

In this chapter, the investigator has in detail dealt with the analysis and interpretation of the data collected through various tools. Martz, has pointed out bare facts, objective data, never determine anything. They become significant only as interpreted in the light of accepted standards and assumptions and these standards in the final analysis are not susceptible to scientific determination. In ordinary life we seldom deal with bare facts interpreted. This interpretation or analysis is determined by the purpose to which we relate the facts.

4.1. Analysis

In this chapter, the investigator analyzed the data by calculated measures of central tendency i.e., mean. Besides this, the researcher calculated measures of dispersion i.e., standard deviation. Finally, graphical representation of data in the form of bar diagrams was shown.

4.2. Interpretation

The process of interpretation is essentially states what the result shows, what does it mean, what is its significance and what is the answer to the original problem. Interpretation is thus by no means a mechanical process. It calls for a critical examination of the results, ones analysis in the light of all the limitations in data gathering. Interpretation is one of the most important steps in the total procedure or research. The analysis and the interpretation had been carried out to study the significance of the means by calculating *t-values*.

4.3. Teacher Analysis

Table-32

Sample size, means and S.D. of different sub groups of teachers

S. No.	Name of the variable	Category	Number	Mean	S.D.
1.	Sex	Male	700	491.88	69.54
		Female	700	493.54	70.58
2	Educational Qualification	Graduation	1000	491.44	68.78
		Post Graduation	400	495.88	73.09
3	Age	Below 30	300	496.10	71.84
		30-45	850	490.59	67.49
		Above 45	250	495.86	76.12
4	Designation	SGT	850	493.92	70.36
		School Asst.	450	490.61	68.18
		Head Master	100	491.86	75.85
5	Experience	Below 5 years	225	499.13	75.55
		5-10 years	475	490.89	68.02
		Above 10 years	700	491.88	69.54
6	Management	Government	570	492.03	69.16
		Local body	730	493.36	69.99
		Private	100	491.88	75.85
7	Locality of the school	Urban	700	491.88	69.54
		Rural	700	493.54	70.58
8	Medium of Instruction	Telugu	1160	493.62	70.61
		English	240	488.32	67.19
9	Subject of Teaching	Arts	350	494.92	53.31
		Language	350	495.27	54.46
		Mathematics	350	496.03	87.72
		Science	350	484.61	77.94
10.	Level of Teaching	Lower primary	1000	62.48	7.30
		Upper primary	400	64.78	6.56

From the table 32 it can be observed that, the mean values of male (491.88) and female(493.54) teachers, Graduation(491.44) and Post Graduation (495.88) teachers, below 30(496.10), 30-45(490.59) and above 45 (495.86) age group teachers, SGT(493.92), School Assistants(490.61) and Head Masters(491.86), Below 5(499.13), 5-10(490.89) and above 10(491.88) years experienced teachers, Government(492.03), Local body(493.36) and Private school(491.88) teachers, rural(491.88) and urban(493.54) teachers, Telugu(493.62) and English(488.32) medium teachers, Arts(494.92), Language(495.27), Mathematics(496.03) Science(481.61) subject teachers, level of teaching Lower primary (62.48) and Upper primary (64.78) respectively.

The standard deviations of male (69.54) and female(70.58) teachers, Graduation (68.78) and Post Graduation(73.09) teachers, below 30(71.84), 30-45(67.49) and above 45(76.12) age group teachers, SGT(70.36), School Assistants(68.18) and Head Masters(75.85), Below 5(75.55), 5-10(68.02) and above 10(69.54) years experienced teachers, Government(69.16), Local body(69.99) and Private school(75.85) teachers, rural(69.54) and urban(70.58) teachers, Telugu(70.61) and English(67.19) medium teachers, Arts(53.31), Language(54.46), Mathematics(87.72) and Science(77.94) subject teachers level of teaching lower primary (7.30) and upper primary (6.56) are respectively.

