4

DATA PRESENTATION AND INTERPRETATION

CHAPTER – IV

DATA PRESENTATION & INTERPRETATION

4.1 Introduction

Statistics is a body of mathematical technique or processes for gathering , organizing and analyzing . Quantitative statistics is a basic tool of measurement , evaluation and research . Statistics is data describe group behavior or group characteristic obtained from a number of individual observations , which are combined to make generalizations possible. The researcher who uses statistics is concerned with more than the manipulation of data. Statistical method goes to the fundamental purposes of description and analysis. By statistics we can analyze and interpret the data and can draw conclusion.

Interpretation of data refers to that important part of investigation , which is associated with the drawing of inference from the collected facts after analytical study . It is extremely useful and important part of the study because it makes possible the use of collected data. Statistics facts themselves have no utility .It is the interpretation that makes it possible for us to utilize collected data in various field of study.

4.2 Analysis of the hypothesis

4.2.1 Analysis pertaining to total sample

There is no significant effect of instructional material on environmental awareness of class eighth students.

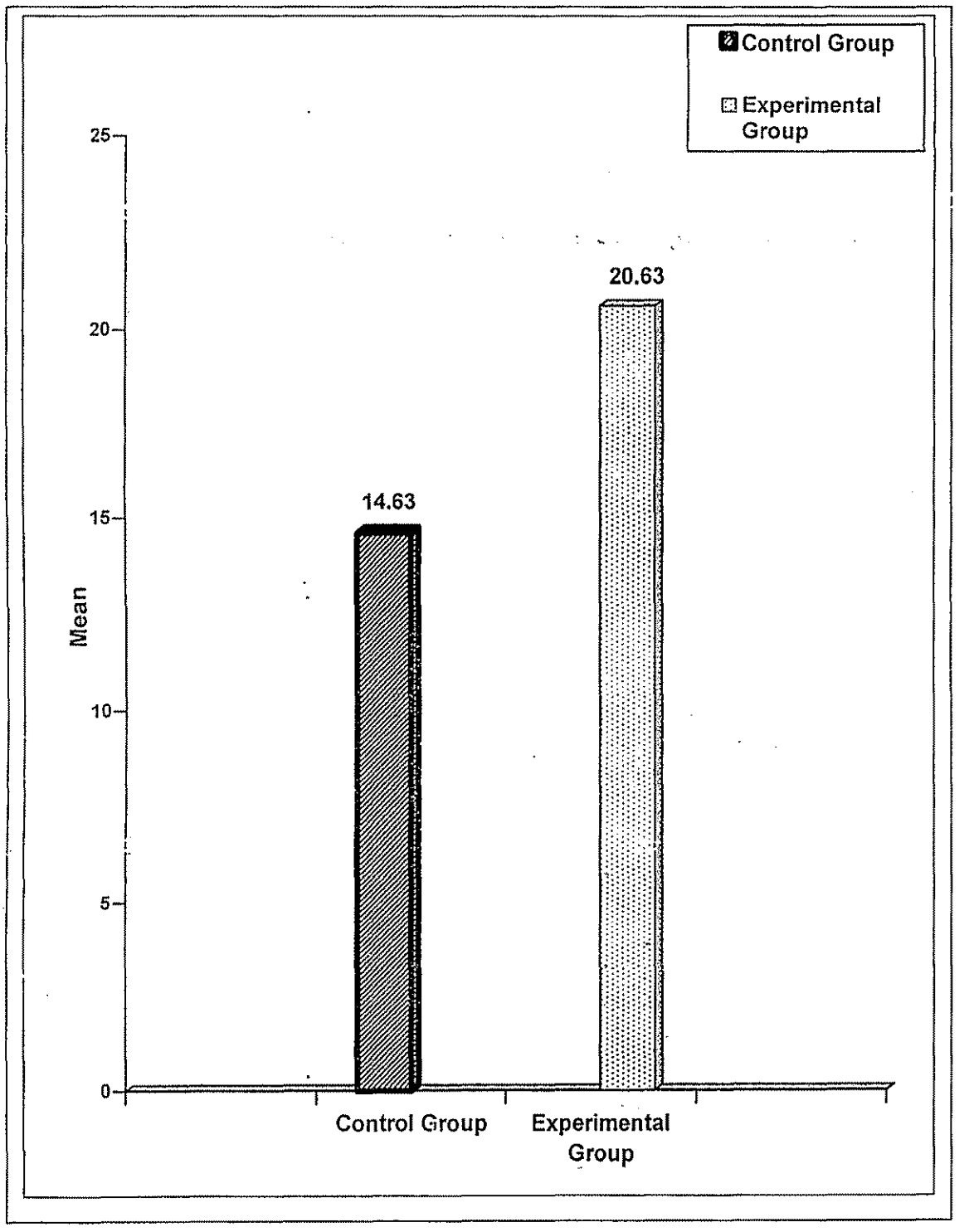
Table 4.1 showing the significant difference between post test score of experimental & control group

