CHAPTER – IV

ANALYSIS AND INTERPRETATION OF DATA

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4.1. MEANING AND IMPORTANCE

Analysis of data means studying the organized material in order to discover inherent facts. The data is studied from as many angles as possible to explore new facts. Analysis requires an alert, flexible and open-minded attempt. It is worthwhile 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 the stating of 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.

Statistics is a body of mathematical techniques or process for gathering, analyzing and interpreting numerical data. Since research yields quantitative data, statistics is the basic tool of measurement, evaluation and research. Statistical data describes group of behavior or group characteristics abstracted from number of individual observations, which are combined to make generalization possible. Statistical methods

go to the fundamental purpose of description and analysis. Statistics enables the researcher to analyze and interpret the data for drawing conclusions.

Interpretation of data refers to that important part of the research, which is associated with the drawing of inferences from the collected facts after an analytical study because statistical facts by themselves have no utility. It is the interpretation that makes it possible to utilize the collected data in various fields of the study.

According to the hypothesis of the study the data collected were analyzed on the basis of the scores of the tools applied. The statistical method serves the fundamental purpose of description and analysis and their proper application involves answering the following questions.

(1)   What facts need to be gathered to provide the information necessary to answer the hypothesis?

(2)   How are these data to be gathered, organized and analyzed?

(3)   What assumptions underlie the statistical methodology to be employed?

(4)   What conclusions could be validly drawn from the analysis of the data?

4.2.   TECHNIQUES USED IN DATA ANALYSIS

In the present study the scores of different secondary school teachers on job preference, professional adjustment and job satisfaction scales, in terms of mean, Standard deviation, t-test and co-efficient of correlation have been employed.

For the sake of convenience and compactness the total analysis of data were were divided into two sections: -

1.   Nature of distribution of scores.

2.   Verification of hypothesis.

4.3. NATURE OF DISTRIBUTION OF DATA

4.3.1. The first objective was to study the status of job preference of secondary school teachers.

Table (4.3.1): Nature of distribution of scores of job preference (N=100)

AM	Median	Mode	SD	SK	KU	MN	MX.
8.04	6.00	2.00	6.77	1.19	0.77	1	32

In job preference scale, the mean of job preference of 100 secondary school teachers is 8.04. From the above table it is clear that mean and median are very far from each other. The scores ranged from 1 to 32 and standard deviation is 6.77. The skewness of the distribution is 1.19, so it is positively skewed. The value of Kurtosis is 0.77, which is more then 0.263, so the distribution is platykurtic.

4.3.2. Second objective was to study the status of professional adjustment among secondary school teachers.

Table (4.3.2) Nature of distribution of scores of professional adjustment (N=100)

AM	Median	Mode	SD	SK	KU	MN	MX.
25.76	26.00	23	3.10	-0.34	-0.29	16	30

In professional adjustment scale, the mean of professional adjustment of 100 secondary school teachers is 25.76. From the above table it is clear that mean and median are very close to each other. The score ranged from 16 to 30 and standard deviation is 3.10. The skewness of the distribution is -0.34, so it is negatively skewed. The value of kurtosis is -0.29, which is less than 0.263, so the distribution is leptokurtic.

4.3.3. Third objective was to study the status of Job Satisfaction among secondary school teachers.

Table (4.3.3): Nature of distribution of scores of job satisfaction

(N=100)

AM	Median	Mode	SD	SK	KU	MN	MX.
26.25	27.00	29.00	3.03	-1.13	0.49	17	29

In job satisfaction scale, the mean of job satisfaction of 100 secondary school teachers is 26.25. From the above table it is clear that mean and median are very close to each other. The scores ranged from 17 to 29 and standard deviation is 3.03. The skewness of the distribution is -1.13, hence it is negatively skewed. The value of Kurtosis is 0.49, which is more than 0.263, so the distribution is platykurtic.

4.4. VERIFICATION OF THE HYPOTHESIS

There are eight hypothesis in the study, which has to be verified:

4.4.1. Correlation between job preference and job satisfaction

The first hypothesis of the study states that there is no significant relationship between job preference and job satisfaction of secondary school teachers.

Table (4.4.1): Significance of 'r' between job preference and job satisfaction.

