# RELATIVE EDUCATION ON PARTICULAR ANTHROPOMETRIC EXTENT OF CONTESTANTS AT UNLIKE NEAR

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#### **Abstract**

Measurements of body size include such descriptive information as height weight and surface area while measurements of body proportion describe the comparative of on height and weight and among length of various body segments. It has been found that top athlete in some sports tends to have those proportions that bio mechanically and the particular performance required (Early 1982).

Athletes for superior performance in any is selected on the basis of his physical structure and body size, which has proved to appropriate for high performance in the given sport (Tanner 1964). Therefore this study has been undertaken with a view to find out the selected anthropometric measurement of national and state level junior athletes.

**Keywords**: Anthropometric measurement, height, weight, thigh girth, leg and hand length

#### Introduction

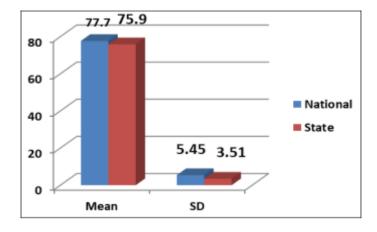
Anthropometry is the branch of Anthropology which is concerned with taking of measurements of human body. This definition has been confined to the kinds of measurements commonly used in associating physical performance with body build (Warren 1974).

Measurements of body size include such descriptive information as height weight and surface area while measurements of body proportion describe the comparative of on height and weight and among length of various body segments. It has been found that top athlete in some sports tends to have those proportions that bio mechanically and the particular performance required (Early 1982).

### **Method and Materials**

In order to compare selected anthropometric measurement of national and state level junior athletes, Forty (40) National level and State level junior athletes of which twenty of each level (Players were selected from sprint, Long jump, shot put, javelin and long distance running events where four athletes of each event. employ PE teachers on Tirunelveli District.

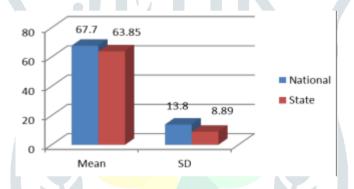
Statistical Procedure The gathered data were duly analyzed through statistical procedure using Descriptive statistics and 't' test was applied to find out significant differences between selected anthropometric measurement and of national and state level athletes, The level of significant was set at 0.05 level of confidence.



The different of clearly revealed height between national and Stare level

# **Findings**

In the Table & Fig., it is clearly revealed that, significant difference exist on Height between national and state level athletes as because Cal "t" value (2.15\*) is higher than Tab t 0.05 (38) value (2.024\*). Mean of performance of national athletes were better than state athletes. Table: Mean, SD and "t" Test on Body Weight of National and State Level Junior Athletes.

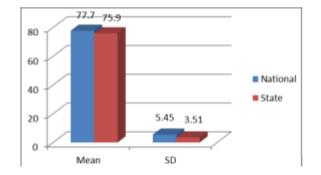


The different of clearly Body weight between national and state level

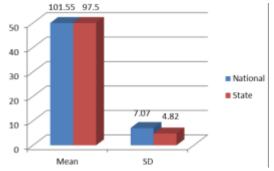
Findings In the Table and Fig, it is clearly reveled that, no significant difference exist on Body weight between national and state level athletes as because Cal "t" value (0.50) Mean of performance of national athletes were better than state athletes.

Mean, SD and "t" Test on Hand Length of National and State Level Junior Athletes

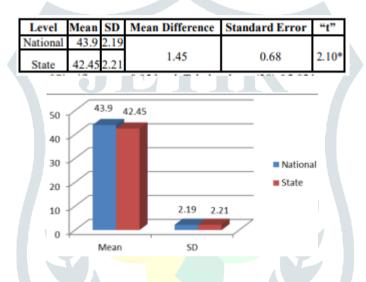
Level	Mean	SD	Mean Difference	Standard Error	"t"
National	77.7	5.43			
State	75.9	3.51	1.8	1.45	1.24



Findings In the Table and Fig., it is clearly reviled that, no significant difference exist on Hand length between national and state level athletes as because Cal "t" value (1.24) Mean of performance of national athletes were better than state athletes.



Findings In the Table & Fig., it is clearly revealed that, significant difference exist on Leg length between national and state level athletes as because Cal "t" value (2.12\*) is higher than Tab t 0.05 (38) value (2.024\*). Mean of performance of national athletes were better than state athletes. Table: Mean, SD and "t" Test on Thigh Girth of National and State Level Junior Athletes.



## **Findings**

In the Table & Fig., it is clearly reveled that, significant difference exist on Thigh Girth between national and state level athletes as because Cal "t" value (2.10\*) is higher than Tab t 0.05 (38) value (2.024\*). Mean of performance of national athletes were better than state athletes.

## **Discussion and Conclusion**

The main results of the present study, conducted in 40 junior National and State athletes aged 14-19 years from South region of India are the following: Result of the study showed that anthropometric characteristics such as-Height, Leg length and Thigh Girth were found to be significant whereas no significant difference was found in case of Body weight, and hand length.

Here researcher believed that due to Biological, environmental & Genetic makeup of the athletes may be causes of obtaining grater height (Nudri et al. 1996). Rather it can be said that in the adolescence stages (13 to 19 years) height is increase steadily and obtained near top height than other growth stages (Singh A. et al. 2007).

The average age of both level (N, S) athletes were 17 & 15 years respectively, so they belongs to this stages and achieved more height, but due to greater age national athletes were found better than state athletes because height of the normal peoples is increased proportionally with age (Singh A. et al. 2007).

Leg length also increases due to increasing overall height of the athletes and development of lower limb is quicker than upper limb (D Gunnell 2001). Thigh circumference of the national athletes were found better, in this case researcher believed that due to strenuous practice, exercise, and nutritional aspect of the athletes

thigh muscle hypertrophy is occurred (Hug F 2006) so that overall circumference of the thigh muscles is increase.

Although there was age difference between both levels of athletes but due to scientific training, conditioning, dieting, and maintaining physical fitness, body weight of the athletes is on control (Train 2004) reported) therefore we found no significant difference of body weight in this study.

Important that there was not enough age difference between national and state level athletes so that due to closer age difference upper limb development is same and no difference was found.

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