The impact of an innovative device to break the defence of the roller catch for young Romanian wrestling players

Ghazwan Karim Khudair, Riyad Jumaa Hassan and Abdulhussain Majid Muhammed
College of Physical Education and Sports Sciences, University of Al-Qadisiyah
Ghazwanka99999999@gmail.com; h.nn36@yahoo.com

Abstract

One of the most important catch in the Roman wrestling grabbed the roller because of its obvious effect during the descent and the importance of this catch through the fact that the player takes the position of the Hack during the game of passive or when getting a mistake where the player sit in the area of the Hack and the player to attack the striker to perform the catch and that the catch a set of and of the alternatives for the purpose of getting the defender out of the situation the danger in the application of the catch and give points, and the importance of research in the manufacture of an auxiliary device through which to break the defense of this catch and thus take the points and win the landing as this device can be circulated to the rest of the age groups and teams of women, hence the problem of research that the player wrestling during the application of Roller Bearing is a set of alternatives to the grip, including rotation of the body in opposite direction of the player. So that it hinders movement and therefore not to give the points focused the problem of research by the following question (How to break the defense of the roller handle)? the purpose of the research (designing an innovative device and knowing its effect in breaking the defense of the roller catch, that the innovative device has the effect of breaking the defense Grab roller).

Keywords: innovative device, wrestling, roller handle.

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1. Introduction and problem of research:

Wrestling game in Iraq have a privileged position because of its history and popularity and the wide spread among Iraqis in several governorates. It is also one of the games that developed during the past decades and achieved advanced results on the Arab and international level. The level of interest in this game in some countries is high because it is linked to the qualities of strength, masculinity and other values, as a result of the scientific development that opened up good prospects for various sports science including the science of kinetic learning which is searching in a sophisticated manner about the best methods and modern methods which positively effect on the development of physical abilities and mobility of athletes and enhance their achievements in athletics, especially the strength which plays a role in the skillful performance, particularly wrestling game, which depends on the special requirements in the performance skill. Therefore, the training experts seek to harness all sciences related to the preparation of the athlete from the physical, skill, planning, psychological and educational according to the training methods which used in achieving the goals. One of the most important catch in the Roman wrestling grabbed the roller because it has a clear impact during the descent and the importance of this catch through the fact that the player takes the position of the Hack during the game of passive or when getting a mistake where the player sit in the area of the Hack and the player to attack the striker to perform the catch and that the catch a set of and of the alternatives for the purpose of getting the defender out of the situation the danger in the application of the catch and give points, and the importance of research in the manufacture of an auxiliary device through which to break the defense of this catch and thus take the points and win the landing as this device can be circulated to the rest of the age groups and teams of women, hence the problem of research that the player wrestling during the application of Roller Bearing is a set of alternatives to the grip, including rotation of the body in opposite direction of the player. So that it hinders movement and therefore not to give the points focused the problem of research by the following question (How to break the defense of the
1.1 Purpose of research:
- Design an innovative device and know its effect in learning to break the defense of the roller handle.

1.2 Research Hypothesis
- The innovative device has the effect of breaking the defense of the roller handle.

2. Research methodology and its field procedures:
2.1 Research Methodology:
- The researcher has adopted the use of the experimental method for its suitability to the nature of the research.

2.2 Community and Research Sample:
The research community included the players of Al-Ittifaq Sports Club (The youth). The sample was randomly selected and then sample was divided into two groups in the simple random way. Where (20 players) were selected to be in the first group (Experimental 10 players) undergo to the application of the device prepared by the researcher, The second control group (10 players) is undergo to the practice of the traditional method (the style adopted) after that the homogeneity of each group was done by using the coefficient of variation in the variables of length, age and mass. All values were less than 30%. The two groups are homogeneous as shown in tables (1), (2). The equivalence between the experimental and control groups was done using the T-law for independent samples. All values were not significant, which means the two samples were equivalent in the search variables as in Table (3).

