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**A Study of the Fitness among Kabaddi and Kho-Kho  
Players with Special Reference to the Select Women Players**

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## ABSTRACT

Better sports performance requires good physical conditioning. The sport requires aerobic and anaerobic fitness. The test was designed to assess kabaddi and Kho Kho players' aerobic and anaerobic fitness. The study included 30 kabaddi and 30 Kho Kho Female players aged 18 to 22. The statistician generalized the fact. It shows no statistical differences in aerobic and anaerobic capability between kabaddi and Kho Kho players.

**Keywords:** Aerobic fitness, anaerobic fitness, Kabaddi players, and Kho Kho players.



## **Introduction:**

Similarly, athletes are regarded as sportsmen, while unfit athletes are useless in competitive sports. Coaches place a premium on competitors' fitness. Each sport necessitates good physical fitness. Due to the influence of technology, the most widely used terminology to describe fitness is "Health-related fitness" and "Motor-performance" fitness.

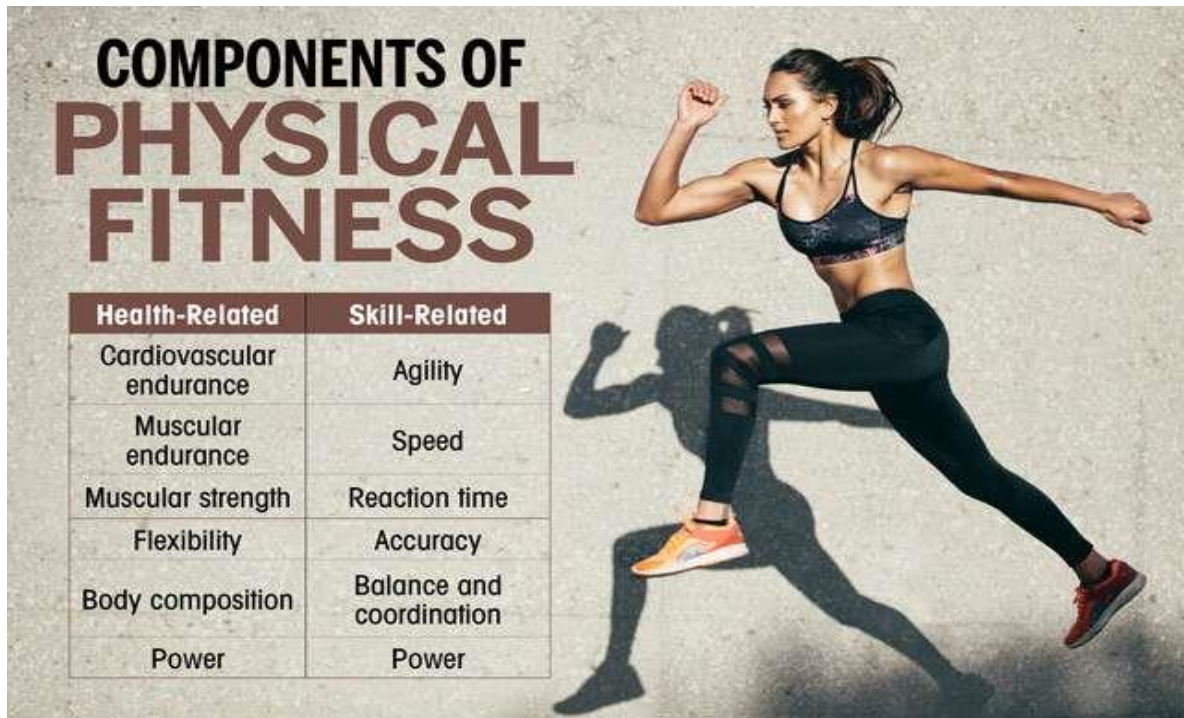
While exercising, the body's aerobic capacity (or ability to use as much oxygen as possible) peaks. The maximal ability to obtain and use oxygen from the blood and cardiorespiratory performance are factors.

Anaerobic capacity refers to the body's ability to use the stored energy without oxygen during strenuous exercise. These include extreme rapid movements, such as the burst speed in a sport like a football, basketball, or kabaddi, or the take-off in a jump.

In order to improve their Kabaddi skills, players must exercise in the same ways as their Kho Kho counterparts do: speed, endurance, agility, and strength. So, the researcher decided to assess and evaluate only two aspects of district-level Kabaddi and Kho Kho players (speed and endurance).

