A Comparative Study of Motor Fitness and Sports Achievement Motivation between Kurukshetra and CCS University Kabaddi Players

Mahadevaswamy B. and M.B. Keerthinayarayanaswamy

Abstract

The 21st Century has augured well for the indigenous game of India and the popular South Asian Game-Kabaddi. Kabaddi is an outdoor team sport. It is a game of speed, strength, strategy and, most importantly, lungpower, and also flexibility. The most successful people would be those who coupled strong achievement motivation with strong competitive motivation. In any game the need for achievement is more important for all participants. The purpose of the study was to compare the interuniversity Kabaddi players in their motor fitness and sports achievement motivation. For this purpose male kabaddi interuniversity players were selected in the age group of 18 to 25. The data was collected during All India Interuniversity Competition during the year 2008-09. The subjects achievement motivation was measured using the Kabaddi Sports Achievement Motivation Questionnaire. To test the significance of the most difference between Kurukshetra University and Chaudhary Charan Singh (CCS) University kabaddi players, 't' test was used. The results show that there was a significant difference on motor fitness and sports achievement motivation level between Kurukshetra University and Chaudhary Charan Singh (CCS) University kabaddi players. Kurukshetra players having the higher sports achievement motivation level and motor fitness than CCS University players.

Key words: Motor fitness, Sports Achievement Motivation.

Introduction

Sport is one of the most enduring of all human activities. Virtually from the beginning of any written human records, in civilizations across the world, accounts of sports and sport-related activities are found. For less than the last century sport has been studied scientifically, and sport psychology is an important part of that scientific study. It is an international field, holding the promise of becoming important and only to the understanding of competitive athletic abilities, but to areas of behavior that relate to many domains of human health and activity. The 21st Century has augured well for the indigenous game of India and the popular South Asian Game-Kabaddi. Kabaddi is an outdoor team sport. It is a game of speed, strength, strategy and, most importantly, lungpower, and also flexibility.

Motor Fitness refers to the ability of a athletes to perform successfully at their sport. The components of motor fitness are Agility, speed, strength, leg power and flexibility. Agility is the ability to change the direction of the body in an efficient and effective manner and to achieve this one requires a combination of balance; the ability to maintain equilibrium when stationary or moving through the coordinated actions of our sensory functions; static balance-ability to retain the centre of mass above the base of support in a stationary position; dynamic balance-ability to maintain balance with body movement. Speed is an integral part of every sport and can be expressed as any one of, or combination of, the following: maximum speed, elastic strength (power) and speed endurance.

A motivation or motive is that which induces a person to direct his or her behaviour toward the attainment of certain goals. It is regarded as a fundamental drive that can motivate athletes to commit large proportions of their lives to achieve particular personal goals. It is associated with a number of behaviour characteristics of an athlete during a sporting situation, such as the effort applied, the ability to continue trying, the choice of action possibilities (e.g. decision to approach or avoid achievement situations), and the performance outcomes.

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Achievement motivation is affected by a number of factors, including an individual's desire for success and fear of failure.

**Need and Importance**

The most successful people would be those who coupled motor fitness and strong achievement motivation with strong competitive motivation. The psychological behaviour is unique in nature which differs from an individual to another individual. The languages, beliefs and their habits followed by different states of India are not alike. So the investigator was motivated to take up this study. The purpose of the study was to compare the motor fitness and sports achievement motivation levels between Kurushethra University and CCS University Kabaddi players.

**Objectives**

The objective of the present study was to compare the motor fitness and sports achievement motivation level between Kurushethra University and CCS Chaudhary Charan Singh University players.

**Limitations**

The following are the limitations of the study:

1. The motor fitness of the subjects were measured through AAPHER Youth Fitness Test Battery (1964), which is considered as the limitation of the study.
2. The Sports Achievement Motivation Questionnaire developed and standardized by the Kamlesh was used to measure the Sports Achievement Motivation of the subjects which is considered as another limitation.
3. Male kabaddi players of Kurushethra University and CCS University who have participated at All India interuniversity Kabaddi competition during the year 2008-09, organised by Swami Ramanand Teerth Marathwada University, Nanded between 18th to 21st January 2009.

