

**CHAPTER-4**  
**DATA ANALYSIS AND**  
**INTERPRETATION**

## CHAPTER IV

### Analysis of data and interpretation of result

#### 4.1 Introduction

Analyzing research data is an important step in the dissertation process. It is the time when researcher may reach important fact the data collected; uncover facts that one might not otherwise have known fact to support the hypothesis of study. By doing in depth of comparison, one can begin to identify relationship between various data that will help to understand more about respondent, and guide the researcher towards better decision. In analysis, relationship or differences that support or conflict the original hypothesis are subjected to test of significance to determine the validity by which conclusion can be made. By statistics researcher can analyze the data. After analysis interpretation and conclusion can draw.

The data thus collected was subjected to appropriate statistical procedure (Pearson product movement correlation and t-test) to test the hypothesis with which the study was initiated. The detail of the statistical technique employed for analysis of the data, result obtained through analysis regarding the acceptance and rejection of the hypothesis is presented in this chapter. Once the data has been collected and the analysis has been done, the researcher can proceed to the stage of interpretation the result.

#### 4.2 Testing of Hypothesis

Hypothesis formulated were tested for significance relationship that existed the mean difference in peer adjustment score of children of working and non-working mother.

##### **Hypothesis (Ho)1:**

There will be no significant relationship between peer adjustment and academic achievement of studentsof class X.

**Table 4.2.1**

**Coefficient of correlation between peer adjustment and academic achievement of class X students**

Variable	N	r	Remark
Peer adjustment	60	0.149	**
Academic achievement			

Note: \*\* Not significant at 0.05 level of confidence

The value of  $r$  to be significant at 0.05 level of confidence with 58 degree of freedom is 0.25. Table 4.2.1 reveals that the obtained value of the coefficient of correlation ' $r$ ' with 58 degree of freedom is 0.149 less than the table value (0.25). Hence the hypothesis that there will be no significant relationship between peer adjustment and academic achievement of students of class X is accepted. This indicates that there is no relationship between peer adjustment and academic achievement of class X students.

**Hypothesis (Ho) 2:**

There will be no significant relationship between adjustment scores and academic achievement of peer in and around school.

**Table 4.2.2**

**Coefficient of correlation between scores of adjustment with peer and academic achievement**

Variable	N	r	Remark
Peer adjustment in & around the school	60	0.008	**
Academic achievement			

Note: \*\* Not significant at 0.05 level of confidence

The value of  $r$  to be significant at 0.05 level of confidence with 58 degree of freedom is 0.25. Table 4.2.2 reveals that the obtained value of the coefficient of correlation ' $r$ ' with 58

degree of freedom is 0.008 less than the table value (0.25) .Hence the hypothesis that there will be no significant relationship between adjustment scores and academic achievement of peer in and around school is accepted this indicates that adjustment and academic achievement of peer in and around school is not related with each other.

**Hypothesis (Ho) 3:**

There will be no significant relationship between the class room adjustment and academic achievement amongst peer.

**Table 4.2.3**

**Coefficient of correlation between the scores of class room adjustment and academic achievement**

Variable	N	r	Remark
Peer adjustment in class room Academic achievement	60	0.156	**

Note: \*\*Not significant at 0.05 level of confidence

The value of ‘r’ to be significant at 0.05 level of confidence with 58 degree of freedom is 0.156 Table 4.2.3 reveals that the obtained value of the coefficient of correlation ‘r’ with 58 degree of freedom is 0.008 less than the table value (0.25) .Hence the hypothesis that there will be no significant relationship between the class room adjustment and academic achievement amongst peer is accepted this indicates that there is no relationship between the class room adjustment and academic achievement amongst peer.

**Hypothesis (Ho) 4:**

There will be no significant relationship between adjustment scores and academic achievement of peer with members of family and community.

**Table 4.2.4**

**Coefficient of correlation between the scores of adjustment**

**In community and academic achievement**

Variable	N	r	Remark
Adjustment in family and community Academic achievement	60	0.79	**

Note: \*\*Not significant at 0.05 level of confidence

The value of 'r' to be significant at 0.05 level of confidence with 58 degree of freedom is 0.25. Table 4.2.4 reveals that the obtained value of the coefficient of correlation 'r' with 58 degree of freedom is 0.79 is less than the table value (0.25). Hence the hypothesis that there will be no significant relationship between adjustment scores and academic achievement of peer with members of family and community is accepted. This indicates that adjustment is not related to academic achievement of peer with members of family and community.

**Hypothesis (Ho) 5:**

There will be no significant relationship between adjustment and academic achievement scores of peer under crises.

**Table 4.2.5**

**Coefficient of correlation between adjustment and academic  
achievement scores of peer under crises.**

Variable	N	r	Remark
Adjustment in family and community Academic achievement	60	0.017	**

Note: \*\*Not significant at 0.05 level of confidence

The value of 'r' to be significant at 0.05 level of confidence with 58 degree of freedom is 0.25. Table 4.2.4 reveals that the obtained value of the coefficient of correlation 'r'

with 58 degree of freedom is 0.017 less than the table value (0.25) .Hence the hypothesis that there will be no significant relationship between adjustment and academic achievement scores of peer under crises is accepted this indicates that adjustment of peer under crises is not related with academic achievement.

