Chapter – 4

ANALYSIS AND
INTERPRETATION OF DATA
CHAPTER - 4

ANALYSIS AND INTERPRETATION OF DATA

4.0 INTRODUCTION:

The data cannot serve any worthwhile purpose unless it is carefully edited, systematically classified, tabulated, scientifically analyzed, intelligently interpreted and rationally concluded.

The chapter deals with the various procedures implemented in data gathering process to measure the different influences of variables which are included in the study. The adopted methods in selection of the sample, collection of data, scoring, analysis and statistical techniques are employed.

The organisation, analysis, and interpretation of data, formulation of results and conclusions are necessary steps to get a meaningful picture out of the collected data in quantification of the data.
4.1 OBJECTIVE-1: OVERALL SELF-CONCEPT OF SECONDARY SCHOOL SPORTS GIRLS AND THEIR CLASSIFICATION:

To find out the self-concept of sports girls and classify them:

Hypothesis: The self-concept of sports girls would be good.

Table 4.1.1: Mean, SD of the whole sample towards Self Concept

<table>
<thead>
<tr>
<th>S.No</th>
<th>No. of Girls</th>
<th>Mean</th>
<th>$1/5^{th}$ of the Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>600</td>
<td>103.73</td>
<td>20.75</td>
<td>13.24</td>
</tr>
</tbody>
</table>

Observation:
The above table shows that the mean value of whole sample is 103.73 and standard deviation is 13.24

Key for Interpretation of self concept:

103 - 120 → Very Good
85 - 102 → Good
67 - 84 → Moderate
49 - 66 → Poor
Below 48 → Very Poor

Interpretation and Discussion:
The self concept of sports girls is found to be very good, because the mean value falls in that category. As the standard deviation value is less than $1/5^{th}$ of the mean value, the sample shows homogeneity in its self-concept.
Sports girls develop confidence to face any situation can take independent decision because of their ability to carry on logical thinking. They can express their views confidently. They can adjust with the new people and can resolve their conflicts on their own. They can develop self control and there by self discipline. They can develop relationship well because of their team in game events. Hence they might have had very good self concept.

Table 4.1.2: Classification of the scores of the whole sample based on Self Concept

<table>
<thead>
<tr>
<th>S.No</th>
<th>Score</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Below 48</td>
<td>Very Poor</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>49 - 66</td>
<td>Poor</td>
<td>2</td>
<td>0.33</td>
</tr>
<tr>
<td>3</td>
<td>67 - 84</td>
<td>Moderate</td>
<td>69</td>
<td>11.50</td>
</tr>
<tr>
<td>4</td>
<td>85 - 102</td>
<td>Good</td>
<td>147</td>
<td>24.50</td>
</tr>
<tr>
<td>5</td>
<td>103 - 120</td>
<td>Very Good</td>
<td>382</td>
<td>63.67</td>
</tr>
</tbody>
</table>

Interpretation and Discussion:

The highest percentage of the sample is found to have very good concept. More than half of sports girls are seen having very good self concept about themselves. The remaining 1/3rd of sports girls are occupying the three categories good self concept, moderate self concept and poor self concept.
The least percentage which is almost negligible is falling in the category of poor self concept. None of the sports girls fall in the category of very poor self concept.

4.2 OBJECTIVE - 2: OVERALL ACHIEVEMENT MOTIVATION OF SECONDARY SCHOOL SPORTS GIRLS AND THEIR CLASSIFICATION:

To find out the achievement motivation of sports girls and classify them:

**Hypothesis:** The achievement motivation of sports girls would be good.

**Table 4.2.1**: Mean, SD of the whole sample based on Achievement Motivation

<table>
<thead>
<tr>
<th>S.No</th>
<th>No. of Girls</th>
<th>Mean</th>
<th>1/5&lt;sup&gt;th&lt;/sup&gt; of the Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>600</td>
<td>86.75</td>
<td>17.35</td>
<td>10.00</td>
</tr>
</tbody>
</table>

**Observation:**

The above table shows that the mean value of whole sample is 86.75 and standard deviation is 10.00.

**Key for Interpretation of Achievement motivation:**

- 81 - 100 → Very High
- 61 - 80 → Good
- 41 - 60 → Moderate
- 21 - 40 → Poor
- Below 20 → Very Poor
**Interpretation and Discussion:**

The achievement motivation of sports girls is found to be very high because the mean value falls in that category. As the standard deviation value is less than \(1/5\) of the mean value, the sample shows homogeneity in its achievement motivation.

The girls who showed interest and participated in sports and games strived hard to achieve in those events. No doubt any, sports person aspires to get excellent results in the competing events. They may be trying their best to win the recognition of the peers and the physical direction as best players. They may also be desiring to become champions either in games or sports activities. Hence they may be having very high achievement motivation with respect to sports and games events.