**Review of Literature**

A review of literature is instrumental in the formulation of hypothesis and deductive reasoning to the problem. Some of the research studies reviewed are given below:

**Suresh Kumar** (2010) investigated “Comparison of Sports Achievement Motivation level among different Topography of Ball Badminton Players”. To achieve the purpose of this study thirty students per each region, totally one hundred and twenty students were selected, and their age ranged between 18 and 24. The data was collected during All India Ball Badminton Tournament for women organised by Bharathidasan University, Trichy from 9th to 13th January 2009. The subjects’ achievement motivation was measured through the Kamlesh Sports Achievement Motivation Questionnaire. To test the significance of the mean difference at different topography namely north, south, east and west analysis of variance (ANOVA) was used. The results showed that there was a significant difference on sports achievement motivation level at different topography.

**Guszkowska and Rychta (2007)** investigated Achievement motivation and physical fitness of 15-year old girls. The study was made to determine the relations between the general and physical education-specific achievement motivation and physical fitness of adolescent girls. The study has revealed that unlike the specific achievement motivation, the general one was uncorrelated with physical fitness variables and had no predictive value for that fitness. Nishida’s indices of achieving success in PE correlated positively with some fitness variables, and the indices of avoiding failures negatively. The only significant predictor for physical fitness proved the variable “overcoming obstacles”. Motivational factors ought to be considered as a determinant of fitness test results attained by adolescent girls.

**Stepinski et al. (2003)** studied on The Level of Chosen Motor Abilities of 13 Years Old Soccer Players. In this investigation an attempt was made to examine the effect of primary school and the first stage of soccer training. The subjects include 40 randomly chosen soccer players born in 1989 – the finalists of the U-14 Polish Soccer Championships. The comparative group consisted of 40 boys born in 1989, which were not active in any kind of sport and were not physically similar to the soccer players. There were no statistically significant differences in morphological age of both examined groups. The soccer players possessed higher level of motor abilities than comparative group. The highest differences in the results of both groups were noticed in the tests evaluating the following motor abilities: frequency of movements, speed and the maximal anaerobic power. Greater differences were observed in the area of conditioning than in coordination.

**Kamlesh, Kumari and Kaur (1987)** studied the level of sports achievement motivation in the inter-collegiate female players (N=43) belonging to various games (Volleyball-12, Hockey-19, and others from Kho-Kho, Football, Kabaddi, Gymnastics and Track and Field – 12). Sports Achievement Motivation test by Kamlesh was administered to the subjects in convenient size groups. It was concluded that the intercollegiate female players have a moderate level of sports achievement motivation. No inter-sports differences on the level of achievement motivation were reported.

**Methodology**

**Hypotheses**

The following are the hypotheses formulated for the study:

1. It was hypothesized that there will be no significant difference in the motor fitness between Kurushethra University and CCS University kabaddi interuniversity players.
2. It was further hypothesized that there will be no significant difference in the sports achievement motivation level between Kurushethra University and CCS University kabaddi interuniversity players.
Materials and Methods

To realise and experiment the objective of the study Kurukshetra University and Chaudhary Charan Singh (CCS) University Meerut Kabaddi in the age group of 18-25 years and those who have participated at the All India Interuniversity Kabaddi Tournament during 2008-09 were selected. The data was collected during All India Interuniversity Competition during the year 2008-09 organized by Swami Ramnand Teerth Marathwada University, Nanded between 18th to 21st January 2009. The subject’s motor fitness i.e. strength (pull up test), speed (50 Meters dash test), agility (4x10 meters shuttle run test, power (standing broad jump test), endurance (600 yards run and walk) and flexibility (Sit and reach Test) of the sample were measured and sports achievement motivation level was also measured using the sports Achievement Motivation questionnaire developed by Kanish (1983). The researcher was well versed in the technique of conducting the test. The investigator had a number of practice sessions in the test administrations. The questionnaire was administered to all the subjects for obtaining their responses related to sports achievement motivation.

Statistical Techniques used

't' test was used for comparing and establish the levels of significance of difference in the motor fitness and sports achievement motivation levels between Kurukshetra University and CCS University kabaddi interuniversity players. The level of significance was found at 0.05 and 0.01 levels.

Analysis and Interpretation

There results are presented in the following tables.