S. No	Group	Variable	Means	S.D	t Value	df	Remarks
1.	Experimental	Instructional Material	20.63	2.36	9.3	58	Significant at 0.01 level
2.	Control	Traditional Method	14.63	2.42			

The table shows that the computed value of the 't' test is **9.3** and the table value of 't' test is **2.66** at **0.01** level.

Thus the computed value of 't' is greater than table value and hence the hypothesis is rejected . It indicates that students of experimental group do differ in their environmental awareness test in comparison to control group.

The value of mean for experimental group (**M= 20.63)** is found to be greater than mean of control group **(M = 14.63).** As mean difference is significant it may be inferred that instructional material enhances environmental awareness of class eight student at significant level.



4.1 Graphical Representation of post test mean value of experimental and Control group.

4.2.2 Analysis pertaining to gender

There is no significant difference between environmental awareness of girls taught by traditional method and through instructional material.

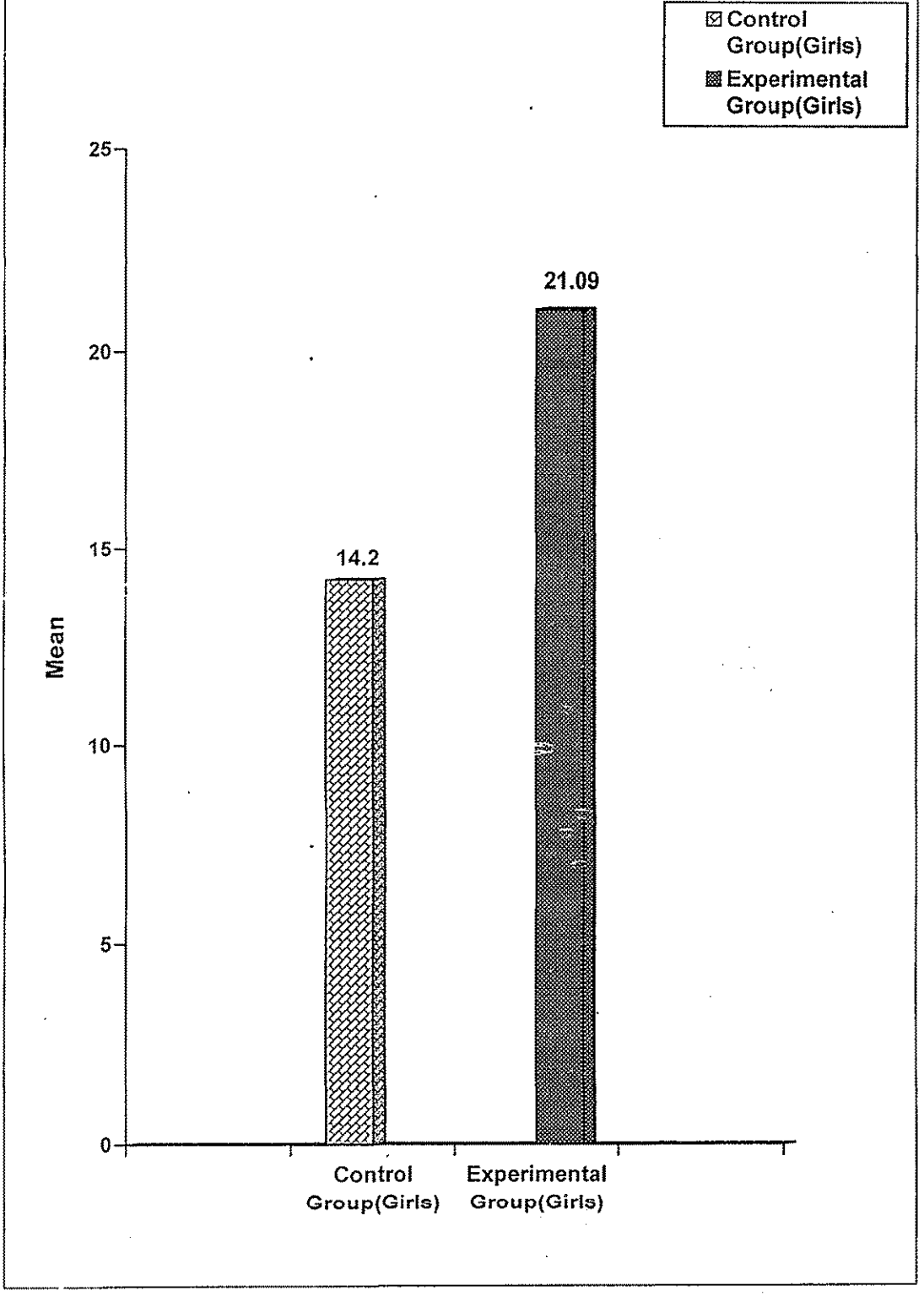
Table 4.2 showing the significant means difference between girls

