

CHAPTER - 4

**ANALYSIS AND
INTERPRETATION OF
DATA**



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4.1 Introduction

The prime responsibility of the educational researcher is that of being able to make either a probability or logical inferences covering the tenability of his/her testable hypotheses. Moreover, the acceptance or rejection of these hypotheses will ultimately determine what contribution the study makes to the scientific development of a particular area.

Present chapter is ment for the analysis and interpretation of the obtained data.

Present study is on the effect of Mass-media and text book on the word power of the students of Class-VIII. In order to collect the data the researcher developed a tool which contains 96 words. These 96 words are drawn from the texts of English up to standard VIII and the general vocabulary used in Mass-media. Further, 96 words represent different human activities such as political, social, cultural, physical, educational and so on.

The tool is structured to elicit and know the word power of the students concerning various environments in which child lives and with which child interacts. However, for the purpose of analysis and interpretation of the data the researcher considered the data in its global form rather than in its divided form.

Basing upon the nature and its usage the researcher identified the source of the words in consultation with the experts and also after considering the students' opinion on the source of words they speak. This

exercise facilitated the researcher to classify the sources of 96 words into two categories namely Mass-media and the text book. The obtained data was put to statistical treatment with this preliminary understanding.

Thus, the analysis made, interpretations done and conclusions arrived at are to be understood in the light of above understanding. The results of the study are presented here under according to the hypothesis and objectives framed.

4.2 Analysis of Data

Analysis of data means studying the tabulated material in order to determine inherent facts or meanings. It involves breaking down existing complex factors into simple and understandable parts and putting the parts in new arrangement for the purpose of interpretation.

4.3 Type of Management

Hypothesis-1: There will be no significant difference in the effect of Mass-media and text-book on the word power of the students of the Class-VIII.

Significance of 't' between the total word power obtained through mass-media and text book.

Table 4.3.1

Source	Mean	S.D.	N	df	't'	Significant
Text-book	15.15	3.48	200	199	43.3	0.00
Mass-media	30.70	6.21	200	-	-	-

In the table 4.3.1 the calculated value of 't' is found to be 43.3 with degree of freedom (199) which is more than the value expected at 0.01 level i.e. (2.69). Hence, the null hypothesis is rejected. It indicates that there is a

significant difference in the effect of Mass-media and text book on the word power. Further, when means are compared, Mass-media (30.70), text book (15.15) it is observed that there is a greater effect of Mass-media than text book on the word power of the students of Class-VIII.

Hypothesis-2: There will be no significant difference in the effect of Mass-media and text book on the word power of Boys and Girls of Class-VIII.

Significance of 't' between boys and girls in relation to text book word power.

Table 4.3.2

Group	Source	Mean	S.D.	N	df	't'	Significant
Boys	text-book	16.43	3.39	103	198	5.793	0.00
Girls	text-book	13.78	3.05	97			

In the table, 4.3.2 the calculated value of 't' is found to be 5.793 with degree of freedom 198. Which is more than the value expected at 0.01 level. It means there is a significant difference among boys and girls in text book word power. When means are compared. Boys (16.43) Girls (13.78) it is observed that boys have more word power from text book than Girls.

Significance of 't' between Boys and Girls in relation to mass-media word power.

Table 4.3.3

Group	Source	Mean	S.D.	N	df	't'	Significant
Boys	Mass-media	33.69	6.07	103	198	8.067	0.00
Girls	Mass-media	27.53	4.59	97			

In the table 4.3.3 the calculated value of 't' is found to be 8.067 with degree of freedom (198) which is more than the value expected at 0.01 level

i.e. (2.69). When means are compared, Boys (33.69) Girls (27.53). It is observed that there is a significant difference among boys and girls in mass-media word power further, it is found that the mass-media word power of Boys is higher than Girls.

Significance of 't' between Boys and Girls in relation to their total word power obtained through mass-media and text book.

Table 4.3.4

Group	Source	Mean	S.D.	N	df	't'	Significant
Boys	Text-book & Mass-media	50.12	8.32	103	198	8.295	0.00
Girls	Text-bok & Mass-media	41.31	6.52	97			

In the table, 4.3.4 the calculated value of 't' is found to be 8.295 with degree of freedom (98) which is more than the value expected at 0.01 level i.e. (2.69). Hence the null hypothesis stands rejected. Moreover, when means are compared Boys (50.12) Girls (41.31) it is observed that there is a significant difference among boys and girls in total word power obtained through mass-media and text book. Further, it is found that the total word power of Boys is more than Girls.

