A comparative study on dynamic balance, kinaesthetic sense among different district level women kho-kho players

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Abstract

In case of sports today best performance can only be achieved through a meticulously planned, executed and controlled training system based on scientific knowledge, theoretical and methodical fundamental of sports training. The purpose of the study was to investigate the differences on dynamic balance and kinaesthetic sense among different district level women kho-kho players. For the purpose of the study 15 women state level kho-kho players were selected from Hooghly district, 15 women state level kho-kho players were selected from Burdwan district and 15 state levels kho-kho players were selected from Purba Medinipur district in West Bengal were randomly selected for this study. The age of the subjects was 15-18 years. Dynamic balance and kinesthetic sense were considered as the variables of the study. ANOVA was applied to calculate the collected data at 0.05 level of significant and to indentify the significance differences among the means critical difference was used as a Post-hoc test. The result showed that there was no significant difference among different state levels women kho-kho players of dynamic balance and kinesthetic sense.

Keywords: Dynamic balance, kinaesthetic sense, Kho-Kho players, District.

Introduction

Now a day’s use of machine is very frequent and it also is a sign of development. But no machine is more sophisticated and better then the human machine (body and mind). So why not to use this god gifted finest machine for the progress of densely populated country. To run the human machine smoothly it depends upon fitness.

A sport is as old as human society and it has achieved a universal following in the modern times. It now enjoys a popularity which out strips any other form of social activity. It has become an integral part of the educational process. Millions of fans follow different sports events all over the world with an enthusiasm bordering and devotion many participate in sports activities for the fun of it or for health, strength and fitness. It has been the shape of a profession to same with high skills, with ample financial benefits linked with high degree of popularity (Sergio Garcia Ramirez-1976) [6].

For the top level performance it is very important to spot, select, and nurture a budding sportsman as it is recognized by all that athlete must possess some inherent qualities which can be developed by means of systematized training for spiting and selecting a player one must consider physique and fitness, as these qualities will go long way towards better performance. Body symmetry and proportion have been studied by artists and sculptors for aesthetic reasons sports scientists and physiologists have been of a view that anthropometry and physical components of an athletic have a lot of to do with his performance but also in tactics of a player or a team. Physiological and physical characteristics help him for better performance (Warren R. Johnson et al.,-1976) [7].

There are numerous factors which are responsible for the performance of a sportsman. The physique and body composition including the size, shape, and form are known to play a significant role in this regard. The performance of a Sportsman in any game or events is also dependent on his skill, training, motivation and on various others factors of physiological and biochemical nature. Age, Sex and physical growth have also been noticed to influence age, sex, and physical growth have also been noticed to influence a person’s capacity for phusical activity (L. Ralph-1977) [8].
Specificity of testing is revered when performance is to be evaluated. Sports specific assessments are useful in providing information concerning an athlete’s ability to participate in sports and additional information can be gained on possible ways to improve performance and prevent injuries. Assessments are also often used to optimize training and in the selection of teams for competition and also prepaid proper factor.

Kho-Kho is a very versatile game that makes enormous physical, psychological, physiological, technical and tactical demands, but it is that physical fitness component that will directly determine the level of demand that can be put on the technical, tactical and psychological abilities of a player. Kho means ‘go’ in this sport where this word is used by a raider to give the authority to a team mate to commence chasing. When a raider who is on the ‘prowl’ says kho and taps a fellow member, who is seated, the person receiving authority to chase can get up and begin his chase. But what is important is that he cannot change the direction from where he began. The person who needs to protect himself however can move to any side of the diagonal line and can also change direction at any time.

All human activity is related with kinesthetic sense. A beginner in any sports/games may not be very accurate in executing a particular skill. For example, in the game of kho-kho at the beginning the players may not execute perfect skills like dodging, pole dive they may not turning pole perfectly etc. This may be due to lack of practice and experience where as an Experienced person will be able to execute a skill perfectly in a game situation. Hence it is clear that employing kinesthetic sense become automatic and obvious. This shows clearly that the kinesthetic sense is the mental attitude that is applied to a particular game situation in the training. The experience acquired in a particular skill, helps us to gain knowledge on kinesthetic sense and attain desired results.

Statement of the Problem
The purpose of the study was to compare the differences on dynamic balance, kinaesthetic sense among different district level women kho-kho players.

Methodology
The objective of the study was to investigate the on dynamic balance and the kinesthetic sense among different district of women state level kho-kho players. For the purpose of the study 15 women state level kho-kho players were selected from Hooghly district, 15 women state level kho-kho players were selected from Burdwan district and 15 state levels kho-kho players were selected from Purba Medinipur district in West Bengal were randomly selected for this study. The age of the subjects was 15-18 years.

