

CHAPTER NO – IV

ANALYSIS AND INTERPRETATION OF DATA.

- 4.1 Meaning and importance.**
- 4.2 Graphical representation of data.**
- 4.3 Hypothesis testing, tables and discussion**

CHAPTER- IV

Analysis and Interpretation of data

4.1 Meaning and Importance :

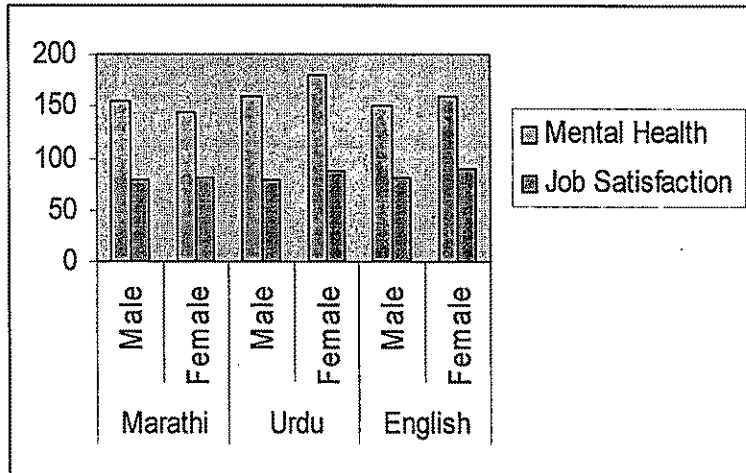
Analysis of data means studying the organised material in order to discover inherent facts. The data is studied from as many angles as possible to explore the new facts. Analysis requires an alert, flexible and open mind. It is worth while to prepare a plan of analysis before the actual collection of data.

Once the research data has been collected and the analysis has been made, the researcher can proceed to the stage of interpreting the results. The process of interpretation is essentially one of stating what the result shows ? What is their meaning and significance ? What is the answer to the original problem ? Interpretation is not a routine and mechanical process. It requires a careful, logical and critical examination of the results obtained after analysis. Keeping in view the limitations of the sample chosen, the tools selected and used in the study, there is always an element of subjectivity and the researcher generally commits certain errors while interpreting results of his study. So to have a meaningful result, it needs the application of some statistical techniques.

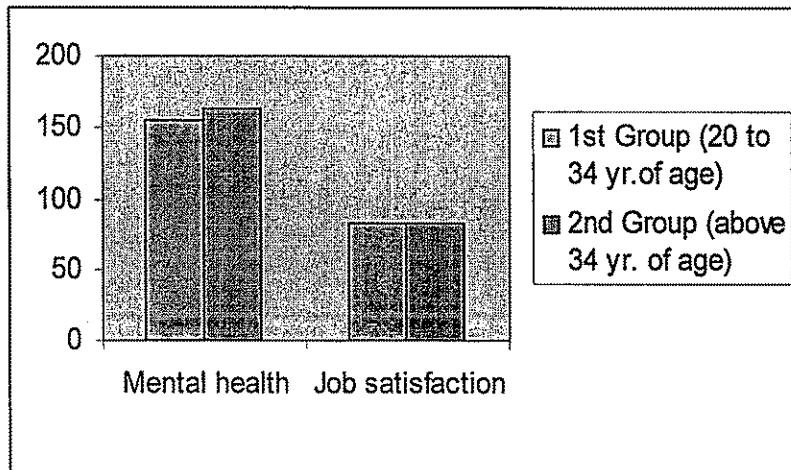
Results and Discussion

In The present study the scoring of different elementary school teachers on mental health and job satisfaction scale in terms of means, S.D. , t-test and ANOVA (one way analysis of variance) co-efficient of correlation have been applied .

