ORIGINAL RESEARCH PAPER

INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

COMPARATIVE STUDY OF ANTHROPOMETRIC MEASUREMENT ANALYSIS ON HANDBALL AND FOOTBALL GUJARAT STATE PLAYERS

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ABSTRACT

For this study Handball, Football players was selected from state level tournament The age group was between 13-17 years. The further study was delimited to only girls For this study Handball players 48 and Football players 48 (Total - 96) was selected. In this study, the Anthropometric measurement, like Leg length, Palm length ,Biceps ,Arm span ,Calf . It will hypothesized that there will may be or may be not significant the Anthropometric, factors of Handball and Football state level players of Gujarat Keeping in view the basic limitations, of the research work, conclusion shows that Handball ball players and Football players in Anthropometric measurement leg length circumference was better of Football players. In Palm length, Biceps, arm span, Calf circumference handball players were better than Football player

KEYWORDS

Anthropometric

INTRODUCTION

Anthropometry (Greek anthropos - "man") and metron - "measure") therefore "measurement of man") refers to the measurement of the human individual. An early tool of physical anthropology, it has been used for identification, for the purposes of understanding human physical variation, in pale anthropology and in various attempts to correlate physical with racial and psychological traits.Today, anthropometry plays an important role in industrial design, clothing design, ergonomics and architecture where statistical data about the distribution of body dimensions in the population are used to optimize products. Changes in life styles, nutrition and ethnic composition of populations lead to changes in the distribution of body dimensions (e.g. the obesity epidemic), and require regular updating of anthropometric data collections. Anthropometry is the most common technique used to assess the presence and degree of protein-energy malnutrition. Anthropometry is the measurement of body parameters to indicate nutritional status Anthropometry can be used to measure an individual to determine if he or she needs nutrition intervention or it can be used to measure many individuals to determine if malnutrition is a problem in a population.

METHOD

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For this study Handball, Football players was selected from state level tournament .The age group was between 13-17 years. The further study was delimited to only girls. For this study Handball players 48 and Football players 48 (Total - 96) was selected. Anthropometric test taken by measure tape and score is count in inches

Result Analysis And Conclusion

To find out the comparison of Anthropometric measurement analysis on handball and football Gujarat state players "t" test was applied. Statistical analysis was done of the raw scores and Mean Difference and standard Deviation was found and was represented throw graph.

The level of significance chosen to study the significance of difference between means obtained by using mean difference method and analysis of variance was set at 0.05 level of confidence, and "t" ratio was considered adequate for the purpose of the study.

TABLE-1- The Difference of the Significance of the Mean of Hand ball and Football Players in the Performance of Leg Length

| Players | MEAN | DIFFERENCE | "t" RATIO |
|----------|-------|------------|-----------|
| Handball | 93.45 | 0.71 | 0.63 |
| Football | 94.16 | | |

significant level 0.05(96) is 1.95 From table 1 it is seen that Handball players mean is 93.45 and Football players mean is 94.16 Mean difference between this two groups is 0.71 and 't' ratio is 0.63 which is not significant at 0.05 level.. Graphically it is represented in Graph-1



GRAPH -1- The Difference of the Significance of the Mean of Handball and Foot ball Players in the Performance of Leg length

TABLE-2- The Difference of the Significance of the Mean of Hand ball and Football Players in the Performance of Palm length

| Players | MEAN | DIFFERENCE | "t" RATIO |
|----------|-------|------------|-----------|
| Handball | 16.85 | 0.28 | 1.32 |
| Football | 16.57 | | |

Significant level 0.05(96) is 1.95 From table 2 it is seen that Handball players mean is 16.85 and Football players mean is 16.57 Mean difference between this two groups is 0.28 and 't' ratio is 1.32 which is not significant at 0.05 level. Graphically it is represented in Graph -2



GRAPH -2- The Difference of the Significance of the Mean of Handball and Foot ball Players in the Performance of Palm length

TABLE-3- The Difference of the Significance of the Mean of Hand ball and Football Players in the Performance of Biceps

| Players | MEAN | DIFFERENCE | "t" RATIO |
|----------|-------|------------|-----------|
| Handball | 24.46 | 3.18 | 6.13 |
| Football | 21.28 | | |

Significant level 0.05(96) is 1.95 From table 3 it is seen that Handball players mean is 24.46 and Football players mean is 21.28 Mean difference between this two groups is 3.18 and 't' ratio is 6.13 which is significant at 0.05 level.. Graphically it is represented in Graph -3





TABLE-4- The Difference of the Significance of the Mean of Hand ball and Football Players in the Performance of Arm span

| Players | MEAN | DIFFERENCE | "t" RATIO |
|----------|--------|------------|-----------|
| Handball | 159.91 | 4.21 | 2.38 |
| Football | 155.70 | | |

Significant level 0.05(96) is 1.95 From table 4 it is seen that Handball players mean is 159.91 and Football players mean is 155.70 Mean difference between this two groups is 4.21 and 't' ratio is 2.38 which is significant at 0.05 level.. Graphically it is represented in Graph -4



GRAPH -4-The Difference of the Significance of the Mean of Handball and Foot ball Players in the Performance of Arm span

TABLE-5- The Difference of the Significance of the Mean of Hand ball and Football Players in the Performance of Calf

| Players | MEAN | DIFFERENCE | "t" RATIO |
|----------|-------|------------|-----------|
| Handball | 33.21 | 2.88 | 3.95 |
| Football | 30.33 | | |

Significant level 0.05(96) is 1.95 From table 5 it is seen that Handball players mean is 33.21 and Football players mean is 30.33 Mean difference between this two groups is 2.88 and 't' ratio is 3.95 which is significant at 0.05 level.. Graphically it is represented in Graph -5



GRAPH -5- The Difference of the Significance of the Mean of Handball and Foot ball Players in the Performance of calf

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