CHAPTER-IV

ANALYSIS OF DATA, RESULTS AND DISCUSSION OF THE FINDINGS

4.1 ANALYSIS OF DATA AND RESULTS OF THE STUDY

4.2 DISCUSSION AND FINDINGS
CHAPTER-IV
ANALYSIS, OF DATA, RESULTS OF THE STUDY
AND DISCUSSION ON THE FINDINGS

4.1 ANALYSIS OF DATA AND RESULTS OF THE STUDY:
This Chapter deals with the mode of analysis of data regarding A.A.H.P.E.R youth fitness test, scores of the psychological parameter and socio-economic status of the sample.

The study consists of three categorical variables namely the schools, gender and fitness. The first of the three relates to three different types of school categorized on the basis of expenditure involved in providing education in the same academically. The second category relates to the gender, that is boys and girls. The last variable relates to high and low fitness of subjects.

The data collected on physical fitness and psychological parameters was subjected to the following statistical analysis.
1. Mean and Standard deviation of all the physical fitness variables separately is found out for all the three schools and boys and girls separately.
2. Mean and Standard Deviation of all total physical fitness variables together is found out for all the three schools and boys and girls separately.
3. Mean and Standard deviation of total physical fitness variables together irrespective of different schools but separately for boys and girls is found out.
4. Mean and Standard deviation of subjects after classifying into different age groups is done for different types of school individually among physical fitness variables and psychological parameters.

5. Subjects were classified into high and low physical fitness groups taking the mean and SD as the criterion.

6. The differences between High and Low physical fitness on psychological parameters were further tested by using 't' test.
Table No.4.1

The table showing average scores among three schools across physical fitness variables

1a) Pull-ups (Boys) and 1b) Flexed arm Hang (Girls)

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
<td>50</td>
<td>3.92</td>
<td>2.84</td>
</tr>
<tr>
<td>Corporation School</td>
<td>50</td>
<td>3.44</td>
<td>2.52</td>
</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>2.48</td>
<td>1.16</td>
</tr>
</tbody>
</table>

Pull-up:

Among boy's the average score of Government School boys is highest which is 3.92, the average score of private school boys is lowest which is 2.48 and the average score of corporation school boys is 3.44.

Flexed arm Hang:

Among girls the average score of Government School girls is highest which is 2.84, the average score of private school girls is lowest which is 1.16 and the average score of corporation school girls is 2.52.

The average score of pull ups measuring shoulder strength among the subgroups of boys are very similar and the average score on flexed arm hang across the 3 sub-groups of girls are almost same. When scores among boys and girls are compared, except among government school boys who tend to have superior shoulder strength than girls on all other variables there is no considerable difference.
Fig. 1: Physical Fitness of all three Schools (Pull-ups) & flexed arm hang

- x axis -1cm = 50 samples
- y axis -1cm = 1 point

- Boys
- Girls

<table>
<thead>
<tr>
<th>School Type</th>
<th>Boys Score</th>
<th>Girls Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
<td>3.92</td>
<td>1.16</td>
</tr>
<tr>
<td>Corporation School</td>
<td>3.44</td>
<td>2.48</td>
</tr>
<tr>
<td>Private School</td>
<td>2.84</td>
<td>2.52</td>
</tr>
</tbody>
</table>
The table showing average scores among three schools across physical fitness variables

2) Bent Knee Sit-ups

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
<td>50</td>
<td>0.6</td>
<td>1.32</td>
</tr>
<tr>
<td>Corporation School</td>
<td>50</td>
<td>0.5</td>
<td>1.06</td>
</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>0.66</td>
<td>0.84</td>
</tr>
</tbody>
</table>

Bent-Knee Sit up:

Among boys the average score of private school boys is highest which is 0.66. The average score of corporation school boys is lowest which is 0.5 and the average score of Government School boys is 0.6. Among girls the average score of Government school girls is highest which is 1.32. The average score of private school girls is lowest which is 0.84 and the average score of corporation school is 1.06.

The average score on Bent knee sit ups measuring the abdominal strength across the three subgroups of boys and girls tend to be almost the same, but the average score scored by the subjects, when compared to the maximum scores is very less which is less than 20% of the maximum score.
Fig. 2: Physical Fitness of all three Schools (Bent Knee Situps)

x axis -1cm = 50 samples
y axis -1cm = 1 point

Government School Corporation School Private School

Boys
Girls

0.6 1.32 0.5 1.06 0.66 0.84
The table showing average scores among three schools across physical fitness variables

3) Shuttle Run

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
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<td>1.02</td>
<td>1.7</td>
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<td>Corporation School</td>
<td>50</td>
<td>3.92</td>
<td>0.98</td>
</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>2.22</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Shuttle Run:

Among boys the average score of corporation school boys is highest which is 3.92, the average score of Government School boys is lowest which is 1.02 and the average score of Private School boys is 2.22.

Among girls the average score of Government School is highest which is 1.7, the average score of corporation school girls is lowest which is 0.98 and the average score of private school girls is 1.5.

The average score on shuttle run measuring the agility and speed across the three subgroups of boys tends to differ among corporation school and government school boys, but, the average score across the three subgroups of girls tend to be almost same. The average score of all the sub-group of girls were less than even 20% of the maximum score. It can also be noticed that the degree of agility and speed is higher among boys than in girls.
Fig. 3: Physical Fitness of all three Schools (Shuttle run)

- x axis -1 cm = 50 samples
- y axis -1 cm = 1 point

Boys
Girls

- Government School
  - Boys: 1.02
  - Girls: 1.7

- Corporation School
  - Boys: 3.92
  - Girls: 0.98

- Private School
  - Boys: 2.22
  - Girls: 1.5
The table showing average scores among three schools across physical fitness variables

4) Standing Broad Jump

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
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<td>1.92</td>
<td>3.06</td>
</tr>
<tr>
<td>Corporation School</td>
<td>50</td>
<td>2.32</td>
<td>1.2</td>
</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>2.66</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Standing broad Jump:

Among boys the average score of private school boys is highest which is 2.66, the average score of Government School boys is lowest which is 1.92 and the average score of corporation school boys is 2.32.

