CHAPTER-IV

ANALYSIS AND INTERPRETATION OF DATA

4.1 Meaning and Importance

4.2 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 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 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 study there is always an element of subjectivity and the researcher generally commits certain errors while interpreting results of his study .

Statistics is a body of mathematical techniques or process for gathering, analysing and interpreting numerical data.Statistical data describes group behavior or group characteristics abstracted from number of individual observations, which are combined to make

generalisation possible. Statistics enables the researcher to analyse and interpret the data for drawing conclusions.

Interpretations 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 utilise the collected data in various fields of the study .

According to the hypothesis of the study the data collected were analysed 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.

In the present study, teachers working in special schools were scored on mental health and job satisfaction scale in terms of mean, S.D., t-test and coefficient of correlation .

4.2 Hypothesis Testing, Analysis and Interpretation

1   There is no significant correlation between job satisfaction and Mental Health of teachers working in special schools

Table 4.2.1: Significance of 'r' between job satisfaction and mental health.

Variables	N.	Mean	S.D.	r	SÉ	Nature of 'r'	Degree of 'r'
Mental Health	56	77.68	11.68	0.718	.06	positive	Moderate
Job Satisfaction	56	152.27	22.77				

Analysis

Table No. 4.2.1 indicates that the value of 'r' is 0.718 ,hence null hypothesis is rejected. The calculated value of 'r' indicates that there is moderate positive correlation between job satisfaction and mental health.

The standard error of coefficient of correlation is .06.To test the dependability of 'r' in terms of Ser there are 99 chances in 100 that the obtained 'r' does not miss the true 'r' by more than .06. Again at .99 confidence interval the true r is atleast larger than .568 and no larger than .868.

Interpretation

The calculated value of r signifies that mental health of teachers is moderately positively correlated to their job satisfaction .Thus it can be interpreted that the teachers who have good self concept ,sound perception of self among others ,better adjustment ability will also have positive attitude ,interest feeling of security,good relation with management and are satisfied in working with children having special needs.

(2) There is no significant effect of special training on job satisfaction of teachers working in special schools.

Table 4.2.2:Significance test 't' of Job satisfaction of Regular and Special Teachers.

Category	N.	Mean	S.D.	df	t	Remarks
Regular Teachers	25	67.92	8.99	54	9.124	Significant
SpecialTeachers	31	85.55	5.32			

- Calculated t value at df 54 at 0.05 level is 9.124
- Table value is 2.66
- Significant at 0.05 level.

The table 4.2.2 shows that mean value of job satisfaction of regular teachers working in special schools is 67.92 and standard deviation is 8.99 . The mean value of job satisfaction of special teachers is 85.55 which is much higher than job satisfaction of regular teachers. The calculated value of t at df 54 at 0.05 level is found to be 9.124 which is higher than the table value of t. Thus null hypothesis is rejected. Hence there exist significant difference between job satisfaction of regular and special teachers.

Interpretation

The higher mean value of teachers with special training shows that they are highly satisfied with job as compared to untrained teachers as during their training they have developed understanding with respect

to different behavior patterns of special children and techniques to help special students to adapt themselves comfortably in school and society. This gives them a sense of achievement. Significant difference in job satisfaction between regular and special teacher indicates that training in special education has a positive effect on job satisfaction of teachers working in special schools. It can be concluded that training in special education equip the teacher with the required knowledge and skill to deal with children with special need efficiently resulting in greater job satisfaction.

(3)   There is no significant effect of special training on mental health of teachers working in special schools.

Table 4.2.3: Significance test 't' of mental health of regular and special teachers .

Category	N.	Mean	S.D.	df	t	Remarks
Regular teachers	25	132.80	12.98	54	7.826	Significant
Special teachers	31	169.16	16.30			

- Calculated t value at df 54 at 0.05 level is 7.826
- Table value of t is 2.66
- Significant at 0.05 level .

The table 4.2.3 shows that mean value of mental health of regular teachers working in special school is 132.80 and SD is 12.98 .The mean value of regular teachers is 169.16 which is higher than the

37

mean of job satisfaction of regular teachers . The table also depicts that the calculated 't' value is 7.826 . The table value of 't' at df 54 at 0.05 level is 2.66 .As the calculated value of 't' is found to be greater then the table value, the null hypothesis is rejected. Hence there exist significant difference between regular and special teachers with respect to mental health.

Interpretation

Higher mean value of teachers with special training shows that they have better mental health as compared to regular teachers who are working in special schools without special training. Above table also shows significant difference in mental health of regular and special teachers indicating that special training has positive effect on mental health of teachers working in special schools. It can be concluded that sound mental health helps in realistic perception of self and others, increase chances of adjustment with self and others and also increase chances of professional achievement. Teachers with special training are aware of the limitations in teaching children with special needs ,thus they are better adjusted at their workplace .They have realistic approach towards the learning achievement of special children and thus are not frustrated or get irritated when not getting desired outcome.

(4)   There is no significant difference between job satisfaction of below middle age group and above middle age group of teachers working in special schools.

Table 4.2.4 Significance 't' of job satisfaction of two age groups.