## **Methodology:**

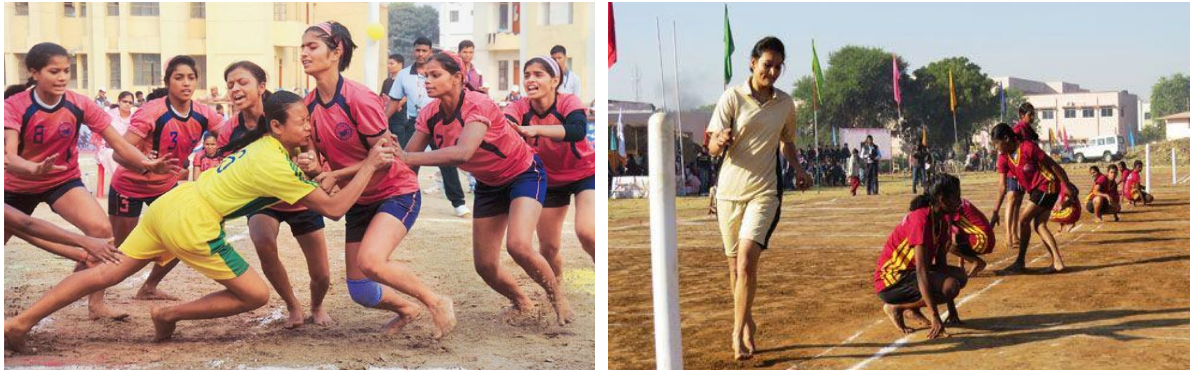
For this study, 30 district-level Kabaddi athletes and 30 district-level Kho Kho competitors between the ages of 18 and 22 were recruited through a random selection process to perform the 600-yard Run/Walk test to measure aerobic fitness or anaerobic fitness, and the results were recorded in minutes. Next, it was decided how much aerobic fitness each participant possessed by administering a 50-meter dash test and recording the time it took them to finish it. In this study, the means and standard deviations of the variables were calculated for data analysis and interpretation. Finally, the t-test was employed to determine whether or not there was a statistically significant difference between the means. The threshold for statistical significance was set at P 0.05.



### Results:

Thirty (30) district-level female kabaddi players and thirty (30) district-level Kho Kho players were studied for data on selected factors, including aerobic and anaerobic fitness.

GROUPS:	“AEROBIC FITNESS:”		“ANAEROBIC FITNESS:”	
	“MEAN”	S. D	“MEAN”	S. D
“Kabaddi Players:”	2.67	+/- 0.20	8.53	0.64
Kho – Kho Players:	2.74	+/- 0.17	8.35	0.60



**TABLE -1:**

**“Mean and Standard Deviation (SD) of the groups:”**

Table-1 shows that kabaddi and Kho Kho players have aerobic fitness levels of  $2.67 \pm 0.20$  and  $2.74 \pm 0.17$ , respectively. Anaerobic fitness for the groups had a mean of  $8.53 \pm 0.64$  and a standard deviation of  $8.35 \pm 0.60$ .

When it comes to aerobic fitness, it is clear that kabaddi players have a slight advantage over Kho Kho players. However, the results were reversed regarding anaerobic fitness, with Kho Kho players outperforming kabaddi players.

**TABLE -2:**

**“Mean difference between the groups with Aerobic fitness:”**

“GROUPS:”	“Mean:”	“Mean Diff:”	“SE:”	“T ratio:”
“Kabaddi Players:”	2.67	0.07	0.048	*1.45
Kho - Kho Players:	2.74			

“\*Significant at 0.05 level of confidence.  $T(0.05)_{58} = 2.00$ ”

Because of its statistical significance, t-tests were used. The table above reveals a mean difference of 0.07 and a standard error of 0.048 in the aerobic fitness of kabaddi players and Kho Kho players.



“In terms of aerobic fitness, there was no statistically significant difference between Kabaddi and Kho Kho players based on the computed t value of 1.45.”

**TABLE - 3:**

**“Mean difference between the groups in relation to Aerobic Fitness:”**

”GROUPS:”	”MEAN:”	”Mean Diff:”	”SE:”	”t ratio:”
”Kabaddi Players:”	8.53	0.18	0.16	1.125
Kho – Kho Players:	8.35			

“\* Significant at 0.05 level of confidence T (0.05) 58=2.00”

Mean anaerobic fitness differences between the groups are 0.18 and 0.16, respectively, according to Table-3. In this case,  $t = 1.125$ , which aligns with the value entered into the database. “Therefore, it can be concluded that there is no statistically significant difference in aerobic fitness between kabaddi players and Kho Kho players.”

### Discussion:

The research found that kabaddi players and Kho Kho players have similar aerobic and anaerobic skills. So it does not matter which game you play if you do not have a high level of speed or agility or essential endurance or balance or strength or strength endurance.

Both teams' players put in a lot of time and effort to improve their abilities. As a result, the aerobic and anaerobic fitness of female kabaddi and kho kho players was equivalent.

### Conclusions:

A lack of difference in aerobic fitness between Kabaddi and Kho Kho players may be deduced from the results of this study. There were no significant variations in aerobic fitness between female Kabaddi and Kho Kho players.



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### **References:**

- Bucher A. Charles. Foundation of Physical Education. Third Edition, Kamala Nagar, Delhi, Surjeet Publication, (1986).
- Clarke, H.H. Physical and motor tests in the Medford boy's Growth study. Englewood Cliffs N.J. Prentice-Hall, Inc, (1993).
- Jonson, B.L and Nelson, J.K. Practical Measurement for Evaluation in Physical Education, 3<sup>rd</sup> Edition, Surjeet Publications, (1997).
- Singh, Hardayal, Science of Sports Training, New Delhi, D.V.S. Publications, (2006).