Table-33

Significance of the difference between male and female teachers with regard to the problems of students in elementary education

Sex	N	Mean	Std. Dev.	t-value
Male	700	491.88	69.54	0.44 ^{NS}
Female	700	493.54	70.58	

NS: Not Significant

It is observed from the table 33, the mean score of female teachers with respect to ‘Problems of students in elementary education’, (493.54) is slightly higher than that of male teachers (491.88). The t-value is found to be 0.44, which is not significant at 0.05 level. This shows that there is no significant difference between male and female teachers. Hence, the formulated null hypothesis **“There is no significant difference between male and female teachers with regards to the Problems of students in elementary education”** is accepted.

Table-34

Significance of the difference between Graduate and Post Graduate teachers with regard to the problems of students in elementary education

Qualification	N	Mean	Std. Dev.	t-value
Graduation	1000	491.44	68.78	1.07 ^{NS}
Post Graduation	400	495.88	73.09	

NS: Not Significant

The above table revealed that, the mean score of Post Graduate teachers with respect to ‘Problems of students in elementary education’, (495.88) is slightly higher than that of Graduate teachers (491.44). The t-value

is found to be 1.07, which is not significant at 0.05 level. This shows that there is no significant difference between Graduate and Post Graduate teachers. Hence, the formulated null hypothesis **“There is no significant difference between Graduate and Post Graduate teachers with regard to the Problems of students in elementary education”** is accepted.

Table-35

Significance of the difference between below 30 and 30 to 45 years age group teachers with regard to the problems of students in elementary education

Age	N	Mean	Std. Dev.	t-value
Below 30 Years	300	496.10	71.84	1.20 ^{NS}
30 - 45 Years	850	490.59	67.49	

NS: Not Significant

Table 35 examine that, the mean score of below 30 years age group teachers with respect to ‘Problems of students in elementary education’ (496.10) is slightly higher than that of 30-45 years age group teachers (490.59). The t-value is found to be 1.20, which is not significant at 0.05 level. This shows that there is no significant difference between below 30 and 30-45 years age group teachers. Hence, the formulated null hypothesis **“There is no significant difference between below 30 and 30-45 years age group teachers with regard to the Problems of students in elementary education”** is accepted.

Table-36

Significance of the difference between below 30 and 45 years and above age group teachers with regard to the problems of students in elementary education

Age	N	Mean	Std. Dev.	t-value
Below 30 Years	300	496.10	71.84	0.04 ^{NS}
45 & Above	250	495.86	76.12	

NS: Not Significant

From the above table it is examined that the mean score of below 30 years age group teachers with respect to ‘Problems of students in elementary education’ (496.10) is slightly higher than the mean of 45 years & above age group teachers (495.86). The t-value is found to be 0.04, which is not

significant at 0.05 level. This shows that there is no significant difference between below 30 and 45 years & above age group teachers. Hence, the formulated null hypothesis **“There is no significant difference between below 30 and 45 years & above age group teachers with regard to the Problems of students in elementary education”** is accepted.

Table-37

Significance of the difference between 30 to 45 and 45 years and above age group teachers with regard to the problems of students in elementary education

Age	N	Mean	Std. Dev.	t-value
30 - 45 Years	850	490.59	67.49	1.05 ^{NS}
45 & Above	250	495.86	76.12	

NS: Not Significant

Table 37 depicts that, the mean score of 45 years & above age group teachers with respect to ‘Problems of students in elementary education’ (495.86) is slightly higher than that of 30-45 years age group teachers (490.59). The t-value is found to be 1.05, which is not significant at 0.05 level. This shows that there is no significant difference between 30-45 and 45 years & above age group teachers. Hence, the formulated null hypothesis **“There is no significant difference between 30-45 and 45 years & above age group teachers with regard to the Problems of students in elementary education”** is accepted.

Table-38

Significance of the difference between Secondary Grade Teachers and School Assistants with regard to the problems of students in elementary education

Designation	N	Mean	Std. Dev.	t-value
Secondary Grade Teacher	850	493.92	70.36	0.82 ^{NS}
School Asst.	450	490.61	68.18	

NS: Not Significant

Table 38 observed that, the mean score of Secondary Grade Teachers with respect to ‘Problems of students in elementary education’ (493.92) is slightly higher than that of School Assistants (490.61). The t-value is found to be 0.82, which is not significant at 0.05 level. This shows that there is no significant difference between Secondary Grade Teachers and School Assistants. Hence, the formulated null hypothesis “**There is no significant difference between Secondary Grade Teachers and School Assistants with regard to the Problems of students in elementary education**” is accepted.