Variables	'r'	df	Significance
Job preference Job satisfaction	0.19	98	Yes

The above table indicates that the value of 'r' is significant at 0.05 level and hence the hypothesis is rejected. This indicates that there is significant relationship between job preference and job satisfaction of secondary school teachers. Hence it can be stated that Job preference and job satisfaction affects each other. This may be due to their interest and positive attitude towards profession, which leads to job satisfaction.

4.4.2. Correlation between professional adjustment and job satisfaction

The second hypothesis of the study states that there is no significant relationship between professional adjustment and job satisfaction of secondary school teachers.

Table (4.4.2) : Significance of 'r' between professional adjustment and job satisfaction

Variables	'r'	df	Significance
Professional adjustment Job satisfaction	0.42	98	Yes

The above table indicates that the value of 'r' is significant at 0.05 level and hence the hypothesis is rejected. This indicates that there is significant relationship between professional adjustment and job satisfaction of secondary school teachers. Hence it can be stated that professional adjustment and job satisfaction affects each other. This may be for better performance and output the teacher try to make some adjustment so as to be satisfied and effective in their job.

4.4.3. Correlation between professional adjustment and job preference

The third hypothesis of the study states that there is no significant relationship between professional adjustment and job preference of secondary school teachers.

Table (4.4.3): Significance of 'r' between professional adjustment and job preference.

Variables	'r'	df	Significance
Professional adjustment Job preference	0.09	98	No

The above table indicates that the value of 'r' is not significant at 0.05 level and hence the hypothesis is accepted. This shows that there is no significant relationship between professional adjustment and job preference of secondary school teachers. Hence it can be stated that professional adjustment and Job preference are does not affect each other.

4.4.4. Gender and Job preference

The fourth hypothesis of the study states that there is no significant difference between male and female secondary school teachers in respect of job preference.

Table (4.4.4): Significance of 't' between male and female teachers in respect of job preference.

Category	AM	SD	N	df	t	Significant
Male	6.39	3.15	28	98	2.49	Yes
Female	8.68	5.88	72			

The 't' value is significant at 0.05 level and hence the hypothesis is rejected. This shows that there is gender variation in respect of job preference. Again when we compare the mean of male and female teachers we find that female preferred teaching as compared to male. This may be due to some factors such as the timing of the work, opportunities for interaction with students, responsibilities, opportunities to the development of society.
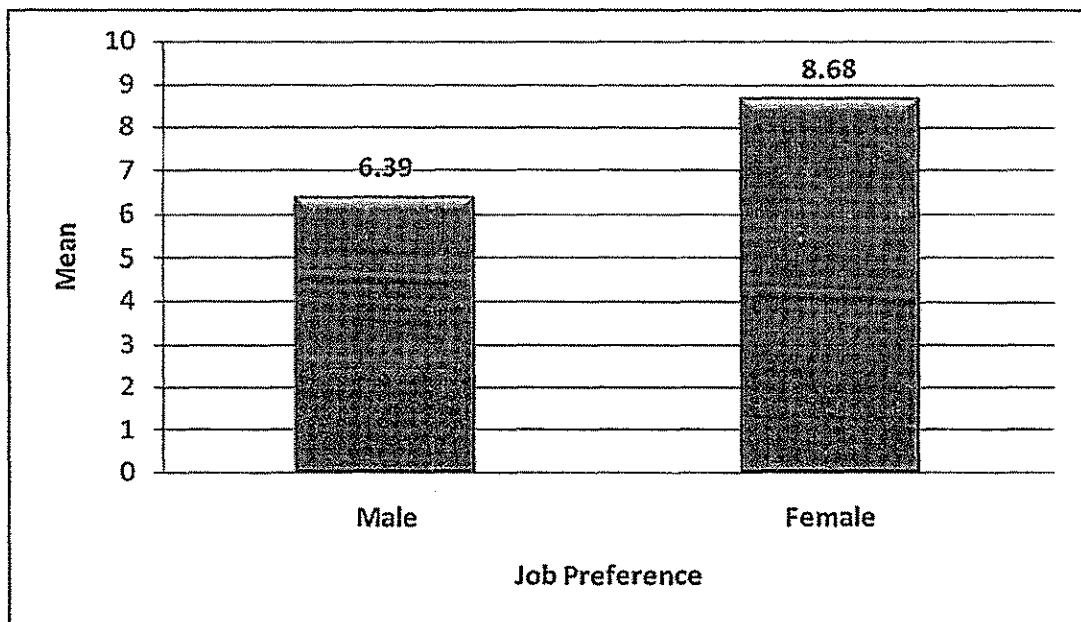

Fig.4.1: Graphical representation of mean of male and female teachers in respect of job preference

4.4.5. Gender and professional adjustment

The fifth hypothesis of the study states that there is no significant difference between male and female secondary school teachers in respect of professional adjustment.