Table (1) shows the homogeneity of the experimental group

<table>
<thead>
<tr>
<th>No</th>
<th>Variables</th>
<th>Arithmetic averages</th>
<th>Standard Deviations</th>
<th>Coefficient of variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Length (cm)</td>
<td>171.33</td>
<td>3.54</td>
<td>2.06%</td>
</tr>
<tr>
<td>2</td>
<td>Age (year)</td>
<td>17.2</td>
<td>0.95</td>
<td>5.52%</td>
</tr>
<tr>
<td>3</td>
<td>Mass (kg)</td>
<td>72.75</td>
<td>11.74</td>
<td>16.13%</td>
</tr>
</tbody>
</table>

Table (2) shows the homogeneity of the control group

<table>
<thead>
<tr>
<th>No</th>
<th>Variables</th>
<th>Arithmetic averages</th>
<th>Standard Deviations</th>
<th>Coefficient of variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Length (cm)</td>
<td>171.25</td>
<td>5.64</td>
<td>3.29%</td>
</tr>
<tr>
<td>2</td>
<td>Age (year)</td>
<td>17.32</td>
<td>0.99</td>
<td>5.71%</td>
</tr>
<tr>
<td>3</td>
<td>Mass (kg)</td>
<td>72.21</td>
<td>7.38</td>
<td>10.22%</td>
</tr>
</tbody>
</table>

Table (3) shows the parity of experimental and control groups in the variables searched

<table>
<thead>
<tr>
<th>No</th>
<th>Variables</th>
<th>Measurement units</th>
<th>Experimental group</th>
<th>control group</th>
<th>Calculated T value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>SMA</td>
<td>SD</td>
<td>SMA</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Length</td>
<td>cm</td>
<td>171.33</td>
<td>3.54</td>
<td>171.25</td>
<td>5.64</td>
</tr>
<tr>
<td>2</td>
<td>Age</td>
<td>Year</td>
<td>17.02</td>
<td>0.95</td>
<td>17.32</td>
<td>0.99</td>
</tr>
<tr>
<td>3</td>
<td>weight</td>
<td>kg</td>
<td>72.75</td>
<td>11.74</td>
<td>72.21</td>
<td>7.38</td>
</tr>
</tbody>
</table>

* T value of T (2.4) at the level of significance (0.05) and the temperature of (18)
2-3 tools, methods and devices used in the search:
1. The observation
2. Personal interviews
3. Registration form for collecting special scores of the research sample (recording the results of skilled performance)**
4. Medical balance for measuring lengths and weights.

2.3.1 Device used in search:
- The device was prepared by the researchers as the device has a base to install the device to the ground, the engine (CARE Box) controlled by a keyboard for the purpose of changing the direction from right to left and vice versa, it also has a serrated teeth connected to a doll that is held by the performing player and is about 120 cm long. It contains an electric wire for the purpose of connecting to electricity to start work and shows through the following forms.

- The following forms show the device and also show the method used (normal) when performing the skilled performance of the grab:

1 - The usual method:

![Figure (2) shows the method used to perform grab (normal).](image1)

2-second method (the device used):

![Figure 2](image2)
2.4 Exploratory experiment:

The exploratory experiment is one of the most important necessary procedures carried out by the researchers before conducting the main experiment. Therefore, it is a preliminary experimental study conducted by the researcher on the sample (preliminary) before doing his research in order to test the methods of research and tools. The researcher conducted the exploratory experiment on a sample of (4) players from outside the research sample, the exploratory experiment was held on 20/3/2018 at 9:30 am and the experiment was aimed at the following:

1- Identify the suitability of the device for the sample.
2- Make sure that the tools are ready.
3- Identify the time it takes to perform each player as well as the total time.

2.5 Field research procedures:

- Pre-test for two groups was conducted and the grades were put by arbitrators. Where the test was carried out by the performance and practical application of the grab and then continued working on the device for the experimental group while the control group applied the test on the method used for the grab. The researchers then carried out the post-test of the two groups, and the grades were put by arbitrators.