S. No	Group	Total No of Girls	Means	S.D	t Value	df	Remarks
Girls (Gender)	Experimental	11	21.09	2.54	7.07	19	**Significant at 0.01 level**
	Control	10	14.2	2.18			

The table shows that the computed value of the **'t'** test is **7.07** and the table value of **'t'** test is **2.86** at **0.01** level.

Thus the computed value of **'t'** is greater than table value and hence the hypothesis is rejected. It indicates that the girls of experimental group do differ in their environmental awareness test in comparison to control group girls.

The value of mean for experimental group girls (**M=21.09**) is found to be greater than mean of control group (**M=14.2**) . As mean difference is significant. It may be inferred that instructional material enhances environmental awareness of experimental group girls at significant level.



4.2 Graphical representation of post test mean value of experimental and control group girls

There is no significant difference between environmental awareness of boys taught by traditional method and through instructional material.

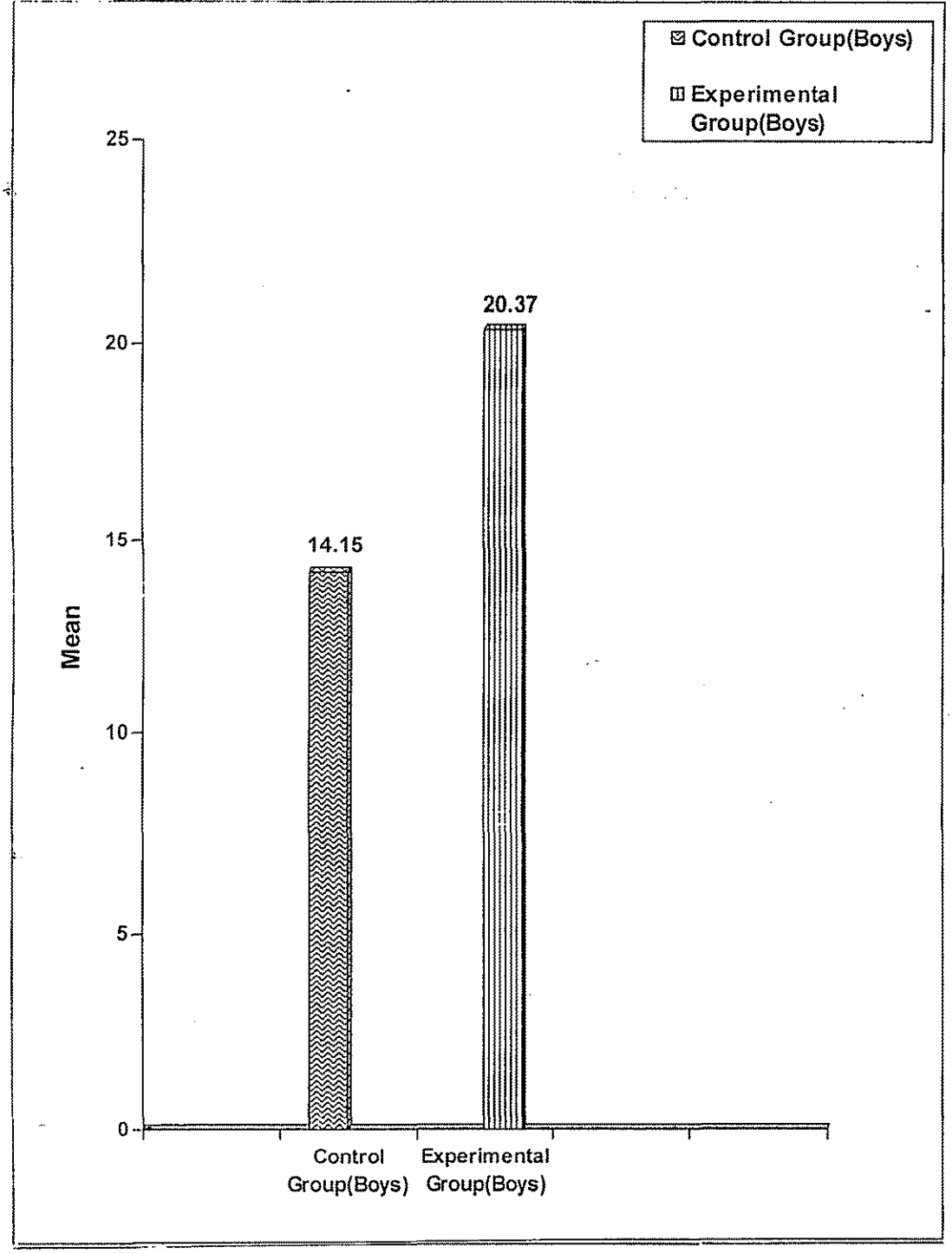
Table 4.3 showing significant means difference between boys

S. No	Group	Total No of Boys	Means	S.D	t Value	df	Remarks
Boys (Gender)	Experimental	19	20.37	2.36	7.97	37	Significant at 0.01 level
	Control	20	14.15	2.43			

The table shows that the computed value of the **'t'** test is **7.97** and the table value of **'t'** test is **2.71** at **0.01** level.

Thus the computed value of't' is greater than table value and hence the hypothesis

Is rejected. It indicates that the boys of experimental group do differ in their environmental awareness test in comparison to control group boys (M=20.37) is found to be greater than mean of contra group boys (N=14.15) As mean difference is significant, it may be inferred that instructional material enhances environmental awareness of experimental group boys at significant level.