Table (4.4.5): Significance of 't' between male and female teachers in respect of professional adjustment.

Category	AM	SD	N	df	t	Significant
Male	24.68	2.71	28	98	2.34	Yes
Female	26.18	3.13	72			

The value of 't' is significant at 0.05 level and hence the hypothesis is rejected. This shows that there is Gender variation in respect of professional adjustment. Again when we compare the mean of male and female we find female have better adjustment as compared to male. This may be due to the way females are brought up, they learn to adjust in all situation. The general environment of the institution and personal life adjustment may also be the reason.
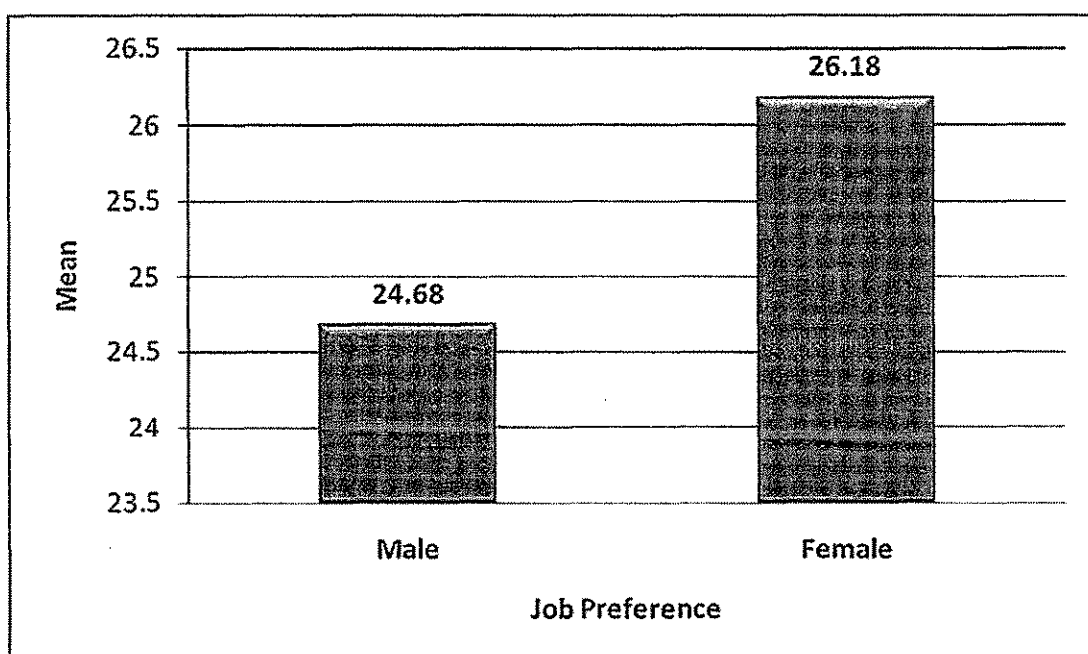

Fig.4.2: Graphical representation of mean of male and female teachers in respect of Professional adjustment

4.4.6. Gender and job satisfaction

The sixth hypothesis of the study states that there is no significant difference between male and female secondary school teachers in respect of job satisfaction.

Table (4.4.6): Significance of 't' between male and female teachers in respect of job satisfaction.