Among girls the average score of Government school girls is highest which is 3.06, the average score of private school girls is lowest which is 1.0 and the average score of corporation school girls is 1.2

The average scores of standing broad jump measuring explosive strength across the 3 sub groups of boys are very similar but the average scores among girls tend to differ. Explosive strength is best among government school girls, but, among other two sub groups explosive strength was higher among boys than in girls. It can also be noticed that the average score of Government school boys, private school girls and corporation school girls are less than 20% of the maximum score.
Fig. 4: Physical Fitness of all three Schools
(Standing Broad Jump)

- x axis -1cm = 50 samples
- y axis -1cm = 1 point

- Boys
- Girls

<table>
<thead>
<tr>
<th>School</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
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<tr>
<td>Corporation School</td>
<td>2.32</td>
<td>1.2</td>
</tr>
<tr>
<td>Private School</td>
<td>2.66</td>
<td>1</td>
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</table>
The table showing average scores among three schools across physical fitness variables

5) 50-Yard Dash

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
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<td>1.22</td>
<td>1.96</td>
</tr>
<tr>
<td>Corporation School</td>
<td>50</td>
<td>1.42</td>
<td>1.38</td>
</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>3.96</td>
<td>1.84</td>
</tr>
</tbody>
</table>

50 yard Dash:

Among boys the average score of private school boys is highest which is 3.96, the average score of Government school boys is lowest which is 1.22 and the average score of corporation school boys is 1.42.

Among girls the average score of government school girls is highest which is 1.96, the average score of corporation school girls is lowest which is 1.38 and the average score of private school girls is 1.84.

The average score of 50 yard dash measuring the speed across the 3 sub groups of boys tend to be different and across the 3 subgroups of girls tends to be almost the same. It can also be noticed that the average score of Government School boys, corporation school boys and all three schools among girls are less than 20% of the maximum score.
Fig. 5: Physical Fitness of all three Schools (50-Yard Dash)

x axis - 1 cm = 50 samples
y axis - 1 cm = 1 point

Government School: 1.22
Corporation School: 1.42, 1.38
Private School: 3.96, 1.84

Boys
Girls
The table showing average scores among three schools across physical fitness variables

6) Softball Throw

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
<td>50</td>
<td>0.84</td>
<td>1.34</td>
</tr>
<tr>
<td>Corporation School</td>
<td>50</td>
<td>1.2</td>
<td>0.98</td>
</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>1.0</td>
<td>1.84</td>
</tr>
</tbody>
</table>

Softball throw:

Among boys the average score of corporation school boys is highest which is 1.2, the average score of Government school boys is lowest which is 0.84 and the average score of private school boys is 1.0.

Among girls the average score of private school girls is highest which is 1.84, the average score of corporation school girls is lowest which is 0.98 and the average score of Government School girls is 1.34.

The average score on softball throw measuring explosive strength of arms across the 3 sub groups of both boys and girls tend to be almost similar. But the average score of all three subgroups among both boys and girls are less than 20% of the maximum score.
Fig. 6: Physical Fitness of all three Schools (Soft Ball Throw)

- x axis -1cm = 50 samples
- y axis -1cm = 1 point

Graph showing the physical fitness scores for boys and girls in Government School, Corporation School, and Private School.

- Government School: Boys 0.84, Girls 1.34
- Corporation School: Boys 1.2, Girls 0.98
- Private School: Boys 1, Girls 1.84
The table showing average scores among three type of school across physical fitness variables

7) 600 Yard Walk and Run :

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
<td>50</td>
<td>2.28</td>
<td>4.14</td>
</tr>
<tr>
<td>Corporation School</td>
<td>50</td>
<td>0.68</td>
<td>1.22</td>
</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>1.98</td>
<td>3.06</td>
</tr>
</tbody>
</table>

Among boys the average score of Government school boys is highest which is 2.28, the average score of corporation school boys is lowest which is 0.68 and the average score of private school boys is 1.98.

Among girls the average score of Government School girls is highest which is 4.14, the average score of corporation school girls is lowest which is 1.22 and the average score of private school girls is 3.06.

The average score on 600 yard walk and run measuring cardio-vascular endurance across the 3 sub groups tends to be different among Government school boys and Corporation School Boys and also among all 3 sub-groups of girls. The cardio-vascular endurance was better among girls than boys of respective schools. It is also noticed that the average scores of private school boys, Corporation School boys and corporation school girls is less than 20% of maximum score.
Fig. 7: Physical Fitness of all three Schools (600 Yards)

-1cm = 50 samples
-1cm = 1 point

Government School: 2.28
Corporation School: 0.68
Private School: 1.98

Boys

Girls
The result obtained from the study suggests that there exists overall low level of physical fitness among the secondary school children. It is noticed that in most of the selected test items the children tend to score less than 20% of the maximum score, this is noticed among Government School boys across abdominal strength, agility, explosive strength of legs and arms and speed. In case of government school girls though they score highest in physical fitness variables they are certainly weak in case of abdominal strength, speed and explosive strength of arms. Among corporation school boys the average scores are very less across all the variables except shoulder strength, agility and explosive strength of legs. In case of corporation school girls also the average scores are very less among all the variables. The average score of private school boys though highest compared to other two schools yet their performance is definitely low across the variables abdominal strength, explosive strength (arms) and cardio-vascular endurance. In case of private school girls the average scores are very less among all the variables except across shoulder strength and cardio-vascular endurance.
Table No.4.2

Table showing average scores among three schools across psychological parameter.

a) Acceptance

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
<td>50</td>
<td>17.4</td>
<td>18.5</td>
</tr>
<tr>
<td>Corporation School</td>
<td>50</td>
<td>18.1</td>
<td>18.4</td>
</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>17.0</td>
<td>18.2</td>
</tr>
</tbody>
</table>

Acceptance:

Among boys the average score of corporation school boys is highest which is 18.1, the average score of private school boys is lowest which is 17.0 and the average score of Government School boys is 17.4.

Among girls the average score of Government School girls is highest which is 18.5, the average score of private school girls is lowest which is 18.2 and the average score of corporation school girls is 18.4.

The average score of acceptance measuring the degree to which an individual agrees upon, across the 3 sub groups among both boys and girls, tends to be almost similar but the Government school girls and Corporation school boys had highest level of acceptances among respective sub groups.
Fig. 8: Mean of Psychological Variables among Boys and Girls of three different types of Schools (Acceptance)

- X axis: -1cm = 50 samples
- Y axis: -1cm = 5 point

Government School: 17.4, 18.5
Corporation School: 18.1, 18.4
Private School: 17, 18.2

Boys
Girls
Table showing average scores among three schools across psychological parameter.

b) Co-operation

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
<td>50</td>
<td>17.7</td>
<td>17.4</td>
</tr>
<tr>
<td>Corporation School</td>
<td>50</td>
<td>18.2</td>
<td>18.5</td>
</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>17.3</td>
<td>17.8</td>
</tr>
</tbody>
</table>

Co-Operation: Among boy's the average score of corporation school boys is highest which is 18.2, the average score of private school boys is lowest which is 17.3 and the average score of Government school boys is 17.7.

Among girls the average score of corporation school girls is highest which is 18.5, the average score of Government school girls is lowest which is 17.4 and the average score of private school girls is 17.8.