- Modified Bass Test was administered to measure Dynamic Balance and the results were recorder in Seconds.
- Distance Perception Jump was administered to measure Kinesthetic Sense and the results were recorder to the nearest centre mater and the score was the total for the Jumps.

‘ANOVA’ was applied to calculate the collected data at 0.05 level of significant and to indentify the significance differences among the means critical difference was used as a Post-hoc test.

Finding
To find out whether there was any significant difference among mean values of Dynamic Balance among the three Districts, one way analysis of variance technique was employed. ‘F’ –ratio of Dynamic Balance for different District has been presented.

<table>
<thead>
<tr>
<th>District</th>
<th>Dynamic Balance (Mean)</th>
<th>Dynamic Balance (S.D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burdwan District</td>
<td>57.93</td>
<td>8.13</td>
</tr>
<tr>
<td>Hooghly District</td>
<td>55.0</td>
<td>7.38</td>
</tr>
<tr>
<td>Purba Medinipur District</td>
<td>54.80</td>
<td>7.43</td>
</tr>
</tbody>
</table>

Fig 1: Comparison of Mean, S.D on Dynamic Balance among three Districts.
From Table-2 It was understood that table values of ‘F’ was 3.22 which was higher than calculated value (3.22>.79). So the calculated ‘F’ was not statistically significant at 0.05 levels.

Discussion of Finding

From the findings of Table-2&4 It was found that there is no significant difference in Dynamic Balance and Kinaesthetic Sense the fact may be describe due to that all the three District are merely similar in Environmental condition the stand point of West Bengal Geography Dynamic Balance and Kinaesthetic Sense, may also be a cause of no significant difference. The training and coaching programs on state level players in West Bengal is yet not been structured scientifically specific to a particular game. Most of the players practices under less qualified coaches and fitness experts having very little knowledge in the science of the game. Some of the players practices under self guidance. This may be cause of general fitness development rather game specific fitness development required for high level performance. This type of result may perhaps due to the above fact that the subjects represented as players of different District had almost equal general motor ability causes no significant difference in dynamic balance and Kinaesthetic Sense. Further the investigator is of the opinion that it may also happen due to sampling error as the sample size was not too large.

Conclusion

1. No Significant difference was found in case of Dynamic Balance among Burdwan district, Hooghly district, Purba Medinipur district of state level women kho-kho players.

2. No Significant difference was found in case of Kinaesthetic Sense among Burdwan district, Hooghly district, Purba Medinipur district of state level women kho-kho players.

References


<table>
<thead>
<tr>
<th>Variable</th>
<th>Source of variance</th>
<th>Sum of squares</th>
<th>Mean square variance</th>
<th>Degree of Freedom</th>
<th>‘F’ ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamic Balance</td>
<td>Between Groups</td>
<td>92.31</td>
<td>46.155</td>
<td>(K-1) = 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>2639.34</td>
<td>62.84</td>
<td>(N-K) =42</td>
<td>.73 N.S</td>
</tr>
</tbody>
</table>

*significant at 0.05 level of confidence, Tab- F0.05 (2, 42) = 3.22

From Table-4 It was understood that table values of ‘F’ was 3.22 which was higher than calculated value (3.22>.79). So the calculated ‘F’ was not statistically significant at 0.05 levels.

Table 3: Mean and Standard Deviation and ‘F’-ratio on Kinaesthetic Sense among three District

<table>
<thead>
<tr>
<th>District</th>
<th>Dynamic Balance (Mean)</th>
<th>Dynamic Balance (S.D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burdwan District</td>
<td>10.53</td>
<td>2.42</td>
</tr>
<tr>
<td>Hooghly District</td>
<td>12.60</td>
<td>3.64</td>
</tr>
<tr>
<td>Purba Medinipur District</td>
<td>11.73</td>
<td>4.06</td>
</tr>
</tbody>
</table>

Table 4: ‘F’ ratio for Kinaesthetic Sense of different District

<table>
<thead>
<tr>
<th>Variable</th>
<th>Source of variance</th>
<th>Sum of squares</th>
<th>Mean square variance</th>
<th>Degree of Freedom</th>
<th>‘F’ ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinaesthetic Sense</td>
<td>Between Groups</td>
<td>32.3</td>
<td>16.15</td>
<td>(K-1) = 2</td>
<td>.73 N.S</td>
</tr>
<tr>
<td></td>
<td>Within Groups</td>
<td>535.28</td>
<td>12.74</td>
<td>(N-K) =42</td>
<td>1.26 N.S</td>
</tr>
</tbody>
</table>

*significant at 0.05 level of confidence, Tab- F0.05 (2, 42) = 3.22

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