Comparative study of strength and agility between wrestlers and judokas

Chetan Sharma

Abstract
The purpose of the present study was to compare the strength and agility of male wrestlers and judokas. For accomplishing the purpose of the study, data was gathered on total 40 (Wrestlers – 20 and Judokas – 20) junior state and junior national level male players from Shiksha Bharti Vidya Niketan Kalayat and from Judo Center of Govt Senior Secondary School (GSSS) Songal, Haryana. To check strength and agility of selected subjects, Medicine ball put and Illinois Agility test was utilized. To compare strength and agility level of wrestlers and judokas mean, standard deviation and unpaired t-test were utilized with the help of statistical package of SPSS. To test the hypothesis the significance level was set at 0.05 percent. The outcome reveals that there was significant difference in strength and agility variables of wrestling and judo male players.

Keywords: Comparative study, agility, wrestlers, judokas

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. (Kumar and Chaudhary, 2014) [4].

Physical wellness of a player relies upon the idea of his amusement and furthermore outer conditions. There are various wellness components that should be produced. For example, speed, perseverance, deftness and quality to right and Main tenure of body weight. Badminton and yard tennis both are practically comparable recreations. A total badminton player ought to have that spryness of an aerialist, the energy of a race horse, the executioner impulse of a puma and like a garden tennis player. A portion of the benchmarks the fit player accomplish meet the requests of the diversions are quality, control, speed and so forth wellness segments. Court and field amusements like Badminton, garden tennis, Table-Tennis, Kabaddi Squash, Football, Volleyball help in creating quality and speed of the players while different recreations like boxing, gymnastic, wrestling and so on creating deftness and energy of its players better (Meenu and Parul, 2014) [6].

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). Engine wellness is one of the real segments of physical wellness and incorporates such components as strong quality, speed, deftness, adjust and co-appointment. These qualities are not as specifically indispensable as cardio-respiratory wellness for general wellbeing yet play a few essential immediate and backhanded parts both in practical wellbeing and execution limit. "Wellness is an expansive term signifying dynamic qualities that enable you to fulfill your requirements in regards to mental and passionate dependability, social awareness and versatility profound and moral fiber natural wellbeing steady with your heredity. Motor capacity tests measures the quick limit of a man to take part in an assortment of games (Mathews, 1978) [5].
Procedure and Methodology
The present research was entitled as “Comparative Study of Strength and Agility Between Wrestlers and Judokas”. To accomplishing the purpose of the study, data was gathered on total 40 (Wrestlers – 20 and Judokas – 20) junior state and national level male Wrestlers and Judokas from Shiksha Bharti Vidya Niketan Kalayat, Haryana. To check strength and agility of selected subjects, Medicine ball put and Illinois Agility test was utilized. To compare strength and agility level of wrestlers and judokas mean, standard deviation and unpaired t-test were utilized with the help of statistical package of SPSS. To test the hypothesis the significance level was set at 0.05 percent.

Result and Finding

Table 1: Comparison of mean and standard deviation of strength variable between wrestlers and judokas

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Standard Error of mean</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Judokas</td>
<td>20</td>
<td>5.97</td>
<td>0.89</td>
<td>0.19</td>
<td>2.39*</td>
</tr>
<tr>
<td>Wrestlers</td>
<td>20</td>
<td>6.67</td>
<td>0.96</td>
<td>0.21</td>
<td></td>
</tr>
</tbody>
</table>

Table & Figure 1 statistically represent that the Mean and Standard Deviation with regard to wrestlers was 5.97 and 0.89 whereas in case of Judokas it was 6.67 and 0.96 respectively. The calculated t-value (2.39) which is greater than the tabulated t-value (2.021) at 0.05 levels. So, it indicates that there is significant difference of strength variable between Wrestling and Judo Players.

Table 2: Comparison of mean and standard deviation of agility variable between wrestlers and judokas

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard Error of mean</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wrestlers</td>
<td>20</td>
<td>10.84</td>
<td>1.20</td>
<td>0.21</td>
<td>2.61</td>
</tr>
<tr>
<td>Judokas</td>
<td>20</td>
<td>11.74</td>
<td>1.42</td>
<td>0.26</td>
<td></td>
</tr>
</tbody>
</table>

Table & Figure 2 statistically represent that the mean and standard deviation with regard to wrestlers is 10.84 and 1.20 whereas in case of Judokas it is 11.74 and 1.42 respectively. The calculated t-value (2.61) which is greater than the tabulated t-value (2.021). So, it indicates that there is significant difference of agility variable between Wrestling and Judo Players.
Discussion
The result of the study reveals that there was significant difference of strength and agility variables between junior state and national level male Wrestlers and Judokas. The main root cause behind this significant difference can be training schedule and specific competitive demands of both games. Studies of Gaurav et al. (2011) \cite{1} and Meswaniya (2012) \cite{7} in line with the findings of the present study.

Conclusion
1. The results substantiate that, significant difference was observed between junior state and national level male Wrestlers and Judokas for their strength.
2. The results prove that, significant difference was found between agility variable of junior state and national level male Wrestlers and Judokas.

Reference