The average score on co-operation measuring the quality of working together, across the 3 sub groups of both boys and girls tends to be similar and the quality of co-operation was higher among corporation school boys and girls.
Fig. 9: Mean of Psychological Variables among Boys and Girls of three different types of Schools (Co-operation)

- Government School
- Corporation School
- Private School

- Boys
- Girls

x axis - 1cm = 50 samples
y axis - 1cm = 1 point
Table showing average scores among three schools across psychological parameter.

c) Identification

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
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<td>20.3</td>
<td>20.2</td>
</tr>
<tr>
<td>Corporation School</td>
<td>50</td>
<td>18.6</td>
<td>19.5</td>
</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>17.9</td>
<td>19.0</td>
</tr>
</tbody>
</table>

**Identification:** Among boys the average score of government school boys is highest which is 20.3, the average score of Private school boys is lowest which is 17.9 and the average score of corporation school boys is 18.6.

Among girls the average score of government school girls is highest which is 20.2, the average score of private school girls is lowest which is 19.0 and the average score of corporation school girls is 19.5.

The average score on identification measuring the ability of an individual to associate oneself with others across the 3 sub groups of boys tends to differ, but among girls it tends to be almost similar. The quality of identification is comparatively higher among government school boys and girls.
Fig. 10: Mean of Psychological Variables among Boys and Girls of three different types of Schools

Identification

x axis - 1 cm = 50 samples
y axis - 1 cm = 1 point

- Government School
- Corporation School
- Private School

Boys
Girls
Table showing average scores among three schools across psychological parameter.

d) Dominance

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
<td>50</td>
<td>8.9</td>
<td>8.0</td>
</tr>
<tr>
<td>Corporation School</td>
<td>50</td>
<td>16.0</td>
<td>8.9</td>
</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>10.0</td>
<td>17.4</td>
</tr>
</tbody>
</table>

**Dominance**: Among boys the average score of corporation school boys is highest which is 16.0, the average score of Government School boys is lowest which is 8.9 and the average score of private school boys is 10.0.

Among girls the average score of private school girls is highest which is 17.4 the average score of government school girls is lowest which is 8.0 and the average score of corporation school girls is 8.9

The average score on Dominance measuring the quality of positive leadership across the 3 sub-groups of boys tends to be different among corporation school and other two schools. But among the 3 sub-groups of girls the average score tends to be different among private schools and other schools. It is noticed that private school girls and corporation school boys were more dominant than others.
Fig. 11: Mean of Psychological Variables among Boys and Girls of three different types of Schools (Dominance)

- x axis: 1 cm = 50 samples
- y axis: 1 cm = 1 point

- Government School: Boys 8.9, Girls 8
- Corporation School: Boys 16, Girls 8.9
- Private School: Boys 8.9, Girls 10
- 17.4
Table showing average scores among three schools across psychological parameter.

e) Rejection

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
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<td>5.9</td>
<td>4.1</td>
</tr>
<tr>
<td>Corporation School</td>
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<td>4.1</td>
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<tr>
<td>Private School</td>
<td>50</td>
<td>4.8</td>
<td>3.3</td>
</tr>
</tbody>
</table>

Rejection: Among boys the average score of government school boys is higher which is 5.9, the average score of corporation school boys is lowest which is 4.2 and the average score of private school boys is 4.8.

Among girls the average score of corporation school and Government school girls both are highest which is 4.1, the average score of private school girls is lowest which is 3.3.

The average score on Rejection measuring the quality to refuse or reject, across the 3 sub-groups among both boys and girls tends to be almost similar. But the quality of rejection was more among Government School boys and girls and also among Corporation school girls.
Fig. 12: Mean of Psychological Variables among Boys and Girls of three different types of Schools (Rejection)

- x axis -1cm = 50 samples
- y axis -1cm = 1 point

Boys
Girls

Government School
Corporation School
Private School
Table showing average scores among three schools across psychological parameter.

f) Isolation

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
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<td>9.5</td>
<td>9.0</td>
</tr>
<tr>
<td>Corporation School</td>
<td>50</td>
<td>6.9</td>
<td>7.6</td>
</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>8.7</td>
<td>6.6</td>
</tr>
</tbody>
</table>

**Isolation:** Among boys the average score of government school boys is highest which is 9.5, the average score of corporation school boys is lowest which is 6.9 and the average score of private school boys is 8.7.

Among girls the average score of government school girls is highest which is 9.0, the average score of private school girls is lowest which is 6.6 and the average score of corporation school girls is 7.6.

The average score on Isolation measuring the quality of feeling of separation across the 3 sub groups among boys tends to be different among Government School boys and Corporation school boys, and among girls also the average score tends to be different among government school girls and private school girls. The degree of Isolation was higher among government school boys and girls.
Fig. 13: Mean of Psychological Variables among Boys and Girls of three different types of Schools (Isolation)

- x axis -1cm = 50 samples
- y axis -1cm = 1 point

- Government School: Boys 9.5, Girls 9
- Corporation School: Boys 6.9, Girls 7.6
- Private School: Boys 8.7, Girls 6.6
Table showing average scores among three schools across psychological parameter.

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
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<tr>
<td>Government School</td>
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<td>14.4</td>
<td>15.1</td>
</tr>
<tr>
<td>Corporation School</td>
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</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>12.9</td>
<td>14.1</td>
</tr>
</tbody>
</table>

**Differentiation:** Among boys the average score of government school boys is higher which is 14.4, the average score of corporation school boys and private school boys is 12.9.

Among girls the average score of government school girls is highest which is 15.1, the Average score of Private School girls is lowest which is 14.1 and the average score of corporation school girls is 14.5.

The average score on Differentiation measuring the quality of feeling discriminated or separated across the 3 sub-groups of both boys and girls tends to be almost similar, but government school boys and girls had higher levels of differentiation.
**Fig. 14:** Mean of Psychological Variables among Boys and Girls of three different types of Schools (Differentiation)  

- x axis - 1 cm = 50 samples  
- y axis - 1 cm = 1 point

<table>
<thead>
<tr>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
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</tr>
<tr>
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<tr>
<td>Private School</td>
<td>12.9</td>
</tr>
<tr>
<td></td>
<td>14.1</td>
</tr>
</tbody>
</table>

**Legend:**  
- □ Boys  
- ★ Girls
Table showing average scores among three schools across psychological parameter.

h) Submission

<table>
<thead>
<tr>
<th>Type of School</th>
<th>N</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government School</td>
<td>50</td>
<td>14.5</td>
<td>12.7</td>
</tr>
<tr>
<td>Corporation School</td>
<td>50</td>
<td>13.2</td>
<td>12.4</td>
</tr>
<tr>
<td>Private School</td>
<td>50</td>
<td>13.7</td>
<td>12.9</td>
</tr>
</tbody>
</table>

**Submission:** Among boys the average score of government school boys is highest which is 14.5, the average score of corporation school boys is lowest which is 13.2 and the average score of Private school boys is 13.7.

