

INFLUENCE OF ANTHROPOMETRIC MEASUREMENTS ON INDIGENOUS GAMES

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Abstract:

A new demand has appeared in sport anthropometric research. The focus of the new investigations became the analysis of the relationship between anthropometric characteristics and sports performance. Increasing popularity of elite competitive sports and the spectacular development in athletic performances aroused considerable interest in the anthropometric measurements that characterise successful athletes.

The main aim of this study was to compare the selected anthropometric measurements of Kho-Kho and Atya-Patya male players, Height, Chest girth, Thigh Girth and Calf Girth were considered for this study. To achieve the purpose of the study data was collected from 120 players and sixty from each game, who have represented their respective states in Kho-Kho and Atya-Patya game. The age of the subjects was ranging from 18-25 years. The data collected was treated with the statistical technique 't' and found there is a significant difference between Kho-Kho and Atya-Patya players in the selected anthropometric measurements.

KEY WORDS:

Anthropometry, Kho-Kho, Atya-Patya, height, chest girth, thigh girth, Calf girth,

INTRODUCTION

Anthropometric dimensions play an important role in determining the success of an athlete. Quite naturally, the interest in anthropometric dimensions of sports persons from different competitive sports has been increased tremendously over the last decades. It has been well established that specific anthropometric dimensions indicate whether the player would be suitable for the competition at the highest level in a specific sport.

Increasing popularity of elite competitive sports and the spectacular development in athletic performances aroused considerable interest in the anthropometric measurements that characterise successful athletes. A new Demand has appeared in sport anthropometric research. The focus of the new investigations became the analysis of the relationship between anthropometric characteristics and sports performance.

Specific anthropometric characteristics are needed to be successful in certain sporting events. It is also important to note that there are some differences in body structure of sports persons involved in sports.

There are numerous factors which are responsible for the performance of a sportsman. The physique is one among them. At present, sportsman for superior performance in any sports is selected on the basis of physical structure and body size. Structural measurement include anthropometric measurements which consist of objective measurement of structures such as height, weight, width, depth and the circumference of the various part of body.

AIM OF THE STUDY:

The Aim of the study was to compare the selected anthropometric measurements such as Height, Chest girth, Thigh Girth and Calf Girth of Kho-Kho and Atya-Patya Male Players.

METHODS & MATERIALS:

To achieve the aim of the study, Data collected from sixty players of each game, who have represented their respective states in Kho-Kho and Atya-Patya game at national tournament. The age of the subjects were ranging from 18-25 years.

RESULTS AND DISCUSSION:

The data collected was treated with the statistical technique 't' and results are presented in the following tables.

Table- 1. Shows Mean, standard deviation, and 't' value of height of Kho-Kho and Atya- Patya Players.

Sl. No.	Players	Sample Size	Mean value	Standard deviation	't' value
1.	Kho-kho	60	163.47	6.30	4.233
2.	Atya-Patya	60	169.50	8.14	

The above table shows the mean value, standard deviation and t value of height between Kho-Kho and Atya – Patya male players. As the t value indicated in the table shows there is a significant difference between Kho-Kho and Atya-Patya players. In this variable Atya – Patya players found significant than the Kho – Kho male players.

Table 2. Shows Mean, standard deviation, and 't' value of chest girth of Kho-Kho and Atya- Patya Players.

Sl. No.	Players	Sample Size	Mean value	Standard deviation	't' value
1.	Kho-kho	60	87.99	6.68	4.801
2.	Atya-Patya	60	81.95	5.21	

The above table depicts the mean value, standard deviation and t value of chest girth between Kho-Kho and Atya – Patya male players. As the t value indicated in the table shows there is a significant difference between Kho-Kho and Atya-Patya players. In this variable Kho – Kho players found significant than the Atya – Patya male players.

Table 3 . Shows Mean, standard deviation' and 't' value of thigh girth of Kho-Kho and Atya-Patya P layers.

Sl. No.	Players	Sample Size	Mean value	Standard deviation	't' value
1.	Kho-kho	60	50.37	4.49	3.376
2.	Atya-Patya	60	47.98	3.21	

The above table reveals that the mean value, standard deviation and 't' value of thigh girth between Kho-Kho and Atya – Patya male players. As the t value indicated in the table shows there is a significant difference between Kho-Kho and Atya-Patya players. In this variable Kho – Kho male players found significant than the Atya – Patya players.

Table 4 . Shows Mean, standard deviation' and 't' value of calf girth of Kho-Kho and Atya - Patya players.

Sl. No.	Players	Sample Size	Mean value	Standard deviation	't' value
1.	Kho-kho	60	34.47	2.33	0.889
2.	Atya-Patya	60	34.00	2.64	

The above table indicates the mean value, standard deviation and t value of calf girth between Kho-Kho and Atya – Patya male players. As the t value indicated in the table there is no significant difference between Kho-Kho and Atya-Patya players in calf girth. When mean values are compared it shows, the Kho – Kho male players are having more mean value than Atya – Patya players.

CONCLUSION:

The data collected to achieve the aim of the study was treated with statistical technique 't' test and results showed that Kho –Kho Players were found significant in chest girth and thigh girth than the Atya – Patya male players, in height atya – patya players found significant than the Kho – Kho male players. But there is no significant difference in calf girth between Kho – Kho and Atya - Patya players. In Height atya patya players found significant because in game situation atya patya players have to block the offender in trenches height will help the players to block the players effectively. In chest girth and thigh girth Kho- Kho players found significant because they are necessary to execute some of the Kho –Kho game skills.this might be the reason kho- kho players found significant than atya patya players. In calf girth there is no significant difference between the players selected for the study because for most of the skills of both the games need power component.

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