

An International Multidisciplinary Peer-Reviewed E-Journal www.j.vidhyayanaejournal.org
Indexed in: ROAD & Google Scholar

# A COMPARATIVE STUDY OF STRENGTH AND CO-ORDINATIVE ABILITY AMONG SCHOOL LEVEL MALE KABADDI AND KHO-KHO PLAYERS OF DISTRICT-WARANGAL

Mr. S. Kiran Kumar Goud, PhD Scholar,

Annamalai University, Chidambaram, Tamilnadu, India,

Lecturer in Physical Education Dept UCPE- KU, Kakatiya University, Warangal, Telangana.

Dr. P. Senthil

Assistant Professor,

Department of Physical Education, Annamalai University, Chidambaram, Tamil Nadu. India.



An International Multidisciplinary Peer-Reviewed E-Journal www.j.vidhyayanaejournal.org
Indexed in: ROAD & Google Scholar

#### **Abstract:**

The purpose of the study was to compare the arm and shoulder strength, abdominal strength and coordinative ability among male Kabaddi and Kho-Kho players. To accomplish the study a sample 120 players, 60 players each of Kabaddi and Kho-Kho, studying in Government Senior Secondary Schools of District Warangal of Telangana was selected as subjects. It was hypothesized that no significant difference would appear between the Kabaddi and Kho-Kho player's w.r.t. selected physical fitness variables. Data was collected using selected test items of AAHPERD's Physical fitness test battery. Mean, Standard Deviation and T-test were used to analyze the data statistically. The level of significance was set at 0.05 level of confidence. The results showed a significant difference between the Kabaddi and Kho-Kho player's w.r.t. physical fitness variables arm and shoulder strength and co-ordinative ability except abdominal strength where both Kabaddi and Kho-Kho players performed similarly.

**Keywords:** Strength, Co-ordinative Ability, Kabaddi, Kho-Kho.

#### **Introduction:**

Sport is as old as the human society, and it has achieved universal following in the modern times. It now enjoys popularity which strips out any other form of social activity. It has become an integral part of educational process. Millions of fans follow different sports events all over the world. Many participate in sports activities for the fun of it or for health, strength and fitness. It is taking the shape of a profession to some with high skills, with ample financial benefits linked with high degree of popularity.

Each sports activity demands different types and levels of different physical abilities. When a particular sport possesses qualities, it contributes to the development of specific physical fitness. It is this specific fitness which makes it possible for a player to perform unusual and extraordinary movements with a very high standard of efficiency. Regular training leads to improve one's physical fitness which includes strength, speed, flexibility, endurance and co-ordination. Co-ordination ability plays a very vital role in all games and sports because when an athlete participants in game and sports, he has to bring about a series of changes in direction and movement at various parts of the body. The main objective of the study was set to compare the Kabaddi and Kho-Kho player's w.r.t. selected physical fitness variables i.e. the arm and shoulder strength, abdominal strength and co-ordinative ability.

### **Hypothesis:**

It was hypothesized that no significant difference would appear between the Kabaddi and Kho-Kho player's w.r.t. selected physical fitness variables.







An International Multidisciplinary Peer-Reviewed E-Journal www.j.vidhyayanaejournal.org
Indexed in: ROAD & Google Scholar

#### **Procedure:**

In the present investigation, a survey type of study has been conducted. In total, investigator selected a sample of 120 players by means of purposive random sampling from ten schools of the Warangal district of Telangana, out of which he selected 12 Kabaddi players each from the first five schools and 12 Kho-Kho players each from the other five schools. The subjects were boys of 10+1 and 10+2 classes of Government Senior Secondary Schools and were of 15-17 years age group only. Moreover, the present research was confined to only those players who had participated at zonal level school tournament of district Warangal. Data regarding selected physical fitness variables was collected using selected test items of AAHPERD's Physical fitness test battery. Mean, Standard Deviation and T-test were used to analyze the data statistically. The level of significance was set at 0.05 level of confidence.

#### **Results and Discussion:**

The Mean, Standard Deviation and 't' values of the investigated physical fitness variables of Kabaddi and Kho-Kho players are given in the table No. 1, 2, 3, 4 and 5 and their analysis and interpretation follows them.

