COMPARATIVE STUDY OF ANTHROPOMETRIC PROFILE OF MALE WRESTLERS AND JUDOKAS

Dr. Chetan Sharma
Parveen Malik

ABSTRACT

The aim of this study was to analyze the anthropometric profile of male wrestlers and judokas. For present study 40 male wrestlers (n=20) and judokas (n=20) were selected from Shiksha Bharti Vidya Niketan Kalayat and from Judo Center of Govt Senior Secondary School (GSSS) Songal, Haryana. The age group selected for this study was 17.64 ± 2.54 years. Data was collected by administrating selected anthropometric measurements which were standing height, sitting height, leg length, upper arm length and forearm length. The collected data were analyzed by using t-test at 0.05 level of significance. Results of this study revealed that there was a significant difference between Standing height (t=6.61), Sitting height (t=2.93) and Forearm length (t=3.23). As there was an insignificant difference between Leg length (t=1.99) and Upper arm length (t=1.97).

INTRODUCTION

As we realize that games like Judo, wrestling, Kabaddi, Kho-Kho, have been broadly acknowledged as an exceedingly aggressive games all through the world. These games managing in incredible request of explosive leg quality, arm, and shoulder. The Motor fitness components are qualities that competitors must create to physically gets ready for sports competition. Sports training programs are designed to build these components in the proper proportions the match the requirements of each sport. Fitness enhances general wellbeing and it is fundamental for full and lively living.

Many games performed on a court or on a field require rapid aggregate body developments. A considerable lot of these are in light of the movement of a ball, restriction players, or colleagues (Young, 2006).

METHODOLOGY

Selection of Sample:

For present study 40 male wrestlers (n=20) and judokas (n=20) were selected from Shiksha Bharti Vidya Niketan Kalayat and from Judo Center of Govt Senior Secondary School (GSSS) Songal, Haryana. The age group selected for this study was 17.64 ± 2.54 years.

Selection of Variables

Following anthropometric characteristics were selected as variables for this study

1. Standing height
2. Sitting height
3. Leg length
4. Upper arm length
5. Forearm length

Measurements of the body was done by anthropometric kit and recorded in centimeters.

Statistical technique

To find out the significance difference between selected anthropometric variables of male wrestlers and judokas, independent t-test was applied where level of significance was chosen as 0.05.

TABLE 1: SCORE OF ANTHROPOMETRIC VARIABLES OF MALE WRESTLERS AND JUDOKAS

<table>
<thead>
<tr>
<th>SR NO</th>
<th>VARIABLES</th>
<th>MEAN (WRESTLERS)</th>
<th>SD (WRESTLERS)</th>
<th>SE (WRESTLERS)</th>
<th>MEAN (JUDOKAS)</th>
<th>SD (JUDOKAS)</th>
<th>SE (JUDOKAS)</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Standing height</td>
<td>173.45</td>
<td>3.845</td>
<td>0.882</td>
<td>182.75</td>
<td>4.982</td>
<td>1.143</td>
<td>6.61</td>
</tr>
<tr>
<td>2</td>
<td>Sitting height</td>
<td>86.625</td>
<td>2.869</td>
<td>0.658</td>
<td>89.425</td>
<td>3.125</td>
<td>0.717</td>
<td>2.93</td>
</tr>
<tr>
<td>3</td>
<td>Leg length</td>
<td>89.25</td>
<td>4.629</td>
<td>1.062</td>
<td>92.525</td>
<td>5.734</td>
<td>1.315</td>
<td>1.99</td>
</tr>
<tr>
<td>4</td>
<td>Upper arm length</td>
<td>35.975</td>
<td>0.455</td>
<td>0.045</td>
<td>35.975</td>
<td>0.455</td>
<td>0.045</td>
<td>1.97</td>
</tr>
<tr>
<td>5</td>
<td>Forearm length</td>
<td>46.35</td>
<td>1.994</td>
<td>0.457</td>
<td>47.95</td>
<td>0.958</td>
<td>0.219</td>
<td>3.23</td>
</tr>
</tbody>
</table>

T value = 2.01(*) Significant results
Table 1: Clearly Indicates the Significant Difference between Standing Height, Sitting Height and Forearm Length of male wrestlers and judokas

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Wrestlers</th>
<th>Judokas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standing height</td>
<td>180</td>
<td>200</td>
</tr>
<tr>
<td>Sitting height</td>
<td>170</td>
<td>190</td>
</tr>
<tr>
<td>Leg length</td>
<td>120</td>
<td>140</td>
</tr>
<tr>
<td>Upper arm length</td>
<td>110</td>
<td>130</td>
</tr>
<tr>
<td>Forearm length</td>
<td>80</td>
<td>90</td>
</tr>
</tbody>
</table>

RESULT

The data was treated statistically and tabulated by working out their arithmetic mean, standard deviation, standard error mean and t-values. The data collected was analysed but taking significance value of (t- 0.05). The analyses shows that there was no significance difference between two groups on the basis of Leg length (t=1.99) and Upper arm length (t=1.97) but there was a significant difference between two groups on the basis of Standing height (t=6.61), Sitting height (t=2.93) and Forearm length (t=3.23).

CONCLUSIONS

In the present study it was concluded that the Judokas are taller than the wrestlers. Their sitting height is also more as well as they have more forearm length. On the other hand there was an insignificant difference between the leg length and upper arm length.

PRACTICAL APPLICATIONS

Similar studies can be conducted among females players. Further this study can be conducted in different sports and games to find the importance of these parameters in the performance of an athlete. As well as this study could also be applicable in other track and field events.

REFERENCES