# CHAPTER IV

# ANALYSIS AND INTERPRETATION OF DATA

## 4.0 INTRODUCTION

The methodology used to carry out the study is covered in the previous chapter. The present chapter deals with the analysis and interpretation of data gathered to by the researcher for fulfilling all the objectives of the study and presentation of the results. Through data analysis the researcher examines the structured information to find underlying facts. Analysis and interpretation are crucial to any research as it gives significance to data gathered and enables the researcher to draw valid findings. One of the most significant aspects of the study is covered in this section. The analysis and interpretation have been done objective wise in different headings.

## 4.1 COMPARISON OF MEAN SCORES OF ACHIEVEMENT IN SOCIAL SCIENCE OF EXPERIMENTAL GROUP AND CONTROL GROUP AT PRE-TEST AND POST-TEST STAGES

The first objective was to study the significant difference between the mean scores of achievement in social science of experimental group and control group students at pre-test and post-test stages. To fulfill this objective the data have been analyzedusing paired t-test and the result has been given in Table No. 4.1.

**Table No. 4.1**

**Table showing paired t-test result of Experimental group (EG) and Control group (CG) at pre-test and post-test level**

| Level of test | Groups | N | Mean | S. D | SEM | df | t value | p value | Level of sig. |
|---|---|---|---|---|---|---|---|---|---|
| Pre-test | EG | 70 | 2.07 | 1.23 | .147 | 69 | .72 | 0.47 | 0.05 |
| | CG | 70 | 2.11 | 1.14 | .137 | | | | |
| Post-test | EG | 70 | 50.49 | 3.23 | .386 | 69 | 9.46* | 0.00 | 0.05 |
| | CG | 70 | 45.67 | 3.12 | .373 | | | | |

*Significant at 0.05 level

From table no. 4.1 it can be seen that the number of students at pre-test level in both Experimental and Control Group are is same that is 70. The Mean score of achievement in Social Science of Experimental group is 2.07 and the mean score of achievement in Social Science of Control Group is 2.11, so the mean score of both thegroup is almost similar. The Standard Deviation (SD) of Experimental group is 1.23 and of Control group is 1.14. The Standard Error of Mean (SEM) of Experimental group is .147 and of Control group is .147.

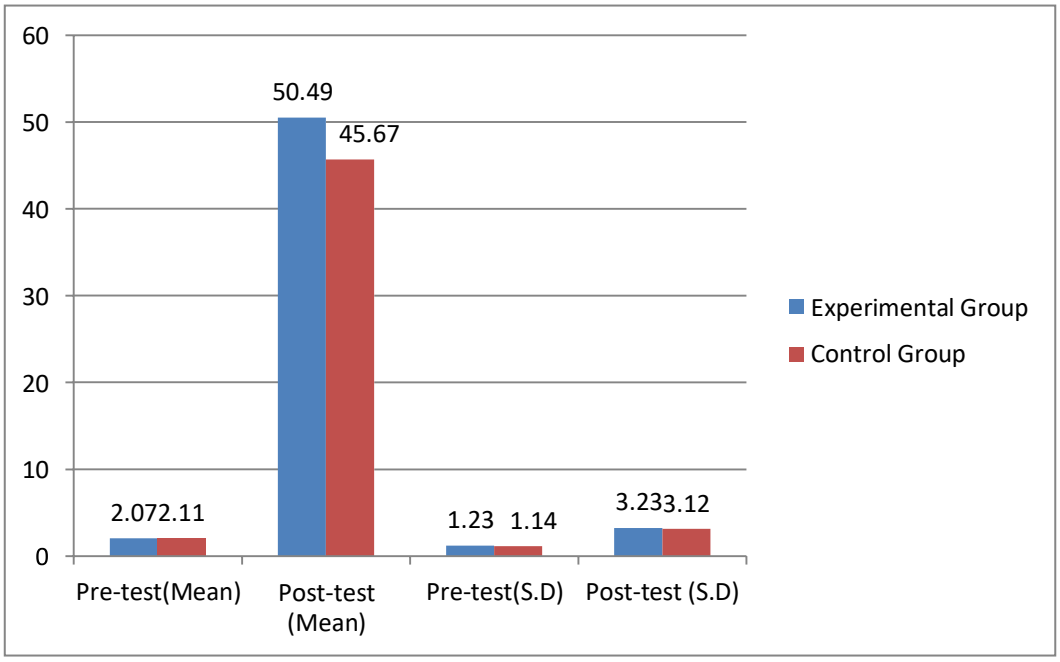
The calculated t-value is .72, which is within the range of -1.99 and 1.99. This means the researcher cannot reject the null hypothesis based on the t-test. Also, the p value is 0.47 which is greater than the 0.05 level of significance having degree of freedom 69. Therefore, it can be said that the null hypothesis which is '*There is no significant difference between the mean scores of achievement in Social Science of Experimental group and Control group students at pre-test stage'* is accepted. Thus, it can be concluded that the there is no significant difference between the mean scores of achievement in Social Science of Experimental group and Control group students at pre-test stage.

Also, from the table no. 4.1, it is seen that at the post-test stage, the number of students in both the group is same, which is 70. The Mean score of achievement in social science of experimental group is 50.49 and the mean score of achievement in social science of control group is 45.67, so there is a difference in mean score of both the group. The Standard Deviation (SD) of experimental group is 3.23 and of control group is 3.12. The Standard Error of Mean (SEM) of experimental group is .386 andof control group is .373.