Hypothesis-3 : There will be no significant difference in the effect of Mass-media and text-book on the word power of the students of rural and urban areas of Class-VIII.

Significance of 't' between the students of rural and urban areas in relation to text-book word power.

Table 4.3.5

Group	Source	Mean	S.D.	N	df	't'	Significant
Village	text-book	13.61	2.88	87	198	5.929	0.00
Town	text-book	16.33	3.45	113			

In the table 4.3.5 the calculated value of 't' is found to be 5.929 with degree of freedom 198. Which is more than the value expected at 0.01 level (2.69). It means that there is a significant difference among the students of rural and urban area in relation to text-book word power. Further, when means are compared, village (13.61) town (16.33) it is observed that the students of urban area have more text-book word power than the students of rural area.

Significance of 't' between the students of urban and rural areas in respect of Mass-media word power.

Table 4.3.6

Group	Source	Mean	S.D.	N	df	't'	Significant
Village	Mass-media	27.86	5.24	87	198	6.179	0.00
Town	Mass-media	32.88	6.03	113			

In the table, 4.3.6 the calculated value of 't' is found to be 6.179 with degree of freedom 198, which is more than the value expected at 0.01 level (2.69). It indicates that there is a significant difference among rural and urban students in mass-media word power. Besides, when means are compared, village (27.86), Town (32.88) it is observed that the urban students have more word power from Mass-media than the students of rural area.

Significance of 't' between the students of rural and urban areas in respect of total word power obtained through Mass-media and text-book.

Table 4.3.7

Group	Source	Mean	S.D.	N	df	't'	Significant
Village	Text-book & Mass-media	41.47	7.30	87	198	6.949	0.00
Town	Text-book & Mass-media	49.212	8.18	113			

In the table, 4.3.7 the calculated value of 't' is found to be 6.949 with degree of freedom 198. Which is more than the value expected at 0.01 level (2.69). Hence, the null hypothesis is rejected. It indicates that there is a significant difference among rural and urban students in total word power obtained through Mass-media and text book. Further when means are compared Village (41.47) Town (49.21), it is observed that the total word power of urban students is higher than the students of rural area.

Hypothesis-4 : There will be no significant difference in the effect of Mass-media and text book on the word power of English and Gujarati medium students of Class-VIII.

Significance of 't' between English and Gujarati medium students in relation to text-book word power.

Table, 4.3.8

Group	Source	Mean	S.D.	N	df	't'	Significant
Gujarati	Text-book	14.68	3.28	173	198	5.048	0.00
English	Text-book	18.11	3.29	27			

In the table 4.3.8 the calculated value of 't' is found to be 5.048 with degree of freedom 198, which is more than the value expected at 0.01 level

(2.69). It indicates that there is a significant difference among the English and Gujarati medium students in respect of text-book word power. Further when means are compared, English (18.11) Gujarati (14.68) it is observed that the students of English medium have more word power from text book than the students of Gujarati medium.

Significance of 't' between the Gujarati and English medium students in relation to Mass-media word power.

Table, 4.3.9

Group	Source	Mean	S.D.	N	df	't'	Significant
Gujarati	Mass-media	30.12	6.22	173	198	3.425	0.00
English	Mass-media	34.41	4.79	27			

In the table, 4.3.9 the calculated value of 't' is found to be 3.425 with degree of freedom 198. Which more than the value expected at 0.01 level (2.69). It indicates that there is a significant difference among the students of English and Gujarati medium in relation to their Mass-media word power, further, when means are compared, English (34.41) Gujarati (30.12). It is observed that the students of English medium have more word power through Mass-media than the students of Gujarati medium.

Significance of 't' between English and Gujarati medium students in their total word power obtained through Mass-media and text book.