Motor Fitness Components

Table 1: Table showing Mean, Standard Deviation, 't' value and Level of Significance of Motor fitness components between Kurukshetra University and CCS University kabaddi interuniversity players. (N=12)

<table>
<thead>
<tr>
<th>Variable of Motor Fitness</th>
<th>Group 1</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>'t' Value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>Kurukshetra University</td>
<td>7.956</td>
<td>1.168</td>
<td>0.236</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>CCS University</td>
<td>7.603</td>
<td>0.762</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agility</td>
<td>Kurukshetra University</td>
<td>12.870</td>
<td>1.295</td>
<td>1.144</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>CCS University</td>
<td>12.813</td>
<td>1.081</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strength</td>
<td>Kurukshetra University</td>
<td>8.166</td>
<td>2.657</td>
<td>0.193</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>CCS University</td>
<td>8.333</td>
<td>1.370</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leg Power</td>
<td>Kurukshetra University</td>
<td>3.150</td>
<td>0.620</td>
<td>4.105</td>
<td>Significant at 0.001 level</td>
</tr>
<tr>
<td></td>
<td>CCS University</td>
<td>2.387</td>
<td>0.168</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td>Kurukshetra University</td>
<td>21.750</td>
<td>6.854</td>
<td>0.746</td>
<td>Not Significant</td>
</tr>
<tr>
<td></td>
<td>CCS University</td>
<td>24.133</td>
<td>8.065</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df = 22.

From the table, it can be understood that the value of 't' 4.105 is greater than the table value 2.05 at 0.05 and 2.75 at 0.01 level of significance in leg power. Hence the part of the null hypothesis is rejected and an alternative hypothesis is accepted that there is a significant difference in motor fitness in leg power between Kurukshetra University and CCS University kabaddi interuniversity players. The Kurukshetra University kabaddi players (N=9, 156) have excellent leg power than CCS University players (2.387).

The above table further shows that the 't' value of 0.236, 1.144, 0.193 and 0.746 are less than the table value 2.05 at 0.05 level of significance in speed, agility, strength and flexibility respectively. Therefore the part of the null hypothesis is accepted that there is no significant difference in motor fitness in speed, agility, strength and flexibility between Kurukshetra University and CCS University kabaddi interuniversity players.

The comparison mean scores of motor fitness between Kurukshetra University and CCS University kabaddi interuniversity players is as shown in graphical representation (Fig 1)

Fig 1: Bar graph showing comparison of the mean scores of motor fitness between Kurukshetra University and CCS University kabaddi interuniversity players.

Sports Achievement Motivation

Table 2: Table showing Mean, Standard Deviation, 't' value and Level of Significance of Sports Achievement Motivation level between Kurukshetra University and CCS University kabaddi interuniversity players. (N=12)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group 1</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>'t' Value</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UNIVERSITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation</td>
<td>CCS University</td>
<td>20.833</td>
<td>5.812</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df = 22.
As per the table, the 'r' value of 1.297 is less than the table value 2.05 at 0.05 level of significance in sports achievement motivation level. Therefore the null hypothesis is accepted that there is no significant difference in sports achievement motivation level between Kurukshetra University and CCS University kabaddi interuniversity players. The comparison of the mean scores of sports achievement motivation between Kurukshetra University and CCS University kabaddi interuniversity players is as shown in graphical representation (Fig.2).

Results and Discussion
The statistical measures of data of the present study revealed that there was no significant difference in the motor fitness components namely speed, agility, strength and flexibility and there is no significant difference in sports achievement motivation level between Kurukshetra University and CCS University kabaddi interuniversity players. Further the results showed that there is a significant difference in motor fitness in leg power between Kurukshetra University and CCS University kabaddi interuniversity players. This may be attributed to the fact that both the team players of the study were basically university players who have participated at the All India Interuniversity Tournaments and they undergo similar activities throughout the day, they involved in more or less similar nature of activity and type of motor component due to the type of exercise and also they undergo similar strategies and tactical elements during their skill practices and training. So the motor fitness are almost same except in leg power. The Kurukshetra University kabaddi players had better and significantly different levels in leg power than CCS University.

Conclusion
The findings of the study reveal that there was no significant difference in motor fitness and sports achievement motivation levels between Kurukshetra University and CCS University kabaddi interuniversity players except in motor fitness in leg power. The Kurukshetra University kabaddi players had significant difference in leg power than CCS University. From the mean differences. It can be learnt that the CCS University kabaddi players have better performance in motor fitness in speed, agility, strength and flexibility than Kurukshetra University.

Suggestions
1. It is suggested that such a study can be carried out for other game players also.
2. Similar type of study can be carried out for different age group and female players.
3. It may also helps the coaches and physical education director/teachers while selecting players for the team, regarding total ability, capabilities, fitness etc.

References
2. Bucher A. Charles, “Foundation of Physical Education”.