The t-value is 9.46 which is greater than the table value of 1.99. The p-value is 0.00 which is smaller than the 0.05 level of significance having degree of freedom 69. Therefore, it can be said that the null hypothesis which is '*There is no significant difference between the mean scores of achievement in Social Science of Experimental group and Control group students at post-test stage'* is rejected. Thus, it can be concluded that the there is significant difference between the mean scores of achievement in social science of experimental group and control group students at post-test stage.

**Figure 4.1**

**Mean Score and Standard Deviation (S.D) of achievement of Experimental group and Control Group at pre-test and post-test level**




The above analysis shows that there is no significant difference between the mean scores of achievement of experimental group and control group at pre-test stage. However significant difference has been found between the mean scores of achievement of experimental group and control group at post-test stage. Hence, it is clear that experiential learning approach is effective in increasing the achievement of students in social science of experimental group.

## 4.2 COMPARISON OF ADJUSTED MEAN SCORES OF ACHIEVEMENT IN SOCIAL SCIENCE OF STUDENTS BELONGING TO EXPERIMENTAL GROUP AND CONTROL GROUP BY CONSIDERING PRE-ACHIEVEMENT IN SOCIAL SCIENCE AS THE COVARIATE.

The second objective was to compare the adjusted mean scores of achievement in social science of students belonging to experimental group and control group by considering pre-achievement in social science as the covariate. The data have been analyzed using one way analysis of covariance. The results have been presented in Table no. 4.2 & 4.3

**Table No. 4.2**

**Adjusted mean scores of achievement in social science**

| Dependent Variable: Post-test scores | | | | |
|---|---|---|---|---|
| **Groups** | **Mean** | **SEM** | **95% confidence interval** | |
| | | | **Lower Bound** | **Upper Bound** |
| **Experimental** | **50.48** | **.380** | **49.729** | **51.232** |
| **Control** | **45.67** | **.380** | **44.925** | **46.428** |

Covariates appearing in the model are evaluated at the following values:

Pretest =2.09.

**Table No. 4.3**

**Result of one-way ANCOVA of achievement in social science by considering pre-achievement in social science as the covariate.**

| **Sources of variance** | **Df** | **$SS_{y.x}$** | **$MSS_{y.x}$** | **$F_{y.x}$** | **Sig.** | **Remark** |
|---|---|---|---|---|---|---|
| Groups | 1 | 807.63 | 807.63 | 79.90* | 0.00 | p‹ 0.05 |
| Error | 137 | 1384.67 | 10.10 | | | |
| Total | 140 | 325823.00 | | | | |

*Significant at 0.05 at level

Table no. 4.3 shows that the adjusted F-value is 79.90 which is significant at 0.05 level of significance. The df is 1/137. It indicates that the adjusted mean scores in social science of experimental group and control group differ significantly when pre-achievement was taken as covariate. Hence, the null hypothesis that is *'There is no significant difference between the mean scores of achievement in Social Science of Experimental group and Control group by considering pre-achievement in Social Science as the covariate*' is rejected. Further the adjusted mean score of the experimental group is 50.48 which is significantly higher than those of control group whose adjusted mean score of achievement in social science is 45.67. Therefore, it

can be said that the experiential learning approach in social science is significantly superior to the conventional approach when groups were matched in respect of pre-achievement score in social science.

## 4.3 COMPARISON OF ADJUSTED MEAN SCORES OF ACHIEVEMENT IN SOCIAL SCIENCE OF STUDENTS BELONGING TO EXPERIMENTAL GROUP AND CONTROL GROUP BY CONSIDERING INTELLIGENCE AS COVARIATE

The third objective was to compare the adjusted mean scores of achievement in Social Science of students belonging to Experimental group and Control group by considering intelligence as the covariate. The data have been analyzed using one way Analysis of Covariance. The results have been presented in the Table no. 4.4

**Table No. 4.4**

**Result of one-way ANCOVA of achievement in social science by considering intelligence as the covariate.**

| **Sources of variance** | **Df** | **$SS_{y.x}$** | **$MSS_{y.x}$** | **$F_{y.x}$** | **Sig.** | **Remark** |
|---|---|---|---|---|---|---|
| Groups | 1 | 14603.59 | 14603.59 | 5581.70* | 0.00 | p‹ 0.05 |
| Error | 137 | 358.43 | 2.61 | | | |
| Total | 140 | 325823.00 | | | | |

*Significant at 0.05 at level

Table no. 4.4 shows that the adjusted F-value is 5581.70 which is significant at 0.05 level of significance. The df is 1/137. It indicates that the adjusted mean scores in social science of experimental group and control group differ significantly whenintelligence was taken as covariate. Hence, the null hypothesis that *'There is no significant difference between the mean scores of achievement in Social Science of Experimental group and Control group by considering intelligence as the covariate'*

is rejected. Therefore, it can be said that the experiential learning approach in social science is significantly superior to the conventional approach when groups were matched in respect of intelligence.