Among girls the average score of private school girls is highest which is 12.9, the average score of corporation school girls is lowest which is 12.4 and the average score of government school girls is 12.7.

The average score on submission measuring the quality of tendency is consistent across the 3 sub groups of both boys and girls. The scores are almost similar, but the government school boys and girls tend to be more submissive.
Fig. 15: Mean of Psychological Variables among Boys and Girls of three different types of Schools

Submission

x axis -1 cm = 50 samples
y axis -1 cm = 1 point

Government School  Corporation School  Private School

<table>
<thead>
<tr>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.5</td>
<td>12.7</td>
</tr>
<tr>
<td>13.2</td>
<td>12.4</td>
</tr>
<tr>
<td>13.7</td>
<td>12.9</td>
</tr>
</tbody>
</table>
Table No.4.3

Table showing average scores among boys and girls across all the Physical fitness variables and psychological parameters

<table>
<thead>
<tr>
<th>Sex</th>
<th>Physical Fitness</th>
<th>Psychological Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boys</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>( \bar{X} )</td>
<td>15.26</td>
<td>107</td>
</tr>
<tr>
<td>SD</td>
<td>8.83</td>
<td>13.71</td>
</tr>
<tr>
<td>Girls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>( \bar{X} )</td>
<td>12.57</td>
<td>104.53</td>
</tr>
<tr>
<td>SD</td>
<td>8.18</td>
<td>13.78</td>
</tr>
</tbody>
</table>

Analysis of total score irrespective of schools

The average score of all physical fitness variables from all the three schools together among boys is 15.26 and the same among girls is 12.57.

The average score of all physical fitness variables among boys irrespective of the subgroups tends to be different from that of the average scores among girls. The average score of boys is higher than that of girls. The reason is basically due to the following factors
1. the social set up of our society,
2. the economic background,
3. the physical education programme at school and involvement of girls in the same.
The social set up of our society is such that girls are forced to be reserved and are not encouraged to participate in any sport, games or physical activity programmes. Parents fear that girls will be exploited if let outside, and their responsibility is to just get them married. Hence their participation in any physical activity reduces. When we consider the economic background also one can say that the basic poverty prevailing, hinders the provision of necessary accessories and participation of girls in sports and other physical fitness activities. The prevailing physical education programmes at schools are also not well organized and well implemented. Enough care is not taken to see that the programmes officially designed are implemented and the students compulsorily participate in them. In case of many institutions, even they do not have a playground, necessary equipments and facilities to follow the programmes of physical education.

The average scores of all psychological variables from all three schools together among boys is 107 and the same among girls is 104.53.

The average scores of all selected psychological parameters irrespective of sub groups among boys tend to differ from that of average scores of girls. The averaged score of boys is higher than that of girls. Here both the average score of physical fitness variables and the average score of psychological variables among boys is higher than the girls. Hence it can be stated that there exists a relationship between physical fitness and selected psychological variables in general.
Fig. 16: Average scores among boys and girls across all the Physical Fitness variables and Psychological parameters.

Boys: 15.26
Girls: 12.57

Physical Fitness

Psychological Variables
Analysis of Physical fitness variables and Psychological parameters age wise (13 & 14 year)

Though the subjects randomly selected for the study belonged to 12 to 15 years age group majority of the student were in the age group of 13 and 14 years. The purpose of selecting the children of this age group is to analyze, the level of growth and development of physical and psychological variables as per the age, and also to ensure the prominence given in the curriculum for the attainment of these aspects. Hence analysis of students among these age groups is done separately.

Table No.4.4

Table showing average scores among boys and girls of 13 years age group across physical fitness variables.

a) Physical Fitness

<table>
<thead>
<tr>
<th>Type of School</th>
<th>13 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Government</td>
<td>7</td>
</tr>
<tr>
<td>Corporation</td>
<td>15</td>
</tr>
<tr>
<td>Private</td>
<td>21</td>
</tr>
</tbody>
</table>

Table showing average scores among boys and girls of 13 years age group across psychological variables.

b) Psychological variables

<table>
<thead>
<tr>
<th>Type of School</th>
<th>13 Years</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Government</td>
<td>7</td>
</tr>
<tr>
<td>Corporation</td>
<td>15</td>
</tr>
<tr>
<td>Private</td>
<td>21</td>
</tr>
</tbody>
</table>
13 years

Government School:

The average score of physical fitness among girls is higher than boys, which is 21.4 and the average score of boys is 16.42. The average score of psychological parameters among the boys is higher than girls which is 116.43 and the average score of girls is 100.71. Here it is also necessary to mention that the no. of boys were 7 and girls were 14.

The average scores for both physical fitness and psychological parameters tend to differ among boys and girls in government school, but the average score on physical fitness is higher among girls and the average score of psychological parameters is higher among boys.

Corporation School:

The average score of physical fitness among boys is higher than girls which is 13.0 and the average score of girls is 10.87. The average score of psychological parameters among boys is higher than girls which are 103.67 and 102.59 respectively. The no. of boys were 15 and girls were 29.

The average scores on physical fitness among boys and girls of corporation school tend to differ. The average score of boys is higher than girls, but the average score on psychological parameters tends to be similar.
Private School:

The average score of physical fitness variables among girls is higher than boys which is 16.43 and the average score of boys is 15.96. The average score of psychological parameters among boys is higher than girls which are 102.62 and 100.24 respectively. The no. of boys and girls both were 21 each.

The average score of physical fitness among boys and girls of private school tends to be similar but the average score of psychological parameters among boys and girls tends to differ. The average score on psychological parameters across boys tends to be higher than the girls.

When scores of all three schools are compared irrespective of boys and girls, the average score of government school girls is highest and average score of corporation school girls is lowest among physical fitness variables and the average score of government school boys is highest and private school girls is lowest among psychological parameters.
Fig. 17: Average scores among boys and girls of 13 years age group across Physical Fitness

☐ Government ☐ Corporation ☐ Private
Fig. 18: Showing Average scores among boys and girls of 13 years age group across Psychological Variables
Table showing average scores among boys and girls of 14 years age group across physical fitness variables.

c) Physical fitness

<table>
<thead>
<tr>
<th>Type of School</th>
<th>14 Years</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Boys</td>
<td>N</td>
<td>Girls</td>
</tr>
<tr>
<td>Government</td>
<td>30</td>
<td>14.34</td>
<td>31</td>
<td>19.2</td>
</tr>
<tr>
<td>Corporation</td>
<td>15</td>
<td>15.0</td>
<td>21</td>
<td>12.62</td>
</tr>
<tr>
<td>Private</td>
<td>9</td>
<td>23.89</td>
<td>21</td>
<td>10.76</td>
</tr>
</tbody>
</table>

Table showing average scores among boys and girls of 14 years age group across psychological variables.

d) Psychological variables

<table>
<thead>
<tr>
<th>Type of School</th>
<th>14 Years</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Boys</td>
<td>N</td>
<td>Girls</td>
</tr>
<tr>
<td>Government</td>
<td>30</td>
<td>111.0</td>
<td>31</td>
<td>110.81</td>
</tr>
<tr>
<td>Corporation</td>
<td>15</td>
<td>103.0</td>
<td>21</td>
<td>108.33</td>
</tr>
<tr>
<td>Private</td>
<td>9</td>
<td>110.71</td>
<td>21</td>
<td>101.67</td>
</tr>
</tbody>
</table>
14 Years

Government School:

The average score of physical fitness among girls is higher than boys which is 19.2 and average score of boys is 14.34. The average score of psychological parameters among boys is higher than girls which is 111.0 and average score of girls is 110.81. The number of subject among boys is 30 and girls are 31.