**Table 4.2.2 : Classification of the scores of the whole sample based on Achievement Motivation**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Score</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Below 20</td>
<td>Very Poor</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>21 - 40</td>
<td>Poor</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>41 - 60</td>
<td>Moderate</td>
<td>10</td>
<td>1.67</td>
</tr>
<tr>
<td>4</td>
<td>61 - 80</td>
<td>Good</td>
<td>124</td>
<td>20.67</td>
</tr>
<tr>
<td>5</td>
<td>81 - 100</td>
<td>Very Good</td>
<td>466</td>
<td>77.67</td>
</tr>
</tbody>
</table>
Interpretation and Discussion:

The highest percentage of the sample is found to have very high achievement motivation. Above $\frac{3}{4}^{th}$ of sports girls are seen having very high achievement motivation about themselves. The remaining $\frac{1}{4}^{th}$ of sports girls are occupying the two categories high achievement motivation and moderate achievement motivation.

The least (nearly 2%) percentage is falling in the category of moderate achievement motivation. It is a note worthy feature to find none of the sports girls fall in the categories of low and very low achievement motivation.

4.3 OBJECTIVE - 3: OVERALL ACADEMIC PERFORMANCE OF SECONDARY SCHOOL SPORTS GIRLS AND THEIR CLASSIFICATION:

To find out the academic performance of sports girls and classify them:

Hypothesis: the academic performance of sports girls would be good.

Table 4.3.1: Mean, SD of the whole sample towards Academic Performance

<table>
<thead>
<tr>
<th>S.No</th>
<th>No. of Girls</th>
<th>Mean</th>
<th>$1/5^{th}$ of the Mean</th>
<th>S.D</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>600</td>
<td>60.17</td>
<td>12.03</td>
<td>11.97</td>
</tr>
</tbody>
</table>

Observation:

The above table shows that the mean value of whole sample is 60.17 and standard deviation is 11.97.
Key for Interpretation of Academic performance:

- Below 50 → Fair
- 51 - 60 → Very Fair
- 61 - 70 → Good
- 71 - 80 → Very Good
- 81 - 100 → Excellent

Interpretation and Discussion:

The mean academic performance of sports girls is found to be good according to the present classification. Whereas above 60% in the usual academic line is considered first class performance.

As the standard deviation is less than the $1/5^{th}$ of the mean value the sample of sports girls is found to be homogeneous in their academic performance irrespective of the variation in their sports and games events.

Table 4.3.2: Classification of the scores of the whole sample based on Academic Performance

<table>
<thead>
<tr>
<th>S.No</th>
<th>Score</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Below 50</td>
<td>Fair</td>
<td>172</td>
<td>29</td>
</tr>
<tr>
<td>2</td>
<td>51 - 60</td>
<td>Very Fair</td>
<td>228</td>
<td>39</td>
</tr>
<tr>
<td>3</td>
<td>61 - 70</td>
<td>Good</td>
<td>102</td>
<td>17</td>
</tr>
<tr>
<td>4</td>
<td>71 - 80</td>
<td>Very Good</td>
<td>71</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>81 - 100</td>
<td>Excellent</td>
<td>27</td>
<td>5</td>
</tr>
</tbody>
</table>
Interpretation and Discussion:

More than 1/3rd of the sample has very fair academic performance. About 29% of the sports girls had fair academic performance. The remaining 1/3rd of the sample performed very well all of these have secured first class marks. Out of them 17% of them are found in good category, 12% of them came under very good category of academic performance. It is otherwise considered distinction according to the usual standards. 5% of them secured excellent academic scores.

It is evident that the participation in games and sports positively influenced their academic programs also. The average performance of the sports girls is found to be much better than academic performance of the 8th and 9th class pupils.
4.4 ‘t’ TEST:

Standard scores provide a method of expressing any score in a distribution in terms of its distance from the mean in standard deviation units. The utility of this conversion of a raw score to a standard score will become clear as each type is introduced and illustrated. When small samples are involved, the ‘t’ table is used to determine statistical significance of the table.

In this study the investigation has been carried out by the Descriptive Statistical Analysis, such as calculating measures of central tendency like Mean and calculating measures of dispersion like Standard deviation. For testing the null hypothesis (Significance of the difference between means) the Co-efficient of Correlation and t-test has been used by the investigator.

SELF CONCEPT

4.5 OBJECTIVE - 4: INFLUENCE OF VARIABLES LIKE TYPE OF SCHOOL, LOCALITY OF SCHOOL AND PARTICIPATING EVENT ON THE SELF CONCEPT OF THE SPORTS GIRLS.

To find out the influence of the following variables on the self concept of the sports girls.
4.5.1 Influence of the type of school on the self concept of sports girls.

Table 4.5.1: Mean, SD and t-value w.r.t type of school towards Self Concept

<table>
<thead>
<tr>
<th>MANAGEMENT</th>
<th>N</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>t-ratio</th>
<th>Df</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVERNMENT</td>
<td>300</td>
<td>106.73</td>
<td>9.93</td>
<td>5.71**</td>
<td>598</td>
</tr>
<tr>
<td>PRIVATE</td>
<td>300</td>
<td>100.72</td>
<td>15.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at both the levels.

Observation:

Table 4.5.1 depicts that the mean score of Government school sports girls (106.73) is higher than the mean score of Private school sports girls (100.72). The ‘t’ ratio is found to be 5.71, which is significant at 0.01 level of confidence.