4.3 Graphical representation of post test mean value of Experimental and Control group boys

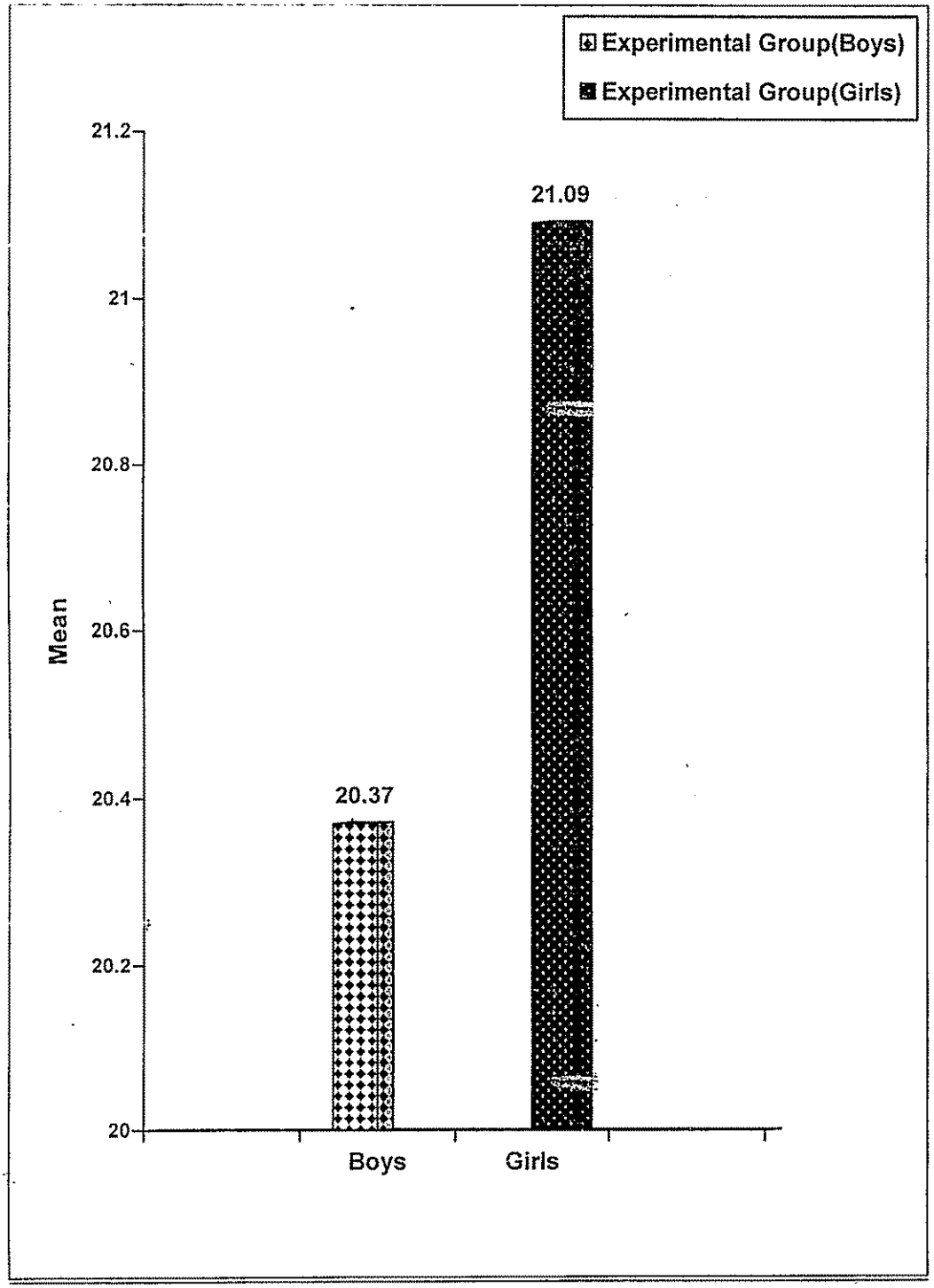
There is no significant difference between environmental awareness of girls and boys taught through instructional material

Table 4.4 showing the significant means difference between boys and girls of experimental groups:

Group	Variables	No of Student	Mean	S.D	't' value	dt	Remarks
Experimental	Boys	19	20.37	2.54	0.66	28	Not significant At 0.01 and 0.05 level
	Girls	11	21.09	2.36			

The table shows that the computed value of't' test is 0.66 and table value of't' is 2.76 at 0.01 level.

Thus the computed value of't' test is smaller than table value and hence the hypothesis is accepted. It indicates that boys of experimental group do not differ in their environmental awareness that in comparison to girls of experimental group.



4.4 Graphical representation of post test mean value of Boys and girls of Experimental group

4.3 Interpretation

Table 4.1, 4.2, 4.3, 4.4 inform us the following basic facts

Firstly, - the environmental awareness of boys and girls is similar, taught through instructional material

Secondly- Instructional material has shown positive effect on both boys and girls taught through instructional material.

Thirdly – The environmental awareness of boys taught through instructional material is found to be more than boys treated by traditional method.

Fourthly – The environmental awareness of girls taught through instructional material is found to be more than girls treated by traditional method.

On the whole result pertaining to gender reveals that instructional material has helped both boys and girls in enhancing their environmental awareness but there is no difference between boys and girls regarding intensity of improvement .This means that enhancement on environmental awareness among boys & girls is similar the instructional material has helped both alike. From this it is evident that instructional material (IM) can be used for all the students, irrespective of their gender in improving the achievement.