The average score of physical fitness across boys and girls of government schools tends to differ and the average score of physical fitness is higher among girls than in boys, but, the average scores of psychological parameters across boys and girls tend to be almost similar.

Corporation School:

The average score of physical fitness among boy’s is higher than girls which is 15.0 and the average score of girls is 12.62.

The average score of psychological parameters among girls is higher than boys which is 108.33 and the average score of boys is 103.0. The number of subjects among boys and girls are 15 and 21 respectively.

The average scores on physical fitness across boys and girls of corporation school tends to differ and the average score of physical fitness is higher among boys than in girls. The average score on psychological parameters across boys and girls also tends to differ and the average score of girls is higher than boys.
**Private School:**

The average score of physical fitness among boys is higher than girls which is 23.89 and the average score of girls is 10.76.

The average score of psychological parameters among boys is higher than girls which is 110.71 and the average score of girls is 101.67. The number of subjects among boys and girls are 9 and 21 respectively.

The average scores of physical fitness across boys and girls of private school tend to differ and the average score of physical fitness is higher among boys than in girls. The average score of psychological parameters across boys and girls also tends to differ and the average score of boys is higher than that of girls.
Fig. 19: Average scores among boys and girls of 14 years age group across Physical Fitness
Fig. 20: Showing Average scores among boys and girls of 14 years age group across Psychological Variables
Table No.4.5

The table showing the significant difference between high and low fitness groups (Boys/Girls) on the selected psychological parameters

a) Acceptance [Government School Boys]

<table>
<thead>
<tr>
<th></th>
<th>High fitness group</th>
<th>Low fitness group</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>X̄</td>
<td>16.4</td>
<td>20.67</td>
</tr>
<tr>
<td>S.D.</td>
<td>2.94</td>
<td>2.28</td>
</tr>
</tbody>
</table>

Significant at 2.00 level; t score = 2.66

The mean and standard deviation of government school boys high fitness group in acceptance is 16.4 and 2.94 respectively and the number of subjects in high fitness group is 5.

The mean and standard deviation of government school boys low fitness group in acceptance is 20.67 and 2.28 respectively and the number of subjects in low fitness group is 6.

Significant difference was found on two psychological parameters namely acceptance and isolation between high and low fitness groups. According to t-score a significant difference of 2.07 was found among high and low fitness group in the psychological parameter of acceptance and a significant difference of 4.42 was found among high and low fitness groups in psychological parameter of isolation.

The group, which had high fitness, was more ready to accept than the low fitness group. The physical fitness had a direct relationship with the component acceptance among government school boys.
Fig. 21: Mean of Psychological Variables having significant difference according to T-test among Government School Boys

Acceptance - T-Score = 2.07

Government School Boys

- High fitness group: X ± SD
- Low fitness group: X ± SD
The table showing the significant difference between high and low fitness groups (Boys/Girls) on the selected psychological parameters

b) Isolation [Government School Boys]

<table>
<thead>
<tr>
<th></th>
<th>High fitness group</th>
<th>Low fitness group</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>( \bar{x} )</td>
<td>13.2</td>
<td>6.17</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.69</td>
<td>3.44</td>
</tr>
</tbody>
</table>

Significant at 2.00 level; \( t \) score = 4.42

The mean and standard deviation of government school boy's high fitness group in Isolation is 13.2 and 1.69 respectively and the number of subjects in high fitness group is 5. The mean and standard deviation of government school boys low fitness group in Isolation is 6.17 and 3.44 respectively and the number of subject in low fitness group is 6.

The high fitness groups were also more isolated than the low fitness groups which also establishes a relationship between fitness variables and particular psychological parameters.

Government school boys with high physical fitness had less acceptance than those of low physical fitness which shows they had lower levels of positive need satisfaction in acceptance when compared to low fitness group. It is also noticed that boys belonging to high physical fitness group were more isolated than those belonging to low physical fitness group.
Fig. 22: Mean of Psychological Variables having significant difference according to T-test among Government School Boys

Isolation - T-score - 4.42

Government School Boys

X + SD High fitness group
X - SD Low fitness group
The table showing the significant difference between high and low fitness groups (Boys/Girls) on the selected psychological parameter

c) Differentiation [Government School Girls]

<table>
<thead>
<tr>
<th></th>
<th>High fitness group</th>
<th>Low fitness group</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>( \bar{x} )</td>
<td>14.18</td>
<td>18.4</td>
</tr>
<tr>
<td>S.D.</td>
<td>2.46</td>
<td>3.92</td>
</tr>
</tbody>
</table>

Significant at 2.00 level; t score = 2.22

The mean and standard deviation of government school girl's high fitness group among differentiation is 14.18 and 2.46 respectively and the number of subjects in high fitness group is 11.

The mean and standard deviation of government school girl's low fitness group among differentiation is 18.4 and 3.92 respectively and the number of subjects in low fitness group is 5.

Among government school girl's significant difference according to t-score was found in one psychological parameter of high and low fitness groups, which is differentiation. A significant difference of 2.22 was found among the high fitness and low fitness groups.
Differentiation was most prominently found in girls of low fitness group. The girls who belonged to high fitness group showed a significantly low level of differentiation which proves there exists a relationship between physical fitness variable and psychological parameter differentiation.

Govt. school girls with high fitness levels were less differentiative which shows that they had low level of negative need satisfaction in differentiation.
Fig. 23: Mean of Psychological Variables having significant difference according to T-test among Government School Girls
Differentiation T-Score = 2.22
The table showing the significant difference between high and low fitness groups (Boys/Girls) on the selected psychological parameters

d) Dominance [Corporation School Girls]

<table>
<thead>
<tr>
<th></th>
<th>High fitness group</th>
<th>Low fitness group</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>( \bar{X} )</td>
<td>9.5</td>
<td>5.33</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.89</td>
<td>2.53</td>
</tr>
</tbody>
</table>

Significant at 2.00 level; t score = 3.3

The mean and standard deviation of Corporation School Girls of high fitness group in dominance is 9.5 and 1.89 respectively and the number of subjects in high fitness group is 6.