Interpretation:

The obtained t-value is greater than the table values at both the levels. From the above table it is found that there is significant difference between sport girls of Government and private schools in their self concept. The self concept of sports girls of Government schools is better than that of sports girls of private schools.
Hypothesis: I a

The hypothesis that there is no significant difference between Government and Private school sports girls in their Self Concept is rejected.

The graph plotted below also certifies the above investigation.

Graph - 4.5.a

Findings: The sports girls of government schools are found to have higher self concept than the sports girls of private schools.
4.5.ii The influence of locality of school on the self concept of the sport girls.

Table 4.5.2: Mean, SD and t-value w.r.t locality of school towards Self Concept

<table>
<thead>
<tr>
<th>LOCALITY</th>
<th>N</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>t-ratio</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN</td>
<td>300</td>
<td>107.20</td>
<td>10.39</td>
<td><strong>6.67</strong></td>
<td>598</td>
</tr>
<tr>
<td>RURAL</td>
<td>300</td>
<td>100.25</td>
<td>14.79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at both the levels

Observation:

Table 4.5.2 depicts that the mean score of Urban area sports girls (107.20) is higher than the mean score of Rural area sports girls (100.25). The ‘t’ ratio is found to be 6.67, which is significant at 0.01 level of confidence.

Interpretation:

The obtained t-value is greater than the table values at both the levels. From the above table it is found that there is significant difference between sports girls of rural and urban schools in their self concept. The self concept of sports girls of urban schools is better than that of the sports girls of rural schools.
Hypothesis: I b

The hypothesis that there is no significant difference between Urban and Rural area sports girls in Self Concept is rejected.

The graph plotted below also certifies the above investigation.

Graph - 4.5.b

Finding: Urban sports girls are found to have high self concept compared to rural sports girls.
4.5.iii The influence of participating event on the self concept of sport girls.

Table 4.5.3: Mean, SD and t-value w.r.t participating even towards Self Concept

<table>
<thead>
<tr>
<th>PARTICIPATION</th>
<th>N</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>t-ratio</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPORTS</td>
<td>518</td>
<td>103.14</td>
<td>13.35</td>
<td>2.72**</td>
<td>598</td>
</tr>
<tr>
<td>GAMES</td>
<td>82</td>
<td>107.40</td>
<td>11.94</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at both the levels

Observation:

Table 4.5.3 depicts that the mean score of girls participating in games (107.40) is higher than the mean score of participating in sports (103.14). The 't' ratio is found to be 2.72, which is significant at 0.01 level of confidence.

Interpretation:

The obtained t-value is greater than the table values at both the levels. From the above table it is found that there is significant difference between the girls participating in sports event and games events in their self concept. The self concept of the girls participating in the games events is better than that of the girls participating in sports events.
Hypothesis I c:

The hypothesis that there is no significant difference between girls participating in Sports and Games in their Self Concept is rejected.

The graph plotted below also certifies the above investigation.

Findings: Girls participating in games events are found to have higher self concept than the girls participating in sports events.
4.6 OBJECTIVE - 5: INFLUENCE OF VARIABLES LIKE TYPE OF SCHOOL, LOCALITY OF SCHOOL AND PARTICIPATING EVENT ON THE ACHIEVEMENT MOTIVATION OF THE SPORTS GIRLS:

To find out the influence of the following variables on the Achievement Motivation of the sports girls.

4.6.i Influence of the type of school on the Achievement Motivation of sports girls.

Table 4.6.1: Mean, SD and t-value w.r.t type of school towards Achievement Motivation

<table>
<thead>
<tr>
<th>MANAGEMENT</th>
<th>N</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>t-ratio</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVERNMENT</td>
<td>300</td>
<td>89.29</td>
<td>6.94</td>
<td>6.45**</td>
<td>598</td>
</tr>
<tr>
<td>PRIVATE</td>
<td>300</td>
<td>84.20</td>
<td>11.79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at both the levels

Observation:

Table 4.6.1 depicts that the mean score of Government school sports girls (89.29) is higher than the mean score of Private school sports girls (84.20). The 't' ratio is found to be 6.45, which is significant at 0.01 level.

Interpretation:

The obtained t-value is greater than the table values at both the levels. From the above table it is found that there is significant difference between sport girls of Government and private schools in
their Achievement Motivation. The Achievement Motivation of sports girls of Government schools is better than that of sports girls of private schools.

**Hypothesis II a:**

The hypothesis that there is no significant difference between Government school and Private school sports girls in Achievement Motivation is rejected.

The graph plotted below also certifies the above investigation.

**Graph - 4.6.a**

![Graph showing mean scores of different Management group students in Achievement Motivation](image)

Findings: Government school girls are found to have high achievement motivation compared to private school girls.
4.6.ii The influence of locality of school on the Achievement Motivation of the sport girls.

Table 4.6.2: Mean, SD and t-value w.r.t locality of school towards Achievement Motivation

<table>
<thead>
<tr>
<th>LOCALITY</th>
<th>N</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>t-ratio</th>
<th>Df</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN</td>
<td>300</td>
<td>88.68</td>
<td>8.05</td>
<td>4.81**</td>
<td>598</td>
</tr>
<tr>
<td>RURAL</td>
<td>300</td>
<td>84.82</td>
<td>11.32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at both the levels

Observation:

Table 4.6.2 depicts that the mean score of Urban area school sports girls (88.68) is higher than the mean score of Rural area sports girls (84.82). The ‘t’ ratio is found to be 4.81, which is significant at 0.01 level.