Table-39

Significance of the difference between School Assistants and Head Masters with regard to the problems of students in elementary education

Designation	N	Mean	Std. Dev.	t-value
School Asst.	450	490.61	68.18	0.16 ^{NS}
Head Master	100	491.86	75.85	

NS: Not Significant

Table 39 shows that, the mean score of Head Masters with respect to ‘Problems of students in elementary education’ (491.86) is slightly higher than that of School Assistants (490.61). The t-value is found to be 0.16, which

is not significant at 0.05 level. This shows that there is no significant difference between Head Masters and School Assistants. Hence, the formulated null hypothesis **“There is no significant difference between School Assistants and Headmasters with regard to the Problems of students in elementary education”** is accepted.

Table-40
Significance of the difference between Secondary Grade Teachers and Head Masters with regard to the problems of students in elementary education

Designation	N	Mean	Std. Dev.	t-value
Secondary Grade Teacher	850	493.92	70.36	0.27 ^{NS}
Head Master	100	491.86	75.85	

NS: Not Significant

Table 40 observed that, the mean score of Secondary Grade Teachers with respect to ‘Problems of students in elementary education’ (493.92) is slightly higher than that of Head Masters (491.86). The t-value is found to be 0.27, which is not significant at 0.05 level. This shows that there is no significant difference between Secondary Grade Teachers and Head Masters. Hence, the null hypothesis **“There is no significant difference between Secondary Grade Teachers and Head Masters towards Problems of students in elementary education”** is accepted.

Table-41

Significance of the difference between below 5 and 5 to 10 years experienced teachers with regard to the problems of students in elementary education

Experience	N	Mean	Std. Dev.	t-value
Below 5 Years	225	499.13	75.55	1.44 ^{NS}
5 - 10 Years	475	490.89	68.02	

NS: Not Significant

Table 41 exhibit that, the mean score of below 5 years experienced teachers with respect to ‘Problems of students in elementary education’ (499.13) is slightly higher than that of 5-10 years experienced teachers (490.89). The t-value is found to be 1.44, which is not significant at 0.05 level. This shows that there is no significant difference between below 5 and 5-10 years experienced teachers. Hence, the formulated null hypothesis **“There is no significant difference between below 5 and 5-10 years experienced teachers with regard to the Problems of students in elementary education”** is not rejected.

Table-42

Significance of the difference between 5 to 10 and above 10 years experienced teachers with regard to the problems of students in elementary education

Experience	N	Mean	Std. Dev.	t-value
5 - 10 Years	475	490.89	68.02	0.24 ^{NS}
Above 10 Years	700	491.88	69.54	

NS: Not Significant

Table 42 shows that, the mean score of above 10 years experienced teachers with respect to ‘Problems of students in elementary education’ (491.88) is slightly higher than that of 5-10 years experienced teachers (490.89). The t-value is found to be 0.24, which is not significant at 0.05

level. This shows that there is no significant difference between 5-10 and above 10 years experienced teachers. Hence, the formulated null hypothesis **“There is no significant difference between 5-10 and above 10 years experienced teachers with regard to the Problems of students in elementary education”** is not rejected.

Table-43

Significance of the difference between below 5 and above 10 years experienced teachers with regard to the problems of students in elementary education

Experience	N	Mean	Std. Dev.	t-value
Below 5 Years	225	499.13	75.55	1.33 ^{NS}
Above 10 Years	700	491.88	69.54	

NS: Not Significant

Table 43 observed that, the mean score of below 5 years experienced teachers with respect to ‘Problems of students in elementary education’ (499.13) is slightly higher than that of above 10 years experienced teachers (491.88). The t-value is found to be 1.33, which is not significant at 0.05 level. This shows that there is no significant difference between below 5 and above 10 years experienced teachers. Hence, the formulated null hypothesis **“There is no significant difference between below 5 and above 10 years experienced teachers with regard to the Problems of students in elementary education”** is accepted.

