

Analysis of Anthropometric Measurements of Athletics and Judokas

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Abstract – It is well known fact that sports is the only one area were modification and sculpturing (beauty) takes place on human body because of this in sports importance has been given to anthropometric studies .It is known fact sports training and nutritional diet brings a greater changes in anthropometric structure and size. So it is a present need of a day to understand and gain the knowledge, it is possible only by applying the anthropometric techniques.

The application of anthropometrical techniques helps in understanding and developing athletic physique which helps coaches in identifying talent, designing individualized training regiments to suit each athlete according to the body build and helping athlete to maintain proper body composition. A rare study on anthropometry of south Indian sports family has heightened its importance for researcher to take above mentioned topic for the research.

The main purpose of the study was to analyze the anthropometric variables Chest width, Knee width (R+L) , and Ankle diameter (R+L), of athletics and judokas. For this study data was collected from forty National level athletics and players each. Subjects were selected randomly and the age of the subjects was ranging from 20-25 years. The data collected was treated with the statistical technique's T test and found there is a difference between athletics and judoka.

Index Terms : Anthropometry, Chest, Knee, Ankle and Judoka.

INTRODUCTION

Anthropometry may also be stated as the science of measurement applied to the human body and generally includes measurement of height, weight and selected body and limb's girth.

Anthropometry means the measurement of man, whether living or dead and consists primarily in the measurement of the dimension of the body.

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The application of anthropometrical techniques helps in understanding and developing athletic physique which helps coaches in identifying talent, designing individualized training regiments to suit each athlete according to the body build and helping athlete to maintain proper body composition. A rare study on

anthropometry of south Indian sports family has heightened its importance for researcher to take above mentioned topic for the research.

Athletics and Judo games considered as the whole body exercise characterized as an individual and resistance activity where the athletes have to overcome the time and distance and Gravity in normal environment at a specific place. In same sense combative games, players have to overcome the resistance of opponent who is physically, mentally strong and active in normal environment at training and competition.. People involved in these activities develop various physical abilities. This was the basic motivational factor for the research scholar to take up a search topic on the analysis of the anthropometrical Measurements that are developed through athletics (track and field) and judo games and to enlighten the same in relation to other sports, and for the sound and healthy happy life.

PURPOSE OF THE STUDY:

The main purpose of the study was to analyze anthropometric variables Chest width, Knee width

(R+L) , Ankle diameter (R+L), of athletics and Judokas

METHODOLOGY:

To achieve the purpose of the study, data was collected from eighty players, forty players from each track and field event and game. Players have represented their respective state in athletics and judo game at national level. Subjects are randomly selected and anthropometric variables, Chest width, Knee width (R+L) , Ankle diameter (R+L), measured for the subjects those who were ranging from 20-25years.

STATISTICAL TECHNIQUE:

The collected data was analyzed by using 'T' statistical technique with the help of 19th version of SPSS.

RESULTS AND FINDINGS

TABLE-1

MEAN, STANDARD DEVIATION AND 'T' VALUE OF VARIABLES CHEST WIDTH TEST OF ATHLETICS AND JUDOKAS CHEST WIDTH

Particulars	N	Mean	Standard Deviation	T-score
Athletics	40	27.9	2.12	1.470
Judokas	40	28.73	2.90	

Significance at 0.05 level

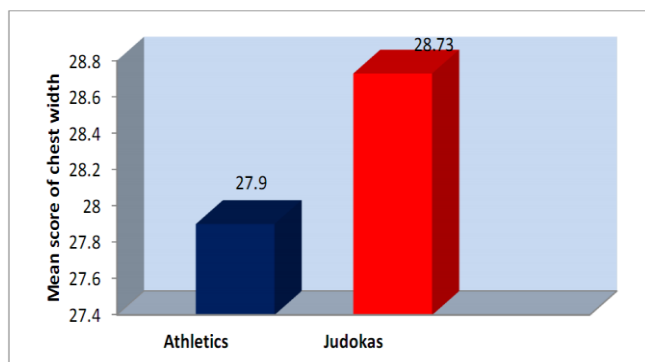


Fig. 1. Comparison of mean value of Variables chest width test among Athletics and Judokas

TABLE-2

MEAN, STANDARD DEVIATION AND 'T' VALUE OF VARIABLES KNEE WIDTH (R+L)TEST OF ATHLETICS AND JUDOKAS KNEE WIDTH (R+L)

Particulars	N	Mean	Standard Deviation	T-score
Athletics	40	19.40	1.56	0.97
Judokas	40	19.77	1.79	

Significance at 0.05 level

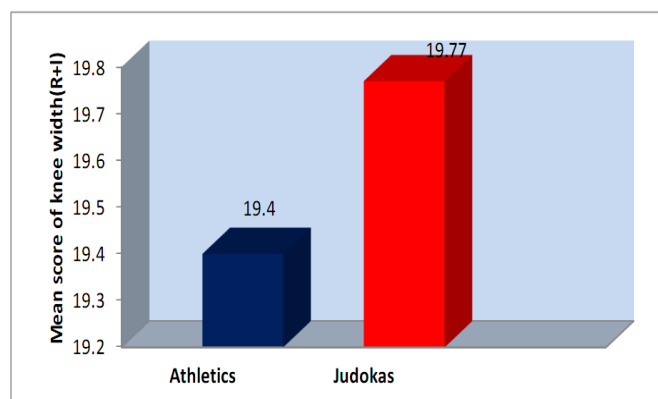


Fig. 2. Comparison of mean value of Variables knee width (R+L) test among Athletics and Judokas

TABLE-3

MEAN, STANDARD DEVIATION AND 'T' VALUE OF VARIABLES ANKLE DIAMETER (R+L)TEST OF ATHLETICS AND JUDOKAS ANKLE DIAMETER (R+L)

Particulars	N	Mean	Standard Deviation	T-score
Athletics	40	13.7	0.91	0.034
Judokas	40	13.69	1.03	

Significance at 0.05 level

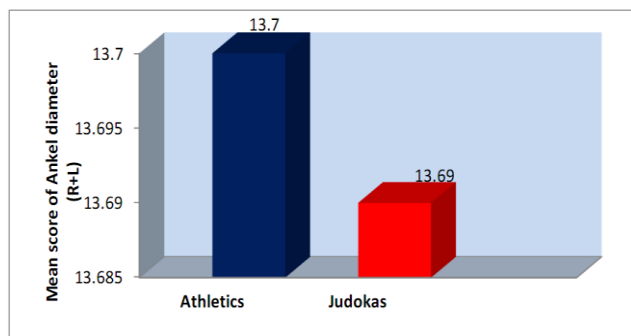


Fig. 3. Comparison of mean value of Variables Ankle diameter (R+L) test among Athletics and Judokas

When the scores of various Anthropometric variables in relation to athletics and judokas are compared there was difference in all the variables and significant difference was not found as per the 'T' test at 0.05 level for the variables Chest width, Knee width (R+L), Ankle diameter (R+L).

DISCUSSION ON FINDINGS

The result obtained in the present study after statistical analysis of the data shows that there is difference in the average scores of the selected Anthropometric variables Chest width, knee width (R+L), Ankle diameter (R+L). Hence the hypothesis that there exists difference among the parameters of Anthropometric measurements across the athletes and Judokas may be accepted.

CONCLUSIONS

1. As per the hypothesis collected data was analysed and concluded that there exist a difference in Anthropometric variables across the athletes and judokas at 0.05 level.
2. The study enables Physical Education Teachers to identify the structural characteristics of child and encourage him to specialize in disciplines, which demands these functions.
3. Study have revealed that the individuals who have excelled in different sports have specific body types.

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