Comparative study of cardiovascular fitness between Rural & Urban College boys of physical education classes

Baljinder Singh

Abstract
The purpose of this study was to compare cardiovascular fitness level of college boys in physical education classes from rural and urban colleges. Cardiovascular fitness is defined as the ability to perform large muscle or vital body activities continuously for a sustained period. A number of factors contribute to efficient cardiovascular functioning including the ability of the heart to pump blood, the ability of the veins & arteries to carry blood, the ability of the muscles to utilize the oxygen delivered by the blood. The study concerned with Cooper’s 12 minute run & walk test to measure cardiovascular fitness level of Rural & Urban college boys of Physical education classes. Study was delimited on College boys of B.A Classes come under all the affiliated college of Panjab university Chandigarh. This investigation was done to raise the standard of performance to conceivable international standard we must emphasis scientific basis of physical education and sports at college level. The results of this investigation prove that conditioning programme do increase the cardiovascular fitness of the physical education classes. Study was conducted on two hundred college boys who had took physical education as an elective subject Bachelor of Arts Classes. The data was analyzed by applying t-test. Researcher hypothesized as social belief that rural boys are more efficient comparative to the urban boys & that hypothesis has been accepted. End of the day researcher found that there are several factors which affecting the cardiovascular fitness in both rural & urban college boys of Physical education classes.

Keywords: Comparative, cardiovascular fitness, physical education

1. Introduction
Physical fitness is an active state that enables a person to do everyday activities without being easily tired, participate in leisure activities enthusiastically and overcome difficult situations. According to cardiologists and sports science experts, physical activity can increase cardiovascular efficiency through increasing the working potential of lungs and heart that leads to the reduction of blood pressure and harmful fast in the blood. Nowadays public exercise, especially morning exercise, walking, jogging, cycling, running and working out, is popular among different groups of people due to its ease and convenience.

Fitness is defined as the ability to perform large muscle or vital body activities continuously for a sustained period. A number of factors contribute to efficient cardiovascular functioning including the ability of the heart to pump blood, the ability of the veins & arteries to carry blood, the ability of the muscles to utilize the oxygen delivered by the blood. The study concerned with Cooper’s 12 minute run & walk test to measure cardiovascular fitness level of Rural & Urban college boys of Physical education classes

Material & Methods
For the purpose of the study 200 college level boys who opted Physical Education as an elective subject were selected from four different colleges of Panjab University Chandigarh. In which 50 students were selected from G.H.G Khalsa College Gurusar Sadhar and 50 were selected from G.N College Narangwal both colleges comes under rural area, like that 50 students were selected from K.L.S.D College Ludhiana & last 50 students has been selected from Arya College Ludhiana as subjects from urban area.

Selection of Variable: Cardiovascular fitness has been selected as the variable
Criterion Measures: Cardiovascular fitness was measure with the help of cooper’s 12 minute run and walk test constructed by cooper in 1960.
**Procedure and Administration:** The 400 meter track was marked into eight division of 50 meter by flag post and the subjects were asked to run for 12 minute continuously. If subjects cannot continue running then they were permitted to walk. Subjects were instructed not to take rest. Ten subjects were assigned to each spotter who recorded the laps completed. When subjects completed 12 minute whistle was blown and subjects stood where they has been running. The distance covered was recorded nearest to 50 meter.

**Statistical Technique Employed:** To determine the significance of the differences between the means of rural and urban college boy’s students of physical education classes on cardiovascular fitness t-test was employed and the level of significance was set at .05 level.

**Results**
Findings pertaining to cardiovascular fitness of rural and urban college boys which were subjected to ‘t’ test have been presented in the following table:

<table>
<thead>
<tr>
<th>Groups</th>
<th>N</th>
<th>MEAN</th>
<th>S.D.</th>
<th>‘t’ test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural</td>
<td>100</td>
<td>2236.6</td>
<td>173.64</td>
<td>2.5869*</td>
</tr>
<tr>
<td>Urban</td>
<td>100</td>
<td>2064.95</td>
<td>256.6</td>
<td></td>
</tr>
</tbody>
</table>

$t_{0.05}(198) = 1.98$

**Figure**
Comparison of mean of cardiovascular fitness between Rural & Urban boys of Physical Education classes

**Conclusion**
The study conducted on the cardiovascular fitness of rural and urban college boys provided valuable information about the relative health of rural and urban boys as it proved that rural boys are generally fit than their urban counterparts. The study showed that rural boys have on average higher endurance level than urban boys the difference between the figures for urban and rural subjects were deemed to be significant on the basis of t-test.

**References**