Interpretation:

The obtained t-value is greater than the table values at both the levels. From the above table it is found that there is significant difference between sports girls of rural and urban schools in their Achievement Motivation. The Achievement Motivation of sports girls of urban schools is better than that of the sports girls of rural schools.
Hypothesis II b:

The hypothesis that there is no significant difference between sports girls in Urban and Rural area sports girls in Achievement Motivation is rejected.

The graph plotted below also certifies the above investigation.

Graph - 4.6.b

Findings: Urban school girls are found to have higher achievement motivation compared to rural girls.
4.6.iii The influence of participating event on the Achievement Motivation of sport girls.

Table 4.6.3: Mean, SD and t-value w.r.t participating event towards Achievement Motivation

<table>
<thead>
<tr>
<th>PARTICIPATION</th>
<th>N</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>t-ratio</th>
<th>Df</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPORTS</td>
<td>518</td>
<td>86.20</td>
<td>10.20</td>
<td>3.40**</td>
<td>598</td>
</tr>
<tr>
<td>GAMES</td>
<td>82</td>
<td>90.21</td>
<td>7.86</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at both the levels

Observation:

Table 4.6.3 depicts that the mean score of girls participated in Games (90.21) is higher than the mean score of girls participated in Sports (86.20). The 't' ratio is found to be 3.40, which is significant at 0.01 level.

Interpretation:

The obtained t-value is greater than the table values at both the levels. From the above table it is found that there is significant difference between the girls participating in sports event and games events in their Achievement Motivation. The Achievement Motivation of the girls participating in the games events is better than that of the girls participating in sports events.
Hypothesis II c:

The hypothesis that there is no significant difference between girls participated in Sports and Games in Achievement Motivation is rejected.

The graph plotted below also certifies the above investigation.

Graph – 4.6.c

Findings: Girls participating in games events are found to have high achievement motivation than girls participating in sports events.
4.7 OBJECTIVE - 6: INFLUENCE OF VARIABLES LIKE TYPE OF SCHOOL, LOCALITY OF SCHOOL AND PARTICIPATING EVENT ON ACADEMIC PERFORMANCE OF THE SPORTS GIRLS:

To find out the influence of the following variables on the Academic Performance of the sports girls.

4.7.1 Influence of the type of school on the Academic Performance of sports girls.

Table 4.7.1: Mean, SD and t-value w.r.t type of school towards Academic Performance

<table>
<thead>
<tr>
<th>MANAGEMENT</th>
<th>N</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>t-ratio</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOVERNMENT</td>
<td>300</td>
<td>58.89</td>
<td>11.33</td>
<td>2.64**</td>
<td>598</td>
</tr>
<tr>
<td>PRIVATE</td>
<td>300</td>
<td>61.45</td>
<td>12.45</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at both the levels

Observation:

Table 4.7.1 depicts that the mean score of Private school sports girls (61.45) is higher than the mean score of Government school sports girls (58.89). The 't' ratio is found to be 2.64, which is significant at 0.01 level of confidence.

Interpretation:

The obtained t-value is greater than the table values at both the levels. From the above table it is found that there is significant difference between sport girls of Government and private schools in
their Academic Performance. The Academic Performance of sports girls of private schools is better than that of sports girls of Government schools.

Hypothesis III.a:

The hypothesis that there is no significant difference between Government and Private school sports girls in Academic Achievement is rejected.

The graph plotted below also certifies the above investigation.

Graph - 4.7.a

Findings: Private school girl students are found to have high academic achievement compared to government girl students.
4.7.ii. The influence of locality of school on the Academic Performance of the sports girls.

Table 4.7.2: Mean, SD and t-value w.r.t locality of school towards Academic Performance

<table>
<thead>
<tr>
<th>LOCALITY</th>
<th>N</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>t-ratio</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>URBAN</td>
<td>300</td>
<td>58.14</td>
<td>10.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RURAL</td>
<td>300</td>
<td>62.21</td>
<td>12.64</td>
<td>4.22**</td>
<td>598</td>
</tr>
</tbody>
</table>

** Significant at both the levels

Observation:

Table 4.7.2 depicts that the mean score of rural area sports girls (62.21) is higher than the mean score of urban area sports girls (58.14). The 't' ratio is found to be 4.22, which is significant at 0.01 level of confidence.

Interpretation:

The obtained t-value is greater than the table values at both the levels. From the above table it is found that there is significant difference between sports girls of rural and urban schools in their Academic Performance. The Academic Performance of sports girls of rural schools is better than that of the sports girls of urban schools.
Hypothesis III.b.

The hypothesis that there is no significant difference between urban and rural area sports girls in Academic Achievements is rejected.

The graph plotted below also certifies the above investigation.

Graph - 4.7.b

Findings: Rural sport girls are found to have high academic achievement compared to urban sports girls.
4.7.iii The influence of participating event on Academic Performance of sport girls.

