A comparative study of physical fitness components between cricket and softball players

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Abstract
It is a comparative study of selected physical fitness components of college going Cricket and softball players from Dr B R Ambedkar Degree and PG College, Baghlingampally whose age is between 18-24 years. Physical fitness variables for comparative study are Agility, Strength, Speed, Flexibility and Endurance. In this study the data was collected to use the various test items which taken from different physical fitness batteries. Total sample of 120 college students was framed the basis for conducting the present study. The data was collected by use of measurement of agility, strength speed, flexibility and endurance as well as application of standing broad jump, 6Lbs medicine ball put test, 50 yard dash test, Kraus-Weber floor touch test and 12 min run and walk test. The data was analyzed and compared with the help of statically procedure n which Mean, Standard deviation and Z Ratio were employed

Keywords: Comparative study, physical fitness components, cricket and softball players

Introduction
Physical fitness is a state of health and wellbeing and, more specifically, the ability to perform aspects of sports, occupations and daily activities. Physical fitness is generally achieved through proper nutrition, moderate-vigorous physical exercise and sufficient rest. Before the industrial, revolution, fitness was defined as the capacity to carry out the day’s activities without undue fatigue. However, with automation and changes in lifestyles physical fitness is now considered a measure of the body’s ability to function efficiently and effectively in work and leisure activities, to be healthy, to resist hypo kinetic diseases, and to meet emergency situations. Health related components of physical fitness include body composition, cardiovascular fitness, flexibility, muscular endurance and strength. Skill related components include agility, balance, coordination, power, reaction time and speed.

Methodology
Selection of subject in the present study survey method has been used by the Investigator. The study was conducted on sample of Cricket and Softball male players. All the selected players was attended the coaching camp of their college team and participated in inter collegiate tournament of Cricket and Softball.

Selection of variables
The physical fitness variables for the present investigation are power, strength, endurance, flexibility and cardio-vascular endurance

Administration of test
For measure the physical fitness variables different test items employed like standing broad jump for leg strength, 6Lbs Medicine ball put for arm strength, 50 yard dash for speed, krausweber floor touch test for flexibility and 12 min Run/walk test for cardio-vascular endurance.

Collection of Data
The data was collected by survey method from randomly chosen students of various
participating colleges. 60 players of Cricket and 60 players of Softball were participated in this study.

**Analysis of Data**
The data was analyzed through Mean, S.D, and Z-ratio by applying independent means test of the significance of mean differences.

**Result**
Descriptive statistics and Z-ratio results of Cricket and Softball players.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Variables</th>
<th>Cricket Mean</th>
<th>Cricket SD</th>
<th>Softball Mean</th>
<th>Softball SD</th>
<th>Z-ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SJB</td>
<td>2.30</td>
<td>0.16</td>
<td>2.17</td>
<td>0.16</td>
<td>3.304</td>
</tr>
<tr>
<td>2</td>
<td>6Lbs</td>
<td>12.14</td>
<td>1.11</td>
<td>11.12</td>
<td>1.41</td>
<td>4.152</td>
</tr>
<tr>
<td>3</td>
<td>50 yard dash</td>
<td>6.34</td>
<td>0.45</td>
<td>6.76</td>
<td>0.47</td>
<td>4.136</td>
</tr>
<tr>
<td>4</td>
<td>KWFT</td>
<td>9.89</td>
<td>0.20</td>
<td>9.92</td>
<td>0.29</td>
<td>459</td>
</tr>
<tr>
<td>5</td>
<td>12 min run./walk</td>
<td>2.39</td>
<td>0.23</td>
<td>2.43</td>
<td>0.29</td>
<td>1.621</td>
</tr>
</tbody>
</table>

The result of descriptive statistics and Z-ratio are presented in table no. 01. It may be noted that the number of subject being 60 from Cricket and 60 from Softball, the degree of freedom is equal to 102. Therefore, Z-ratio equal to 1.96 and 2.58 is significant at 0.5 levels respectively.

**Conclusions**
The conclusion could be drawn from the main of the study that the Cricket players were found to be better than the softball players on three components of physical fitness such as Leg power, Arm strength and speed where as these groups of players had similar trunk flexibility and endurance.

**References**
2. Pel G. Comparison of physical, fitness over a four year period at the University of Dakota. The research quartly. 1968; 10:90