## 4.4 EFFECT OF TREATMENT, GENDER AND THEIR INTERACTION ON ACHIEVEMENT IN SOCIAL SCIENCE BY CONSIDERING PRE-ACHIEVEMENT IN SOCIAL SCIENCE AND INTELLIGENCE AS COVARIATES

The fourth objective was to study the effect of Treatment, Gender and their interaction on achievement in Social Science by considering pre-achievement in Social Science and intelligence as covariate.

The Treatment has two levels which are Experiential Learning Approach and Conventional Approach. The gender also has two levels i.e Male and Female. Hence Treatment has two levels and gender also has two levels, therefore 2x2 Factorial design Analysis of Covariance has been used to analyse the data. The results are givenin Table no. 4.5

**Table No. 4.5**

**Result of 2x2 Factorial Design ANCOVA of Achievement in social science by considering pre-achievement in social science and intelligence as covariates.**

| **Sources of variance** | **Df** | **$SS_{y.x}$** | **$MSS_{y.x}$** | **$F_{y.x}$** | **Sig.** | **Remark** |
|---|---|---|---|---|---|---|
| Treatment | 1 | 14603.51 | 14603.51 | 5512.72* | .000 | p‹ 0.05 |
| Gender | 1 | .704 | .704 | .266 | .607 | p› 0.05 |
| Treatment x Gender | 1 | .111 | .111 | .042 | .838 | p› 0.05 |
| Error | 135 | 357.62 | 2.64 | | | |
| Total | 140 | 280676.0 | | | | |

*****Significant at 0.05 at level

Table No. 4.5 shows that the adjusted F-value for Treatment is 5512.72 which is significant at 0.05 level of significance having df 1/135. It indicates that the adjusted

mean scores in Social Science of Experimental group and Control group differ significantly when pre- achievement in Social Science and intelligence were taken as covariates. On the basis of this, the null hypothesis that '*There is no significant difference between the mean scores of achievement in Social Science of Experimental group and Control group by considering pre-achievement in Social Science and intelligence as covariates'* is rejected. Further the adjusted mean score of achievement in Social Science of Experimental group is **50.48** which are significantly higher than those of Control group whose adjusted mean score of Achievement in Social Science is **45.67**. Hence, it can be said that the Treatment of Experiential learning approach is significantly superior to the Conventional approach when both groups were matched with respect to pre-achievement in Social Science and intelligence.

Table No. 4.5 also shows that the adjusted F-value for gender is .266 which is not significant at 0.05 level of significance having df 1/135. It refers that the adjusted mean scores of achievement in Social Science obtained by boys and girls did not differ significantly when pre-achievement in Social Science and Intelligence were taken as covariates. Thus, it means that gender does not have any significant effect on the achievement in Social Science when pre-achievement and intelligence are the covariates.

Hence, the null hypothesis that '*There is no significant effect of gender on achievement in Social Science by considering pre-achievement in Social Science and intelligence as covariates'* is accepted.

The adjusted F-value for interaction between Treatment and Gender is **.042** which is not significant at 0.05 level of significance, having df 1/135. It denotes that the interaction between Treatment and Gender does not have any effect on the achievement in Social Science when the covariates are pre-Achievement in Social Science and Intelligence. On the basis of this the null hypothesis that '*There is no significant effect of Treatment, Gender and their interaction on achievement in Social Science by considering Pre-achievement in Social Science and intelligence as covariates'* is accepted. Hence it can be concluded that achievement in Social Science is not dependent on the interaction effect of gender and treatment.

## 4.5 EFFECT OF TREATMENT, INTELLIGENCE AND THEIR INTERACTION ON ACHIEVEMENT IN SOCIAL SCIENCE BY CONSIDERING PRE-ACHIEVEMENT IN SOCIAL SCIENCE AS COVARIATE

The fifth objective was to study the effect of Treatment, Intelligence and their interaction on achievement in Social Science by considering pre-achievement in Social Science as the covariate. The Treatment has two levels which are Experiential Learning Approach and Conventional Approach. Intelligence has three levels i.e. High Average, Average and Low Average. Hence Treatment has two levels and intelligence has three levels, therefore 2x3 Factorial design Analysis of Covariance has been used to analyze the data. The results are given in Table no. 4.6

**Table No. 4.6**

**Result of 2x3 Factorial Design ANCOVA of achievement in social science by considering pre-achievement in social science as covariates**

| Sources of variance | Df | $SS_{y.x}$ | $MSS_{y.x}$ | $F_{y.x}$ | Sig. | Remark |
|---|---|---|---|---|---|---|
| Treatment | 1 | 12135.02 | 12135.02 | 4535.439* | .000 | p< 0.05 |
| Intelligence | 2 | 3.37 | 1.69 | .631* | .000 | p<0.05 |
| Treatment x Intelligence | 2 | 1.99 | .998 | .373 | .69 | p> 0.05 |
| Error | 133 | 355.85 | 2.68 | | | |
| Total | 140 | 280676.0 | | | | |

*Significant at 0.05 at level

The table No. 4.6 depicts that the adjusted F-value for Treatment is **4535.439** which is significant at 0.05 level of significance, having df 1/133, it means that the adjusted mean scores of achievement in Social Science of the Experimental group and the Control group differs significantly when the covariate is pre-achievement in Social

Science. On the basis of this, the null hypothesis that '*There is no significant difference between the mean scores of achievement in Social Science of Experimental group and Control group by considering are-achievement in Social Science as covariate'* is rejected.