Category	AM	SD	N	df	t	Significant
Male	26.36	3.69	28	98	0.19	No
Female	26.21	2.72	72			

The value of 't' is not significant at 0.05 level and hence the hypothesis is accepted. This indicates that there is no significant difference between male and female teachers in respect of their job satisfaction. Gender variations are not evident in respect of job satisfaction. This means that male and female teachers are alike in their job satisfaction.
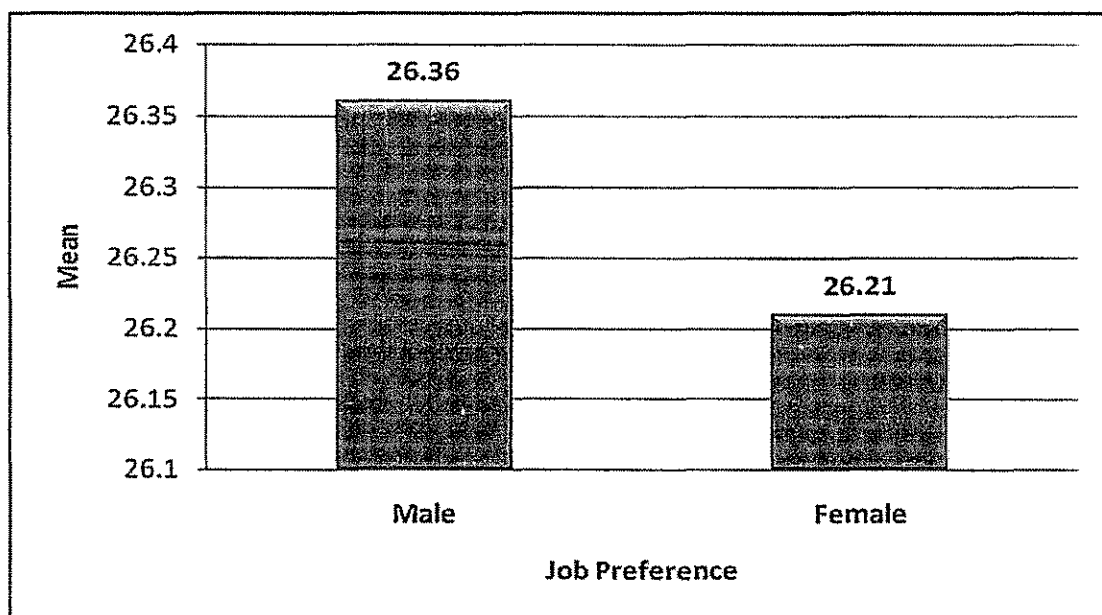

Fig.4.3: Graphical representation of mean of male and female teachers in respect of job satisfaction

4.4.7. Job preference and professional adjustment

The Seventh hypothesis of the study states that there is no significant difference between the teachers who preferred teaching as profession and those who preferred other profession in respect of professional adjustment.

Table (4.4.7): Significance of 't' between teachers who preferred teaching and those who preferred other profession in respect of professional adjustment.

Category	AM	SD	SD.M	N	df	t	Significant
Preference in Teaching	25.98	3.06	.42	52	98	0.74	No
Preference in other Profession	25.52	3.15	.45	48			

The value of 't' is not significant at 0.05 level and hence the hypothesis is accepted. This shows that there is no significant difference between teachers preferring teaching and those preferring other profession in respect of professional adjustment. Hence it can be stated that male and female teachers both are adjustable irrespective of their preferences. This may be due to their adjustment to the environment and interest in the work, which arises after joining the job.
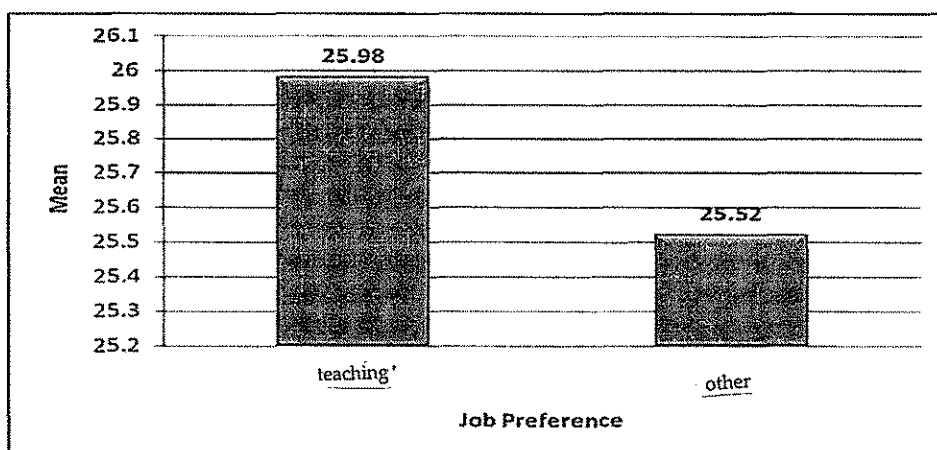