 $\frac{Table-1:}{Mean \ values, \ standard \ deviation \ and `t' \ value \ of \ arm \ and \ shoulder \ strength \ variable \ of \ Kabaddi \ and \ Kho-Kho \ players:}$ 

	N	Mean	S.D.	S.E.M.	Mean	Df	t-value
					Difference		
Kabaddi	60	10.93	1.68	0.22	0.98	118	3.09*
Kho-Kho	60	9.95	1.79	0.23			

<sup>\*</sup>Significant at 0.01 level.

**Table – 1:** reveals that the mean scores of arm and shoulder strength variable of the selected Kabaddi and Kho-Kho players are 10.93 and 9.95 respectively and the calculated 't'- value (3.09) for both the groups is higher than the table value at 0.01 level of significance. Thus it is interpreted that the two groups differ significantly w.r.t. the variable arm and shoulder strength.

Hence, the formulated hypothesis for the Kabaddi and Kho-Kho players' w.r.t. the variable arm and shoulder strength is rejected.

 $\frac{Table-2:}{}$  Mean values, standard deviation and 't' value of abdominal strength variable of Kabaddi and Kho-Kho players:

	N	Mean	S.D.	S.E.M.	Mean Difference	Df	t-value
Kabaddi	60	28.93	1.77	0.23	0.400	118	1.19
Kho-Kho	60	29.33	1.90	0.25			



An International Multidisciplinary Peer-Reviewed E-Journal www.j.vidhyayanaejournal.org
Indexed in: ROAD & Google Scholar

Not significant at 0.05 level.

**Table – 2** reveals that the mean scores of abdominal strength variable of the selected Kabaddi and Kho-Kho players are 28.93 and 29.33 respectively and the calculated 't'-value (1.19) for both the groups is less than the table value at 0.05 level of significance. Thus it is interpreted that the two groups do not differ significantly w.r.t. the variable abdominal strength.

Hence, the formulated hypothesis for the Kabaddi and Kho-Kho players' w.r.t. the variable abdominal strength is accepted.

### **Table – 3:**

Mean values, standard deviation and 't' value of co-ordinative ability variable of Kabaddi and Kho-Kho players:

	N	Mean	S.D.	S.E.M.	Mean Difference	Df	t-value
Kabaddi	60	11.12	0.22	2.86	0.111	118	3.09*
Kho-Kho	60	11.01	0.17	2.18			

<sup>\*</sup>significant at 0.01 level.

**Table – 3** reveals that the mean scores of co-ordinative ability variable of the selected Kabaddi and Kho-Kho players are 11.12 and 11.01 respectively and the calculated 't' – value (3.09) for both the groups is higher than the table value at 0.01 level of significance. Thus, it is interpreted that the two groups differ significantly w.r.t. the variable co-ordinative ability.

Hence, the formulated hypothesis for the Kabaddi and Kho-Kho players' w.r.t. the variable coordinative ability is rejected.

#### **Conclusion:**

Based on the analysis and interpretation of the data and within the limitations of the present investigation, following conclusions are drawn:

The Kabaddi players are better than Kho-Kho players when compared against the physical fitness variable arm and shoulder strength and co-ordinative ability.

The Kabaddi and Kho-Kho players have same level of physical fitness when compared against the physical fitness variable abdominal strength.



An International Multidisciplinary Peer-Reviewed E-Journal www.j.vidhyayanaejournal.org
Indexed in: ROAD & Google Scholar

#### **References:**

- ➤ Brar, G.S. (1975) "A Comparison of Physical Fitness of two different Socio- economic groups", Unpublished M.P.E. Thesis, Jiwaji University.
- ➤ Brenda, B. (1995) "The Relation of Selected Physical and Psychological Variables to the Development of Tennis Player", Dissertation Abstracts International, 56.
- ➤ Craig, Andrews Barry (1976) "Physical Fitness level of Canadian and South African School Boys", Dissertations Abstract International", Vol. 36.
- ➤ Gabbett, T. & Anderson, S. (2006) "Change in Skill and Physical Fitness following Training in Talent Identified Volleyball Players", Journal of Strength and Conditioning, Vol-20 (Issue-1).