Table 4.7.3: Mean, SD and t-value w.r.t participating even towards Academic Performance

<table>
<thead>
<tr>
<th>PARTICIPATION</th>
<th>N</th>
<th>Mean</th>
<th>Std.Dev.</th>
<th>t-ratio</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPORTS</td>
<td>518</td>
<td>59.87</td>
<td>12.12</td>
<td>1.53</td>
<td>598</td>
</tr>
<tr>
<td>GAMES</td>
<td>82</td>
<td>62.05</td>
<td>10.79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Observation:

Table 4.7.3 depicts that the mean score of girls participating in games (62.05) is higher than the mean score of participating in sports (59.87). The 't' ratio is found to be 1.53, which is not significant at 0.05 level.

Interpretation:

The obtained t-value is less than the table values at both the levels. From the above table it is found that there is no significant difference between the girls participating in sports event and games events in their Academic Performance.
Hypothesis III.c:

The hypothesis that there is no significant difference between girls participating in Sports and Games in Academic Achievement is accepted.

The graph plotted below also certifies the above investigation.

Graph - 4.7.c

Findings: There is no significant difference between the girls participating in sports and games in their academic achievement.
4.8 STATISTICAL SIGNIFICANCE OF COEFFICIENT OF CORRELATION

The idea of statistical significance and its relationship to the null hypothesis have been emphasized. An observed coefficient of correlation may result from chance or sampling error, and a test to determine its statistical significance is appropriate. The null hypothesis states that the coefficient of correlation is zero only when chance or sampling error has been described on a probability basis a coefficient of correlation can be accepted as statistically significant.

Correlation Table

Table 4.8.1: Correlation between variables like Self Concept, Achievement Motivation and Academic Performance

<table>
<thead>
<tr>
<th>S.No</th>
<th>Relation between variables</th>
<th>Values</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Self Concept Vs Achievement Motivation</td>
<td>0.76**</td>
<td>600</td>
</tr>
<tr>
<td>2</td>
<td>Self Concept Vs Academic Performance</td>
<td>0.03</td>
<td>600</td>
</tr>
<tr>
<td>3</td>
<td>Achievement Motivation Vs Academic Performance</td>
<td>0.05</td>
<td>600</td>
</tr>
</tbody>
</table>

** Correlation is significant at both the levels.

Hypothesis:

1. There is no significant relationship between self concept and achievement motivation of Sports girls.
2. There is no significant relationship between self concept and academic performance of sports girls.

3. There is no significant relationship between achievement motivation and academic performance of sports girls.

Findings:

1. From the above table the value 0.76 is significant at 0.01 level. There is a significant relationship between self concept and achievement motivation among the sports girls. Hence the hypothesis is rejected.

2. From the above table the value 0.03 is not significant. There is no significant relationship between self concept and academic performance among the sports girls. Hence the hypothesis is accepted.

3. From the above table the value 0.05 is not significant. There is no significant relationship between achievement motivation and academic performance among the sports girls. Hence the hypothesis is accepted.
4.9 DIFFERENCES BETWEEN VARIABLES LIKE RURAL AND URBAN (GOVT., PRIVATE) SCHOOLS IN THE SELF CONCEPT OF SPORTS GIRLS:

Hypothesis IV:

A) There would be no significant difference in the Self concept of sports girls
   1. between rural government and rural private schools.
   2. between rural government and urban government schools.
   3. between rural government and urban private schools.
   4. between rural private and urban government schools.
   5. between rural private and urban private schools.
   6. between urban government and urban private schools.
Table 4.9.1 Analysis of Variance (ANOVA)  
- Locality & School wise in Self Concept

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>17499.63</td>
<td>3</td>
<td>5833.21</td>
<td>39.76</td>
<td>0.00</td>
</tr>
<tr>
<td>Within Groups</td>
<td>87447.99</td>
<td>596</td>
<td>146.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>104947.63</strong></td>
<td><strong>599</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.9.1 shows the ANOVA between groups and within groups, the df values are 3 and 596 and sum of squares are 17499.63 and 87447.99 and mean squares are 5833.21 and 146.72 respectively. The F-ratio is found to be 39.76 which is significant at 0.01 level. So the null hypothesis "There is no significant difference between and within the mean scores of sports girls studying in Rural Government schools, Rural Private schools, Urban Government schools and Urban Private schools in Self Concept towards Self Concept and Achievement Motivation of Sports Girls" is rejected.

Findings:

There is significant difference between sports girls studying in rural government, rural private, urban government, urban private schools in self concept.
**Table 4.9.2 : Differences between variables like Rural and Urban (Govt., Private) Schools based on Self Concept**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-Ratio</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rural Government</td>
<td>150</td>
<td>106.09</td>
<td>10.40</td>
<td>7.44**</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Rural Private</td>
<td>150</td>
<td>94.41</td>
<td>16.19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Rural Government</td>
<td>150</td>
<td>106.09</td>
<td>10.40</td>
<td>1.12</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Government</td>
<td>150</td>
<td>107.37</td>
<td>9.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Rural Government</td>
<td>150</td>
<td>106.09</td>
<td>10.40</td>
<td>0.75</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Private</td>
<td>150</td>
<td>107.03</td>
<td>11.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Rural Private</td>
<td>150</td>
<td>94.41</td>
<td>16.19</td>
<td>8.48**</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Government</td>
<td>150</td>
<td>107.37</td>
<td>9.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Rural Private</td>
<td>150</td>
<td>94.41</td>
<td>16.19</td>
<td>7.83**</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Private</td>
<td>150</td>
<td>107.03</td>
<td>11.30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Urban Government</td>
<td>150</td>
<td>107.37</td>
<td>9.44</td>
<td>0.28</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Private</td>
<td>150</td>
<td>107.03</td>
<td>11.30</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at both the levels.

