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## A comparative study on strength endurance & agility between kabaddi and kho-kho players

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### Abstract

The purpose of the present study was to compare the muscular strength endurance and agility between kabaddi and kho-kho players, who represented inter-collegiate competitions. Kabaddi and Kho-Kho are famous indigenous games. These games are played maximum in rural and urban areas. Kabaddi and Kho-Kho game was originated in Maharashtra state in India and has considerably long tradition. Kabaddi and Kho-Kho game is, at present, becoming the most popular amongst the indigenous activities in Physical Education in India and Asian countries specially in South Asia. Kabaddi and Kho-Kho games provided to do mostly same the body activities. For this 24 (12 kabaddi and 12 kho-kho players) subjects from Gulbarga University Kalburgi. Their age ranged between 21 to 25 years. Chinning-up and shuttle run-10\*10yards were considered for this study. It was hypothesized that no significant difference of chinning up & shuttle run between kabaddi and kho-kho players. For analysis of the data mean, standard deviation and 't' test was applied. Level of significance set was .05 level. Result shows that there was no significant difference found in chinning up & shuttle run.

**Keywords:** Physical fitness, Endurance, strength, agility, kabaddi and kho-kho players

### Introduction

A sport is a psycho-social activity. It has both psychological and social dimensions besides physical, physiological and technical aspects. Most of the nation's share a common interest in sports competitions especially at certain times during the Olympic Games where people from all nations focus their attention on that drama of competition. But the quality of the participation of the athletes and sportsmen is determined by their psychological factors. Kabaddi and kho-kho players, who represented inter-collegiate competitions. Kabaddi and Kho-Kho are famous indigenous games. These games are played maximum in rural and urban areas. Kabaddi and Kho-Kho game was originated in Maharashtra state in India and has considerably long tradition. Kabaddi and Kho-Kho game is, at present, becoming the most popular amongst the indigenous activities in Physical Education in India and Asian countries specially in South Asia. Kabaddi and Kho-Kho games provided to do mostly same the body activities.

Kho-Kho and Kabaddi are the most popular games in Maharashtra specially at marathwada region. The Study of physical fitness and profiles of sports participants is one of the most popular areas in sports physical fitness research. Fitness is the overall pattern of Physiological characteristics that makes person a unique individual. It is well known fact that players, of one game differ from the players of other games in their fitness traits (Carrom 1980).

The game of Kabaddi and Kho-Kho are simple in nature, easy to organize, less expensive. Hence they reach to common peoples. Both games can be played in a small area and practically less equipment is required. Kabaddi is most aggressive and heavy contact game, but Kho-Kho is a semi contact game. Both games differ from each other in their nature, skill, techniques and strategies etc.

The complex nature of physical fitness can be best understood in terms of its components such as cardiovascular endurance, strength, flexibility, speed, agility and muscular endurance. In addition to these components of physical fitness there are many other factor which contribute to physical fitness including heredity, living standard, nutrition, hygienic conditions, environmental and climate factors etc. (Sallis *et al.* 1992) [7].

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Different games provided to do the body activities, differently. Kabaddi and Kho-Kho players are equally conducive for developing these skills amongst players. The theory of coordinative abilities is though it is rapidly getting recognition in the world of sports. However, there is no general agreement regarding the number of coordinative abilities required for sports.

**Statement of the problem**

A comparative study on strength endurance & agility between Kabaddi and Kho-Kho players

**Hypothesis**

There would be a significance difference in strength endurance & agility between Kabaddi and Kho-Kho players.

**1. Samples**

For the purpose of the study 12 Kabaddi and 12 Kho-Kho players of the Akkamahadevi Women’s University and they participated at inter collegiate level, the age ranging between 21-to 25 years were being selected as samples.

**Procedures**

The subjects were thoroughly acquainted with the testing procedure as well as the purpose and significance of the study. A thorough orientation of requirements during the testing procedures and physical fitness test were made for successful completion of study.

