A comparative study of selected physical variables of kabaddi and kho-kho players of Jamboni block

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Abstract
The purpose of the study was to compare the selected physical variables of kabaddi and kho-kho players of Jamboni block. Twenty male kabaddi players of Jamboni block and twenty kho-kho players of Jamboni block. Selected physical variables (flexibility, endurance, agility & explosive strength) were selected for this study. It was hypothesized that significant difference would be found between physical variables of kabaddi and kho-kho players. To examine the significance difference between the group mean of different physical variables ‘t’ test was applied and level of confidence was set at 0.05 level. Significant difference found between the means of selected physical variables (Flexibility, endurance and agility). No significance difference found between the means of explosive strength variables. Mean value indicate that in flexibility, endurance and agility kho players were better than kabaddi players but in case of explosive strength kabaddi players are better than kho-kho players.

Keywords: Flexibility, Endurance, Agility, Explosive strength etc

Introduction
Kabaddi is a combative team game, ‘played with absolutely no equipment, in a rectangular court, either outdoors or indoors with seven players on each side of the ground. Each side takes alternate chances for offence and defense. The basic idea of the game is to score points by entering into opponents ‘court and touching as many defense players as possible without getting caught in a single breath.
In kabaddi the basic defense position are in three zones, center zone and left zone, the defense player occupying one of these zones have specific functions to perform. In co-ordination with his counterparts in the other defense zones, for maintaining the defensive strong hold. The player is identified by the position he occupies irrespective of the varying number of offense and defense players.
The game of kabaddi requires a high level of motor fitness and neuro-muscular coordination in order to perform very complex movement of the game. Speed and endurance are the demands of the game with special reference to the other aspect of coordinative ability.
Kho-Kho is Indian traditional game. Kho-Kho game is played particularly in rural and urban areas. Kho–Kho game was originated in India and has considerably long tradition. The Kho-Kho game is, at present, becoming the most popular amongst the indigenous activities in Physical Education in India and neighboring countries in South Asia. Different games provided to do the body activities, differently. The theory of coordinative abilities is thought to be rapidly getting recognition in the world of sports. However, there is no general agreement regarding the number of coordinative abilities required for sports. Monitoring of a training programme provides useful information to both scientists and coaches in relation to its effectiveness, the athlete’s physical condition and preparation for competition. In order for monitoring to be effective (i.e. providing updated and accurate information on physiological profiling), the tests need to be administered at regular, predetermined intervals based on training cycles.

Objective of the study
The objective of the study was to compare the selected physical variables of kabaddi and kho-kho players of Jamboni block.
Methodology
Selection of subjects
For this study twenty male kabaddi players of Jamboni block and twenty players of Jamboni block were chosen as the subject of this study. The age of the subjects were ranged between 18-25 years.

Procedure
The criterion measure chosen to test the hypothesis was flexibility, endurance, agility and explosive strength.

Flexibility: was measured by Back and hamstring stretch test with the help of flexomeasure. The score was recorded in centimeters.

Endurance: Distance covered by the subject to run/ walk 12 min. was recorded to the nearest of meter. The distance was recorded with the help of measuring tape.

Agility: Time taken by subjects to perform 4× 10 mts. Shuttle run was recorded with the help of stopwatch.

Explosive strength: The maximum height touched by the subjects in vertical, was recorded in centimeter.

Analysis of the Data
The obtained data were statistically analyzed by using ‘t’ test, to compare the selected physical variables of kabaddi and kho-kho players.

Results of the study
The data was analyzed by ‘T’ test. The significance of mean difference found between score obtains on physical variables of kabaddi and kho-kho players.

Table 1: Comparison of means of selected physical variables of kabaddi and kho-kho players.

<table>
<thead>
<tr>
<th>Components</th>
<th>Group</th>
<th>Mean</th>
<th>S.D</th>
<th>T-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility</td>
<td>Kabaddi</td>
<td>14.82</td>
<td>6.12</td>
<td>2.80*</td>
</tr>
<tr>
<td></td>
<td>Kho-Kho</td>
<td>19.75</td>
<td>7.42</td>
<td></td>
</tr>
<tr>
<td>Endurance</td>
<td>Kabaddi</td>
<td>1.78</td>
<td>.342</td>
<td>2.45*</td>
</tr>
<tr>
<td></td>
<td>Kho-Kho</td>
<td>1.54</td>
<td>.274</td>
<td></td>
</tr>
<tr>
<td>Agility</td>
<td>Kabaddi</td>
<td>11.74</td>
<td>0.57</td>
<td>15.36*</td>
</tr>
<tr>
<td></td>
<td>Kho-Kho</td>
<td>9.16</td>
<td>0.49</td>
<td></td>
</tr>
<tr>
<td>Explosive Strength</td>
<td>Kabaddi</td>
<td>56</td>
<td>16.44</td>
<td>0.816</td>
</tr>
<tr>
<td></td>
<td>Kho-Kho</td>
<td>52</td>
<td>14.48</td>
<td></td>
</tr>
</tbody>
</table>

The Table 1 shows the comparison of means of selected physical variables of kabaddi and kho-kho players of Jamboni block. In flexibility mean value of kabaddi players is 14.82 and kho-kho players is 19.75. In endurance mean value of kabaddi players is 1.78 and kho-kho players is 1.54. In agility mean value of kabaddi players is 11.74 and kho-kho players is 9.16. In explosive strength mean value of kabaddi players is 56 and kho-kho players is 52. There is significant difference found between the means of selected physical variables (flexibility, endurance and agility) of kabaddi and kho-kho players as ‘t’ value required to be significant is 2.021 and calculated value is more as compare to tabulated value. There is insignificant difference was found between the means of explosive strength of kabaddi and kho-kho players of Jamboni block. Since the obtained value of ‘t’ 0.816 was less than tabulated value 2.021.

Conclusion
On the basis of the result obtained it is concluded that there is significant difference between the means of selected physical variables (flexibility, endurance and agility) of kabaddi and kho-kho players of Jamboni block. Mean value indicates that in flexibility, endurance and agility of kho-kho players are better than the kabaddi players. Insignificant difference found between the mean of explosive strength of kabaddi and kho-kho players of Jamboni block.

References