Chapter 4

Analysis and Interpretation of Data

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Analysis And Interpretation of The Data

The present chapter describes the presentation of data, so that data can be statistically analyzed. The data collected by administering the test mentioned in earlier chapter.

4.1 statistics used in the study

(a). Mean

To denote average

(b). standard deviation

To measure variability

(c). level of significance

It is a measure of the strength of the evidence that sample before you will reject the null hypothesis and conclude that the effect is statistically significant. The researcher determines the significance level before conducting the experiment.

In this research the level of significance was 0.05.

(d). T test:-

To determine the significance of difference between two means

4.2 Presentation of data

In the following tables the data is represented

Table 4.1 Description of control group before treatment

Number of students 'N'	Mean 'M'	Standard deviation 'SD'
22	10.4545455	2.9556608

Table 4.2 Description of control group before treatment

Number of students 'N'	Mean 'M'	Standard deviation 'SD'
26	10.53846154	3.849475489

Table 4.3 Description of control group after treatment

Number of students 'N'	Mean 'M'	Standard deviation 'SD'
22	10.8636364	2.43575459

Table 4.4 Description of experimental group after treatment

Number of students 'N'	Mean 'M'	Standard deviation 'SD'
26	13.7272727	3.26863621

4.3 Analysis of data

After the calculations analyzed data is presented in following tables

Table 4.5 Table 4.5 pre test comparison of control group and experimental group

Group (N)	Degree of freedom 'df'	Mean 'M'	Standard deviation	SEm	T score	P score	Level of significance
Control Group (22)	46	10.45454	2.9556608	0.630008	0.0835	0.9338	difference is not statistically Significant.
Experimental Group (26)		10.53846	3.849475489	0.754929			

Conclusion: A reference to the table 4.5 shows that the obtained t score was lower than P score at 0.05 level of significance for df= 46. It means there no significant difference in the mean of the groups. Therefore on the basis

available evidences investigator concluded that students performed normal in achievement test, when teaching was done via traditional methods of teaching.

Table 4.6 Post test comparison of control group and experimental group

Group (N)	Degree of freedom 'df'	Mean 'M'	Standard deviation	SEm	t score	P score	Level signif e
Control Group (22)	46	10.86363	2.4357545	0.5193046 2388	3.3877	0.0015	differ is ver statist
Experimental course (26)		13.72727	3.2686362	0.6410323 0107			signif

Conclusion: A reference to the table 4.6 shows that the obtained t score wa higher than P score at 0.05 level of significance for df= 46. It means there i significant difference in the mean of the groups. Therefore on the basis o available evidences investigator concluded that students performed better in achievement test while teaching via activity based teaching.

4.4 Analysis of Feedback form

In feedback maximum students were impressed with activity based teaching. For the 26 students, detailed description of points is given below,

Points	Number of students (26)	Total
35	1	35
34	6	204
33	2	66
32	10	320
31	04	124
30	03	90
		839

Maximum points for 26 students were 910. All the students got 839 points, which is 92.19 percentages.

With reference to it investigator concluded that the students were extremely happy with activity based teaching.