A critical study of physical Fitness and Scholastic standard of Tribal and Non-Tribal School Children

AJAY KUMAR MANDAL  
Dept. of Physical Education  
S.R.Fatepuria College  
Beldanga, Murshidabad, W.B.

ARNAB RAY  
Research Scholar  
Dept. of Physical Education  
Vishwabharati, W.B.

ABSTRACT

The main purpose of the study was to find out the physical fitness of Tribal and Non Tribal students of R.K.A.S and R.K.S.S student of Hanuman Vyayam Prasarak Mandal, Amravati (MS). Another purpose of the study to find out the difference in physical fitness and scholastic standard in between Tribal and Non Tribal students as well as to determine the relationship between physical fitness and scholastic standard of the selected group. To achieve the purpose of the study the researchers had selected 30 male subjects from Tribal and Non Tribal students of H.V.P.M in Amravati District. The age group range was between 11-13 years. The criterion measures chosen for testing the hypothesis in this study were numerical scores obtained from the strength, endurance, speed, agility, balance, flexibility test and scholastic standard. The necessary data were collected by administering AAHPHER youth physical fitness test items for collecting the data for physical fitness components. For comparing physical fitness of Tribal and Non Tribal students the researcher selected the following test items :- Pull-up, Sit-up, Shuttle Run, Standing Broad Jump, 50 yard dash, 600 yard run and walk test.

The statistical analysis of the collected data from the subjects consisting of raw scores was converted in standard scores. The two groups Tribal and Non Tribal students were tested and raw score were compiled and tabulated accordingly. The mean and standard deviation of both the group for the above mentioned items were calculated. The items were converted into composite score. The researcher again calculated the mean and standard deviation of the composite scores of the groups. Thus, the researcher found the mean differences of Tribal students and Non Tribal students.

The findings of the study showed that there would be a significance difference in the physical fitness and scholastic standard students of Tribal and Non Tribal Students because our null hypothesis is rejected and research hypothesis is accepted when the tabulated value of ‘T’ (2.00) is less than calculated value of ‘t’ (9.67) at 0.05 level of confidence. So, there is significance difference between the means of two groups.

KEY WORDS

Physical Fitness, Scholastic Standard, Tribal and Non Tribal Students.
INTRODUCTION

To have a fit nation means healthy and productive citizens. So the most important problem is to find ways and means to help people understand and appreciate the values of fitness and develop self guidance attitude toward the attainment of physical fitness.

Fitness is a product of exercise and exercise or training has been shown through research to possess important implications in the general health of people. However, fitness is more than a product of exercise while exercise is necessary to obtain and maintain fitness, there is more involved than mere physical activity. It is a part of education but it is also a part of life.

STATEMENT OF THE PROBLEM

The present study was stated a critical study of physical fitness and scholastic standard of Tribal and Non Tribal school children.

PURPOSE OF THE STUDY

The main purpose of the study was to test the physical fitness of Tribal and Non-Tribal students of R.K.A.S. and R.K.S.S. student of Hanuman Vyayam Prasarak Mandal, Amravati (Maharashtra). Another purpose of the study to find out the difference in physical fitness and scholastic standard in between Tribal and Non-Tribal students as well as to determine the relationship between physical fitness and scholastic standard of the selected group.

SIGNIFICANCE OF THE STUDY

1) This study would help to know the physical fitness and scholastic standard of Tribal and Non Tribal students.
2) This study would show the level of superiority in physical fitness of Tribal student over the Non Tribal students.
3) This study would also show the level of superiority in scholastic standard of non tribal of students over the tribal student.
4) The status of physical fitness and scholastic standard of the students would identify by the present study.

HYPOTHESIS

It was hypothesized that there would be significant difference in the physical fitness and scholastic standard Tribal and Non-Tribal Students.

Further it was hypothesized that the Tribal students would be better than Non-Tribal students in physical fitness and another side Non-Tribal student would be better than Tribal student in scholastic.

At last it was hypothesized that there is no significant relationship between physical fitness and scholastic standard in among Tribal and Non-Tribal students.
DELIMITATION

1) The study was delimited to male students only.
2) 30 (Thirty) students were selected from each group of Tribal and Non-Tribal students.
3) The age of the subjects was ranging 11-13 years.
4) Time of conducting the test was same.
5) The test was conducted in Degree College of physical education, Amravati (MS).