The mean and standard deviation of Corporation School Girls of low fitness group in dominance is 5.33 and 2.53 respectively and the number of subjects in low fitness group is 6.

A significant difference of 3.3 according to t-score was found among high and low physical fitness groups in psychological parameter dominance. It was found that high fitness group of girls were more dominant when compared to low fitness group.
Fig. 24: Mean of Psychological Variables having significant difference according to T-test among Corporation School Girls
Dominance T-Score = 3.3

Corporation School Girls

- □ X + SD High fitness group
- ○ X - SD Low fitness group
The table showing the significant difference between high and low fitness groups (Boys/Girls) on the selected psychological parameters

<table>
<thead>
<tr>
<th></th>
<th>High fitness group</th>
<th>Low fitness group</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>N</strong></td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td><strong>X</strong></td>
<td>5.67</td>
<td>9.0</td>
</tr>
<tr>
<td><strong>S.D.</strong></td>
<td>2.28</td>
<td>1.91</td>
</tr>
</tbody>
</table>

Significant at 2.00 level; t score = 2.77

The mean and standard deviation of corporation school girls of high physical fitness group in Isolation is 5.67 and 2.28 respectively and the number of subject in high fitness group are 6.

The mean and standard deviation of corporation school girls of low physical fitness group in isolation is 9.0 and 1.91 respectively and the number of subjects in low fitness group is 6.

A significant difference of 2.77 according to t-score was found among high and low physical fitness groups in the psychological parameter Isolation. It was found that girls with high fitness were less isolated when compared to girls of low physical fitness.

Totally it is noticed that corporation school girls who belonged to high physical fitness level were more dominant which shows they had higher levels of positive need satisfaction in dominance. They also had lower levels of isolation which shows they had low levels of negative need satisfaction in isolation.
Fig. 25: Mean of Psychological Variables having significant difference according to T-test among Corporation School Girls
Isolation T-score -2.77

Corporation School Girls

- X + SD High fitness group
- X - SD Low fitness group

Isolation

5.67

9
Table No.4.6

a) Table showing the significant difference between boys and girls of Government (High fitness on Isolation)

<table>
<thead>
<tr>
<th></th>
<th>High Fitness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
</tr>
<tr>
<td>N</td>
<td>5</td>
</tr>
<tr>
<td>( \bar{X} )</td>
<td>13.2</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.69</td>
</tr>
</tbody>
</table>

Significant at 2.00 level; t score = 3.66

The mean and standard deviation of government school boys of high fitness group in isolation is 13.2 and 1.69 respectively and the number of students in high fitness group is 5.

The mean and standard deviation of government school girls of high fitness group in isolation is 8.36 and 3.62 respectively and the number of students is 11.

A significant difference of 3.66 between boys and girls in accordance with t-score was found among high physical fitness groups in the psychological parameter isolation. It was found that government school boys were more isolated than the girls in high fitness group.
Fig. 26: Mean of Psychological Variables having significant difference according to T-test among Government School Boys and Girls
Isolation T-score - 3.66

Government School Boys and Girls

Arrow X + SD High fitness group
Arrow X - SD Low fitness group
b) Table showing the significant difference between boys and girls of Government (Low fitness on Co-operation)

<table>
<thead>
<tr>
<th></th>
<th>High Fitness</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>N</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>( \bar{x} )</td>
<td>20.67</td>
<td>17.2</td>
</tr>
<tr>
<td>S.D.</td>
<td>2.29</td>
<td>1.04</td>
</tr>
</tbody>
</table>

Significant at 2.00 level; t score = 3.36

The mean and standard deviation of government school boys of low fitness group in co-operation is 20.67 and 2.29 respectively and the number of students in low fitness group is 6.

The mean and standard deviation of government school girls of low fitness group in co-operation is 17.2 and 1.04 respectively and the number of students in low fitness group is 5.

A significant difference of 3.36 between boys and girls in accordance with t-score was found among low fitness groups in the psychological parameter cooperation. It can be seen that government school boy's are more co-operative than government school girls in low fitness group.
Fig. 27: Mean of Psychological Variables having significant difference according to T-test among Government School Boys and Girls low fitness group

Co-operation T-Score = 3.36

Government School Boys and Girls

Co-operation

Boys
Girls
c) Table showing the significant difference between boys and girls of Government (Low fitness on submission)

<table>
<thead>
<tr>
<th></th>
<th>High Fitness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
</tr>
<tr>
<td>N</td>
<td>6</td>
</tr>
<tr>
<td>( \bar{X} )</td>
<td>18.0</td>
</tr>
<tr>
<td>S.D.</td>
<td>2.58</td>
</tr>
</tbody>
</table>

Significant at 2.00 level; \( t \) score = 3.27

The mean and standard deviation of government school boys of low fitness group in submission is 18 and 2.58 respectively and the number of students in low fitness group is 6.

The mean and standard deviation of government school girls of low fitness group in submission is 14.4 and 0.8 respectively and the number of students in low fitness group is 5.

A significant difference of 3.27 between boys and girls in accordance with \( t \)-score was found among low fitness groups in the psychological parameter submission. It can be seen that government school boys were more submissive than government school girls in low physical fitness group.
Fig. 28: Mean of Psychological Variables having significant difference according to T-test among Government School Boys and Girls low fitness group
Submission T-Score -3.27

Government School Boys and Girls

- Boys
- Girls
d) Table showing the significant difference between boys and girls of corporation (High fitness on submission)

<table>
<thead>
<tr>
<th></th>
<th>High Fitness</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>N</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>X</td>
<td>13.0</td>
<td>14.5</td>
</tr>
<tr>
<td>S.D.</td>
<td>2.36</td>
<td>2.22</td>
</tr>
</tbody>
</table>

Significant at 2.00 level; t score = 2.69

The mean and standard deviation of corporation school boys of high fitness group in submission is 13 and 2.36 respectively and the number of students in high fitness group is 9.

The mean and standard deviation of corporation school girls of high fitness group in submission is 14.5 and 2.22 respectively and the number of students in high fitness group is 6.

A significant difference of 2.69 between boys and girls in accordance with t-score was found among high fitness groups in the psychological parameter submission. It can be seen that girls were more submissive than boys in high physical fitness group.
Fig.29: Mean of Psychological Variables having significant difference according to T-test among Corporation School Boys and Girls High fitness group
Submission T-Score - 2.69

Corporation School Boys and Girls

Bar chart showing differences between boys and girls with T-Score 2.69.
e) Table showing the significant difference between boys and girls of Corporation School (Low fitness on Dominance)

<table>
<thead>
<tr>
<th></th>
<th>High Fitness</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>5</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>( \bar{X} )</td>
<td>10.2</td>
<td>5.33</td>
<td></td>
</tr>
<tr>
<td>S.D.</td>
<td>1.47</td>
<td>2.83</td>
<td></td>
</tr>
</tbody>
</table>

Significant at 2.00 level; t score = 3.68

The mean and standard deviation of corporation school boys of low fitness group in Dominance is 10.2 and 1.47 respectively. The number of students in low fitness group is 5.

