Experimental

Comparative study of Health Related physical fitness components of Male Football players of Bankura and Howrah District of West Bengal

Kalicharan Ghosh, Dr. Najmuddin Khan

Research Scholar, Department of Physical Education, Mandsaur University, Mandsaur
Assistant Professor, Department of Physical Education, Mandsaur University, Mandsaur

ARTICLE INFO

Article history:
Submission: 17-02-2024
Review: 20 to 30-03-2024
Accepted: 01-04-2024
Available Online: 21-07-2024

Keywords: Comparative Study, Health related fitness

ABSTRACT

The purpose of this study was to compare the health Related physical fitness Components of Male Football players of Bankura and Howrah District of West Bengal. To achieve the purpose of the study, selected 15 Football players from Bankura and 15 Football players from Howrah District, West Bengal. The subjects were aged between 20 and 25. For the study, the physical fitness components selected modified sit-ups test in one-minute for strength/muscular endurance and 12 minute run/walk test for cardio-respiratory endurance. To find out whether there was any significant difference between Bankura District Football and Howrah District players means and standard deviations were computed. The result of the study showed that the there was a significant difference in strength/muscular and cardio-respiratory endurance between Bankura District Football and Howrah District players.

DOI: https://doi.org/10.58914/ijyesspe.2024-9.Spl.11

Email: kalicharanghosh99@gmail.com

V ol : 9, Special Issue, 2024, ISSN: 0975-265X
Health-related physical fitness was assessed through the modified sit-ups test in one-minute for strength/muscular endurance and 12 minute run/walk test for cardio-respiratory endurance.

To analyze the Health-related physical fitness parameters of male football players, means, standard deviations, were computed. For the computation of collected data, SPSS software 16.0 was used. The level of significance was set at 0.05.

Table 1

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>S D</th>
<th>Obtained ‘t’ ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bankura</td>
<td>15</td>
<td>2.66</td>
<td>3.14</td>
<td></td>
</tr>
<tr>
<td>Howrah</td>
<td>15</td>
<td>2.76</td>
<td>3.31</td>
<td>0.944</td>
</tr>
</tbody>
</table>

Not Significance at 0.05 level

Table 1 revealed that the mean cardio-respiratory endurance of male football players of Bankura and Howrah were 2.66 and 2.76 respectively. The standard deviation of two groups in strength/muscular endurance were 3.14 and 3.31. The mean difference in strength/muscular endurance of two groups was 2.71. The standard error of mean difference in strength/muscular endurance of two groups were 0.13. The obtained ‘t’ ratio in strength/muscular endurance was 0.944. Table 1 reveals that the obtained ‘t’ value 0.944 is less than the required value of 2.05 at 0.05 level of confidence with 28 degree of freedom. So it is found to be no statistically significant and concluded that there is no significant mean difference between Bankura and Howrah District male football players strength/muscular endurance.

The mean values of cardio-respiratory endurance of male football players of Bankura and Howrah District have been graphically represented in Figure 1.
Table 2:
Computation ‘t’ ratio of strength/muscular endurance for Male football players of Bankura and Howrah District

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Mean</th>
<th>S D</th>
<th>Obtained ‘t’ ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bankura</td>
<td>15</td>
<td>30.00</td>
<td>3.84</td>
<td></td>
</tr>
<tr>
<td>Howrah</td>
<td>15</td>
<td>28.17</td>
<td>3.61</td>
<td>5.20*</td>
</tr>
</tbody>
</table>

*Significance at 0.05 level, t (0.5) 19 = 2.05*

Table 2 revealed that the mean strength/muscular endurance of Male football players of Bankura and Howrah District were 30.00 and 28.17 respectively. The standard deviation of Male football players of Bankura and Howrah District in speed were 3.84 and 3.61 respectively. The mean difference in strength of two groups was 0.7. The standard error of mean difference is strength of two groups were 0.22. The obtained ‘t’ ratio in speed was 5.20. Since the obtained ‘t’ ratio value of 5.20 was greater than the required table value of 2.05 at 0.05 level of confidence with 28 degree of freedom. It was found to be statistically significant.
Conclusion

The result of the study showed that there was a significant difference in strength/muscular endurance and there is no significant in cardio respiratory endurance between Male football players of Bankura and Howrah District

References

2. Barrow, Mcgee. Defined strength/muscular endurance as the ability of the body or parts of the body to change direction rapidly and accurately. OP. Cit, 113.
5. Davis in kinesiological review, AAHPER, 1968, 49.