**Collection of data**

The data on selected physical fitness variables were collected by employing the standard testing procedures available in the literature. This data was collected in the field of Department of Physical Education, Akkamahadevi Women’s University.

**Selection of variables and their criterion measures**

**Table 1:** Shows the chinning up & shuttle run which were selected for this study.

| S. No | Variables              | Units             | Criterion measures |
|-------|------------------------|-------------------|--------------------|
| 1.    | Chinning-ups           | Maximum performed | muscle strength    |
| 2.    | Shuttle run(10*10yard) | Seconds           | Agility            |

**Statistical procedure**

The data was analyzed and compared with the help of descriptive statistics and independent ‘t’ test. The level of significance to the test ‘t’ ratio was fixed at 0.05 levels which was considered to be appropriate for the purpose of the study.

**Findings & Discussion**

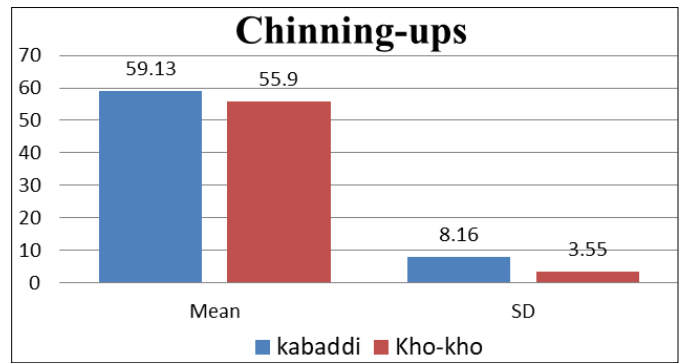
**Table 2:** Shows that muscular strength between Kabaddi and kho-kho players

| Chinning-ups |         |       |      |
|--------------|---------|-------|------|
| Sl.no        | Players | Mean  | SD   |
| 1            | kabaddi | 59.13 | 8.16 |
| 2            | Kho-kho | 55.9  | 3.55 |

**Table 3:** Shows Comparative analysis of chinning-ups between kabaddi and kho-kho players

| Group   | Number | Mean  | SD   | ‘t’ Value |
|---------|--------|-------|------|-----------|
| Kabaddi | 12     | 59.13 | 8.16 | 0.112     |
| Kho-Kho | 12     | 55.9  | 3.55 |           |

Significant at 0.05 level



**Fig 1:** Comparison of Mean Difference of Chinning-up between Kabaddi and Kho-Kho players

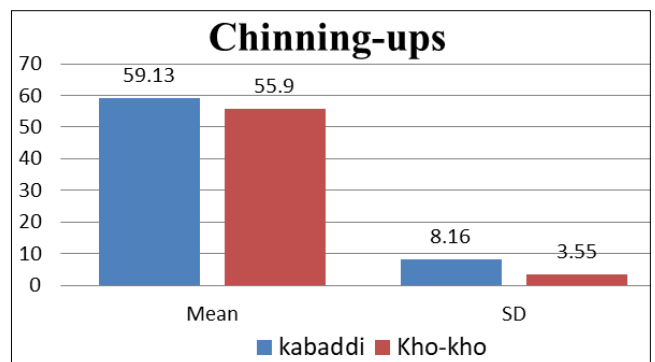
**Table 4:** Shows that and agility between Kabaddi and kho-kho players

| Shuttle run |         |       |      |
|-------------|---------|-------|------|
| S. No       | Players | Mean  | SD   |
| 1           | kabaddi | 29.06 | 4.37 |
| 2           | Kho-kho | 34.08 | 5.05 |

**Table 5:** Shows Comparison analysis of shuttle run (10\*10 yards) between kabaddi and kho-kho players.

| Group   | Number | Mean  | SD   | ‘t’ Value |
|---------|--------|-------|------|-----------|
| Kabaddi | 12     | 29.06 | 4.37 | 2.418*    |
| Kho-Kho | 12     | 34.08 | 5.05 |           |

Not significant at 0.05 level



**Fig 2:** Comparison of Mean Difference of (10x10yrd.) Shuttle run between Kabaddi and Kho-Kho players.

Table 2 saying that the mean and standard deviation values of muscular strength and agility of kabaddi and kho-kho players. There values were recorded as kabaddi players are muscular strength endurance mean 59.13 sd 8.16, agility mean 29.06 sd 4.37, and kho-kho players muscular strength mean 55.9 sd, 3.55 and agility mean 34.08 sd 5.05 respectively.