2.5.1 Scientific foundations:

The scientific foundations of the device were carried out in terms of the validity of the test through the virtual honesty and honesty of the arbitrators as well as the stability was done through testing and re-testing and objectivity through the arbitrators.

2.6 Main experience:

After completing the procedures that qualify the main experiment and the validity of the devices and tools, the researchers conducted the tests on the sample of the ten (10) players for each group (experimental - control), the test was conducted in the wrestling hall at the club sports agreement. The tests started on Monday and the researcher carried out the post-test for the two groups and the grades were put by the arbitrators ***, after the completion of the tests and the termination of the main experiment, dump forms and data collection, then the researchers performed statistical treatments.

2.7 Statistical Means:

The researchers used statistical bag (SPSS) for data processing the following statistical laws were used:
- The arithmetic mean.
- Standard deviation
3. Presentation, analysis and discussion of the results:

3.1 Presentation and analysis of the results:

Table (4): Shows the arithmetic averages and standard deviations and the value of ($t$) of the test (pre-test) for the two groups (experimental - control) and the search variable (roller handle).

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Measuring unit</th>
<th>Group</th>
<th>SMA</th>
<th>SD</th>
<th>Value of significance level</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Roller handle</td>
<td>The point</td>
<td>Experimental</td>
<td>4.72</td>
<td>1.06</td>
<td>0.838</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Control</td>
<td>4.97</td>
<td>0.911</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table above shows the arithmetic averages, standard deviations and the value of the significance level at a temperature of (18). The value of the significance level was (0.838) and this indicates that there is no significant difference between the two groups in the pre-test which confirms the equivalence of the two groups of the search variable (roller handle) of the experimental groups - control and pre-test.

Table (5) Shows the arithmetic averages and standard deviations and the value of ($t$) of the test (post-test) of the two groups (experimental - control) and the search variable (roller handle).

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Measuring unit</th>
<th>Group</th>
<th>SMA</th>
<th>SD</th>
<th>Value of significance level</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Roller handle</td>
<td>The point</td>
<td>Experimental</td>
<td>7.35</td>
<td>0.53</td>
<td>0.00</td>
<td>Not significant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Control</td>
<td>5.62</td>
<td>0.65</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The table above shows the arithmetic averages and standard deviations and the value of ($t$) calculated at a temperature of (18) and the value of the significance level reached (0.00). This indicates that there are significant differences between the two groups for the experimental group in the post test.

3.2 Discussion of results:

In the pre-test of the roller handle for the two groups. This confirms the equivalence of the two groups this is because the researchers divided the sample into two equal groups and there was no experimental or an intruder affects one of them.

In the post-test, there were significant differences between the two groups for the benefit of the experimental group. The reason for this development of the experimental group could be attributed to the use of the auxiliary device in several axes:

1. On the one hand, the auxiliary device was raising motivation and enthusiasm in the experimental group.

2. On the other hand, the auxiliary device affects certain resistance against the movement of the performer and thus performance was covering the working muscles to develop work against the opponent.

3. Rotational motion in a certain direction and reverse the direction of the movement increases the learner's ability to pay attention to the movement of the opponent and thus develop mental processes, especially the speed of reaction.
4-The device also works as dolls used as aids in sports clubs and it is better in that the device causes the resistance in different directions and not like dolls that can't move.

4. Conclusions and Recommendations:

4.1 Conclusions

1-The device has an effect in the method used to calculate the number of successful attempts in the defense of the roller handle and we mean the experimental group.

2-There was no superiority in terms of the grades of the arbitrators of the method used to perform the defense Grab roller for the control group because of the superiority of the experimental group on it.

4.2 Recommendations

The researchers recommend using the proposed device to teach the skill of breaking the defense Grab roller in wrestling and generalization the device on the sports institutions.

References