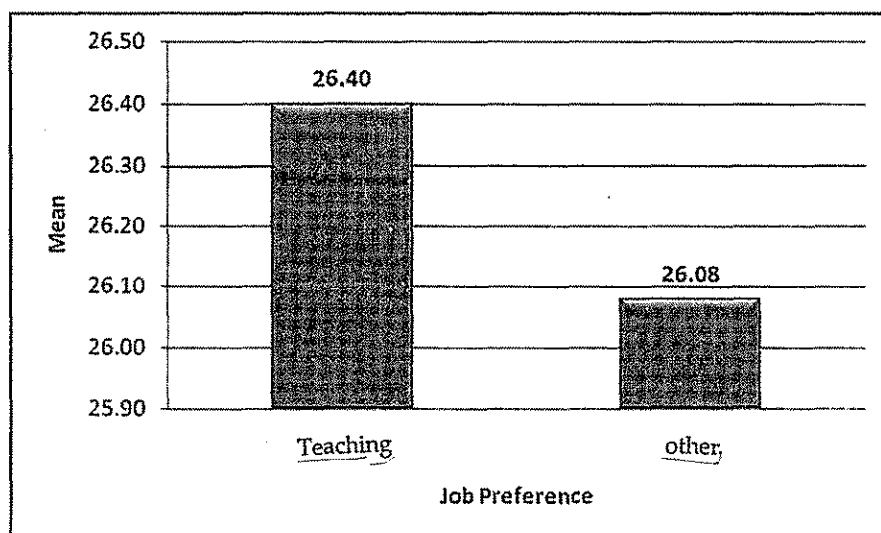**Fig.4.4: Graphical representation of job preference in respect of Professional adjustment.**

4.4.8.Job preference and job satisfaction

The eighth hypothesis of the study states that there is no significant difference between the teachers who preferred teaching as profession and those who preferred other profession in respect of job satisfaction.

Table (4.4.8): Significance of 't' between teachers who preferred teaching and those who preferred other profession in respect of job satisfaction.

Category	AM	SD	SD.M	N	df	t	Significant
Preference in Teaching	26.40	2.65	0.36	52	98	0.52	No
Preference in other Profession	26.08	3.42	0.49	48			

Here the value of 't' is not significant at 0.05 level and hence the hypothesis is accepted. This shows that there is no significant difference between teachers preferring teaching and those preferring other profession in respect of job satisfaction. This may be due to satisfaction with work, salary, security, promotion policies, authority etc. after joining the job.

4. 5: Graphical representation of job preference in respect of Job satisfaction.

4.5. OVERVIEW

In conclusion it can be stated that the findings of the study is in agreement and refute with some of the findings obtained by other investigator in the same field.

The present study found that there is a relationship between professional adjustment and job satisfaction. This indicates that both these variables affect each other. This finding is in accordance with the finding of J.C.Goyal (1980) who studied the relationship among attitudes, job satisfaction, adjustment and professional interest of teacher educators. In his study Goyal found that job satisfaction could be predicted by attitude and occupational adjustment.

' Further another finding of the study reveals that there is no significant difference between male and female teachers in respect of job satisfaction, however the findings made by Meenakshi Agarwal (1991) who studied job satisfaction of teachers in relation to some demographic variables and values, refutes the finding of the present study. The reason of this difference can be due to various experience, exposure to the environment and educational foundations of the teacher.

Another study carried out by J.C.Goyal (1980) found that majority of teacher educators were favorably inclined towards their profession and were satisfied with their job. Although they were not well adjusted and had low professional interest. The present study supports this finding, as there is no significant difference between teachers preferring teaching and other profession, in respect of professional adjustment and job satisfaction.

Thus we can conclude that there is no relationship between professional adjustment and job preference, but some relation is there between professional adjustment and job satisfaction and between job preference and job satisfaction. This may be due to environment of work place, experiences, socio psychophysical adjustment, professional relationship adjustment, personal life adjustment and financial adjustment, which makes them professionally adjusted and satisfied.