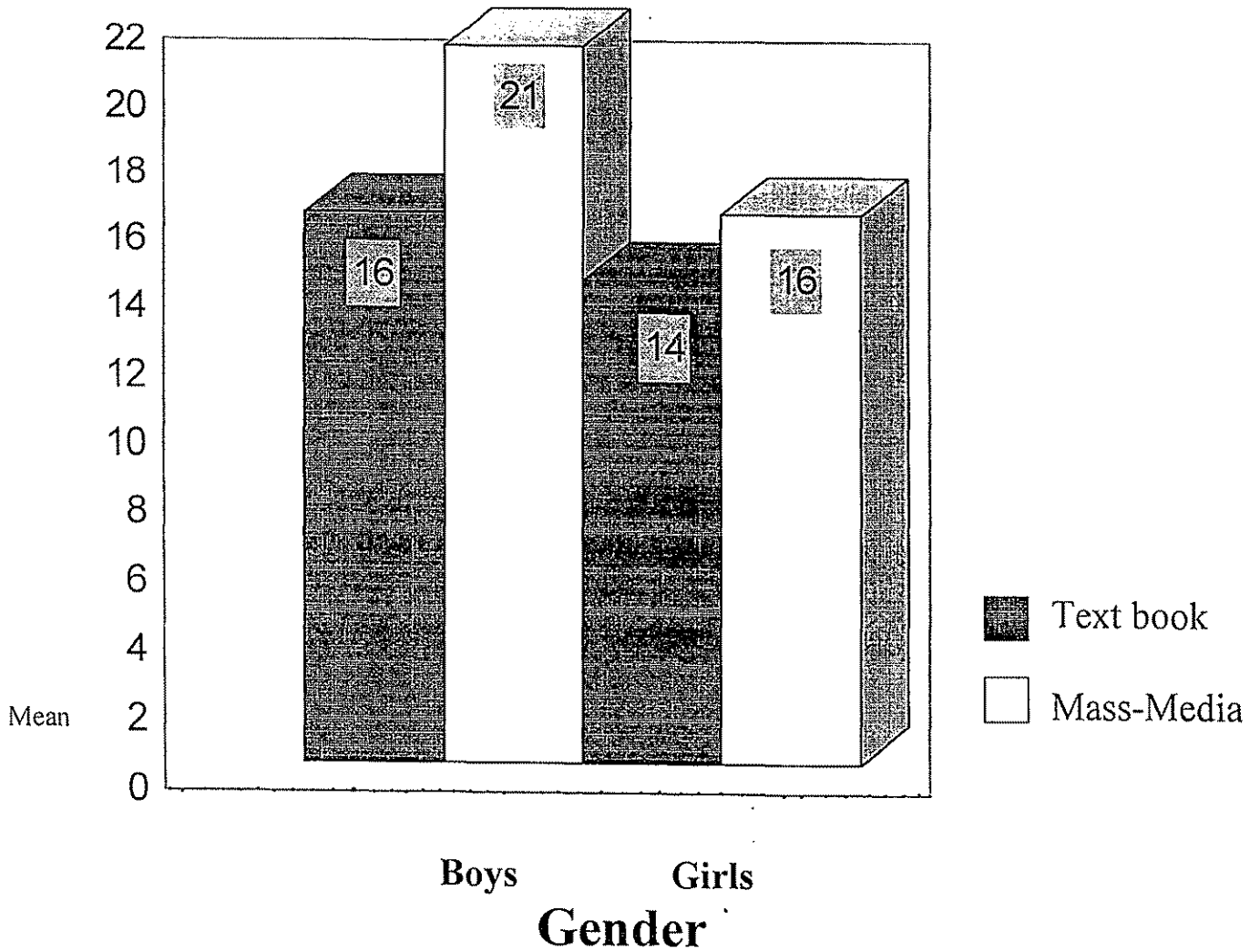
Table, 4.3.10

Group	Source	Mean	S.D.	N	df	't'	Significant
Gujarati	Text-book & Mass-media	44.80	8.43	173	198	4.493	0.00
English	Text-book & Mass-media	52.52	7.35	27			

In the table, 4.3.10 the calculated value of 't' is found to be 4.493 with degree of freedom 198. Which is more than the value expected at 0.01 level (2.69). Hence, the null hypothesis is rejected. It indicates that there is a significant difference among the English and Gujarati medium students in their total word power obtained through Mass-media and text book. Moreover, when means are compared Gujarati (44.80), English (52.52) it is observed that in their total word power obtained through mass-media and text book the English medium students have more word power than the students of Gujarati medium.

