Indigenous Games; An Analysis On Selected Physical Fitness And Physiological Parameters Of Free Style Wrestlers And Kabaddi Players Of Hyderabad Karnataka Region

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Introduction:
Sports has emerged as a discipline not merely to discuss performance, technique or records but also to study it as a means by which greater societal forces may be analyzed and through which various problems may be remedied.

A wrestling and Kabaddi game requires the specific fitness with reference to vital capacity, strength speed, flexibility and co-ordination. Fitness training equips the sports person to face the physical and physiological challenges that come his way in his competitive sports career. Specific physiological and physical fitness characteristics enable the player to perform the unusual movement required by the concerned sport. Physiological and physical fitness characteristics measurement plays an important role on the successful wrestling and Kabaddi performance. These parameters further help to predict talent and finance on the potentially of best athletes for each sport.

Based on the knowledge of modern sports sciences, scientific principles of training and coaching and application of sophisticated modern testing and measuring techniques, it has now become possible to predict performance of the athletes’ at different levels of competitions.

Objectives of The Study Related To Hypotheses
1. To find out the physical and physiological parameters level among wrestlers and Kabaddi players of Hyderabad Karnataka region
2. To analyze the difference in the physical and physiological parameters among wrestlers and Kabaddi players of Hyderabad Karnataka region

Hypotheses of The Study
1. There would be a better physical and physiological parameters level among wrestlers and Kabaddi players of Hyderabad Karnataka region
2. There would be differences in the physical and physiological parameters among wrestlers and Kabaddi players of Hyderabad Karnataka region

Review of Related Literature
Sunil kumara et.al ( 2011)
The main purpose of and objectives of the present study was to compare the wrestlers and Kabaddi players on the selected physical and mental abilities.

The purpose of the present study one hundred players -50 from the game of Kabaddi and 50 from the wrestling has been selected on purposively and randomly basis, who has won medal/ position in Delhi school zonal, inter –zonal and participated in national school games during the 2009 and 2010. All the subjects’ were regularly practicing and competing in their respective sports competition.

Keyword ; wrestling,Kabaddi,K.U.U,strength, speed
Anil Kumar (2014)

The purpose of the present study the physical fitness variable of wrestlers and Kabaddi players. To fulfill the objective of the study, (25 wrestling and 25 Kabaddi) players. Only those male players of K.U.K were selected who have participated at minimum inter collegiate level K.U.K the data were collected in different coaching camps organized by the university. The age of the selected subjects ranged from 16 to 25 years. (Standing broad jump and 60 yard dash tests) were used to measures the selected physical fitness variables of the players. In order to analyze the data t-test was used to analyzed the data and investigator observed the significance difference between wrestling and Kabaddi players.

Sample Selection

The total 360 samples (180 free style wrestlers and 180 Kabaddi players) from six district of Hyderabad Karnataka region Were selected by random sampling method.

<table>
<thead>
<tr>
<th>Sample design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Game</td>
</tr>
<tr>
<td>Wrestling</td>
</tr>
<tr>
<td>Kabaddi</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Collection of Data

The data is collected from total 380 samples (180 free style wrestlers and 180 Kabaddi players) from six district of Hyderabad Karnataka region on the selected physical fitness parameters like upper and lower body strength ,anaerobic Power,Agitliy, Flexibility and Speed and Physiological variables are like vo2max, breath hold capacity.

Selection of Tests And Variables

The selected physical and physiological parameters and their respective tests to be administered are presented in table.

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Variables</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Uppers body strength</td>
<td>Bench press test</td>
</tr>
<tr>
<td>2</td>
<td>lower body strength</td>
<td>Squat test</td>
</tr>
<tr>
<td>3</td>
<td>Anaerobic power</td>
<td>30 meter test</td>
</tr>
<tr>
<td>4</td>
<td>Agility</td>
<td>SEMO test</td>
</tr>
<tr>
<td>5</td>
<td>flexibility</td>
<td>Sit and reach test</td>
</tr>
<tr>
<td>6</td>
<td>Vo2max (vital capacity)</td>
<td>Spiro meter test</td>
</tr>
<tr>
<td>7</td>
<td>Breath hold capacity</td>
<td>Breath hold test</td>
</tr>
</tbody>
</table>

In the present study standard equipments such as spirometre, stop watch, measuring tape apparatus which are available in the department of physical education, Gulbarga university, kalaburgi were used.

Physiological parameters measurement:

(a) Vital capacity

Purpose to assess the vital capacity.

Equipments used

Digital spiro meter

Procedure
Instruct the players to place the mouthpiece on top of their tongue, with their teeth and lips around the mouthpiece. Seal the outer part of the mouthpiece with their lips. Let the players get used to the feeling of breathing with the mouthpiece in their mouth to realize there is no resistance.

If a flow volume loop is required the players must keep the mouthpiece in their mouth, and inhale deeply at the end of the expiration. Click the stop button or press the enter key to conclude the test. Accept or reject the test based on the player’s effort. Click on yes to start another test, no to stop. Repeat steps 3 and 4 until the appropriate number of tests has been performed. Try to obtain 3 accepted tests for the players.

**Scoring**

The best of the three trials was recorded as the test score.

a) **Physical fitness parameters**

Using bench press subject, from a supine position on the bench, grasps the bar with an overhead grip with the hands approximately shoulder width apart. Subject lifts the bars from bench and pull down it on the chest, then extend the elbow fully, but do not lock them. To get 1rm , subject warm up himself by performing 5-10 reps with 30-40% of body weight and rest for one minute, then add 4-9 kg weight so that so that can lift it in 3-5 reps and rest for 2 minutes and again add further 4-9kg weight so that can lift it in 2-3 reps and rest for 2-4 minutes, then keep adding weight until can lift the weight correctly just one time.

**Analysis of Data and Interpretation of Results**

The analysis of data and interpretation is done based on the statistical results and findings. Further the results are discussed as per the following steps,

1. Analysis of physical fitness and physiological parameters level among wrestlers and Kabaddi players of kalaburgi, raichur, yadgir, bellary, koppal and bidar district of Hyderabad Karnataka region.
2. Analysis of different in the physical fitness parameters among wrestlers and Kabaddi players of kalaburgi, raichur, yadgir, bellary, koppal and bidar district of Hyderabad Karnataka region.

**Conclusions And Recommendation**

**Conclusion**

1. There is a significance difference in the physical fitness like bench press test (upper body strength) between kalaburgi and raichur district wrestlers
2. There is a significance difference between kalaburgi and raichur district Kabaddi players in vital capacity test.

**Recommendations:**

- It is recommended that based on the study results coaches and trainers can prepare scientific training programmers for better performance of Kabaddi players and wrestlers in the Hyderabad Karnataka region
- The data and results can be utilized by concerned wrestling and Kabaddi federation / association of Karnataka and India in general for talent identification in Hyderabad Karnataka region.

**References:**

1. Anil Kumara (2014) , comparison status of strength and speed between kho-kho and Kabaddi male players , international journal of multidisciplinary research and development,vol.1(7); 63-66