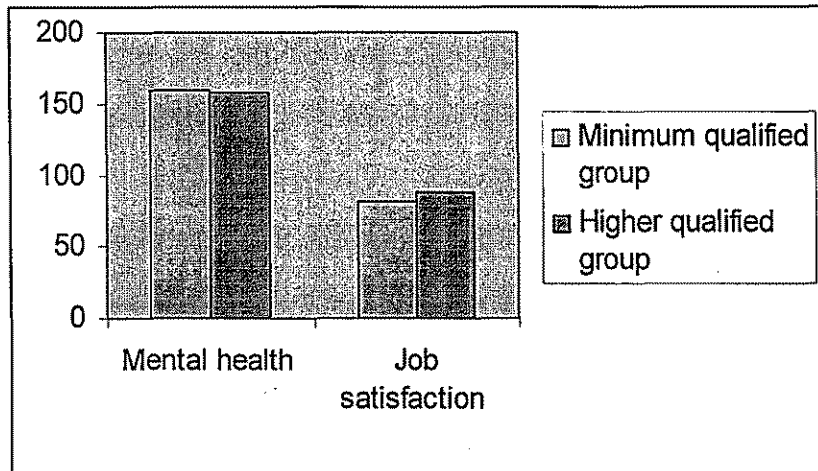
4.2 Graphical Representation of Data



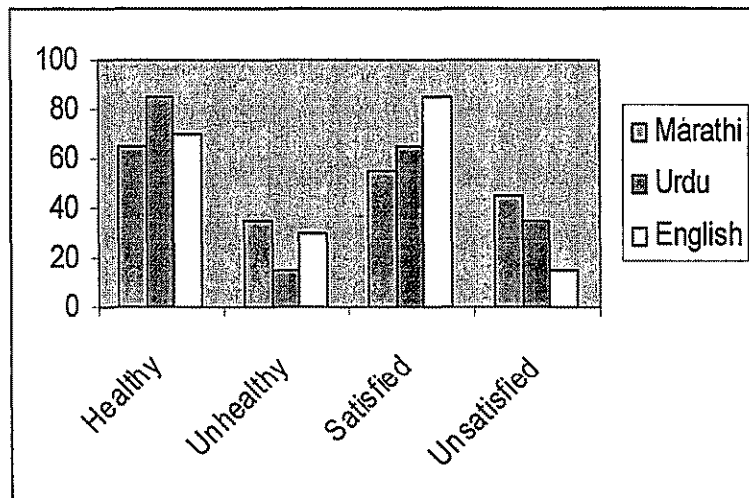
4.2.1 Mean of mental health and job satisfaction of elementary teachers



4.2.2. Mean of mental health and job satisfaction of two age groups.



4.2.3. Mean of mental health and job satisfaction of minimum and higher qualified groups.



4.2.4 Percentage of healthy, unhealthy, satisfied, unsatisfied teachers of Marathi, Urdu & English Medium.

4.3. Hypothesis testing

(1) H_0 = There is no significant co-efficient of correlation between the mean of mental health and job satisfaction of elementary teachers.

Table: 4.3.1: Significance of co-efficient correlation 'r' between mental health and job satisfaction of elementary teachers.

Variables	N	d.f.	'r'	Remarks
mental health & job satisfaction	60	58	0.60	Significant at 0.01 level,

The above table shows that the coefficient of correlation between mental health and job satisfaction is 0.60 and it is significant at 0.01 level. The hypothesis is rejected, hence there is a significant coefficient of correlation between mental health and job satisfaction of elementary teachers.

(2) H_0 = There is no significant difference in the mean of mental health of male and female elementary teachers .

Table 4.3.2: Significance test 't' between male & female in relation to mental health.

Category	M	SD	N	df	't'	Remarks
Male	155.33	21.45	30	58	0.98	Not significant
Female	161.33	28.78	30			

The above table indicates that the mean score of female teacher is more than male teacher. The 't' value of male and female teachers is not significant at 0.05 level. Thus the null hypothesis is accepted.

(3) Ho= There exists no significance difference between the mean of job satisfaction of male and female elementary teachers.

Table 4.3.3: Significant test 't' of job satisfaction of male and female elementary teachers.

Category	M	SD	N	df	't'	Remarks
Male	79.73	14.09	30	58	2.05	Not significant at 0.05 level
Female	86.40	10.93	30			

The above table indicates that the 't' value of job satisfaction of male and female elementary teachers at 0.05 level is not significant. Thus the null hypothesis is accepted, so we can conclude that there is no significant difference between the mean of job satisfaction of male and female teachers.

(4) Ho= There exists no significant difference between the mental health of younger (from 20 to 34 years) age group and older age group (from 34 years & above).

Table 4.3.4: Significance test 't' of mental health of two age groups .

Category	Mean	SD	N	df	't'	Remarks
younger age group (20 to 34 years)	155.14	20.92	35	58	1.23	Not significant at 0.05
older age group (34 year & above)	162.52	26.93	25			

The above table indicates that the 't' value of younger age group (20 to 34 year) and older age group (34 year above) is not significant at 0.05 level. Thus the Null hypothesis is accepted.

(5) H_0 = There is no significant difference in job satisfaction between younger and older age group.

Table 4.3.5: Significance test 't' of job satisfaction between two age groups.

Category	Mean	SD	N	df	't'	Remarks
Younger age group	83.45	13.84	35	58	0.27	Not significant at 0.05 level.
Older age group	82.52	11.82	25			

The 't' value of younger age group and older age group is not significant at 0.05 level. Thus the null hypothesis is accepted. Hence we can conclude that there is no significant difference in job satisfaction of younger age group (20 to 34 years) and older age group (34 and above year). Thus age does not have effect on mental health and job satisfaction of elementary teachers.

