



## A Study of Anthropometrical Profile of Indian Railway International Sprinters

### KEYWORDS

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**ABSTRACT** *The purpose of this investigation was to analyze the anthropometrical profile of Indian Railway sprinters. 15 men sprinters were selected from Inter- Railway Athletic Championship held at Jawaharlal Nehru Stadium, Chennai during the academic year 2010-2011. The age of the subjects ranged from 23 to 29 years. Their anthropometric measurements such as arm length, leg length, height, weight were taken. All the measurements were taken by the same investigator. The Descriptive analysis was used to analyze the value of mean and the standard deviation. All the data were collected by using the standardized equipments and tests. We found that the mean values of arm length, leg length, height and weight are 76.2 cm, 100.4 cm, 171.4 cm and 62.9 kg respectively.*

### INTRODUCTION

Sports activities are Universal and these activities are carried out in throughout the world to attain the physical and mental health of the sportsmen. In action to it sports can offer major physical, physiological and psychological benefits through participation. There is some evidence to indicate that physical health can be improved through regular sports participation. And some of the physiological and psychological factors influence the sports performance. Anthropometric measurement plays a major role in shaping the performance of individual sports person and achieve in sports. Anthropometry in physical anthropology refers to the measurement of the human individual for the purpose of understanding human physical variation. Today, anthropometry plays an important role in industrial design, clothing design and also in sports. We use the standardized techniques to measure athletes and the calculations of body composition, dimensions, proportions and ratio to help in improving sports performances.

The anthropometrical studies have identified ideal values for the body dimensions of athletes in different sports. Most sports have procedures for identifying talent. Through the anthropometrical measurement, we can identify the player's potential and promote the performance of the sports person.

### METHODOLOGY

15 men short distance like 100mts, 200mts, 400mts sprinters were selected from Indian Railways who participated in Inter-Railway athletic meet held at Jawaharlal Nehru Stadium, Chennai during the academic year 2010-2011, the age of the subjects ranged from 23-29.

### Anthropometrical measurement:

The following Anthropometric characteristics were measured.

Arm length

Leg length

Height

Weight

The measurement were taken from the same investigator, Standard descriptive statistics (mean, standard deviation) were determined for directly measured and derived variables. The subjects were selected by the single group design. The mean values of arm length, leg length, height and weight are 76.2 cm, 100.4 cm, 171.4 cm and 62.9 kg respectively.

### THE TABLE SHOWED THE DESCRIPTIVE STATISTICS-MEAN AND STANDARD DEVIATION OF ANTHROPO-METRIC PARAMETERS OF THE SPRINTERS

S.NO	VARIABLES	n	MEAN	S.D
1.	Arm length	15	76.2	10.54
2.	Leg length	15	100.4	9.2
3.	Height	15	171.4	15.05
4.	Weight	15	62.9	18.05

### CONCLUSION

For the purpose of the study, 15 sprinters (n=15) were selected from Indian Railways. Their arm length, leg length, height and weight were taken. Data were analyzed by Descriptive analysis. The result of the study shows that all the selected Anthropometric variables were significant among the subjects. Hence it was concluded that the Physical Education Teachers and the coaches may select the athletes for sprinting event those who have the mean value of this study. So they will perform higher achievements like this subjects.