The perusal of table 3 indicates that the mean and standard value for strength endurance of kabaddi and kho-kho players were recorded as 59.13 sd 8.16 and 29.06 sd 4.37 respectively. Mean values shows that kabaddi players have performed better than kho-kho players.

The perusal of table 4 indicates that the mean and standard value for agility of kabaddi and kho-kho players was recorded as 29.06 sd 4.37 and 34.08 sd 5.05 respectively. Mean value shows that kho-kho players have performed better than kabaddi players.

The study was aimed to the find out comparative relationship of muscular endurance and agility between university level kabaddi and kho-kho players. There are various factors influence that the muscular strength & agility such as physical activity, training, nutrient maturation etc. many research study

was proved that Kho-Kho players are having good speed and agility compare to Kabbadi player.

This study indicated that kho-kho players are better than kabaddi players of agility and kabaddi players are better than kho-kho players of muscular strength.

### Conclusion

On the basis of result and analysis of data the following conclusions may be drawn:

Kabaddi players were shown that the better muscular strength than kho-kho players.

Kho-kho players are shown that the better agile than kabaddi players.

### References

1. Dutta. Visnu, Mane. Manohar. A Comparative study of speed, strength, and agility of inter- Uppal A.K, physical fitness and wellness, Friends publications (India), 2013, 134(2004).
2. Yobu A, Test Measurement and Evaluation in Physical Education and Sports, Friends publications (India), New Delhi-110002-(2010). collegiate basketball and volleyball players, Veriorum multi-disciplinary e-research journal, 2013, 4(2).
3. Gill. Monmeet *et al.* comparative study of physical fitness components of rural and urban female students of Panjabi University, Patiala, Anthropologist. 2010; 12(1):17-21.
4. Kansal K. Devinder, Test Measurement and Evaluation in Sports and Physical Education, D. V. S publications, Kalkaji, New Delhi-110019, 1996.
5. Mondal S, Bandyapadhy P. Impact of KHO-KHO Playing on Physiological Changes and Development of Some Specific Skill Related Physical Fitness Factors, Indian Journal of Applied Research, Issue: 8, August 2014. ISSN-2249-555X.
6. Mayur M Patel, Nitish K Dutta. A Review on Selected Physical and Physiological Components of Inter Collegiate Kabaddi and Kho-Kho Players, Gra - Global Research Analysis, 2014, 3(3). ISSN No 2277-8160.
7. Sallis JF, Hovell MF, Hofstetter CR. Predictors of adoption and maintenance of vigorous physical activity in men and women. Preventive Medicine. 1992; 21:237-251
8. Shoken SS. 'The comparative study of personality traits of Kho-Kho and Kabaddi players.' Master's Thesis, B.N. Chakravarty University, Kurukshetra, 1977.
9. Singh Hardayal. Science of Sports training, D. V. Sublications, Kalkaji, New Delhi-110019, 1995.
10. Singh Raspal, Singh Hoshiyar. An evaluation of Selected Physical Fitness variables of Kabaddi, Kho-kho and Wrestling players from Haryana and Punjab, India, Research Journal of Physical Education Sciences. 2013; 1(2):1-4. ISSN 2320-9011.
11. Srivastava, Amit, Tripathi, Rishi. A Comparative study of selected physical & physiological variables of school level football players and swimmers, International journal of movement education and social science, 2013, 2(1).