From the above table, it reveals that

1. The mean scores of sports girls from Rural Government is higher than the mean scores of Rural Private schools. The 't' Ratio is found to be 7.44 which is significant at both the levels of confidence. This shows that there is a significant difference in the mean scores of both the groups.

2. The mean score of sports girls from Urban Government schools (106.09) is higher than the mean score of Rural Government
schools (94.41). The 't' ratio is found to be 1.12, which is not significant at 0.05 level. This shows that there is no significant difference in the mean scores of both the groups.

3. The mean score of sports girls from Urban Private schools (106.09) is higher than the mean score of Rural Government schools (106.09). The 't' ratio is found to be 0.75, which is not significant at 0.05 level. This shows that there is no significant difference in the mean scores of both the groups.

4. The mean score of sports girls from Urban Government schools (107.37) is higher than the mean score of Rural Private schools (94.41). The 't' ratio is found to be 8.48, which is significant at 0.01 level. This shows that there is a significant difference in the mean scores of both the groups.

5. The mean score of sports girls in Urban Private schools (107.03) is higher than the mean score of Rural Private schools (94.41). The 't' ratio is found to be 7.83, which is significant at 0.01 level. This shows that there is a significant difference in the mean scores of both the groups.

6. The mean score of sports girls in Urban Government schools (107.37) is higher than the mean score of Urban Private schools (107.03). The 't' ratio is found to be 0.28, which is not significant at 0.05 level. This shows that there is no significant difference in the mean scores of both the groups.
Hypothesis:

1. The hypothesis that there is no significant difference between sports girls from Rural Government and Rural Private schools in Self Concept towards Self Concept and Achievement Motivation in sport Girls is rejected.

2. The hypothesis, that there is no significant difference between sports girls from Rural Government and Urban Government schools in Self Concept towards Self Concept and Achievement Motivation in sport Girls, is accepted.

3. The hypothesis that there is no significant difference between sports girls from Rural Government and Urban Private schools in Self Concept towards Self Concept and Achievement Motivation in sport Girls is accepted.

4. The hypothesis that there is no significant difference between sports girls from Rural Private and Urban Government schools in Self Concept towards Self Concept and Achievement Motivation in sport Girls is rejected.

5. The hypothesis, that, “there is no significant difference between sports girls in Rural Private and Urban Private schools in Self Concept towards Self Concept and Achievement Motivation in sport Girls” is rejected.

6. The hypothesis that there is no significant difference between sports girls in Urban Government and Urban Private schools in Self Concept towards Self Concept and Achievement Motivation in sport Girls is accepted.
The graph plotted below also certifies the above investigation

Graph - 4.9.a

Mean Scores of different variables in Self Concept

Findings:

1. Sports girls of rural government schools are found to have higher self concept compared to girls of rural private schools.

2. There is no significant difference between the rural government and urban government school girls in their self concept.

3. There is no significant difference between rural government and urban private school girls in their self concept.

4. Sports girls of urban government schools are found to have higher self-concept than the girls of rural private schools.

5. The sports girls of urban private schools are found to have higher self-concept compared to the girls of rural private schools.

6. There is no significant difference between urban government and urban private school girls in their self concept.
4.10 DIFFERENCES BETWEEN VARIABLES LIKE RURAL AND URBAN (GOVT., PRIVATE SCHOOLS IN THE ACHIEVEMENT MOTIVATION OF SPORTS GIRLS:

There would be no significant difference in the Achievement Motivation of sports girls

1. between rural government and rural private schools.
2. between rural government and urban government schools.
3. between rural government and urban private schools.
4. between rural private and urban government schools.
5. between rural private and urban private schools.
6. between urban government and urban private schools.

Table 4.10.1 Analysis of Variance (ANOVA)
- Locality & School wise in Achievement Motivation

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>9346.41</td>
<td>3</td>
<td>3115.47</td>
<td>36.74</td>
<td>0.00</td>
</tr>
<tr>
<td>Within Groups</td>
<td>50537.08</td>
<td>596</td>
<td>84.79</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>59883.49</td>
<td>599</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.10.1 shows the ANOVA between groups and within groups, the df values are 3 and 596 and sum of squares are 9346.41 and 50537.08 and mean squares are 3115.47 and 84.79 respectively. The F-ratio is found to be 36.74 which is significant at 0.01 level. So the null hypothesis “There is no significant difference
between and within the mean scores of sports girls studying in Rural Government schools, Rural Private schools, Urban Government schools and Urban Private schools in Achievement Motivation towards Self Concept and Achievement Motivation of Sports Girls" is rejected

**Findings:** There is significant difference in achievement motivation among girls studying in rural government, rural private, urban government and urban private schools.