Further the adjusted mean scores of achievement in Social Science of Experimental group is **50.48** which is significantly higher than those of Control group whose adjusted mean scores of achievement in Social Science is **45.67**. Hence, it can be said that the Experiential learning approach which was used as Treatment for the Experimental group was superior and effective than the Conventional approach of the Control group, when groups were matched with respect to pre-achievement scores in social science.

Table no 4.6 also depicts the adjusted F-value value for intelligence which is **.631** with df 2/133 which is significant at 0.05 level of significance. It indicates that the adjusted mean scores of achievement in social science of three groups namely High Average, Average and Low Average do not differ significantly. Hence the null hypothesis that '*There is no significant effect of intelligence on achievement in Social Science by considering in pre-achievement as covariate'* is rejected. Therefore, it can be said that intelligence has significant effect on achievement in social science when pre-achievement is the covariate.

To determine the significant differences in the adjusted mean scores of achievement in Social science across different groups, the data was subjected to additional analysis using Bonferroni pair wise comparison. Results are presented in the Table No. 4.7

**Table No 4.7**

**Pair wise comparison of the adjusted mean scores in social science of High Average, Average and Low Average intelligence students**

| Intelligence group | Intelligence group | Mean Difference | Std. Error | Sig. |
|---|---|---|---|---|
| High Intelligence | Average | 11.15 | 1.85 | .001* |
| | Low Average | 27.36 | 0.78 | .000* |
| Average Intelligence | High | 11.15 | 1.85 | .001* |
| | Low Average | 16.21 | 1.23 | .000* |
| Low Average Intelligence | High | 27.36 | 0.78 | .000* |
| | Average | 16.21 | 1.23 | .000* |

*Significant at 0.05 level of significance

From the table no. 4.7 it can be interpreted that –

- The adjusted mean difference in social science achievement score of students having High and Average Intelligence is significant, at 0.05 level of significance (P‹0.05). Therefore, a significant mean difference is found between the students having High and Average Intelligence.
- The adjusted mean difference in social science achievement score of students having High and Low Average Intelligence is significant, at 0.05 level of significance (P‹0.05). Therefore, a significant mean difference is found between the studentshaving High and Low Average Intelligence.
- The adjusted mean difference in social science achievement score of students having Average and Low Average Intelligence is significant at 0.05 level of significance, (P‹0.05). Hence, a significant mean difference is found between the students having Average and Low Average Intelligence.

Table No. 4.7 also shows the adjusted F-Value for interaction between Treatment and Intelligence which is **.373** with df 2/133 which is not significant at 0.05 level significance. This implies that there is no significant effect of interaction between Treatment and Intelligence on achievement in social science when pre-achievement is the covariate. On the basis of this the null hypothesis that *'There is no significant effect of Treatment, Intelligence and their interaction on achievement in Social Science when pre-achievement in Social Science is considered a covariate*' is accepted. Hence, it can be concluded that achievement in social science is not dependent on the interaction effect of Treatment and Intelligence.

## 4.6 EFFECT OF TREATMENT, STUDY HABITS AND THEIR INTERACTIONS ON ACHIEVEMENT IN SOCIAL SCIENCE BY CONSIDERING PRE-ACHIEVEMENT IN SOCIAL SCIENCE AS COVARIATE

The sixth objective was to study the effect of Treatment, Study habits and their interactions on achievement in social science by considering Pre-achievement insocial science as covariate.

The Treatment has two levels which are Experiential Learning Approach and Conventional Approach. Study habits have three levels, which are, Good Study habits, Average Study habits and Unsatisfactory Study habits. Therefore 2x3 Factorialdesign Analysis of Covariance has been used to analyze the data. The results are givenin Table no. 4.8

**Table No. 4.8**

**Result of 2x3 Factorial Design of ANCOVA of achievement in Social Science by considering pre-achievement in Social Science as covariate**

| **Sources of variance** | **Df** | **$SS_{y.x}$** | **$MSS_{y.x}$** | **$F_{y.x}$** | **Sig** | **Remark** |
|---|---|---|---|---|---|---|
| Treatment | 1 | 11216.45 | 11216.45 | 4195.01* | .000 | p< 0.05 |
| Study habits | 2 | 3.935 | 1.967 | .736 | .000 | p< 0.05 |
| Treatment x Study habits | 2 | 1.934 | .967 | .362 | .697 | p> 0.05 |
| Error | 133 | 355.61 | 2.674 | | | |
| Total | 140 | 280676.00 | | | | |

***** Significant at 0.05 at level

From Table No. 4.8 it can be seen that the adjusted F-value for Treatment is **4195.01** which is significant at 0.05 level of significance, with df 1/133, which means the adjusted mean scores of achievement in social science of the Experimental group and the Control group differs significantly when the covariate is pre-achievement in Social Science.

On the basis of this, the null hypothesis that '*There is no significant difference between the mean scores of achievement in Social Science of Experimental group and Control group by considering pre-achievement in Social Science as covariate'* is rejected.

Further the adjusted mean scores of achievement in Social Science of Experimental group is **50.48** which is significantly higher than those of Control group whose adjusted mean scores of achievement in Social Science is **45.67**. Hence, it can be said that the Experiential learning approach which was used as Treatment for the

Experimental group was superior and effective than the Conventional approach of the Control group, when groups were matched with respect to pre-achievement scores in Social Science.

