188</td>
<td>0.668</td>
<td>Non sig</td>
</tr>
</tbody>
</table>
Equivalence of the two search groups:

Before starting the implementation of the strategy, the researchers resorted to verifying the equivalence of the two research groups in the variables related to the technical performance test for the effectiveness of the triple jump, as shown in the Table (2).

Table (2) shows the equivalence between the research variables.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Groups</th>
<th>Arithmetic mean</th>
<th>Standard deviation</th>
<th>T value</th>
<th>Sig level</th>
<th>Sig type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical performance of the triple jump</td>
<td>Control</td>
<td>4.05</td>
<td>0.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>experimental</td>
<td>3.82</td>
<td>0.35</td>
<td>0.924</td>
<td>0.364</td>
<td>Non Sig</td>
</tr>
</tbody>
</table>

Table (2) shows that the differences in the technical performance tests between the two research groups have appeared not significant, as the calculated (T) values are less than their tabular value of (2.04) at the level of significance (0.05) and below the degree of freedom (26), and this indicates the parity of the two research groups in the tests.

VI. STEPS SEARCH PROCEDURE:

Determining the technical performance of the triple jump effectiveness:

After examining the researchers on several special sources in measuring the technical performance, the researchers did not find it better than depicting the artistic performance of the students and it was presented to a group of assessors as an accurate measure of the level of their technical performance for this event.

As the technical performance of the two research groups was photographed (and they were given two attempts for each student) and they were presented to a group of assessors with specialization in athletics to evaluate the technical performance of this activity under discussion.

Exploratory experiment:

Conducting the experiment is to inform the researchers about the ability and validity of what helps him in conducting his experiment from an assistant work team, devices and tools, and his tests that he will use in the research, and that it is an experiment or a mini-test in preparation for a larger test.

The researchers conducted an exploratory experiment on a group of (10) students before the researchers took the pre-test in their research to find out the obstacles they might face.

VII. FIELD RESEARCH PROCEDURES:

Pre-tests

Before implementing the educational units according to the cognitive conflict strategy, the tribal tests were applied to the members of the control and experimental research groups, which are related to the technical performance test for the effectiveness of the triple jump on Sunday, 6/12/2020 in the external arena of the College of Physical Education and Sports Sciences / University of Kerbala, and the researchers were keen to establish the times and circumstances of the test, such as the time, place, method of testing, the members of the assistant work team, and their location in order to work as much as possible to create the same atmosphere and conditions when we perform the post-tests.

Implementation of the educational units of the strategy (M.U.R.D.E.R):

The researchers applied the educational units of the (MURDER) strategy to the students of the second stage, the experimental group, on Sunday 13/12/2020 by six educational units on (Sunday and Tuesday) and the time for implementing the educational units ended on Tuesday, 29/12/2020, while the control group used the curriculum followed by the subject teacher.

Post-tests:
After completing the educational units prepared according to the (MURDER) strategy, post-tests were conducted on Sunday 3/1/2021 on the students of the second stage of the experimental and control groups, which included tests of technical performance for the effectiveness of the triple jump and under direct supervision by the researchers and with the same conditions, specifications and conditions pre-tests, for the purpose of obtaining more accurate results.

Statistical methods:
The search data was processed through the Statistical Package for the Social Sciences (SPSS).

Presentation, analysis and discussion of the results:

Presenting, analyzing and discussing the results of the offensive positions tests for the effectiveness of football:

**Presenting and analyzing the results of the technical performance test for the effectiveness of the triple jump for the control group in the pre and post-test:**

Table (3) shows the arithmetic means, standard deviations, and the calculated and tabulated t-values in the pre and post-tests of the control group to test the technical performance of the triple jump effectiveness.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>T value</th>
<th>Sig type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>standard deviation</td>
<td>Mean</td>
<td>standard deviation</td>
</tr>
<tr>
<td>Technical performance of the triple jump</td>
<td>4.05</td>
<td>0.56</td>
<td>6.24</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Table (3) shows that the arithmetic mean value reached in the pre-tests (4.05) and standard deviation (0.56), and in post-tests amounted to the arithmetic mean value (6.24) and standard deviation (0.47). The value (t) calculated between the pre and post-tests equals (4.22) below the significance level (0.05) and the degree of freedom (13), which indicates the existence of a significant statistically significant difference between the pre and post-tests in favor of the post-test.