**Table 4.10.2 : Differences between variables like Rural and Urban (Govt., Private) Schools based on Achievement Motivation**

<table>
<thead>
<tr>
<th>S.No</th>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-Ratio</th>
<th>Df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rural Government</td>
<td>150</td>
<td>89.68</td>
<td>6.65</td>
<td>8.23**</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Rural Private</td>
<td>150</td>
<td>79.95</td>
<td>12.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Rural Government</td>
<td>150</td>
<td>89.68</td>
<td>6.65</td>
<td>0.97</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Government</td>
<td>150</td>
<td>88.91</td>
<td>7.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Rural Government</td>
<td>150</td>
<td>89.68</td>
<td>6.65</td>
<td>1.37</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Private</td>
<td>150</td>
<td>88.45</td>
<td>8.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Rural Private</td>
<td>150</td>
<td>79.95</td>
<td>12.85</td>
<td>7.44**</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Government</td>
<td>150</td>
<td>88.91</td>
<td>7.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Rural Private</td>
<td>150</td>
<td>79.95</td>
<td>12.85</td>
<td>6.67**</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Private</td>
<td>150</td>
<td>88.45</td>
<td>8.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Urban Government</td>
<td>150</td>
<td>88.91</td>
<td>7.22</td>
<td>0.49</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Private</td>
<td>150</td>
<td>88.45</td>
<td>8.81</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
From the above table, it reveals that

1. The mean score of Rural Government school sports girls (89.68) is higher than the mean score of Rural Private school sports girls (79.95). The 't' ratio is found to be 8.23, which is significant at 0.01 level. This shows that there is a significant difference in the mean scores of both the groups.

2. The mean score of Rural Government school sports girls (89.68) is higher than the mean score of Urban Government school sports girls (88.91). The 't' ratio is found to be 0.97, which is not significant at 0.01 level. This shows that there is no significant difference in the mean scores of both the groups.

3. The mean score of Rural Government school sports girls (89.68) is higher than the mean score of Urban Private school sports girls (88.45). The 't' ratio is found to be 1.37, which is not significant at 0.01 level. This shows that there is no significant difference in the mean scores of both the groups.

4. The mean score of Urban Government school sports girls (88.91) is higher than the mean score of Rural Private school sports girls (79.95). The 't' ratio is found to be 7.44, which is significant at
0.01 level. This shows that there is a significant difference in the mean scores of both the groups.

5. The mean score of urban private school sports girls (88.45) is higher than the mean score of rural private school sports girls (79.95). The 't' ratio is found to be 6.67, which is significant at 0.01 level. This shows that there is a significant difference in the mean scores of both the groups.

6. The mean score of urban government school sports girls (88.91) is higher than the mean score of urban private school sports girls (88.45). The 't' ratio is found to be 0.49, which is not significant at 0.05 level. This shows that there is no significant difference in the mean scores of both the groups.

HYPOTHESIS:

1. The hypothesis that there is no significant difference between Rural Government and Rural Private school sports girls in Achievement Motivation towards Self Concept and Achievement Motivation in sport Girls is rejected.

2. The hypothesis that there is no significant difference between Rural Government and Urban Government school sports girls in Achievement Motivation towards Self Concept and Achievement Motivation in sport Girls is accepted.
3. The hypothesis that there is no significant difference between Rural Government and Urban Private school sports girls in Achievement Motivation towards Self Concept and Achievement Motivation in sport Girls is accepted.

4. The hypothesis that there is no significant difference between Urban Government and Rural Private school sports girls in Achievement Motivation towards Self Concept and Achievement Motivation in sport Girls is rejected.

5. The hypothesis that there is no significant difference between rural private and urban private school sports girls in Achievement Motivation towards Self Concept and Achievement Motivation in sport Girls is rejected.

6. The hypothesis that there is no significant difference between urban government and urban private school sports girls in Achievement Motivation towards Self Concept and Achievement Motivation in sport Girls is accepted.
Findings:

1. Sports girls of rural government schools are found to have high achievement motivation compared to rural private school sports girls.

2. There is no significant difference among rural government and urban government school girls in their achievement motivation.

3. There is no significant difference among rural government and urban private school girl students in their achievement motivation.

4. Sports girls of urban government schools are found to have high achievement motivation compared to rural private girl students.

5. Urban private school girls are found to have high achievement motivation compared to rural private school students.

6. There is no significant difference between urban government and urban private girl students in their achievement motivation.
4.11 DIFFERENCES BETWEEN VARIABLES LIKE RURAL AND URBAN (GOVT., PRIVATE) SCHOOLS IN THE ACADEMIC PERFORMANCE OF SPORTS GIRLS:

There would be no significant difference in the Academic Performance of sports girls

1. between rural government and rural private schools.
2. between rural government and urban government schools.
3. between rural government and urban private schools.
4. between rural private and urban government schools.
5. between rural private and urban private schools.
6. between urban government and urban private schools.