Table No. 4.8 also depicts the adjusted F-value for Study habits which is **.736**, significant at 0.05 level of significance with df 2/133, it refers that the adjusted mean scores of achievement in social science of three groups namely Good Study habits, Average Study habits and Unsatisfactory Study habits, differ significantly. Hence the null hypothesis that *'There is no significant effect of Study habits on Achievement in Social Science by considering in Pre-achievement in Social Science as covariate'* is rejected. Therefore, it can be said that Study habits have significant effect on achievement in social science when pre-achievement is the covariate.

To determine the significant differences in the adjusted mean scores of achievement in social science across different groups of study habits, the data was subjected to additional analysis using Bonferroni pair wise comparison. Results are presented in the Table No. 4.9-

**Table No 4.9**

**Pair wise comparison of the adjusted mean scores of students belonging to Good Study habits, Average Study habits and Unsatisfactory Study habits**

| **Study habits group** | **Study habits group** | **Mean Difference** | **Std. Error** | **Sig.** |
|---|---|---|---|---|
| Good study habits | Average | 13.84 | 1.88 | .000* |
| | Unsatisfactory | 26.19 | 0.75 | .000* |
| Average Study habits | Good | 13.84 | 1.88 | .000* |
| | Unsatisfactory | 12.35 | 1.12 | .002* |
| Unsatisfactory study habits | Good | 26.19 | 0.75 | .000* |
| | Average | 12.35 | 1.12 | .002* |

*Significant at 0.05 level of significance

From the table no. 4.9 it can be interpreted that –

- The adjusted mean difference in Social Science achievement score of students having good study habits and average study habits are significant, at 0.05 level of

significance (P<0.05). Therefore, a significant mean difference is found between the students having Good and average study habits.

- The adjusted mean difference in Social Science achievement score of students having Good and Unsatisfactory study habits is significant, at 0.05 level of significance (P<0.05). Therefore, a significant mean difference is found between the studentshaving Good and Unsatisfactory study habits.
- The adjusted mean difference in Social Science achievement score of students having Average and Unsatisfactory study habits is significant at 0.05 level of significance, (P<0.05). Hence, a significant mean difference is found between the students having Average and Unsatisfactory study habits.

Table No. 4.8 also depicted that the adjusted F-value for interaction between Treatment and Study Habits is **.362** which is not significant at 0.05 level of significance, having df 2/133. It denotes that the interaction between Treatment and Study habits do not have any effect on the Achievement in Social Science when the covariate is Pre-achievement in Social Science. On the basis of this the null hypothesis that *'There is no significant effect of Treatment, Study habits and their interaction on achievement in Social Science by considering pre-achievement in Social Science as covariates'* is accepted.
Hence, it can be concluded that achievement in Social Science is not dependent on the interaction effect of Treatment and Study habits.

## 4.7 REACTION OF STUDENTS BELONGING TO EXPERIMENTAL GROUP TOWARDS EXPERIENTIAL LEARNING APPROACH USED BY THE RESEARCHER

The seventh objective was to study the reaction of students belonging to Experimental group towards the Experiential learning approach (ELA) used by the researcher. The researcher assessed the reaction of the students belonging to the Experimental group to find out the effectiveness of Experiential learning approach. The reaction of the Experimental group was assessed at the end of the Treatment. Frequency percentage and mean have been used to analyze the data related to this objective.

**Table No. 4.10**

**Statement wise Mean. Standard Deviation and Coefficient of Variation values of students Reaction towards Video Instructional Material**

| Group | Overall Mean of Favorable reaction | Standard Deviation | Coefficient of Variation |
|---|---|---|---|
| Experimental | 4.53 | 0.086 | 1.9% |

Table No. 4.10 shows that, the Overall Mean score of reaction towards Experiential learning approach is found to be 4.53. Standard Deviation is 0.086 and Coefficient of Variation is 1.9%. The Reaction Scale towards Experiential learning approach consists of 20 statements which is related various aspects of Experiential learning approach used as the intervention for the Experimental group.

**Table No. 4.11**

**Range and interpretation source for the Mean favorable reaction (Intensity Index II)**

| **S.L. No.** | **Range** | **Interpretation** |
|---|---|---|
| 1 | 3.68-5.0 | Highly favorable reaction |
| 2 | 2.34-3.67 | Moderate favorable reaction |
| 3 | 1-2.33 | Low favorable reaction |

Source: Alkharusi, H. (2022)