**Presenting and analyzing the results of the technical performance test for the effectiveness of the triple jump in the experimental group in the pre and post-test:**

Table (4) shows the arithmetic means, standard deviations and the calculated and tabular (t) values in the pre and post-tests of the experimental group to test the technical performance of the effectiveness of the triple jump.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>T value</th>
<th>Sig type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>standard deviation</td>
<td>Mean</td>
<td>standard deviation</td>
</tr>
<tr>
<td>Technical performance of the triple jump</td>
<td>3.82</td>
<td>0.35</td>
<td>7.68</td>
<td>0.94</td>
</tr>
</tbody>
</table>

Table (4), shows that the arithmetic mean value in the tribal tests was (3.28) with a standard deviation of (0.35), and in the post-test, the mean value was (7.68) and with a standard deviation (0.94). The value of (t) was calculated between the pre and post-tests equal to (4.94) below the significance level (0.05) and the degree of freedom (13), which indicates the existence of a significant statistically significant difference between the pre and post-tests in favor of the post-test.

**Presentation of the results of the post-tests between the control and experimental groups to test the technical performance of the effectiveness of the triple jump and its analysis:**

Table (5) shows the values of the arithmetic means, standard deviations, and the calculated and tabulated (T) value of the technical performance test for the effectiveness of the triple jump between the control and experimental groups in the post-tests.

<table>
<thead>
<tr>
<th>Variables</th>
<th>control</th>
<th>experimental</th>
<th>T value</th>
<th>Sig type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>standard deviation</td>
<td>Mean</td>
<td>standard deviation</td>
</tr>
<tr>
<td>Technical performance of the triple jump</td>
<td>6.24</td>
<td>0.47</td>
<td>7.68</td>
<td>0.94</td>
</tr>
</tbody>
</table>
deviation of (0.47), while the arithmetic mean value of the experimental group in the post-tests was (7.68) with a standard deviation of (0.94). And the t-value calculated for the post-tests between the control and experimental groups was equal to (5.13) at the level of significance (0.05) and the degree of freedom (26), which indicates the existence of significant statistically significant differences between the control group and the experimental group in favor of the experimental group.

Through our observation of tables (3,4,5), it was found that the results of the tests had a significant difference with a statistical significance with a probability of error (0.05) and in favor of the post test of the control group, and the researchers attribute this development to the members of the control group in their post-test of the method used before The teacher, in addition to the students' understanding of the duties given to them, their commitment and discipline, and their consistency in the application.

As for the experimental group, the results showed that there is a significant difference in favor of the post-test for the experimental group, and the researchers attribute this development to the proper use of the educational units according to the stages of the strategy, and it contained exercises that were selected scientifically and with correct repetitions and consistent with the student's abilities as well as a commitment to the objectives for the work of the strategy and this was confirmed Accordingly (Fouad Suleiman Colada, 1989) “The clear and specific goals are behaviorally depicted or performed at a certain level, so they have good and noticeable effectiveness” (2).

The researchers also attribute the reasons for the development of the experimental group members in the post-test to the nature of the strategy (MURDER) and its stages that were used in the research, as each stage of its stages included a set of steps that helped the students to modify their previous knowledge and information by searching for a solution to the conflict and its realization. Each stage contains specific information so that they can understand and realize a broader and better than their previous information and awareness.

VIII. CONCLUSIONS AND RECOMMENDATIONS:

Conclusions:

- The strategy (M.U.R.D.E.R) and the strategy used by the teacher had clear effectiveness in increasing the students' ability to learn the technical performance of the triple jump.

- The strategy (M.U.R.D.E.R) showed a clear and significant development for the experimental group members in learning the technical performance of the triple jump effectiveness.

Recommendations:

In light of the conclusions reached by the researchers recommend the following:

- The necessity of providing sufficient and appropriate equipment, tools, activities and means to achieve the educational goals of the football event.

- Conducting studies similar to this study that includes other variables that were not addressed in this study or with other samples, such as being female, and comparing their results with the results of the current research.

REFERENCES:

1 Hussein Hamza Najm: (2019); The effect of exercises similar to playing in the development of cognitive flexibility, some perceptions of the environment, scoring accuracy and offensive playing positions for young footballers, PhD thesis, University of Babylon, College of Physical Education and Sports Sciences.

2 Fouad Suleiman Qalada: (1989); Educational Objectives and Teaching Curricula, Alexandria, New Publications House.