LIMITATIONS

1) Interest, diet and socio-economic status were not known.
2) Subjects belonged to different status, culture and climate.
3) Sports achievement of subjects was not considered.
4) The individual practice and daily exercise programme of the students were not known.
5) Inherent Potentialities of the students were not considered.
6) Facilities of physical education in both schools were different to some extent.
7) Interest of the subjects towards the test was not known.

STATISTICAL ANALYSIS

The raw scores of the AAHPER Youth physical fitness test obtained on the subjects were converted into standard scores for all the 6 items and further added to get composite score in physical fitness for each subject.

Whether the Tribal and Non-Tribal student were distinguished by different degree of physical fitness and scholastic standard was determined by the test of significance of means differences if physical fitness and scholastic scores of the Tribal and Non-Tribal subjects by applying ‘t’ test. The Level of significance was chosen at 0.05 Level.

ANALYSIS AND INTERPRETATION OF DATA

The mean and standard deviation of both the groups were calculated. The items were converted into composite scores.

The researcher again calculated the mean and standard deviation of the composite scores of the groups. Thus, the researchers found the mean differences of Tribal students and Non-Tribal students.

Table – 1

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>M.D.</th>
<th>Degree of Freedom</th>
<th>S.E.</th>
<th>t - ratio</th>
<th>Tabt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribal Student</td>
<td>328.04</td>
<td>20.22</td>
<td>56.18</td>
<td>58</td>
<td>5.81</td>
<td>9.67*</td>
<td>2.00</td>
</tr>
<tr>
<td>Non-Tribal Student</td>
<td>211.86</td>
<td>24.61</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Significant at 0.05 level of confidence.
Tabulated $t_{0.05}$ (58) of freedom was = 2.00

Table – 1 indicates that there are significant difference in between Tribal and Non-Tribal in physical fitness standard as the obtained t-ratio value of 9.67* is greater the tabulated t-value of 2.00. The difference of mean has been depicted on Graph-1.

Graph – 1

Comparison of Means of Physical Fitness scores Between the Tribal and Non Tribal Students

![Graph showing comparison of means](image)

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
<th>M.D.</th>
<th>S.E.</th>
<th>t - ratio</th>
<th>Tab t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tribal Student</td>
<td>42.14</td>
<td>6.20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-Tribal Student</td>
<td>57.86</td>
<td>5.87</td>
<td>15.72</td>
<td>1.56</td>
<td>10.08*</td>
<td>2.00</td>
</tr>
</tbody>
</table>

* Significant at 0.05 level of confidence.

Tabulated $t_{0.05}$ (58) of freedom was = 2.00
Table – 2 indicates that there are significant difference in between Tribal and Non-Tribal in Scholastic standard as the obtained t-ration value of 10.08* is greater the tabulated t-value of 2.00. The difference of mean has been depicted on Graph-2.

Graph – 2

Comparison of Means of Scholastic scores Between

Tribal and Non Tribal students

![Graph showing comparison of means between Tribal and Non-Tribal students.]

Table – 3

<table>
<thead>
<tr>
<th>Variables Correlated</th>
<th>Coefficient of correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical fitness and scholastic standard of Tribal student</td>
<td>0.21@</td>
</tr>
<tr>
<td>Physical fitness and scholastic standard of Non-Tribal student</td>
<td>0.02@</td>
</tr>
</tbody>
</table>

@ Not significant at 0.05 level of confidence.

Tabulated $r_{0.05}$ (28) of freedom was = 0.361
It is learnt from the table – 3 that there is no significant relationship in between physical fitness and scholastic standard in among Tribal and Non-Tribal students, as obtained, r – value of 0.21 and of are lesser the tabulated r – value of 0.361. Hence there is no significant relationship in between physical fitness and scholastic standard.

CONCLUSION

From the statistical analysis, the following conclusion has been drawn:-

1. There was significant difference compositely in physical fitness and scholastic standard of Tribal and Non- Tribal Students.
2. It was hypothesized that there would be same difference as in physical fitness and scholastic standard of Tribal and Non-Tribal students. The findings of the study revealed that there was significant difference in physical fitness and scholastic standard but there in no significant relationship between physical fitness and scholastic standard in among Tribal and Non-Tribal students. Thus the Hypothesis has been accepted.

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