Cardiovascular endurance - A comparative study among Boxing and Judo players

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Abstract
For the purpose of the investigation, the sample for the study were 40 male players in the age group of 18-25 years, from Boxing (N=20) and Judo (N=20). The subjects were undergraduate students of M.D. University, Rohtak. To test the cardiovascular endurance of the subjects, they were divided into two groups i.e. boxing and judo players to perform according to AAHPER Youth Fitness Test to increase their physical fitness variables. The pretest and post test data had been collected, cardiovascular endurance was measured of every individual with the help of AAHPER Youth Fitness Test i.e. 12 MIN RUN/WALK. To examine the hypothesis of the study that will be no significant difference in the cardiovascular endurance of Boxing and judo male players, descriptive statistics and t-test analysis was employed for the present data.

Keywords: Cardiovascular Endurance, Boxing, Judo Players, Youth Fitness.

Introduction
Throughout the history of mankind physical fitness an essential element of everyday life. It is also considered as the degree of cardiovascular endurance to execute a physical task under various ambient conditions. Physical fitness means that the organic system of the body is healthy and function efficiently vigorous tasks and leisure activities beyond 5 Organic development, muscular strength and stamina. Physical fitness impels efficient performance in exercise (Bucher and Prentice, 1985).

Cardiovascular Fitness is the ability to exercise your body for an extended period of time. It requires a strong heart, healthy lungs and clear blood vessels to supply the body with oxygen. It is the ability of the heart, lungs, and blood vessels to deliver an adequate supply of oxygen to exercising muscles. Cardiovascular exercise utilizes the heart, lungs, and large muscle groups, such as running or walking.

Stein (1964) conducted a study to ascertain the reliability of individual test items of Youth fitness test. Tenth and Eleventh grade students of Wake Field High School were selected as subject. The AAHPER Youth Fitness test was administered and the reliability co-efficient for all the items (Pull-ups, Broad Jump, Sit-ups, 50 Yard dash/45.72M and Soft Ball throw) have shown reliability co-efficient ranging between 0.74 and 0.83. All the reliability co-efficients were significant beyond 0.01 level. The Boxer showed a better capability in cardiovascular endurance, the purpose of the present study was to compare the cardiovascular endurance among Boxing and Judo players.

Method and Procedure
For the purpose of the investigation, the sample for the study were 40 male players in the age group of 18-25 years, from Boxing (N=20) and Judo (N=20). The subjects were undergraduate students of M.D. University, Rohtak. To test the cardiovascular endurance of the subjects, they were divided into two groups i.e. Boxing and Judo players to perform according to AAHPER Youth Fitness Test to increase their physical fitness variables. The pretest and post test data had been collected, cardiovascular endurance was measured of every individual with the help of AAHPER Youth Fitness Test i.e. 12 MIN RUN/WALK. To examine the hypothesis of the study that will be no significant difference in the cardiovascular endurance of
Boxing and Judo male players, descriptive statistics and t-test analysis was employed for the present data.

Result and Discussion
For the present study, the mean value, standard deviations and T-test was applied to analyze the data. This data is processed by the applicants of a relevant statistical tool called Mean, S.D., S.E.D. and T-test.

Table 1: Shows the t-ratio of the mean scores on the shuttle run.

<table>
<thead>
<tr>
<th>Players</th>
<th>No.</th>
<th>Mean (M)</th>
<th>S.D.</th>
<th>SED</th>
<th>T-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boxing</td>
<td>20</td>
<td>1.62</td>
<td>156.93</td>
<td>15.56</td>
<td>1.30</td>
</tr>
<tr>
<td>Judo</td>
<td>20</td>
<td>1.60</td>
<td>109.94</td>
<td>15.56</td>
<td>1.30</td>
</tr>
</tbody>
</table>

Significant at 0.01 level of the confidence.

The significant difference of mean, S.D, S.E.D and T ratio of 12 min run/walk exercise of boxing male players and judo male players.

Table 1 illustrates the ‘t’ ratio of mean scores on 12 min run/walk test. It is implied that there is a significant difference between the mean score is 1.62, S.D. is 156.93 for boxing male players and mean score is 1.60 and S.D. is 109.94 for judo male players. And the SED is 15.56. The ‘t’ ratio 1.30 was no significant at any level. The mean score of boxing male players is higher than the judo male players. It is further implied that the boxing male players is higher cardiovascular endurance as compared to the judo male players.

Fig 1: Showing Mean scores of the Judo & Boxing Players on the 12 Min Run/Walk.

Conclusion
IN the present study it was concluded that Boxing male players were more cardiovascular endurance as compared to the Judo male players.

References
5. Physical Fitness Differences between Freestyle and Prem Kumar effect of abdominal strength training on strength endurance and explosive power of women players.