The mean and standard deviation of corporation school girls of low fitness group in dominance is 5.33 and 2.83 respectively. The number of students in low fitness group are 6.

A significant difference of 3.68 between boys and girls in accordance with t-score was found among low physical fitness groups in psychological parameter dominance. It can be noticed that boys were more dominant than girls among low fitness groups.
Fig. 30: Mean of Psychological Variables having significant difference according to T-test among Corporation School Boys and Girls Low fitness group
Dominance T-Score = 3.68

Corporation School Boys and Girls

- Boys
- Girls
f) Table showing the significant difference between boys and girls of Corporation School (Low fitness on Isolation)

<table>
<thead>
<tr>
<th></th>
<th>High Fitness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
</tr>
<tr>
<td>N</td>
<td>5</td>
</tr>
<tr>
<td>X</td>
<td>6.4</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.74</td>
</tr>
</tbody>
</table>

Significant at 2.00 level; t score = 2.5

The mean and standard deviation of corporation school boys of low fitness group in Isolation is 6.4 and 1.74 respectively. The number of students in low fitness group is 5.

The mean standard deviation of corporation school girls of low fitness group in isolation is 9 and 1.91 respectively. The number of students in low fitness group is 6.

A significant difference of 2.5 between boys and girls in accordance with t-score was found among low physical fitness groups in psychological parameter Isolation. It is noticed that girls tended to be more isolated than boys in low physical fitness groups.
Fig. 31: Mean of Psychological Variables having significant difference according to T-test among Corporation School Boys and Girls Low fitness group. Isolation t-Score -2.5
Table showing the significant difference between boys and girls of private School (High fitness on Dominance)

<table>
<thead>
<tr>
<th>High Fitness</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>X</td>
<td>11.14</td>
<td>7.17</td>
</tr>
<tr>
<td>S.D.</td>
<td>3.44</td>
<td>2.85</td>
</tr>
</tbody>
</table>

Significant at 2.00 level; t score = 2.28

The mean and Standard deviation of private school boys of high fitness group in Dominance is 11.14 and 3.44 respectively. The number of students in high fitness group is 7.

The mean and standard deviation of private school girls of high fitness group in Dominance is 7.17 and 2.85 respectively. The number of students in high fitness group is 6.

A significant difference of 2.28 between boys and girls in accordance with t-score was found among high fitness groups in the psychological parameter dominance. It is noticed that boys were more dominant than the girls in high fitness groups.
Fig. 32: Mean of Psychological Variables having significant difference according to T-test among Private School Boys and Girls High fitness group

Dominance t-score - 2.28
h) Table showing the significant difference between boys and girls of private School (Low fitness on Dominance)

<table>
<thead>
<tr>
<th></th>
<th>Low Fitness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Boys</td>
</tr>
<tr>
<td>N</td>
<td>10</td>
</tr>
<tr>
<td>X</td>
<td>9.82</td>
</tr>
<tr>
<td>S.D.</td>
<td>3.52</td>
</tr>
</tbody>
</table>

Significant at 2.00 level; \( t \) score = 2.3

The mean and standard deviation of private school boys of low fitness group in Dominance is 9.8 and 3.52 respectively. The number of students in low fitness group is 10.

The mean and standard deviation of private school girls of low fitness group in Dominance is 6.67 and 1.97 respectively. The number of students in low fitness group is 6.

A significant difference of 2.3 between boys and girls in accordance with \( \text{t-score} \) was found among low fitness groups in the psychological parameter Dominance. It is noticed that boys were more dominant than girls.
Fig. 33: Mean of Psychological Variables having significant difference according to T-test among Private School Boys and Girls Low fitness group
Dominance t-score - 2.3

Private School Girls

Boys
Girls
In case of high fitness groups among government schools, boys were more isolated than girls, among corporation schools girls were more submissive than boys and among private schools boys were more dominant than girls. In case of low fitness groups, government schools boys were more co-operative than girls and girls were more submissive than boys, in case of corporation schools boys were more dominant than girls and girls were more isolated than boys and among private schools boys were found more dominant than girls.
Analysis of influence of the Socio-Economic Status on children's performance (Physically and psychologically) in terms of parental education:

Based on the available data obtained from the school records the parental education as mentioned in the above pie-diagram of the children who were considered for the present study were classified into six groups namely;

1. Illiterates
2. Middle school
3. High school
4. Pre-university
5. Graduation
6. Post graduation
The pie diagram, which represents the educational qualification of the parents of different children's from three different schools shows that the larger population are those, whose educational qualification is of high school level. The next highest group is children whose parents' educational qualification is of middle school level. Third highest group was children whose parents belongs to illiterate group. Next highest group was of parents who belonged to pre-university level followed by graduation and post graduation level.

**Parental Education and Physical Fitness of children:**

Children whose parents were grouped under post graduation group had the highest level of physical fitness and children whose parents were grouped under the group of graduation had the lowest level of physical fitness. There existed considerable differences between children of post graduation group and all other groups while there existed no considerable difference across all other groups.

**Parental education and psychological fitness of the children:**

Children whose parents were grouped under pre-university level scored highest across, psychological, parameters and children whose parents were grouped under high school level scored lowest across psychological parameters.
Fig No.35: Graph represents Parental Education and Physical Fitness of children

Fig No.35: Graph represents Parental Education and Psychological Fitness of children
A comparison of both physical fitness variables and psychological parameters are considered in terms of parental education it can be noticed that children whose parents belonged to post graduation group scored highest across physical fitness variables while children whose parents belonged to pre university group scored highest across psychological parameters. Children whose parents belonged to illiterate group scored better than children whose parents belonged to the graduation group across physical fitness and better than children whose parents belonged to high school group across psychological parameters. Children whose parents belonged to middle school group scored better than children whose parents belonged to all other groups except post graduate groups across physical fitness variables children whose parents belonged to middle school group scored better than illiterates, high school and graduation groups across psychological parameters. Children whose parents belonged to pre university group scored better than children whose parents belong to graduation group across physical fitness variables. Children whose parents belonged to High School scored better than illiterates, pre-university and graduation groups across physical fitness, children whose parents belonged to graduation group scored better than children whose parents belonged to high school group across psychological parameters.