Table-44
Significance of the difference between Government and Local body school teachers with regard to the problems of students in elementary education

Management	N	Mean	Std. Dev.	t-value
Government	570	492.03	69.16	0.34 ^{NS}
Local Body	730	493.36	69.99	

NS: Not Significant

Table 44 revealed that, the mean score of local body school teachers with respect to ‘Problems of students in elementary education’ (493.36) is slightly higher than that of government school teachers (492.03). The t-value is found to be 0.34, which is not significant at 0.05 level. This shows that there is no significant difference between government and local body school teachers. Hence, the formulated null hypothesis **“There is no significant difference between Government and Local body school teachers with regard to the Problems of students in elementary education”** is accepted.

Table-45
Significance of the difference between Local Body and Private school teachers with regard to the problems of students in elementary education

Management	N	Mean	Std. Dev.	t-value
Local Body	730	493.36	69.99	0.20 ^{NS}
Private	100	491.86	75.85	

NS: Not Significant

Table 45 depicts that, the mean score of local body school teachers with respect to ‘Problems of students in elementary education’ (493.36) is slightly higher than that of private school teachers (491.86). The t-value is found to be 0.20, which is not significant at 0.05 level. This shows that there

is no significant difference between local body and private school teachers.. Hence, the formulated null hypothesis **“There is no significant difference between Local body and Private school teachers with regard to the Problems of students in elementary education”** is accepted.

Table-46

Significance of the difference between Government and Private school teachers with regard to the problems of students in elementary education

Management	N	Mean	Std. Dev.	t-value
Government	570	492.03	69.16	0.02 ^{NS}
Private	100	491.86	75.85	

NS: Not Significant

Table 46 depicts that, the mean score of government school teachers with respect to ‘Problems of students in elementary education’ (492.03) is slightly higher than that of private school teachers (491.86). The t-value is found to be 0.02, which is not significant at 0.05 level. This shows that there is no significant difference between government and private school teachers. Hence, the formulated null hypothesis **“There is no significant difference between Government and Private school teachers with regard to the Problems of students in elementary education”** is accepted.

Table-47

Significance of the difference between Rural and Urban area teachers with regard to the problems of students in elementary education

Locality	N	Mean	Std. Dev.	t-value
Rural	700	493.54	70.58	0.44 ^{NS}
Urban	700	491.88	69.54	

NS: Not Significant

Table 47 observed that, the mean score of rural area teachers with respect to ‘Problems of students in elementary education’ (493.54) is slightly higher than that of urban area teachers (491.88). The t-value is found to be 0.44, which is not significant at 0.05 level. This shows that there is no significant difference between rural and urban area teachers. Hence, the formulated null hypothesis **“There is no significant difference between Rural and Urban area teachers with regard to the Problems of students in elementary education”** is accepted.

Table-48

Significance of the difference between Telugu and English medium teachers with regard to the problems of students in elementary education

Medium	N	Mean	Std. Dev.	t-value
Telugu	1160	493.62	70.61	1.07 ^{NS}
English	240	488.32	67.19	

NS: Not Significant

Table 48 observed that, the mean score of Telugu medium teachers with respect to ‘Problems of students in elementary education’ (493.62) is slightly higher than that of English medium teachers (488.32). The t-value is found to be 1.07, which is not significant at 0.05 level. This shows that there is no significant difference between Telugu and English medium teachers. Hence, the formulated null hypothesis **“There is no significant difference between Telugu and English medium teachers with regard to the Problems of students in elementary education”** is accepted.

Table-49

Significance of the difference between Arts and Science teachers with regard to the problems of students in elementary education

Subject of Teaching	N	Mean	Std. Dev.	t-value
Arts	350	494.92	53.31	0.09 ^{NS}
Science	350	495.27	54.46	

NS: Not Significant

Table 49 revealed that, the mean score of Science teaching teachers with respect to ‘Problems of students in elementary education’ (495.27) is slightly higher than that of Arts teaching teachers (494.92). The t-value is found to be 0.09, which is not significant at 0.05 level. This shows that there is no significant difference between Arts and Science teaching teachers. Hence, the formulated null hypothesis **“There is no significant difference between Arts and Science teachers with regard to the Problems of students in elementary education”** is accepted.

