



COMPARATIVE STUDY OF AEROBIC AND ANAEROBIC CAPACITY OF KHO-KHO AND KABADDI PLAYERS

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ABSTRACT:-

The motivation behind the study was to look at the Aerobic and Anaerobic wellness among Kho-Kho and Kabaddi players of region Ganderbal. The data was collected through administration of Cooper 12-minute Run and walk Test and AAHPER youth physical fitness test (only one battery) on selected variables. There were 80 subjects selected randomly by the researcher out of which 40 were Kho-Kho players and remaining 40 were Kabaddi players selected from different colleges of district Ganderbal. The data collected from selected subjects was analysed statistically using independent sample t-test. Aerobic limit and anaerobic limit was studied. The Aerobic fitness was measured by cooper 12-minute run and walk test and the anaerobic fitness was measured by 50 yard dash. In order to compare the selected variables of two groups, independent sample 't' test was used. The aftereffects of the examination show that there is huge distinction amongst aerobic and anaerobic limit of Kho-Kho and Kabaddi players.

KEYWORDS: Aerobic fitness, anaerobic fitness, Kho-Kho and Kabaddi Players.

INTRODUCTION :

The concept of fitness has long and involved history. As indicated by the writing regarding the matter, it can be followed to the work done by Charles Darwin of the survival of the fittest. Always the word fitness suggests the ability of an animal or a human to work and play with a maximum degree of physical efficiency and to be prepared to meet unforeseen danger or destruction. The front line sensible age, in each field of human endeavor deliberate, objective and coherent procedures are taken after according to the benchmarks in light of understanding and usage of legitimate learning. The field of games and sports has been made possible due to research, experimentation and scientific knowledge in games and sports. A wrong thought is pervasive among a



sizeable area of individuals in India that sportsperson when all is said in done are less canny and less caution than non-sportsperson. They think that much of the physical energy of a sportsperson is spent in his sports pursuits. This drains not only his physical energy but also makes him mentally dull. Consequently, his intelligence and mental ability suffer. They, therefore, are of the opinion that the time develop to sports and games on the plane field is a waste in terms of energy loss and of times, which could be more usefully employed in other (i.e. academic) gainful activity. Psychological factors have a significance effect on an athlete's capacity for training and motivation for competition. Sportsperson of a certain psychological type may be more predisposed to injury. Aerobic (cardiovascular)

Capacity alludes to a man's capacity to maintain a specific level of oxygen consuming action for a specific time allotment. A vigorous action is one that requires oxygen trade in the blood to a more noteworthy degree than different exercises, for example, running versus quality preparing. Aerobic fitness is also known as cardiovascular fitness. Anaerobic limit is the capacity to activate vitality amid exercises of serious nature i.e. executing concentrated work with hazardous activity in brief length of time, for example, kicking the football quicker and for dangerous take off in hops, greatest rate for around a few minutes submerged swimming. The physiological systems of the body interact to accomplish a variety of tasks

HYPOTHESIS

According to available literature in the field the following hypothesis was formulated:

H_0 : It was hypothesized that, "There will be no significant difference in aerobic and anaerobic capacity between Kho-Kho and Kabaddi players.

MATERIAL AND METHODS

After due thought of the considerable number of focuses, straightforward arbitrary inspecting system was utilized and the example measure was focused to 40 Kho-Kho and 40 Kabaddi players of locale Ganderbal. Cooper 12-minute Run and walk Test and AAPHER youth physical fitness test was used to measure aerobic and anaerobic capacity of selected subjects

Comparison of Kho-Kho and Kabaddi Players on the variable Aerobic capacity.

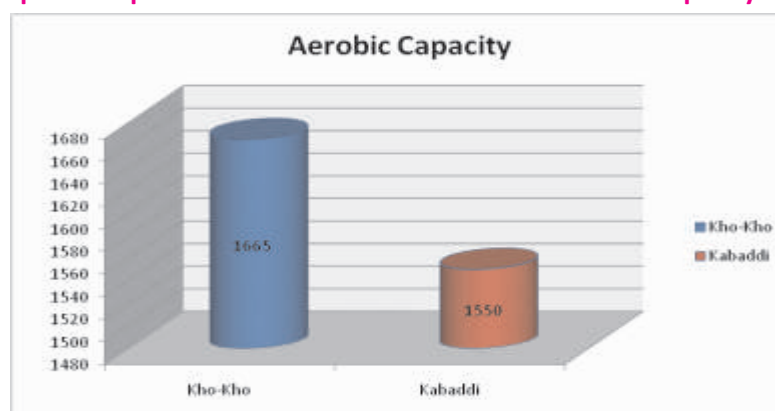
S. No.	Game	No. of Students	Mean	Standard Deviation	't'- Value
01	Kho-Kho	40	1665.0000	125.16656	3.937
02	Kabaddi	40	1550.0000	135.87324	

• Significant at 0.05 level (Df=78)

Table value is =1.99

From the above table it was observed that the obtained 't' value of Aerobic fitness is 3.937 at 0.05 level of significance which is greater than the tabulated value 't' 1.99. Henceforth it was inferred that the two methods for Kho-Kho and Kabaddi players contrast fundamentally from each other. I.e. The Kho-Kho players have more oxygen consuming limit than Kabaddi players. The two means were given graphically in below figure 1.