**Table No. 4.12**

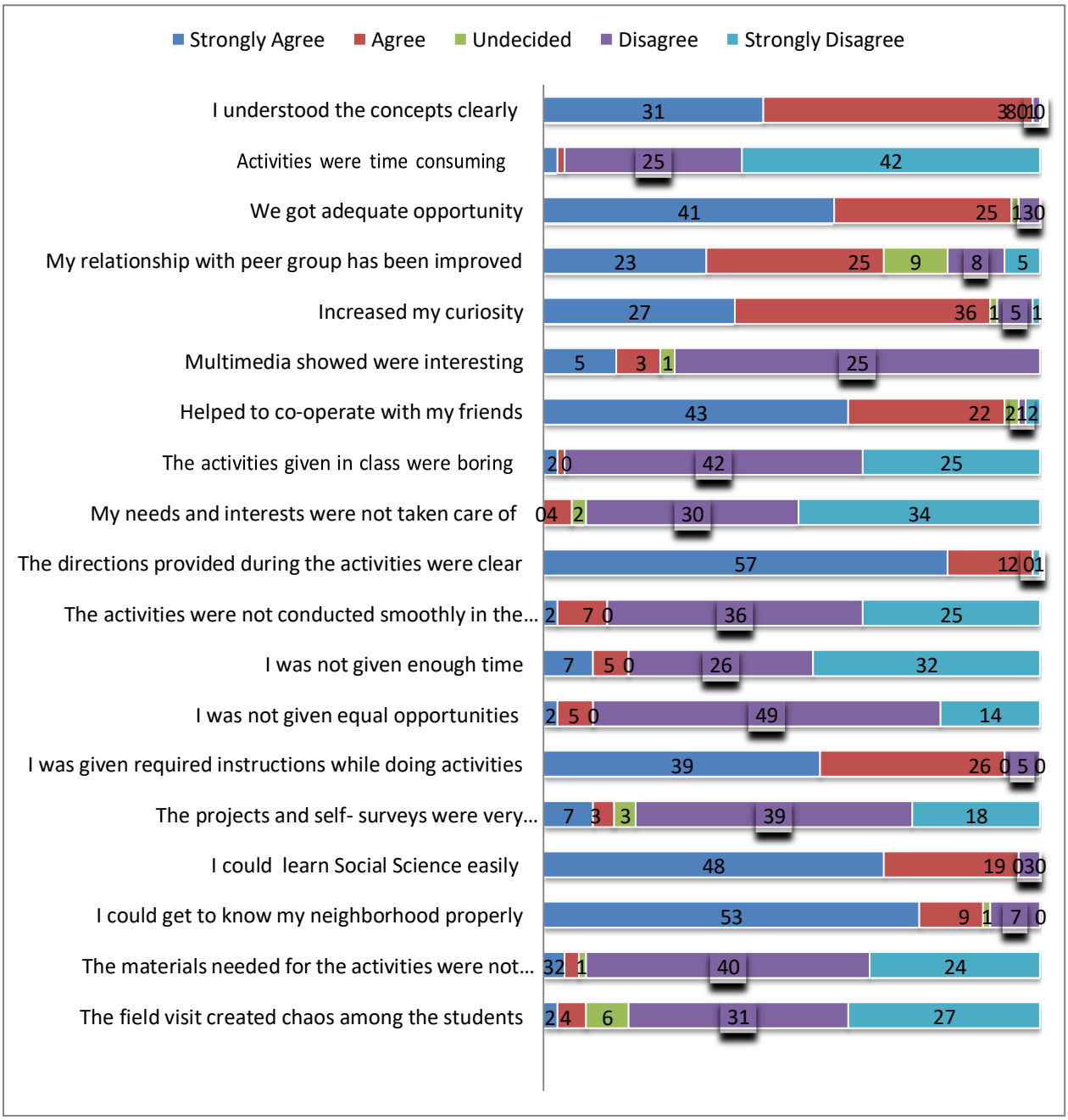
**Statement wise, percentage of responses, Mean and Percentage of Favourable Reaction of students belonging to Experimental Group.**