Graph No. 4.3.11

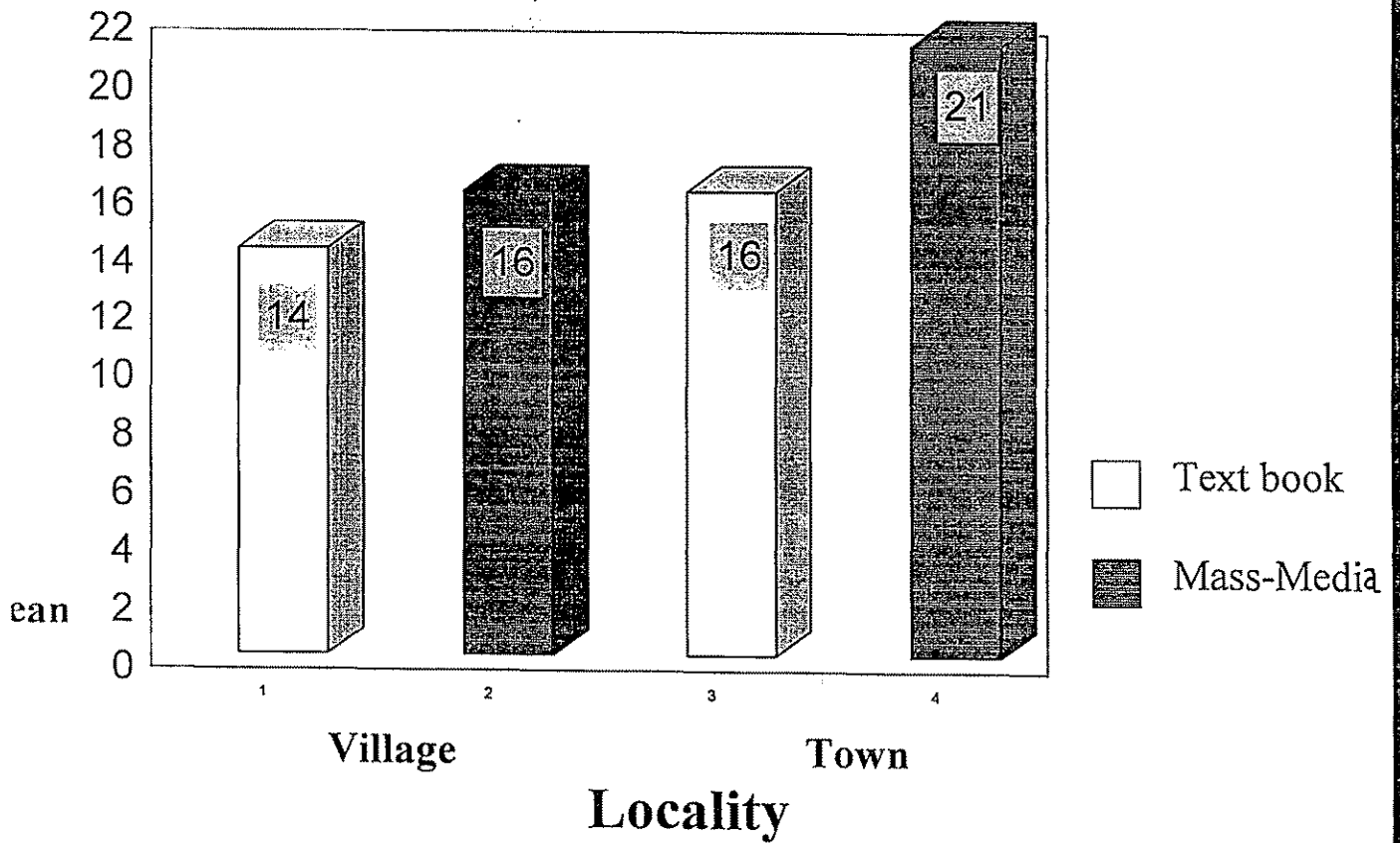
Total Word Power



Graph No. 4.3.11, Shows that boys (text book-16) Mass-Media (21) are far ahead in their work power as compared to Girls (text book-14) Mass-Media - (16)