Category	N.	Mean	S.D.	df	t	Remarks
Below middle age group	30	74.4	9.98	54	1.6	Insignificant
Above middle age group	26	78.92	10.5			

- t value at df 54 at 0.05 level is 1.6
- Table value at df 54 at 0.05 level is 2.66
- Not Significant at 0.05 level .

Analysis

The table 4.2.4 shows that mean value of job satisfaction of below middle age group of teachers is 74.4 and standard deviation is 9.98. The mean value of job satisfaction of older age group teachers is found to be 78.92 and standard deviation is 10.5. The calculated 't' value at df 54 at 0.05 level is 1.6 which is lower than its table value i.e, 2.66. As the calculated value of 't' is found to be less than the table value, the null hypothesis is accepted. Hence there is no significant difference between below middle age group and above middle age group of teachers with respect to job satisfaction.

Interpretation

The result shows that teachers of both age groups working in special schools do not differ from each other in job satisfaction. This indicates that the age has no effect on job satisfaction of teachers. Teachers of both the age groups are equally satisfied with their jobs as they are working in similar system with similar facilities, administration and chances of promotion.

(5) There is no significant difference between mental health of below middle age group and above middle age group of teachers working in special schools.

Table 4.2.5: Significance test 't' of mental health of two age groups.

Category	N.	Mean	S.D.	df	t	Remarks
Below middle age group	30	150.2	18.5	54	0.11	Insignificant
Above middle age group	26	158.8	26.8			

- t value at df 54 at 0.05 level is 0.11
- Table value at df 54 at 0.05 level is 2.66
- Not Significant at 0.05 level .

Analysis

The above table indicates that mean value of mental health for below middle age group is 150.2 and mean value of mental health of above middle age group is found to be 158.8. The calculated 't' value is 0.11which is less than the table value of 't' at df 54 at 0.05 level which is 2.66. Hence the null hypothesis is accepted. Thus there is no significant difference between below middle and above middle age group of teachers working in special schools with respect to their mental health.

Interpretation

The result indicates that there is no significant difference in the two age age groups with respect to the mental health of teachers working in special schools. Teachers of both the age group are at par in dealing with children with special needs. It may be because both the age group of teachers are dealing with similar children ,facing similar problems at workplace, getting similar facilities which determine their adjustment with self and others.

(6)   There is no significant difference between mental health of low salary and high salary group of teachers working in special schools.

Table 4.2.6 : Significance test 't' of mental health of low and high salary groups

Category	N.	Mean	S.D.	df	t	Remarks
Low salary group	29	137.34	12.98	54	8.43	Significant
High salary group	27	173.41	16.30			

- t value at df 54 at 0.05 level is 8.43

- table value at df 54 at 0.05 level is 2.66

- Significant at 0.05 level .
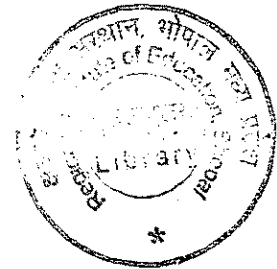
Analysis

The above table shows that the mean value of mental health of high salary group is 173.41 which is much higher than the mean value of mental health of low salary group i.e, 137.41 . The calculated 't' value is found to be 8.43 . The table value of 't' at df 54 is 2.66 at 0.05 level. As the calculated value of 't' is found to be greater than the table value, the null hypothesis is rejected. Hence there is significant difference between low and high salary group of teachers working in special school with respect to mental health.

Interpretation

Higher mean value of higher salary group shows that they have better mental health as compared to low salary group of teachers working in special schools. There is significant difference between mental health of lower and higher salary group. This indicates that salary effects the mental health of teachers working in special schools. The teachers who get higher salary have better sense of achievement ,less stress and adjustment problems as compared to low salary group of teachers who are more anxious and stressed. Teachers with higher salary were found to be scoring higher on personal adjustment, concept of life, self concept and records of achievement as compared to low salary group of teachers.

(7) There is no significant difference between job satisfaction of low salary and high salary group of teachers working in special schools.

Table 4.2.7 : Significance test 't' of Job Satisfaction of low and high salary group

Category	N.	Mean	S.D.	df	t	Remarks
Low salary group	29	68.9	9.69	54	7.82	Significant
High salary group	27	85.67	5.68			

- t value at df 54 at 0.05 level is 7.82

- Table value at df 54 at 0.05 level is 2.66

- Significant at 0.05 level .

Analysis

The above table indicates that the mean value of job satisfaction of high salary group is 85.67 which is higher than the mean value of job satisfaction for low salary group ,i.e,68.9. The calculated 't' value is 7.82 . The table value of 't' at df 54 at 0.05 level is 2.66 which is less than the calculated value. Thus null hypothesis is rejected. Hence there is significant difference between low and high salary group of teachers working in special schools with respect to job satisfaction.

Interpretation

Higher mean value of higher salary group indicates that they are more satisfied with their job as compared to lower salary group of teachers working in special schools. There exist significant difference between job satisfaction of lower and higher salary group. This suggest that job satisfaction is effected by salary the teachers get for their input. This shows that good salary helps in fulfillment of basic needs, develops feeling of security and achievement. If the teachers are getting salary according to their input and expenditure of energy the teachers working in special schools derive satisfaction from their job.