Shivasharanappa Dasappa Ryagi and Dr. CR Bhairaddy

Abstract

The purpose of the study is to find out the relationship of motor fitness variables with playing ability of intercollegiate Kabaddi players. One hundred intercollegiate Kabaddi players of Degrees colleges affiliated to Gulbarga University those who have represented intercollegiate level tournaments, Karnataka were randomly selected as subjects for this study. The age of the subjects were ranged from 18-25 years. With regard to motor fitness variables speed, explosive strength, cardio respiratory endurance, coordinative ability and flexibility were taken into consideration under the independent variables. The dependent variable Overall playing ability was assessed by touching skills, kicking skills, foot work, catching skills, movement in chin, defensive skills and tactics. Speed was assessed by 50 M Run, explosive strength was assessed by standing broad jump, cardio respiratory endurance was measured by 600 yards Run/Walk Test, Coordinative Ability was assessed by 4 x 10 M. Shuttle Run and flexibility was assessed by sit and reach test. The Pearson Product Moment Coefficient of Correlation was used to find out the relationship between variables. The level of significance was fixed at 0.05 level. The playing ability had a correlation with all selected motor fitness variables. The motor fitness is most essential for development of playing ability of Kabadi players.

Keywords: Motor fitness, playing ability, Kabaddi, Relationship

Introduction

Today is the modern competitive Kabaddi era. Every Kabaddi player is in the race to excel others and it has become fundamental mode of human expressions. Kabaddi players are one of the very important functions by which national and international recognition and prestige is gained. The Kabaddi game has various fundamental skills. For all sort of activity, motor fitness is very essential. It is relates to the ability to meet the demands of the environment specifically to preserve, to will stand stress, to resist fatigue and to posses the energy for an abundant life. Motor fitness is an aspect of total fitness and it is viewed as the capacity to function in every way at ones best.

Every sport demands motor abilities at various levels above the average. Specific fitness is achieved when a player acquires the required motor ability at the intensified level for the particular sport. Specific fitness in kabaddi is with reference to strength, speed and coordination (Dey, 2012). On the other hand in physical skills speed, explosive strength, endurance, flexibility and proper coordination between hand eyes and limbs. If player body is flexible then only he can kick, swirl grapple with ankle legs and things. Here more than speed acceleration is paramount; strong leg muscles give more punch to the player. Agility and stamina are also very essential (Jadhav, 2011).

Jeyaraj and Gopinathan (2014) [5] determined the relationship of selected physical fitness variables to Kabaddi playing ability. The result of the study reveals that the physical fitness variables of speed, agility, explosive power, shoulder strength, endurance and flexibility variables were significant relationship with Kababdi playing ability. Devaraju and Needhiraja (2013) [2] predicted the playing ability in Kabaddi from selected physical fitness variables among college level players. The results also revealed that Leg explosive strength, Speed, Muscular endurance and Muscular power become the common characteristics which can predict the playing ability in Kabaddi players. Saravanan and Amuldoss (2013) [13] studied to predict the kabaddi playing ability from selected motor abilities for university men kabaddi players and found that strength showed significant relationship with kabaddi playing ability at
University level. Devaraju and Kalidasan (2012) [3] predicted the study of Kabaddi Playing Ability from Selected Physical Variables among College Level Players. The study found speed and flexibility become the common characteristics which can predict the playing ability in Kabaddi players.

Kabaddi player’s basics requirement is the specific qualities of agility, quick reflexes, speed, explosive power and strength. Along with these physical skills mental skills are also important. So, this game is psycho-physical skill game. It is not only physical game. Fitness is that state which characterizes the degree to which the person is able to function. Fitness is an individual matter. The fitness variable helps to elevate the ‘skills’ to higher levels of performance in the game. Motor fitness and skills are interrelated and based on the line of this statement the researcher was keen and became interested to study the “Relationship between Motor Fitness and Playing Ability of Kabaddi players, which will highlight the importance of motor fitness on playing ability considered as vital and widely needed by a Kabaddi players.

Methodology
Method: Descriptive Survey Method

Selection of Samples: One hundred Kabaddi players who were studying in Degrees colleges affiliated to Gulbarga University those who have represented intercollegiate tournaments Karnataka were randomly selected as subjects for this study. The age of the subjects were ranged from 18-25 years.