Table-50

Significance of the difference between Arts and Language teachers with regard to the problems of students in elementary education

Subject of Teaching	N	Mean	Std. Dev.	t-value
Arts	350	494.92	53.31	0.20 ^{NS}
Language	350	496.03	87.72	

NS: Not Significant

Table 50 revealed that, the mean score of Language teaching teachers with respect to ‘Problems of students in elementary education’ (496.03) is slightly higher than that of Arts teachers (494.92). The t-value is found to be 0.20, which is not significant at 0.05 level. This shows that there is no significant difference between Arts and Language teaching teachers. Hence,

the formulated null hypothesis “**There is no significant difference between Arts and Language teachers with regard to the Problems of students in elementary education**” is accepted.

Table-51

Significance of the difference between Arts and Mathematics teachers with regard to the problems of students in elementary education

Subject of Teaching	N	Mean	Std. Dev.	t-value
Arts	350	494.92	53.31	2.04*
Mathematics	350	484.61	77.94	

* Significant at 0.05 level

Table 51 revealed that, the mean score of Arts teaching teachers with respect to ‘Problems of students in elementary education’ (494.92) is higher than that of Mathematics teaching teachers (484.61). The t-value is found to be 2.04, which is significant at 0.05 level. This shows that there is significant difference between Arts and Mathematics teachers. Hence, the formulated null hypothesis “**There is no significant difference between Arts and Mathematics teachers with regard to the Problems of students in elementary education**” is rejected.

Table-52

Significance of the difference between Language and Science teachers with regard to the problems of students in elementary education

Subject of Teaching	N	Mean	Std. Dev.	t-value
Language	350	496.03	87.72	0.14 ^{NS}
Science	350	495.27	54.46	

NS: Not Significant

Table 52 examined that, the mean score of Language teaching teachers with respect to ‘Problems of students in elementary education’ (496.03) is slightly higher than that of Science teachers (495.27). The t-value is found to

be 0.14, which is not significant at 0.05 level. This shows that there is no significant difference between Language and Science teachers. Hence, the formulated null hypothesis **“There is no significant difference between Language and Science teachers with regard to the Problems of students in elementary education”** is accepted.

Table-53

Significance of the difference between Mathematics and Science teachers with regard to the problems of students in elementary education

Subject of Teaching	N	Mean	Std. Dev.	t-value
Mathematics	350	484.61	77.94	2.10*
Science	350	495.27	54.46	

* Significant at 0.05 level

Table 53 examined that, the mean score of Science teaching teachers with respect to ‘Problems of students in elementary education’ (495.27) is higher than that of Mathematics teachers (484.61). The t-value is found to be 2.10, which is significant at 0.05 level. This shows that there is significant difference between Science and Mathematics teachers. Hence, the formulated null hypothesis **“There is no significant difference between Mathematics and Science teachers with regard to the Problems of students in elementary education”** is rejected.

Table-54

Significance of the difference between Language and Mathematics teachers with regard to the problems of students in elementary education

Subject of Teaching	N	Mean	Std. Dev.	t-value
Language	350	496.03	87.72	1.82 ^{NS}
Mathematics	350	484.61	77.94	

NS: Not Significant

From table 54 it can be understood that, the mean score of (496.03) Language teaching teachers with respect to ‘Problems of students in elementary education’ is slightly higher than that of Mathematics teaching teachers (484.61). The t-value is found to be 1.82, which is not significant at 0.05 level. This shows that there is no significant difference between Language and Mathematics teaching teachers. Hence, the formulated null hypothesis **“There is no significant difference between Language and Mathematics teachers with regard to the Problems of students in elementary education”** is accepted.

Table-55

Significance of the difference between Lower and Upper Primary Teachers with regard to the problems of students in elementary education

level	N	Mean	Std. Dev.	t-value
Lower Primary	1000	62.48	7.30	2.45*
Upper Primary	400	64.78	6.56	

*Significant at 0.05 level

Table 55 observed that, the mean obtained scores of Upper Primary Teachers with respect to ‘Problems of students in elementary education’ (64.78) is higher than that of Lower Primary Teachers (62.48) and the t-value is found to be 2.45, which is significant at 0.05 level. This shows that there is significant difference between Lower and Upper Primary Teachers. Hence, the formulated null hypothesis **“There is no significant difference between Lower and Upper Primary Teachers with regard to the Problems of students in elementary education”** is rejected.