



Comparative Analysis of Selected Anthropometric Variable between Inter-Collegiate Level Female Handball and Kabaddi Players

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Abstract

The purpose of the study was to Analysis of selected anthropometric variable between Inter-Collegiate Level Female Handball and Kabaddi Players. Twenty four inter collegiate level players were selected as subjects from Smt. Bangaramma Sajjan Arts and Commerce College for Women, Vijayapura, District of Karnataka, State were selected as subject at random. The age of the subjects were ranged between 19 to 23 years only. The selected subjects were tested on their selected anthropometric variable. The data on Upper arm girth were collected by the investigator with the standard measuring tape. The collected data were tabulated and statistically analyzed mean, standard deviation and 't' ratio was used as statistical technique independent 't' ratio as two groups are comparing different sets of players. From the results obtained it found that there was a significant difference between the mean values of the handball players and kabaddi players on selected anthropometric variable. From the findings of the study it was concluded that the Kabaddi players are better than the handball players on selected anthropometric variable.

Keywords: Anthropometric Variable, Upper arm girth, Female Handball players and Kabaddi players.

Introduction

Anthropometry is the oldest type of body measurement used, dating back to the beginning of recorded history. The concepts of the ideal proportion varied over periods of time. For example, Polycletus

fashioned Doryphorus, the spear thrower, as a fighter and an athlete, broad shouldered, thick set and square chest as the 'perfect man' (Clarke and Clarke, 1987).

Measurements of body size includes such descriptive information as height, weight and surface area, while measures of body proportion describe the relationship between height and weight among lengths, widths and circumferences of various body segments. It has been found that top athletes in some sports tend to have those proportions that biomechanically aid the particular performance required (Zeigler, 1982). An evidence of this we observe the well-proportionate physique of boxers and gymnasts, the super-structure of great basketball competitors, the solidness of topflight football players, the wiriness of champion distance runners and massive builds of great shot-putters and discus throwers (Clarke and Clarke, 1987).

Anthropometry is the study structure, functions of the human body measurement for use in anthropological comparison and also classification. The use of such as such data, skull dimensions and body proportions in the attempt to classify human beings into – ethnic, racial remains and national groups has been largely discredited. But anthropometric techniques are still used in pale anthropology, and physical anthropology, not only that especially to study evolutionary change in fossil hominid. Anthropometric is something, that means is of or relating with anthropometry. That is the study of the measurement of human heights, weight etc. The study recognizes the purposes of figuring human physique distinction and many different attempts to co-related psychological behaviour and physical with racial. Anthropometry involves making precise, highly measurements of various body parts. So that size and shape could be described accurately and objectively. Basic anthropometric measurements include those for body mass (wt) stature (height) and skin fold thickness.

Objectives of the Study

The purpose of the research paper is to Analysis of selected anthropometric variables between Inter-Collegiate Level Female Handball and Kabaddi Players.

Hypothesis

It was hypothesized that there is no significance difference in the Upper arm girth between Inter-Collegiate Level Female Handball and Kabaddi Players.

Methodology

Selection of subjects

The present study was conducted on 12 subjects 24 from each from Inter-Collegiate Level Female Handball and Kabaddi Players. The study was delimited to randomly selected Smt. Bangaramma Sajjan

Arts and Commerce College for Women, Vijayapura, District of Karnataka state, Female Handball and Kabaddi Players only. The age of the subject ranged between 19-23 years.

Selection of test items and administration of test

Variable	Test items	Unit measurement
Upper arm girth	Flexible Measuring tape	Centimeters

The above variables and test were selected for data collection; the test conducted the help of physical education directors. The subjects were given brief introduction about the test and its purpose and also demonstration before the conduct of each test.

Statistical Analysis

To find out the significance difference of Analysis of selected anthropometric variables between Inter-Collegiate Level Female Handball and Kabaddi Players Vijayapura, District of Karnataka State in comparison to Upper arm girth the data were analyzed by applying Descriptive statistics and Independent sample t-test. The level of significance was set at 0.05.