Selection of Variables
The following variables selected for the study with tests and criterion measures

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Variables</th>
<th>Tests</th>
<th>Criterion Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overall Playing Ability</td>
<td>Overall playing ability (touching skills, kicking skills, foot work, catching skills, movement in chin, defensive skills and tactics) was measured by a panel of experts consisting three persons.</td>
<td>In scores</td>
</tr>
<tr>
<td>2</td>
<td>Speed</td>
<td>50 Meters Run</td>
<td>In Secs.</td>
</tr>
<tr>
<td>3</td>
<td>Explosive Strength</td>
<td>Standing Broad Jump</td>
<td>In Meters</td>
</tr>
<tr>
<td>4</td>
<td>Cardio respiratory Endurance</td>
<td>600 Yards Run/Walki</td>
<td>In Minutes</td>
</tr>
<tr>
<td>5</td>
<td>Coordinative Ability</td>
<td>4 x 10 M. Shuttle Run</td>
<td>In Secs.</td>
</tr>
<tr>
<td>6</td>
<td>Flexibility</td>
<td>Sit &amp; Reach Test</td>
<td>Secs.</td>
</tr>
</tbody>
</table>

Statistical Procedure
The Karl Pearson Product Moment Coefficient of Correlation was used to find out the relationship between playing ability and selected motor fitness variables. The level of significance was fixed at 0.05 level.

Results and Discussion
The relationship of selected motor fitness variables with overall playing ability of Intercollegiate Kabaddi players were ascertained by the obtained values of coefficient of correlation. The results are presented in Table-1.

Table 1: Table shows relationship of selected motor fitness variables with Overall Playing Ability of Intercollegiate Kabaddi players. (N=100, df=98).

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Variable</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>'r' value and Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Overall playing ability</td>
<td>74.990</td>
<td>10.014</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Speed</td>
<td>6.423</td>
<td>0.417</td>
<td>-0.210*</td>
</tr>
<tr>
<td>3</td>
<td>Explosive Strength</td>
<td>2.238</td>
<td>0.236</td>
<td>0.445*</td>
</tr>
<tr>
<td>4</td>
<td>Cardio respiratory Endurance</td>
<td>2.448</td>
<td>0.406</td>
<td>-0.296*</td>
</tr>
<tr>
<td>5</td>
<td>Coordinative Ability</td>
<td>9.738</td>
<td>0.970</td>
<td>0.234*</td>
</tr>
<tr>
<td>6</td>
<td>Flexibility</td>
<td>5.446</td>
<td>1.986</td>
<td>0.209*</td>
</tr>
</tbody>
</table>

* Significant at 0.05 level.

From the table it shows that overall playing ability of the Kabaddi players was correlated with selected motor fitness variables. The table clearly reveals that there is correlation of overall playing ability with speed, explosive strength, cardio respiratory endurance, coordinative ability and flexibility since the obtained ‘r’ values -0.210, 0.445, -0.296, 0.234 and 0.209 are greater than the table value 0.195 at 0.05 level of significance.

\[ y = -5.0525x + 107.44 \]

\[ R^2 = 0.0443 \]

\[ y = 18.828x + 32.845 \]

\[ R^2 = 0.1976 \]
Discussion of Results
Every game needs particular skills, which are necessary for success in the competitions. The fitness components required differ as per the demands of the skills and the game. Kabaddi is an indigenous game involving varied fitness components. The results of the study showed that there was a significant correlation between selected motor fitness variables and overall playing ability of Kabaddi players. The similar results confirmed with Jeyaraj and Gopinathan (2014) [5]; Devaraju and Needhiraja (2013) [2]; Saravanan and Amuldoss (2013) [7] and Devaraju and Kalidasan (2012) [3]. They found that motor fitness variables showed significant relationship with kabaddi playing ability at various levels players. The motor fitness and playing ability will be improved through various resistance and plyometric training.

Conclusion
On the basis of above result, it was found that there was significant correlation between selected motor fitness variables (speed, explosive strength, cardio respiratory endurance, coordinative ability and flexibility) and overall playing ability of Kabaddi players.

References