| S.L No | Statements | Strongly Agree (SA) | Agree (A) | Undecided | Disagree (DA) | Strongly Disagree (SDA) | Mean of Favorable reaction |
|---|---|---|---|---|---|---|---|
| **1** | I understood the concepts clearly through the experiential learning activities | 31 **44.28%** | 38 **54.29%** | 0 | 1 **1.43%** | 0 | **4.45** |
| **2** | The activities were time consuming | 2 **2.86%** | 1 **1.43%** | 0 | 25 **35.71%** | 42 **60%** | **4.63** |
| **3** | My communication skill has been improved through various activities such as Drama, role-play, think-pair and share etc. | 41 **58.57%** | 25 **35.71%** | 1 **1.43%** | 3 **4.29%** | 0 | **4.62** |
| **4** | In the class we got adequate opportunity for the use of newspaper, videos, magazines & other printed materials | 45 **64.28%** | 24 **34.29%** | 0 | 0 | 1 **1.43%** | **4.6** |
| **5** | My relationship with peer group has been improved because of experiential learning activities provided in the class. | 23 **32.86%** | 25 **35.71%** | 9 **12.86 %** | 8 **11.43%** | 5 **7.14%** | **4.47** |
| **6** | The way in which the lesson has been presented increased my curiosity | 27 **38.57%** | 36 **51.43%** | 1 **1.43%** | 5 **7.14%** | 1 **1.43%** | **4.42** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **7** | Multimedia shown in experiential learning class were not interesting and helpful | 5<br>**7.14%** | 3<br>**4.29%** | 1<br>**1.43%** | 25<br>**35.71%** | 36<br>**51.43%** | **4.59** |
| **8** | Experiential learning helped to co-operate with my friends and to do group activities | 43<br>**61.42%** | 22<br>**31.43%** | 2<br>**2.86%** | 1<br>**1.43%** | 2<br>**2.86%** | **4.66** |
| **9** | The activities given in experiential learning class were boring | 2<br>**2.86%** | 1<br>**1.43%** | 0 | 42<br>**60%** | 25<br>**35.71%** | **4.37** |
| **10** | My needs and interests were not taken care of during experiential learning class | 0 | 4<br>**5.71%** | 2<br>**2.86%** | 30<br>**42.86%** | 34<br>**48.57%** | **4.53** |
| **11** | The directions provided by the facilitator during the activities were clear | 57<br>**81.43%** | 12<br>**17.14%** | 0 | 0 | 1<br>**1.43%** | **4.82** |
| **12** | The activities were not conducted smoothly in the class | 2<br>**2.86%** | 7<br>**10%** | 0 | 36<br>**51.43%** | 25<br>**35.71%** | **4.40** |
| **13** | I was not provided with enough time for completing the activities such as Think-pair-share, Projects, presentation and self-surveys | 7<br>**10%** | 5<br>**7.14%** | 0 | 26<br>**37.14%** | 32<br>**45.71%** | **4.55** |
| **14** | I was not given equal opportunities or chance during presentations and group discussions | 2<br>**2.86%** | 5<br>**7.14%** | 0 | 49<br>**70%** | 14<br>**20%** | **4.22** |
| **15** | I was given required instructions while doing activities | 39<br>**55.71%** | 26<br>**37.14%** | 0 | 5<br>**7.14%** | 0 | **4.6** |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **16** | The projects and self-surveys were very complicated to do | 7<br>**10%** | 3<br>**4.29%** | 3<br>**4.29%** | 39<br>**55.71%** | 18<br>**25.71%** | **4.31** |
| **17** | I could learn Social Science easily through experiential learning activities | 48<br>**68.57%** | 19<br>**27.14%** | 0 | 3<br>**4.29%** | 0 | **4.71** |
| **18** | Through self-survey and projects could get to know my neighborhood properly | 53<br>**75.71%** | 9<br>**12.86%** | 1<br>**1.43%** | 7<br>**10%** | 0 | **4.85** |
| **19** | The materials needed for the activities were not enough | 3<br>**4.29%** | 2<br>**2.86%** | 1<br>**1.43%** | 40<br>**57.14%** | 24<br>**34.28%** | **4.37** |
| **20** | The field visit created chaos among the students | 2<br>**2.86%** | 4<br>**5.71%** | 6<br>**8.57%** | 31<br>**44.29%** | 27<br>**38.57%** | **4.46** |
| **Overall Mean of Favourable Reaction of students belonging to Experimental Group.** | | | | | | | **4.53** |

**Figure 4.2: Graphical representation of the statement wise frequencies of responses**




By looking at Table no. 4.12 and Figure no. 4.2 it is evident that –

- Against the statement no. 1, 'I understood the concepts clearly through the experiential learning activities', 44.28%, 54.29% and 1.43% respondents Strongly Agreed (SA), Agreed (A) and Disagreed (DA) respectively. Intensity index 4.45 described that majority of the students showed highly favourable reaction towards the statement, as they could understand the concepts of Social Science clearly through the experiential learning activities.

- Against statement no. 2, 'The activities were time consuming', 2.86% students Strongly Agreed, 1.43 % Agreed, 35.71% Disagreed and 60% students Strongly Disagreed. Intensity Index 4.63 described that majority of the students showed highly favourable reaction towards the statement as they did not find the activities time consuming.
- Against statement no. 3, 'My communication skill has been improved through various activities such as Drama', role-play, think-pair and share etc.', 58.57% students Strongly Agreed, 35.71% students Agreed, 1.43% students Disagreed and 4.29% students Strongly Disagreed. Intensity Index 4.62 refers to Highly favorable reaction of students towards the statement, as majority of the students said that their communication skill is improved through the engagement in these activities.
- Against the statement no. 4, 'In the class we got adequate opportunity for the use of newspaper, videos, magazines & other printed materials', 64.29%, 34.29% and 1.43% students Strongly Agreed (SA), Agreed(S) and Strongly Disagreed (SD) respectively. Intensity Index 4.6 described Highly favourable reaction of students towards the statement, as majority of them got adequate opportunity for the use of newspaper, videos, magazines & other printed materials.
- Against the statement no. 5, 'My relationship with peer group has been improved because of experiential learning activities provided in the class', 32.86% students Strongly Agreed (SA), 35.71% Agreed (A), 12.86% Undecided (U), 11.43% Disagreed (DA) and 7.14% students Strongly Disagreed (SDA) respectively. IntensityIndex 4.47 described Highly favorable reaction of students towards the statement, as majority of the students felt that their relationship with peer group improved because of experiential learning activities provided in the class.
- Against the statement no. 6, 'The way in which the lesson has been presented increased my curiosity', 38.57% students Strongly Agreed (SA), 51.43% Agreed (A), 1.43% Undecided (U), 7.14% Disagreed (DA) and 1.43% students Strongly Disagreed(SDA) respectively. Intensity Index 4.42 described Highly favourable reaction of students towards the statement, as majority of the student 's curiosity was increased due to the innovative way of presenting the lessons.
- Against the statement no. 7, 'Multimedia shown in experiential learning class were not interesting and helpful', 7.14% students Strongly Agreed (SA), 4.29% Agreed (A), 1.43% Undecided (U), 35.71% Disagreed (DA) and 51.43% students Strongly Disagreed (SDA) respectively. Intensity Index 4.59 described Highly favourable

reaction of students towards the statement, as majority of the students find the multimedia shown in the class interesting and helpful.