Graph No. 4.3.12

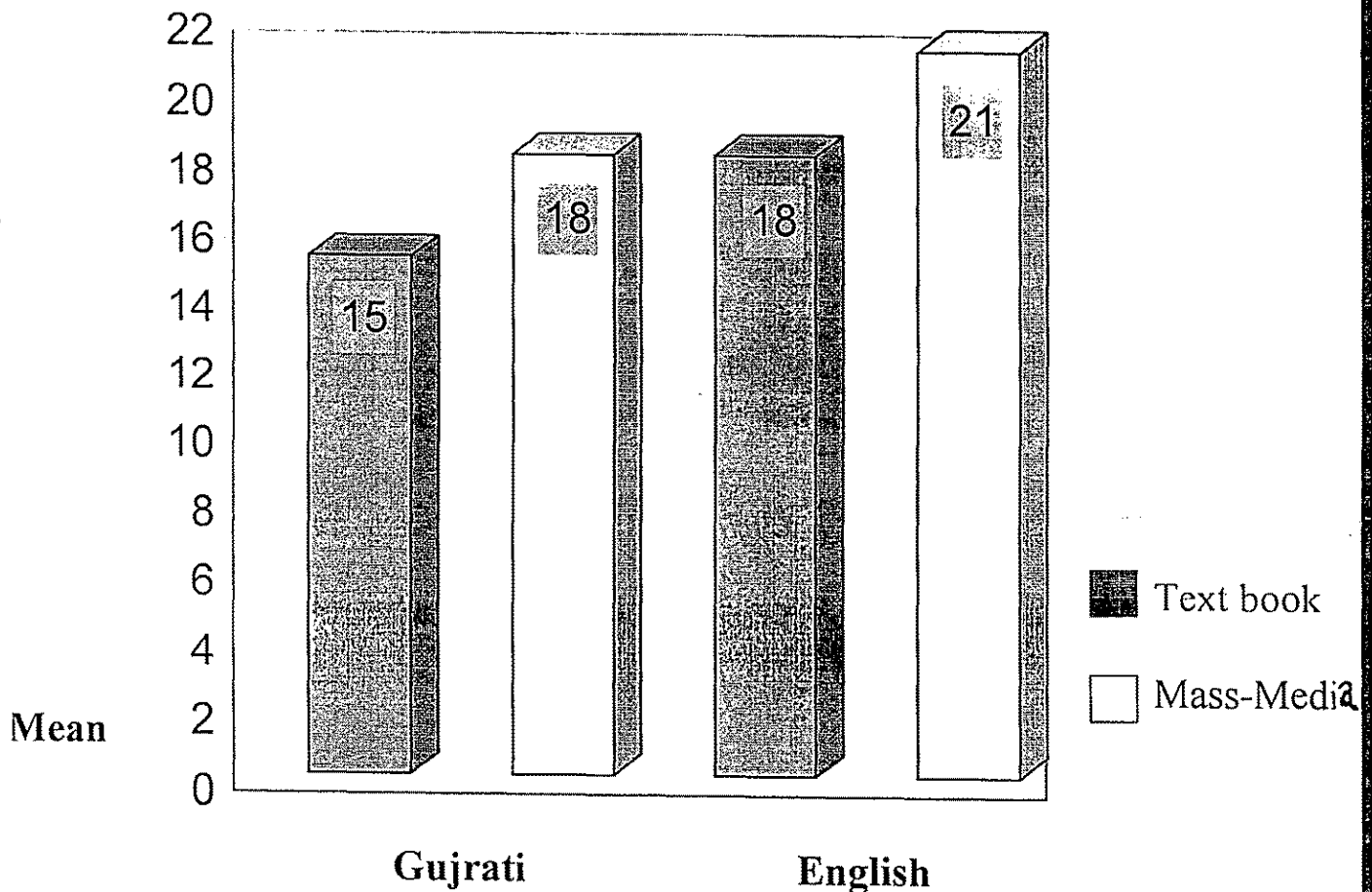
Total Word Power



Graph NO. 4.3.12 shows that the Urban students text book-(16) Mass-Media-(21) are far ahead in their word power as compared to the students of rural area text book-(14) Mass-Media-(16).

Graph No. 2.3.13

Total Word Power



Medium of Instruction

Graph No. 2.3.13 shows that the students of English Medium text book (18) Mass-Media - (21) have more word power as compared to the students of Gujarati Medium text book- (15) Mass-Media- (18).