



ISSN: 2456-0057  
IJPNPE 2018; 3(1): 177-178  
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www.journalofsports.com  
Received: 02-11-2017  
Accepted: 04-12-2017

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## Comparative study of anthropometric variables of male kabaddi and kho-kho players

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### Abstract

The aim of this study was to analyze the anthropometric variables of kabaddi and kho-kho players. For present study 40 state level male kabaddi (n=20) and kho-kho (n=20) players were selected from, two districts of Haryana namely Sirsa and Rohtak. The age group selected for this study was  $17.64 \pm 2.54$  years. Data was collected by administering selected anthropometric measurements which were standing height, sitting height, leg length, upper arm length and forearm length. The collected data were analyzed by using t-test at 0.05 level of significance. Results of this study revealed that there was a significant difference between Standing height (t=6.61), Sitting height (t=2.93) and Forearm length (t=3.23). As there was an insignificant difference between Leg length (t=1.99) and Upper arm length (t=1.97)

**Keywords:** anthropometric, kabaddi, kho-kho players

### Introduction

As we realize that games like Judo, wrestling, Kabaddi, Kho-Kho, have been broadly acknowledged as an exceedingly aggressive games all through the world. These games managing in incredible request of explosive leg quality, arm, and shoulder. The Motor fitness components are qualities that competitors must create to physically gets ready for sports competition. Sports training programs are designed to build these components in the proper proportions the match the requirements of each sport. Fitness enhances general wellbeing and it is fundamental for full and lively living.

Many games performed on a court or on a field require rapid aggregate body developments. A considerable lot of these are in light of the movement of a ball, restriction players, or colleagues (Young, 2006). Engine wellness is one of the real segments of physical wellness and incorporates such components as strong quality, speed, deftness, adjust and co-appointment. These qualities are not as specifically indispensable as cardio-respiratory wellness for general wellbeing yet play a few essential immediate and backhanded parts both in practical wellbeing and execution limit. "Wellness is an expansive term signifying dynamic qualities that enable you to fulfill your requirements in regards to mental and passionate dependability, social awareness and versatility profound and moral fiber natural wellbeing steady with your heredity. Motor capacity tests measures the quick limit of a man to take part in an assortment of games.

### Methodology

#### Selection of Sample

For present study 40 state level male kabaddi (n=20) and kho-kho (n=20) players were selected from, two districts of Haryana namely Sirsa and Rohtak. The age group selected for this study was  $17.64 \pm 2.54$  years.

#### Selection of Variables

Following anthropometric characteristics were selected as variables for this study

1. Standing height
2. Sitting height
3. Leg length
4. Upper arm length

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### 5. Forearm length

Measurements of the body was done by anthropometric kit and recorded in centimetres

### Statistical technique

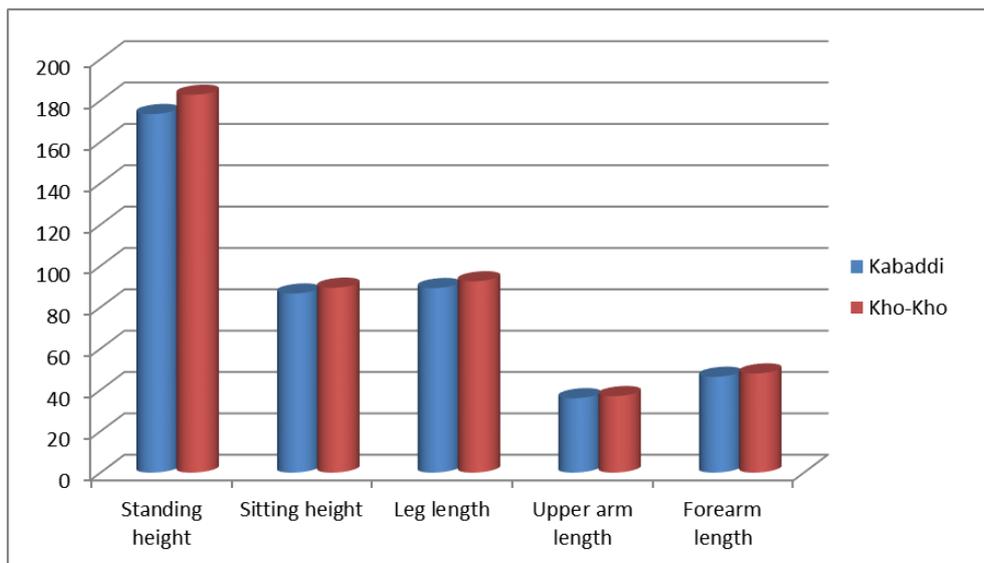
To find out the significance difference between selected anthropometric variables of male players of Kabaddi and Kho- Kho, independent t-test was applied where level of significance was chosen as 0.05.

**Table 1:** Score of Anthropometric Variables of male kabaddi and kho-kho players

Sr. no	Variables	Kabaddi			Kho-kho			t-value
		Mean	SD	SE	MEAN	SD	SE	
1.	Standing height	173.45	3.845	0.882	182.75	4.982	1.143	6.61*
2.	Sitting height	86.625	2.869	0.658	89.425	3.125	0.717	2.93*
3.	Leg length	89.25	4.629	1.062	92.525	5.734	1.315	1.99
4.	Upper arm length	35.975	35.975	0.455	37	1.213	0.278	1.97
5.	Forearm length	46.35	1.994	0.457	47.95	0.958	0.219	3.23*

T value=2.012

(\*) Significant results



**Table 1:** Clearly Indicates the Significant Difference between Standing Height, Sitting Height and Forearm Length of male Kabaddi and Kho-Kho players

### Result

The data was treated statistically and tabulated by working out their arithmetic mean, standard deviation, standard error mean and t-values. The data collected was analysed but taking significance value of ( $t < 0.05$ ). The analyses shows that there was no significance difference between two groups on the basis of Leg length ( $t=1.99$ ) and Upper arm length ( $t=1.97$ ) but there was a significant difference between two groups on the basis of Standing height ( $t=6.61$ ), Sitting height ( $t=2.93$ ) and Forearm length ( $t=3.23$ ).

### Conclusions

In the present study it was concluded that the Kho - Kho players are taller than the Kabaddi players. Their sitting height is also more as well as they have more forearm length. On the other hand there was an insignificant difference between the leg length and upper arm length.

### Practical applications

Similar studies can be conducted among females players. Further this study can be conducted in different sports and games to find the importance of these parameters in the performance of an athlete. As well as this study could also be applicable in other track and field events.

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