- Against the statement no. 8, 'Experiential learning helped to co-operate with my friends and to do group activities', 61.43% students Strongly Agreed (SA), 31.43% Agreed (A), 2.86% Undecided (U), 1.43% Disagreed and 2.86% students Strongly Disagreed (SDA) respectively. Intensity Index 4.66 refers to Highly favourable reaction showed by majority of the students because they learned co-operation skill through various group activities.
- Against the statement no. 9, 'The activities given in experiential learning class were boring', 2.86% students Strongly Agreed (SA), 1.43% Agreed (A), 60% Disagreed and 35.71% students Strongly Disagreed (SDA) respectively. Intensity Index 4.37 described Highly favourable reaction towards the statement as majority of the students did not find the activities provided in experiential learning class boring.
- Against the statement no. 10, 'My needs and interests were not taken care of during experiential learning class', 5.71% students Agreed (A), 2.86% Undecided (U), 42.86% students Disagreed (DA) and 48.57% students Strongly Disagreed (SDA) respectively. Intensity index 4.53 refers to Highly favourable reaction towards the statement as according to majority of the students their needs and interest were taken care of during classes.
- Against the statement no. 11, /The directions provided by the facilitator during the activities were clear', 81.43% students Strongly Agreed (SA), 17.14% students Agreed (A) and 1.43% students Strongly Disagreed (SDA). Intensity Index 4.82 describes Highly favourable reaction towards the statement as majority of them found the directions provided by the facilitator during activities clear.
- Against the statement no. 12, 'The activities were not conducted smoothly in the class', 2.86% students Strongly Agreed (SA), 10% students Agreed (A) and 1.43% students Strongly Disagreed (SDA). Intensity Index 4.40 refers to Highly favourable reaction towards the statement because according to majority of the students the activities were conducted smoothly by the facilitator.
- Against the statement no. 13, 'I was not provided with enough time for completing the activities such as Think-pair-share, Projects, Presentation and Self-surveys', 10% students Strongly Agreed, 7.14% s Agreed (A), 37.14% Disagreed (DA) and 45.71% students Strongly Disagreed. Intensity Index 4.55 described Highly favourable

reaction towards the statement because according to majority of the students they were provided enough time for completing the different activities.

- Against the statement no. 14, 'I was not given equal opportunities or chance during presentations and group discussions', 2.86% students Strongly Agreed (SA), 7.14% Agreed (A), 70% Disagreed (DA) and 20% students Strongly Disagreed (SDA). Intensity Index 4.22 described Highly favourable reaction towards the statement because according to majority of the students they were given equal opportunities during presentations and group discussions.
- Against the statement no. 15, 'I was given required instructions while doing activities', 55.71% students Strongly Agreed (SA), 37.14% Agreed (A) and 7.14% students Disagreed (DA). Intensity Index 4.6 described Highly favourable reaction towards the statement as the majority students admitted that they were given required instructions while doing different activities.
- Against the statement no. 16, 'The projects and self- surveys were complicated to do', 10% students Strongly Agreed (SA), 4.29% Agreed (A), 4.29% students were undecided (U), 55.71% Disagreed (DA) and 25.71% students Strongly Disagreed (SDA). Intensity Index 4.31 refers to Highly favourable reaction towards the statement as majority of the students did not find the projects and self-surveys complicated to do.
- Against the statement no. 17, 'I could learn Social Science easily through experiential learning activities', 68.57% students Strongly Agreed (SA), 27.14% Agreed (A), and 4.29% students Disagreed (DA). Intensity Index 4.71 described Highly favourable reaction towards the statement as majority of the students admitted that they could learn Social Science easily through experiential learning activities.
- Against the statement no. 18, 'Through self-survey and projects could get to know my neighborhood properly', 75.71% students Strongly Agreed (SA), 12.86% Agreed (A) and 1.43% Undecided (U) and 10% students Disagreed (DA). Intensity Index 4.85 refers to Highly favourable reaction towards the statement as majority of the students admitted that they could get to know their neighbourhood properly.
- Against the statement no. 19, 'The materials needed for the activities were not enough', 4.29% students Strongly Agreed (SA), 2.86% Agreed (A), 1.43%Undecided (U), 57.14% Disagreed (DA) and 34.28% students Strongly Disagreed (SDA). Intensity Index 4.37 described Highly favourable reaction towards the

statement as majority of the students admitted that the materials needed for theactivities were enough.

- Against the statement no. 20, 'The field visit created chaos among the students', 2.86% students Strongly Agreed (SA), 5.71% Agreed (A), 8.57% Undecided (U), 44.29% Disagreed (DA) and 38.57% students Strongly Disagreed (SDA). Intensity Index 4.46 refers to Highly favourable reaction towards the statement as according to majority of the students, The field visit did not created chaos among the students.

From the Table No. 4.12 it is also seen that overall Mean score of all the statements is **4.53,** which comes under the range of **3.68 - 5.0** which signifies Highly Favorable Reaction (**See table no. 4.11**). Therefore, it can be concluded that the majority of students had a very positive reaction to the researcher's experiential learning approach.