Table 4.11.1 shows the ANOVA between groups and within groups, the df values are 3 and 596 and sum of squares are 5403.55 and 80359.77 and mean squares are 1801.18 and 134.83 respectively. The F-ratio is found to be 13.36 which is significant at 0.01 level. So the null hypothesis “There is no significant difference
between and within the mean scores of sports girls studying in Rural Government schools, Rural Private schools, Urban Government schools and Urban Private schools in Academic Performance towards Self Concept and Achievement Motivation of Sports Girls" is rejected

Findings:

There is significant difference in Academic Performance among the sports girls studying in Rural government schools, Rural private schools, Urban government schools and Urban private schools.

Table 4.11.2: Differences between variables like Rural and Urban (Govt., Private) Schools based on Academic Performance

<table>
<thead>
<tr>
<th>S.No</th>
<th>Variables</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t-Ratio</th>
<th>Df</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Rural Government</td>
<td>150</td>
<td>62.72</td>
<td>13.32</td>
<td>0.70</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Rural Private</td>
<td>150</td>
<td>61.69</td>
<td>11.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Rural Government</td>
<td>150</td>
<td>62.72</td>
<td>13.32</td>
<td>6.21**</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Government</td>
<td>150</td>
<td>55.06</td>
<td>07.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Rural Government</td>
<td>150</td>
<td>62.72</td>
<td>13.32</td>
<td>0.99</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Private</td>
<td>150</td>
<td>61.21</td>
<td>12.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Rural Private</td>
<td>150</td>
<td>61.69</td>
<td>11.95</td>
<td>5.84**</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Government</td>
<td>150</td>
<td>55.06</td>
<td>07.13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Rural Private</td>
<td>150</td>
<td>61.69</td>
<td>11.95</td>
<td>0.33</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Private</td>
<td>150</td>
<td>61.21</td>
<td>12.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Urban Government</td>
<td>150</td>
<td>55.06</td>
<td>07.13</td>
<td>5.09**</td>
<td>298</td>
</tr>
<tr>
<td></td>
<td>Urban Private</td>
<td>150</td>
<td>61.21</td>
<td>12.98</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

** Significant at both the levels.
From the above table, it reveals that

1. The mean score of sports girls from Rural Government school (62.72) is higher than the mean score of Rural Private schools (61.69). The ‘t’ ratio is found to be 0.70, which is not significant at 0.05 level. This shows that there is no significant difference in the mean scores of both the groups.

2. The mean score of sports girls from rural government schools (62.72) is higher than the mean score of urban government schools (55.06). The ‘t’ ratio is found to be 6.21, which is significant at 0.01 level. This shows that there is a significant difference in the mean scores of both the groups.

3. The mean score of sports girls from rural government schools (62.72) is higher than the mean score of urban private schools (61.21). The ‘t’ ratio is found to be 0.99, which is not significant at 0.05 level. This shows that there is no significant difference in the mean scores of both the groups.

4. The mean score of sports girls from rural private schools (61.69) is higher than the mean score of urban government schools (55.06). The ‘t’ ratio is found to be 5.84, which is significant at 0.01 level. This shows that there is a significant difference in the mean scores of both the groups.
5. The mean score of sports girls in rural private schools (61.69) is higher than the mean score of urban private schools (61.21). The 't' ratio is found to be 0.33, which is not significant at 0.05 level. This shows that there is no significant difference in the mean scores of both the groups.

6. The mean score of sports girls in urban government schools (61.21) is higher than the mean score of urban private schools (55.06). The 't' ratio is found to be 5.09, which is significant at 0.01 level. This shows that there is a significant difference in the mean scores of both the groups.

Hypothesis:

1. The hypothesis that there is no significant difference between sports girls from Rural Government and Rural Private schools in Academic Performance towards Self Concept and Achievement Motivation in sport Girls is rejected.

2. The hypothesis that there is no significant difference between sports girls from Rural Government and Urban Government schools in Academic Performance towards Self Concept and Achievement Motivation in sport Girls is rejected.
3. The hypothesis that there is no significant difference between sports girls from rural government and urban private schools in Self Concept towards Self Concept and Achievement Motivation in sport Girls is accepted.

4. The hypothesis that there is no significant difference between sports girls from rural private and urban government schools in Academic Performance towards Self Concept and Achievement Motivation in sport Girls is rejected.

5. The hypothesis that there is no significant difference between sports girls in rural private and urban private schools in Academic Performance towards Self Concept and Achievement Motivation in sport Girls is rejected.

6. The hypothesis that there is no significant difference between sports girls in urban government and urban private schools in Academic Performance towards Self Concept and Achievement Motivation in sport Girls is rejected.
The graph plotted below also certifies the above investigation

**Graph - 4.11.a**

**Mean Scores of different variables in Academic Performance**

- Rural Govt.: 62.72
- Rural Private: 61.69
- Urban Govt.: 55.06
- Urban Private: 61.21
Findings:

1. Rural Government School Girl students are found to have high academic performance compared to rural private school girl students.

2. Rural government school girl students are found to have high academic performance compared to urban government school girl students.

3. Rural government school girl students are found to have high academic performance compared to urban private school girl students.

4. Rural private school girl students are found to have high academic performance compared to urban government school girl students.

5. There is no significant difference between rural private and urban private school girl students in their academic performance.

6. Urban private school girl students are found to have high academic performance compared to urban private school girl students.