Effect of Selected Exercises on Accuracy of Long Range Shoot, Penalty Shoot and Running Shoot Ability in Korfball

Vickey Kumar
Ph.D Scholar RTM Nagpur University Nagpur

Abstract: The purpose of the present study was to find out the effect of selected exercises on accuracy of long range shoot, penalty shoot and running shoot ability of korfball players. Only forty male korfball players have been selected from Jammu University main campus for sampling purpose. The sample for the present study was randomly selected. The subjects had been divided into two equal groups viz control group and experimental group. To find out the effect of selected exercises on accuracy of long range shoot, penalty shoot and running shoot ability in korfball, statistical term ‘t’ test was used. Result found that there was significant effect of selected exercises on long range shoot, penalty shoot and running shoot ability of korfball players after six weeks training programme.

Key words: exercise, long range shoot, penalty shoot, running shoot and korfball players.

I. Introduction:

By improving the basic components of physical fitness such as strength, flexibility, speed, endurance and agility one can develop physical fitness completely. These elements can be developed through different means or methods of exercise and training. Training method for fitness developed under two broad categories-

(i) Exercise with external resistance: These exercises are most common and important for fitness. In this muscles contract against external resistance.
(ii) Exercises with one’s own body weight as resistance e.g. jumps, pull ups, push ups, climbing.

Korfball has been played in the World Games since 1985. IKF World Championships have been held every four years since 1978. The leading nations are Belgium and the Netherlands. Hong Kong hosted its first international tournament, the Asia Oceania Championship in 2006. New Zealand hosted the Asia Oceania Youth Championships in 2007.

Hypothesis:

It was hypothesized that there would found a significant effect of selected exercises on accuracy of long range shoot, penalty shoot and running shoot ability in korfball.

To test the above mentioned hypothesis, following procedure was adopted:

II. Methodology:

Forty (40) subjects were selected from the main campus of Jammu University. All the subjects were divided into two groups, Experimental and Control group consisting of 20 subjects each. All subjects were selected by using simple random sampling. The researcher was conducting self made test for knowing the long range shoot, penalty shoot and running shoot in order to collect the data.

Administration of Test:

Long Range Shoot:
It is one of the fundamental skill of Korfball game.

Purpose:
To measure the shooting ability of korfball players.

Procedure:
For the collection of data in a precise manner, the subjects will give full demonstration about the conductance of test. The tester will draw a line on the ground 6 meters apart from the pole at three different positions, i.e. straight from the pole, from left side at an angle of 45° and from right side at an angle of 45° and then the subject has been asked to do shooting for 15 times at different positions.

Score:
No. of successful shoots will be considered as score of the subject.
Experimental procedure of Training Design

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of Group</th>
<th>Type of Group</th>
<th>Type of Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A</td>
<td>Experimental</td>
<td>Selected exercises.</td>
</tr>
<tr>
<td>2.</td>
<td>B</td>
<td>Control</td>
<td>No Training</td>
</tr>
</tbody>
</table>

### III. Findings:

The data was collected from 40 players before and after six week training program on long range shoot, penalty shoot and running shoot. Then this data was further analysed by comparing the means of pre and post test of control and experimental groups and was again statistically analyzed by applying 't' test to check the significant difference among selected variables. Therefore separate tables and graphs have been presented for each variable as follows:

#### Comparison Of Long Range Shoot Between Post Test Of Control and Experimental Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>M.D.</th>
<th>D.F.</th>
<th>O.T.</th>
<th>T.T.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>8.4</td>
<td>5.18</td>
<td>8.2</td>
<td>38</td>
<td>5.57</td>
<td>2.02</td>
</tr>
<tr>
<td>Experimental</td>
<td>26.6</td>
<td>3.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Level of significance = 0.05  
Tabulated 't' 0.05 (19) = 1.729

Table reveals that there is found a significant difference between means of post test of control and experimental group, because mean of post test of control group is 18.4 is less than mean of post test of experimental group which is 26.6, and their mean difference is 8.2. To check the significant difference between post test of control and experimental group the data was again analysed by applying 't' test. Before applying 't' test, standard deviation was calculated between post test where S.D. (control group) = 5.18 and S.D. of (experimental group) = 3.21. There was a significant difference between post test of control and experimental group because value of calculated 't' = 5.57 which is more than tabulated 't' = 2.02 at 0.05 level of significance, which shows improvement was found in experimental group because training was given to the subjects of experimental group.

#### Comparison of Penalty Shoot Between Post Test Of Control And Experimental Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>M.D.</th>
<th>D.F.</th>
<th>O.T.</th>
<th>T.T.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>25.3</td>
<td>5.70</td>
<td>4.75</td>
<td>38</td>
<td>2.84</td>
<td>2.02</td>
</tr>
<tr>
<td>Experimental</td>
<td>30.05</td>
<td>4.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Level of significance = 0.05  
Tabulated 't' 0.05 (38) = 2.02

Table reveals that there is a significant difference between means of post test of control and experimental group, because mean of post test of control group is 25.3 which is less than mean of post test of experimental group is 30.05, and their mean difference is 4.75. To check the significant difference between post test of control and experimental group the data was again analyzed by applying 't' test. Before applying 't' test, standard deviation was calculated between post test where S.D. (control group) = 5.70 and S.D. of (experimental group) = 4.91. There was a significant difference between post test of control and experimental group because value of calculated 't' = 2.84 which is more than tabulated 't' = 2.02 at 0.05 level of significance, which shows improvement has been found.

#### Comparison of Running Shoot Between Post Test Of Control And Experimental Group

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>M.D.</th>
<th>D.F.</th>
<th>O.T.</th>
<th>T.T.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>23.5</td>
<td>4.34</td>
<td>6.35</td>
<td>38</td>
<td>3.29</td>
<td>2.02</td>
</tr>
<tr>
<td>Experimental</td>
<td>29.85</td>
<td>3.21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Level of significance = 0.05  
Tabulated 't' 0.05 (38) = 2.02

Table reveals that there is a significant difference between means of post test of control and experimental group, because mean of post test of control group is 23.5 is less than mean of post test of experimental group is 29.85, and their mean difference is 6.35. To check the significant difference between post test of control and experimental group the data was again analysed by applying 't' test. Before applying 't' test,
standard deviation was calculated between post test where S.D. (control group) =4.34 and S.D. of (experimental group) =3.21 There was significant difference between post test of control and experimental group because value of calculated ‘t’ =5.29 which is more than tabulated ‘t’ =2.02 at 0.05 level of significance, which shows improvement was found in experimental group due to six week training and no improvement in running shoot was found in control group.

**IV. Conclusion:**

Within the limitations of the study and from statistical analysis the following conclusion was drawn. There was significant effect of selected exercises on long range shoot, penalty shoot and running shoot ability of korfbal players. Hence the Hypothesis of the researcher is accepted.

**References:**

