The Effect of Educational Exercises on Developing Upgrade Step (hopscotch) of Jumping to Perform the Open and annex Jump Skills on the Jumping Horse Device

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Abstract: The researchers noticed the presence of confusion in the final steps (hopscotch) of the approximate run before performing the jumps on the jumping horse device, which make the researchers to prepare exercises to learn the hopscotch steps to perform the jumping skills of open and annex on the jumping horse in the artistic gymnastics for men. The researchers used the experimental method for its relevance and research nature. the sample of the research was deliberately selected and they are third stage students in the branch of theoretical sciences in the Faculty of Physical Education and Sports Sciences at the Maysan University with the number (45) students (23) students for the experimental group and (22) students for the control group and the researcher use skill test as a research tool.

Keywords: The Effect of Educational, Exercises on Developing Upgrade, hopscotch, Perform the Open and annex Jump Skills, Horse Device

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Introduction

That one of the most important aspects in our current time is the ongoing and continuous development in the sports field from achieving high figures and achievement levels for many countries of the world. The reason for this development and progress is due to the effectiveness of teaching and learning in the search for and find solutions in order to solve the problems facing the mathematical side and to upgrade this aspect to the development level of other sciences. A lot of scientists and specialists in the field of motor learning through research and studies that the learners do not respond to the learning process in one way or one method and that it is necessary to diversify their learning methods during teaching physical skills, especially those skills that require accuracy and cleverness in the implementation, including the skills of jumping movements in the artistic gymnastics for men. As one of the performance conditions of these skills is accuracy and aesthetic movement, and on this basis must be developed modern educational methods in order to reach by learners of the skills of gymnastics to the highest levels.

The effectiveness of gymnastics is a complex game because of the diversity of its equipment and the multiplicity of skills, it is one of the activities that contribute to the development of the individual physical, health, mental and educational capabilities beside providing an opportunity for learners to demonstrate their artistic abilities by creativity in the performance on various devices and their success when mastering the technical and correct foundations of the basic movements on these devices.

To master and complete any skill of gymnastics in general way and the horse jumping device in particular, the player or the learner must master the technical stages until the skill ends completely. Where these stages are linked to each other at the preparation moment of skill performance of until completion. If the learner fails in one of these stages, the result will be the wrong performance and with over-effort, thus, the learner had to master these stages and linked them, where the performance passes on the jumping horse device with the next technical stages (1 - approaching 2 - upgrading 3 - first flight 4 - propulsion 5 - second flight 6 - landing), and the basis in these stages are the first stages (approaching), which starts with the approximate run and end (hopscotch) and hit the leaping. Whenever these stages are mastered the learner has the required speed to upgrade and fly to complete the rest of the performance stages on the jumping horse device.

The importance of this research lies in the development of educational exercises that contribute to the development the upgrade step to the leaping where the safety of performance depends on mastering the upgrading, if he fails in the mastery method and perform it on the jumping ladder failed to perform subsequent skills in general.
Problem of the Research:

Researchers have been teacher’s gymnastics subject for more than ten years. Notes that the most of the student learners of the jumping skills in general and the jumping skills of annex and open in particular, their approximate run is correct at the beginning and when they reach to the jumping platform (leaping) the student begins to enlarge and minimize his last steps before upgrading to the leaping and confusion in those steps before touching the leaping, and cannot adjust the rhythm of the last steps of the approximate run, which ends (hopscotch) to the jumping ladder and this is reflected on the necessity speed of the student at the moment of upgrading, thus decreases the horizontal speed which is the speed resulting from approaching and the vertical speed resulting from pushing the jumping ladder in the upgrade, these two speeds result in the result (flight speed) of the leaping to the horse jumping device, and thus failure to perform for the rest of the jumping stages because the student has failed in the basic steps which the rest of the performance stages are built.

The Objectives

1 - Preparation of educational exercises to develop the step upgrading (hopscotch) of the leaping to perform the skills jumping of open and annex on the jumping horse device.

2 - Knowing the impact of educational exercises prepared by the researcher.

Hypotheses

1- There are statistically significant differences between the pre and post tests and for the control and experimental groups and in favor of the post tests.

1- There are statistically significant differences between the post-tests and the control and experimental groups and in favor of the post-tests of the experimental group.

Human Field: Students of the Faculty of Physical Education and Sports Science Phase III – Maysan University 2018 - 2019

Time domain: from 25/2/2019 to 22/4/2019

Spatial Field: Gymnastic Hall at the Faculty of Physical Education and Sport Sciences at Maysan University.

Terminology:

Upgrading Step (hopscotch step): "It is jumping from the front foot and flying on the springboard with the feet together, hands throw forward and move the feet forward so as to guide the ass to the springboard" [1].

Methodology

The researcher used the experimental method to suit the nature of the research, it is defined as "the only method that can truly test of the hypotheses relationships of cause or effect" [2].

Population

The sample selection process is closely related to the nature of the community because it is "the part that represents the original community or the model which the researcher conducts his entire work"[3]. The researcher identified the research population represented by the students of the third stage theoretical sciences branch - Faculty of Physical Education and Sports Sciences - University of Maysan for the academic year (2018 - 2019) and the number (45) students and the sample of the research was selected by lot where the Division (1) and the number (23) students while The control group was division (2) the number (22) the experimental group, thus the sample constituted (100)% of the original community.

