

CHAPTER 4

ANALYSIS & INTERPERTATION OF RESULTS

4.1 Introduction

Raw data is worthless without analysis. However valid reliable and adequate the data may be it does not serve any worthwhile purpose unless it is carefully edited, systematically classified and tabulated, scientifically analyzed, systematically interpreted and rationally concluded. Good research is characterized by what care has taken in the analysis and interpretation of data after careful and depth answer to the research question of decision making and information users.

Analysis of data means studying the tabulated material in order to determine inherent facts or factors in simple parts and putting the parts together in new arrangements for the purpose of interpretation. The process of interpretation is essentially one of the stating the result finding, show what do you mean? What is their significance? What is answer to the original problem? This part is the heart of the research. It calls for a critical examination of the result of one's analysis in light of all the limitations of the data gathering.

Interpretation of data refers to that important part of the investigator, which is associated with the drawing of inference from the collected facts after an analytic study. It is extremely useful and important part of the study because it makes possible the use of collected data. Statistical facts by themselves have no utility. It is the interpretation that makes it possible for us to utilize collected data in various fields of activity. The usefulness of the collected data lies in its proper interpretation. It provides certain conclusion about the problem under study. Statistics is a body of mathematical techniques or processes for gathering, organizing, analyzing and interpreting numerical data.

Keeping the objectives of the study in view, the data was collected and interpreted. This chapter includes the result and interpretation of data collected for the study.

4.2 Objective of the study

To find out the difference between the academic achievements in science of class 8th students taught by online mode and face to face mode.

4.3 Hypothesis of the study

There is no significant difference in academic achievements in science of class 8th students taught by online mode and face to face mode.

The data were analysed with the help of t test and the result are given in table no. 5

4.4 Finding

Table no. 5-Group wise number of students, mean, difference between mean, variance and t values of students

Group	N	Mean	SD	D	df	Level of significance	Calculated t-value	Tabulated t-value
Control	15	21.467	34.267	2.2	28	0.05	1.06	2.048
Expt.	15	19.267	30.21					

N= Number of Sample SD = Standard Deviation, D = Mean Difference,
df= Degree of Freedom

4.5 Analysis and interpretation

Analysis

From table 5 it can be seen that the calculated t value with the degree of freedom 28 is found to be 1.06. The tabulated t-value at 0.05 level is 2.048. As our calculated t value is less than tabulated value so it indicates that it is not significant at 0.05 level of significance. Therefore, the null hypothesis is not rejected. This shows that there is no significant difference between the mean achievement score of control group and experiment group.

Interpretation

The means of control and experimental groups are 21.467 and 19.267 respectively. The difference between these two means is 2.2 which is not in favor of any group.

Result

It indicates that there is no significant difference between the mean scores of achievement in Science of class 8th students through online and face to face mode of learning. It may be said that both online and face to face mode were found to have achievement level to the same degree.