



## COMPARATIVE ANALYSIS OF SELECTED ANTHROPOMETRIC VARIABLE BETWEEN INTER-COLLEGIATE LEVEL SPORTS PERSON AND NON-SPORTS PERSON

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### **Abstract**

*The purpose of the study was to Comparative Analysis of Selected Anthropometric Variable between Inter-Collegiate Level Sports Person and Non-Sports Person. Fifty inter collegiate level players were selected as subjects from Government First Grade College Kustagi, 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 Sports Person and Non-Sports Person on selected anthropometric variable. From the findings of the study it was concluded that the Sports Person are better than the Non-Sports Person on selected anthropometric variable.*

**Keywords:** *Anthropometric Variable, Upper arm girth, Female Sports Person and Non-Sports Person.*

### **Introduction**

'Anthropometry' means the measurement of men whether living or dead, and consists primarily in the measurement of dimensions of the body. Anthropometry provides the measurement of man using scientific methods and observations on the living man and the skeleton. Anthropometry represents the typical and traditional tool of human biology, physical anthropology and axiology. Recently it has taken a strong bonded relationship with physical education and sports sciences.

The modern world is the outcome of many scientific inventions through centuries. Scientific instruments and machinery big and small have helped to make our daily life easy and comfortable.

Since the modern man depends mostly upon the modern outfits for his daily routine involving metal powers to live an easygoing life, there has been a fall and deterioration in his physical health capacities. Over dependence on machines has made him become less vigorous and lethargic.

The term anthropometry is synonymous with physical anthropology and is an integral part of biometrics, since its data, in large measure, are to be understood only through the use of statistics. The two types of anthropometric measurements gathered are those, which are taken on the living and those taken on the skeleton.

The purpose of an anthropometric study will determine what measurements are required beyond height and weight - body lengths and diatl1eters for studies of race, growth, and skin folds for nutrition and



body composition. It generally co-relates with body and limb lengths, and weight with body breadths, depths, girths, and skin folds.

The science of anthropometry has its development in the play fields of physical Anthropologists. Anthropology has been the study of man's biological structure and defined behaviour in the space. Physical anthropologist has been mainly concerned with the study of human origins and human evolution as well as the varieties of mankind in different parts of the world. Lately new dimensions have been added: namely the study of human growth and development in various human populations. The effect of environment and nutrition on the growth and development of human being is also sought to be assessed.

### **Objectives of the Study**

The purpose of the research paper is to Analysis of selected anthropometric variables between Inter-Collegiate Level Female Sports Person and Non-Sports Person.

### **Hypothesis**

It was hypothesized that there is no significance difference in the Upper arm girth between Inter Collegiate Level Female Sports Person and Non-Sports Person.

### **Methodology**

#### **Selection of subjects**

The present study was conducted on 50 subjects 25 from each from Inter-Collegiate Level Female Sports Person and Non-Sports Person. The study was delimited to randomly selected Government First Grade College Kustagi, District of Karnataka state, Female Sports Person and Non-Sports Person 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	Centimetres

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 Spots Person and Non-Sports Person Kustagi, 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.



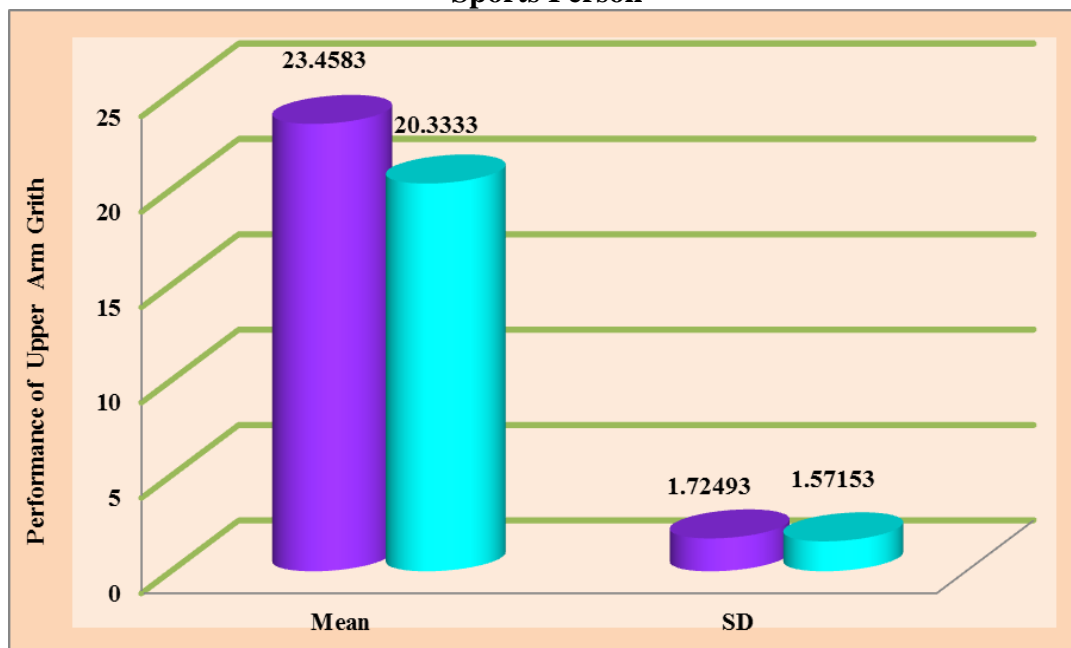
**Table 1: Shows statistical comparison of Upper arm girth between Female Sports Person and Non-Sports Person**

Variable	Games	N	Mean	SD	t-value	Sig
Upper Arm Girth	Sports Person	12	23.4583	1.72493	8.448*	.000
	Non-Sports Person	12	20.3333	1.57153		

\*\*The level of significant 0.05 =Table value 2.07

Table-1.indicates the Upper arm Girth scores of Female players Sports Person and Non-Sports Person. The obtained t" ratio was 8.448; 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 Sports Person and Non-Sports Person were 23.4583 and 20.3333 that indicates the sports Person are better than the Non-Sports Person on Upper arm Girth. The mean difference between the District Level Female sports Person and Non-Sports Person were shown in figure-1

**Figure No.1: Mean and Standard values of Upper arm Girth of Female sports Person and Non-Sports Person**



**Figure No. 1:** showing Mean Difference of Upper arm Girth among the Female sports Person and Non-Sports Person. Mean score of sports Person is 23.4583 and Non-Sports Person are 20.3333; mean difference vale is 8.448 only. It shows that there was significant difference between Female sports Person and Non-Sports Person.



### **Discussion on Findings**

The result of the study indicated that there was a significant difference between the Person and Non-Sports Person. The upper arm girth scores of Sports Person and Non-Sports Person. The obtained t - ratio was 8.448 and the mean of the Sports Person and Non-Sports Person were 23.4583 and 20.3333 that indicates the sports Person are better than the Non-Sports Person on upper arm girths.

### **Conclusion**

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

1. The Sports Person are better than the Non-Sports Person in the selected anthropometric variable among Inter-Collegiate Level Female Players.

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