(6) H_0 = There exists no significance difference in mental health of various teaching experience group teacher.

Table 4.3.6: Significance 'f' ratio of mental health of various teaching experience groups.

Sources of variance	Some of Square Mean	Mean square	df	'f'	Remarks
Between the groups	1787.08	853.54	2	1.54	Not significant at 0.05 level.
with in groups	31448.25	551.72	57		
Total	33155.37		59		

The above table shows that there is no significant difference in the mean of first (1 to 5 year), second (5 to 10 year) and third (10 years and above) teaching experienced group at 0.05 level and the Ho is accepted. From the result we can conclude that teaching experience doesn't effect on the mental health of elementary teachers.

(7)Ho= There exists no significant difference is the job satisfaction of various teaching experienced group.

Table: 4.3.7: Significance of 'f' ratio of job satisfaction of various teaching experienced groups.

Sources of variance	Some of Square Mean	Mean square	df	'f'	Remarks
Between the groups	86.96	43.482	2	0.253	Not significant at 0.05 level.
with in groups	9804.77	172.01	57		
Total	9891.73		59		

The above table indicate that there is no significant difference in the mean of job satisfaction of first, second and third teaching experienced groups, thus the null hypothesis is accepted. From the result we can conclude that teaching experience doesn't have effect on job satisfaction of elementary teachers.

(8) Ho= There exists no significant difference in the mean of mental health of educational qualified groups.

Table 4.3.8: Significance test 't' of mental health of higher qualified and minimum qualified groups.

Category	Mean	SD	N	df	't'	Remarks
Minimum qualified group	158.63	26.20	44	58	0.163	Not significant at 0.05 level.
Higher qualified group	157.50	10.83	16			

The above table shows that there is no significant difference in the mean of mental health of minimum qualified and higher qualified group. Thus the null hypothesis is accepted, from the result we can conclude that qualification doesn't have effect on mental health of elementary teachers.

(9) Ho= There is no significant difference in the mean of job satisfaction of minimum qualified and higher qualified teachers.

Table 4.3.9: Significance test 't' of job satisfaction of educational qualified groups.

Category	Mean	SD	N	df	't'	Remarks
Minimum qualified group	81.59	13.44	44	58	1.47	Not significant at 0.05 level.
Higher qualified group	87.12	10.83	16			

The above table shows that there is no significant difference in the mean of job satisfaction of both groups at 0.05 level. Thus the null hypothesis is accepted. Hence we can say that educational qualification does not help the teacher to get job satisfaction.

(10) Ho= There exists no significant different in mental health of Marathi, Urdu and English medium teachers.

Table 4.3.10: Significance 'f' ratio of mental health of Marathi, Urdu and English medium teachers.

Sources of variance	Sum of Square of Mean	Mean square	df	'f'	Remarks
Between the groups mean of treatment	4629.03	2314.51	2	4.625	significant at 0.05 level.
Within treatment with in group	28526.3	500.46	57		
Total	33155.33		59		

The above table suggest that the calculated F- ratio (4.625) is more than the tabulated value. This means F-ratio is significant and there is significant difference between Marathi, Urdu and English medium teachers' mental health.

Table 4.3.11: Significance of mean difference between medium in relation to mental health .

Categories	Mean Difference	Remark
(1) Marathi V/s (2) Urdu (M= 149.60) (170.35)	20.75	Significant at 0.05 level
(1) Marathi V/s (3) English (155.05)	5.45	Not Significant at 0.05 level
(2) Urdu V/s (3) English	15.30	Not Significant at 0.05 level

The above table shows that there is no significant difference in the mean of mental health of Marathi v/s English and Urdu v/s English teacher. But there is a significant difference in the mean of Marathi v/s Urdu Medium teacher at 0.05 level. The hypothesis is rejected in terms of Marathi and Urdu Medium teacher. Hence we can conclude that Urdu medium teachers have better mental health than Marathi medium teachers.

(11) H_0 = There exists no significant difference in the job satisfaction of Marathi, Urdu and English medium teachers.

Table 4.3.12: Significance 'f' ratio of job satisfaction of Marathi, Urdu and English medium teachers.

Sources of variance	Sum of Square Mean	Mean square	df	'f'	Remarks
Between the groups	363.33	181.66	2	1.08	Not significant at 0.05 level.
with in group	9528.400	467.16	57		
Total	1891.73		59		

The above table shows that there is no significant difference in the mean of job satisfaction of Marathi, Urdu and English medium teachers. Thus the null hypothesis is accepted. From the above result we can conclude that medium of instruction doesn't have effect job satisfaction of elementary teachers.