Result of the study

The scores were obtained by applying the Flexible Measuring tape test. All the individual Flexible Measuring tape test scores used to judge the level of Upper arm girth.

Table 1: Shows statistical comparison of Upper arm girth between Female Handball and Kabaddi Players

Group	N	Mean	SD	T-ratio
Handball	12	12.9167	1.16450	4.278*
Kabaddi	12	14.5100	1.07252	

**The level of significant 0.05 =Table value 2.07

Table-I indicates the Upper arm girth scores of female Handball players and Kabaddi players. The obtained, t^* ratio was 4.278; the required table value was 2.07 at 0.05 level of significance for 11 degrees of freedom at 0.05 level of confidence. Since the obtained value was greater than the table value. There was a significant difference between the female Handball players and Kabaddi players were 12.9167 and

14.5100 that indicates the Kabaddi players are better than the Handball players on Upper arm girth. The mean difference between the Inter-Collegiate Level Female Handball and Kabaddi Players were shown in figure-I

Figure No.1: Mean and Standard values of Upper arm girth of Female Handball and Kabaddi Players

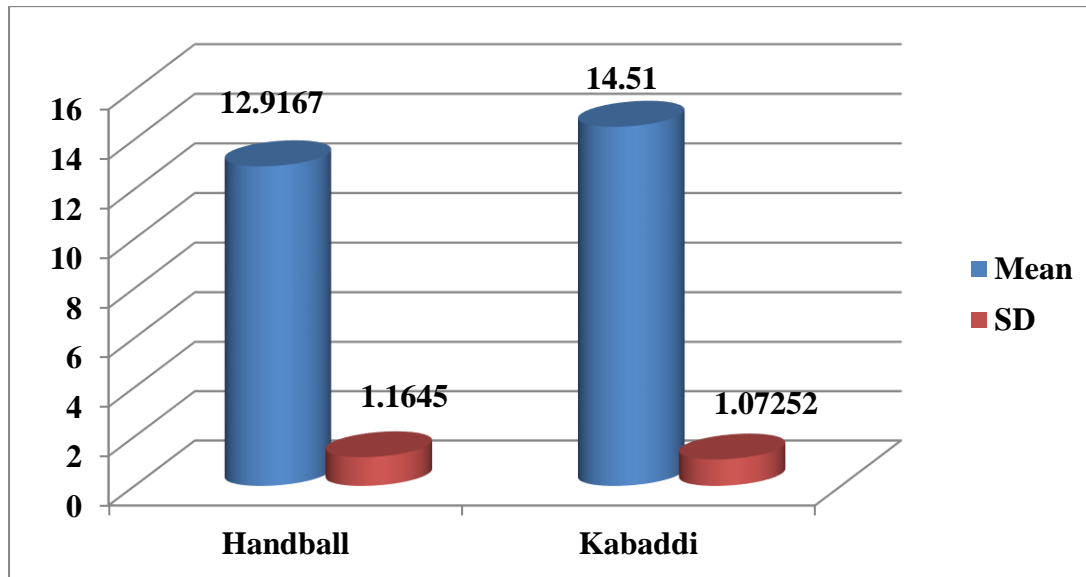


Figure No. 1: showing Mean Difference of Upper arm girth among the Female Handball and Kabaddi Players. Mean score of Handball players is 12.9167 and Kabaddi players are 14.5100; mean difference value is 4.278 only. It shows that there was significant difference between Female Handball and Kabaddi Players.

Discussion on Findings

The result of the study indicated that there was a significant difference between the Handball players and Kabaddi players. The upper arm girth scores of Handball players and Kabaddi players. The obtained t - ratio was 4.278 and the mean of the Handball players and Kabaddi players were 12.9167 and 14.5100 that indicates the Kabaddi players are better than the Handball players on upper arm girths.

Conclusions

Based on the results and discussion it was concluded as follows:

1.The Kabaddi players are better than the Handball players in the selected anthropometric variable among Inter-Collegiate Level Female Players.

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