Homogeneity of the Research Sample

In order to ensure the homogeneity of the sample members and the validity of their spread within the normal distribution curve, the researcher resorted to using the torsion coefficient in the anthropometric research variables (length, mass, age) after obtaining and statistically treating the results, a significant homogeneity was found among the sample members as the results were confined within the normal limits of the torsion factor (+ - 3) As shown in Table (1), most sources indicate that “whenever the resulting degree is between (+ - 3) in the natural distribution curve indicates that the grades are distributed naturally with homogeneity in the selected sample “[4] and Table (1) shows that.

Table (1) shows the homogeneity of the research sample

<table>
<thead>
<tr>
<th>Variables</th>
<th>measuring unit</th>
<th>Arithmetic mean</th>
<th>standard deviation</th>
<th>Mediator Torsion coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Height</td>
<td>CM</td>
<td>173.68</td>
<td>3.16</td>
<td>174.00 0.30-</td>
</tr>
<tr>
<td>Mass</td>
<td>KG</td>
<td>71.73</td>
<td>1.94</td>
<td>72.00 0.42-</td>
</tr>
<tr>
<td>Age</td>
<td>Year</td>
<td>20.33</td>
<td>0.55</td>
<td>20.00 1.8</td>
</tr>
</tbody>
</table>

Equalization of the sample:

In order to be able the researcher to attribute the differences in the results of post-test to the effect of the experimental factor has resorted to the use of the test (t) to ensure the equivalence of the two groups (control and experimental) in all search variables, which showed no significant differences between the two groups, which indicates to equivalence of the two groups (control and experimental) in the variables as shown in Table (2).

Table (2) shows the arithmetic means, the standard deviations, the calculated value (t) and the significance of the differences in the pre-test of the experimental and control groups.

<table>
<thead>
<tr>
<th>Group Variables</th>
<th>experimental S±</th>
<th>A±</th>
<th>Control S±</th>
<th>A±</th>
<th>Calculated value (t)</th>
<th>Significance level</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jumping skill openly</td>
<td>4.17 0.93</td>
<td></td>
<td>3.90 0.87</td>
<td></td>
<td>0.983</td>
<td>0.33</td>
<td>Not significant</td>
</tr>
<tr>
<td>Jumping skill annex</td>
<td>3.91 1.04</td>
<td></td>
<td>3.81 0.79</td>
<td></td>
<td>0.342</td>
<td>0.73</td>
<td>Not significant</td>
</tr>
</tbody>
</table>

**The Used Devices, tools and means of collecting information:**

**Devices:**
- Jumping Horsedevicenumberof (2)
- Plate board (leaping) number of (2)
- Laptop Calculator (brand: HP Pavilion DV3)
- Medical scale of measurement unit (kg)

**Tools**
- Sponge rugs number of (10)
- Tape measure to measure length in cm (cm)
- CDs
- Different library tools (papers, pens, etc.)

**Data collection**
- Observation and experimentation
- Arabic Resources
- Used Tests
- World wide web

Exploratory Experience

The most important characteristic of the accuracy scientific activity is the use of experimental method \(^5\) where the researcher conducted an exploratory experiment on 25/2/2019 on a sample of its members (5) from outside the main sample and the aim was:

1. Identify the appropriated educational exercises and research sample.
2. Ensure the required time to apply the educational exercises.
3. Know if there are obstacles or errors that arise during the implementation of field procedures.

The Suggested Educational Exercises

1. The suggested educational exercises consist of (6) educational units.
2. Distributed the educational units for each week and according to the schedule of lectures.
3. The principle of gradient from easy to difficult during the exercises conducting.
4. These exercises were distributed in proportion to the number of educational units (*).

The main experience of research

1. The pre-measurement of the control and experimental groups was taken on Monday in the gymnastic lecture on 25/2/2019.
2. The educational training exercises of the control group were conduct on Monday 4/3/2019 Until Monday, April 15, 2019.
3. The post-measurement of the control and experimental groups was taken on Monday 22/4/2019.

Conclusion

The two skills under study were evaluated from (10) grades and the evaluation before (3) rectifiers (*) where the Arithmetic mean was calculated to be the final score.

The use of the statistical program Spss to process data statistically and reached the following conclusions:

1. The proposed educational exercises have a great role in developing the performance of the jumping skills of open and annex on the jumping horse.
2. The last step (hopscotch) is affected by organizing the approximate run and speed, and this speed in turn depends on (the length of the running step in approaching - the number of running steps in approaching) whenever the length of the step increases the speed of approaching.
3. In each attempt the student starts approaching from the different starting points from the previous one and therefore the number of different steps reflected negatively on the last step.

The recommendations were:

1. The student must practice on the hopscotch movement (stage before jumping) separately way as a basic skill and must be confirmed by the subject teacher before starting the jumping device.
2. The training should be at the approaching distance from a fixed point of each time the player performs the approach and never changes during the student’s education period, taking into account that this distance may change when the performance level improves.
3. Take into account teaching this step not to be too high about 25 cm, which leads to the fall of the feet perpendicular on the jump ladder and therefore the body bounces high up and this are undesirable. And should not be less than 20 cm because it will be a violent dart and due to excessive flexion of the wrists of the foot, articulations of the knees, thighs and thus use the muscle strength about the required.

Statistical means

The researcher used the statistical package (SPSS) to the data processing by using:

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- Arithmetic mean.
- Mediator.
- Standard deviation.
- Percentage.

- Test (C) for correlated samples.
- Test (T) for independent samples.

References