Since there are no uniform results derived by the analysis of the available data it can be stated that there exists no relationship between the parental education, physical fitness and psychological fitness of selected subject's.
Analysis of influences of the Socio Economic Status on children fitness (physical and psychological) in terms of Parental occupation:

Fig. No.37: Pie diagram representing the size of the population of the children's parents occupational group

Based on the available data obtained from the school records the parental occupation of the children as mentioned in the above pie diagram who were considered as subjects in the present study were classified into three groups namely:

1. Unorganized occupation
2. Organized occupation and
3. Professional occupation

1. 19.44% parents were grouped under unorganized occupational group
2. 39.45% parents were grouped under organized occupational group and
3. 41.11% parents were grouped under professional group.
Parental Occupation and children's physical fitness:

Children whose parents were grouped under professional occupation have the highest level of physical fitness and children whose parents were grouped under organized occupation have the lowest level of physical fitness and there exists no considerable difference among the physical fitness of professional group children and unorganized group children. There also exists no major difference across unorganized group and organized group.

Parental Occupation and Psychological variables:

Children whose parents were grouped under professional occupation have the highest score among the psychological parameters, children whose parents were grouped under unorganized occupation have the lowest score among psychological parameters while the organized occupational group have scored more than the unorganized group. It can also be noticed that there exists considerable differences in performance of

a) professional group and organized group.
b) professional group and unorganized group

When performance in both physical fitness variables and psychological parameters are considered in terms of parental occupation it can be noticed that children whose parents belong to professional group performed better in both physical fitness variables and psychological parameter while the organized grouped has performed better than unorganized group across psychological parameters, whereas the unorganized group have performed better than the organized group across physical fitness variables.
Fig No. 38: Parental Occupation and Children's fitness

Unorganised | Organised | Professional

Fig No. 39: Parental Occupation and Children's psychological variables
A comparison of parental occupation with fitness as depicted in Fig No. 38 and 39 reveals that the children as professional group have a higher level of both physical and psychological fitness. However, children whose parents work in unorganized sector have better physical fitness but have poor psychological fitness which could be due to lack of emotional and social support.
4.2 DISCUSSION AND FINDINGS:

The results of the study "Analysis of Low and High Fitness and Selected Psychological Parameters have been discussed in this chapter. As the topic chosen indicates, the purpose of the study was basically to analyse the selected psychological variables on the physical fitness (high and low) of secondary school children belonging to different socio-economic status.

The first hypothesis according to the study conducted was "the degree of physical fitness differs for the three types of school." The results of the present study also indicates that the degree of physical fitness differ among three schools. Physical fitness of government school girl's was highest among girls and private school boys scored highest among boys, corporation school girls and government school boys scored the least. The major reason for the variation in the degree of physical fitness is due to the basic physical education programme followed in these schools, involvement of students in physical education programme, awareness among parents and their encouragement to children for participation in physical activity. Similarly in the study conducted by Ponthecise and Barket to examine the relationship of physical fitness among two different races of students-Negro's and Whites, administering AAHPER youth fitness test suggested that there
existed significant differences among two groups with regard to most of the physical fitness components.

There are many studies conducted by various persons involving boys and girls, for example study conducted by Yobu Knuttgen, Banga etc. all involves boys and girls separately, to find out various related aspects but, according to our hypothesis the physical fitness among boys is higher than the girls. The findings resulting from the statistical analysis of data also prove the same. The average scores of all the boys irrespective of different schools is higher than the average scores of all the girls irrespective of different schools which is mainly due to lack of participation of girls in the physical activities and the dis-encouragement from the parents.

According to second hypothesis drawn "the physical fitness among boys is higher than girls". The findings resulting from the statistical analysis of data in the present study also prove the same. The average score of all the boys in general is higher than the average score of all girls in general which may be basically due to the social setup and lack of participation of girls in the physical activities.

There are many research work done by scholars like Knuttgen and Banga, A. Yobu etc. who have conducted tests on
boys and girls separately on various variables of physical fitness, psychological parameters and personality traits.

The third hypothesis states that there exists no significant relationship between physical fitness and selected psychological variables. The results obtained state that irrespective of the physical fitness scores there exists no significant difference among the scores of psychological variables.

Though research finding related to psychological parameter selected in the present study was not found many other findings such as the study conducted by Nowicki, Stephen and others stated the need for longitudinal study to establish the relationship between personality variables and physical fitness. The study conducted by Red Lock, Darlene, A. Dudo, Joan stated that there exists no relationship between fitness levels and influence of trait anxiety on stress responses.

The fourth hypothesis states that there may be a significant relation in selected psychological variables among low and high physical fitness group. In the present study significant relation was noticed across some of the psychological variables among high fitness group and low fitness group. The same is as follows: Among the government schools boys, there existed a significant difference on two variables namely acceptance and isolation. It was
found that boys belonging to high fitness groups were less ready to accept and were also more isolated than the low fitness groups.

Among the government schoolgirls, there is a significant difference in differentiation. It was found out that differentiation was more prominent among low fitness group girls than the high fitness group girls.

Among corporation school girls there is a significant difference in two variables namely dominance and isolation. It was found out that girls with high fitness were more dominant than the girls of low fitness groups. It was also found out that girls of low fitness groups were more isolated than the girls of high fitness group.

In case of Government School boys and Girls, high fitness groups there existed a significant difference on isolation. It was found that Government school boys were more isolated than girls across high fitness groups.

In case of government school boys and girls, low fitness groups there existed a significant difference across cooperation and submission. It was found out that Government school boys were more cooperative than government school girls. It was also
found that Government School Boys were more submissive than Government school girls in low fitness group.

In case of corporation school boys and girls, high fitness groups there existed a significant difference across submission. It was found that girls were more submissive than boys across high fitness group.

In case of corporation school boys and girls low fitness groups, there existed a significant difference across dominance and Isolation. It was found out that boys were more dominant than girls and girls tended to be more isolated than boys across low fitness.

In case of private school boys and girls high fitness groups, there existed a significant difference across dominance. It was found that boys were more dominant than girls across high fitness groups.

In case of private school boys and girls low fitness groups there existed a significant difference across Dominance. It was found that boys were more dominant than girls.

According to the fifth hypothesis "there is no relationship between fitness and social economic status of the parents". The present study
conducted considered two aspects of Socio-Economic Status i.e., parental education and occupation. The results obtained, when physical fitness were compared in terms of parental education and occupation were not uniform. Hence it is stated that there exists no relationship between fitness and Socio-Economic Status to establish any relationship between fitness and Socio-Economic Status there is a need to conduct more number of studies considering all components of Socio-Economic Status.

The study conducted by Pontheiux and Barker stated that socio-economic status is positively associated with some physical fitness variables and negatively associated with others Jan Brockhalf's through his study revealed that there existed consistently high positive relationship between Socio-Economic Status and selected physical fitness variables among both boys and girls. Rahim Baig selected parent's education, income and occupation as measures of S.E.S. The study indicated that there existed no significant relationship between vocational interest and Socio Economic Status.