Figure: 1
Graphical Representation of Mean difference of Aerobic capacity



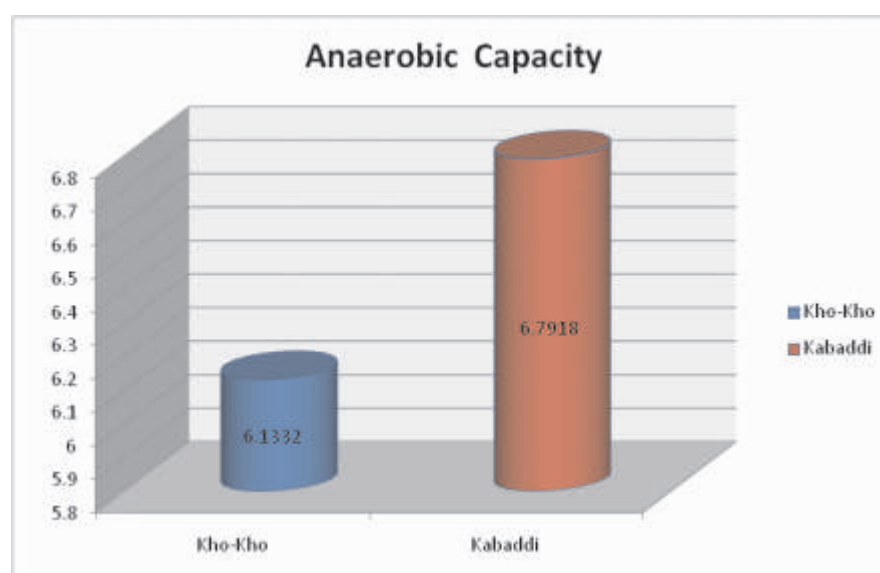
Comparison of Kho-Kho and Kabaddi Players on the variable anaerobic capacity

S. No.	Game	No. of Students	Mean	Standard Deviation	't'- Value
01	Kho-Kho	40	6.1332	.39711	7.696
02	Kabaddi	40	6.7918	.36760	

• Significant at 0.05 level (Df=78)**Table value is =1.99**

From the above table it was observed that the obtained 't' value of Anaerobic fitness is 7.696 at 0.05 level of significance which is greater than the tabulated value 't' 1.99. Consequently it was reasoned that the two methods for Kho-Kho and Kabaddi players vary altogether from each other. i.e. The Kho-Kho players have more Anaerobic capacity than Kabaddi players. The two means were given graphically in below figure 2.

Figure: 2
Graphical Representation of Mean difference of Anaerobic capacity

**DISCUSSION OF FINDINGS:**

The finding of the study shows that there is significant difference in both Aerobic and Anaerobic fitness between Kho-Kho and Kabaddi players.

- The Kho-Kho players have better aerobic capacity than Kabaddi players.
- The Kho-Kho players have better anaerobic capacity than Kabaddi players.

Thus, the null hypothesis "There will be no huge diverse in Aerobic limit and anaerobic limit between Kho-Kho and Kabaddi players." is rejected and the alternative hypothesis "There will be significant difference in aerobic and anaerobic limit between Kho-Kho and Kabaddi players" is accepted.

Aerobic capacity: The measurement discoveries of the present investigation uncovered that there were huge contrasts in Kho-Kho and Kabaddi players in connection to Aerobic limit. This can be attributed to the quantum of aerobic training done by Kho-Kho players in preparatory phase. The aerobic training helps in improvement of oxygen supply to the muscles.

Anaerobic capacity: The statistical findings revealed that there were significant differences among Kho-Kho and Kabaddi in relation to anaerobic capacity, by the help of 12-minute run and walk test and 't'-test. It was found

that there was a significant difference in anaerobic capacity of Kho-Kho and Kabaddi. This difference can be attributed to the nature of the activity done by these groups. The Kho-Kho players continuously perform the activity like running with high explosiveness for pretty longer period of time than Kabaddi players. The findings of the present study show the significant difference in both aerobic and anaerobic capacity of Kho-Kho and Kabaddi players, Kho-Kho players have higher aerobic and anaerobic limit than Kabaddi players of district Ganderbal. It may be concluded that the Kho-Kho players are more involved in the running activities as compared to Kabaddi players, hence becomes the reason of having better aerobic and anaerobic limit than Kabaddi playing persons.

CONCLUSIONS:

The following conclusions were drawn out of this study:-

- In relation to aerobic and anaerobic limit significant difference was found between Kho-Kho and Kabaddi players.
- Kho-Kho players have very better aerobic and anaerobic limit than Kabaddi Players.

RECOMMENDATION:

According to conclusion and findings the researcher gives some recommendations as-

- The present study may be repeated with respect to other physiological and psychological variables on the same subjects.
- The present study may be conducted on the large sample size in order to make the study more valid and detailed.
- Similar study may conduct on the female subjects.
- Similar study may conduct on the players of other games.
- Similar study may conduct on different age groups.
- Similar study may conduct on different level of players.

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