### Hypothesis (Ho)6:

There will be no significant difference between peer adjustment of children of working mother and non-working mother.

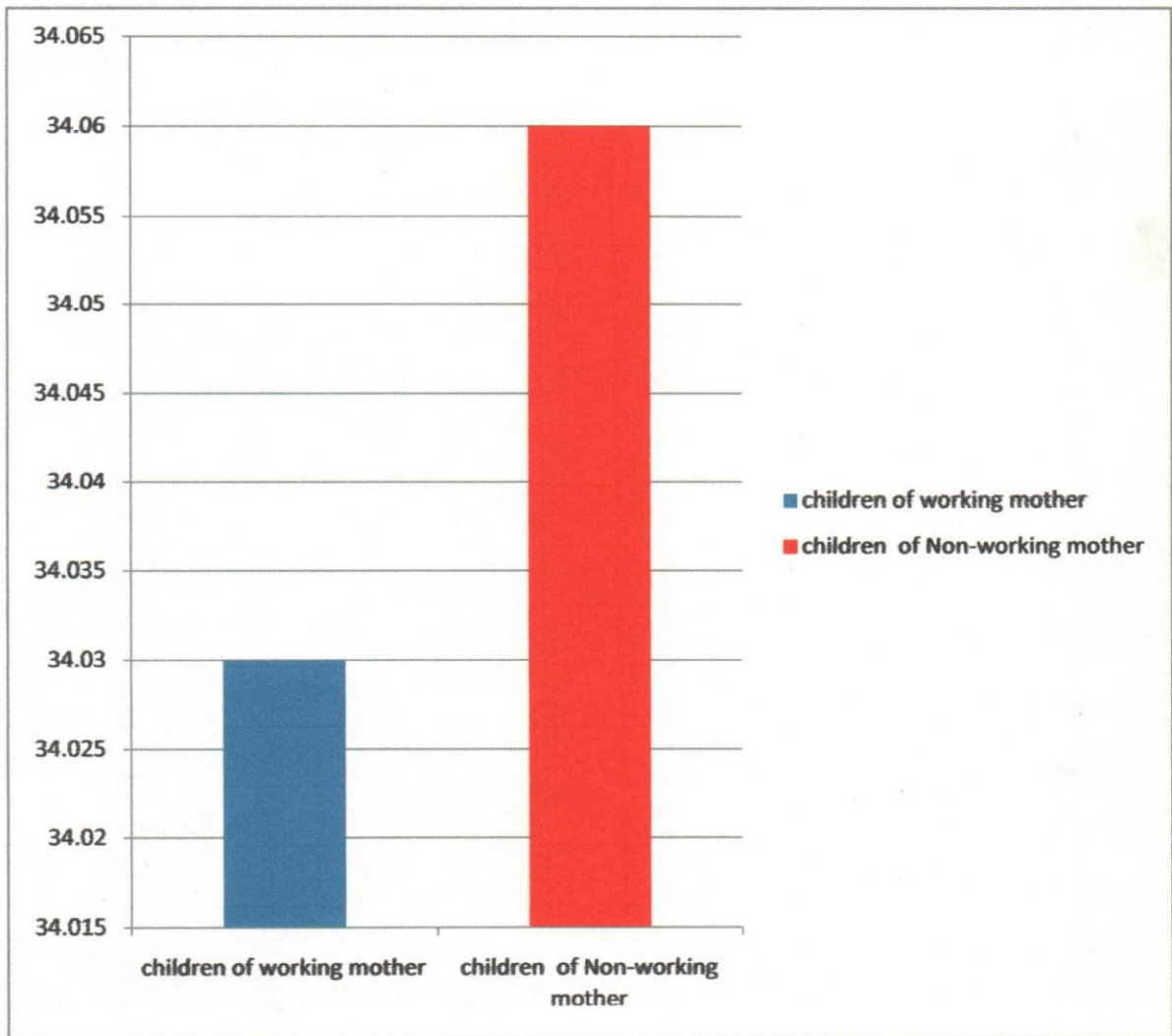
**Table 4.2.6**

**Comparison of mean score of peer adjustment of children of working and non-working mother**

Demographic Variables	Peer Adjustment		Mean difference	t value	Remark
	Mean	SD			
Children of working mother	34.03	6.16	0.03	0.21	**
Children of non- working mother	34.06	5.79			

Note: \*\*Not significantat 0.05 level of confidence

The value of t to be significant at 0.05 level of confidence with 58 degree of freedom is 2.00Table 4.2.6 reveals no significant difference in the mean scores of peer adjustment of children of working and non-working mother. The obtained value of t (0.21) is less than the table value is 2.05 at 0.05 level of significance. Therefore the hypothesis that there will be no significant difference between peer adjustment of children of working mother and non working motheris accepted.



Graph 4.1

Mean score of peer adjustment of children of working and non-working mother

### Hypothesis (Ho) 7:

There will be no significant difference between academic achievement of children of working mother and non-working mother.

**Table 4.2.7**

**Comparison of mean score of academic achievement of children of working and non-working mother**

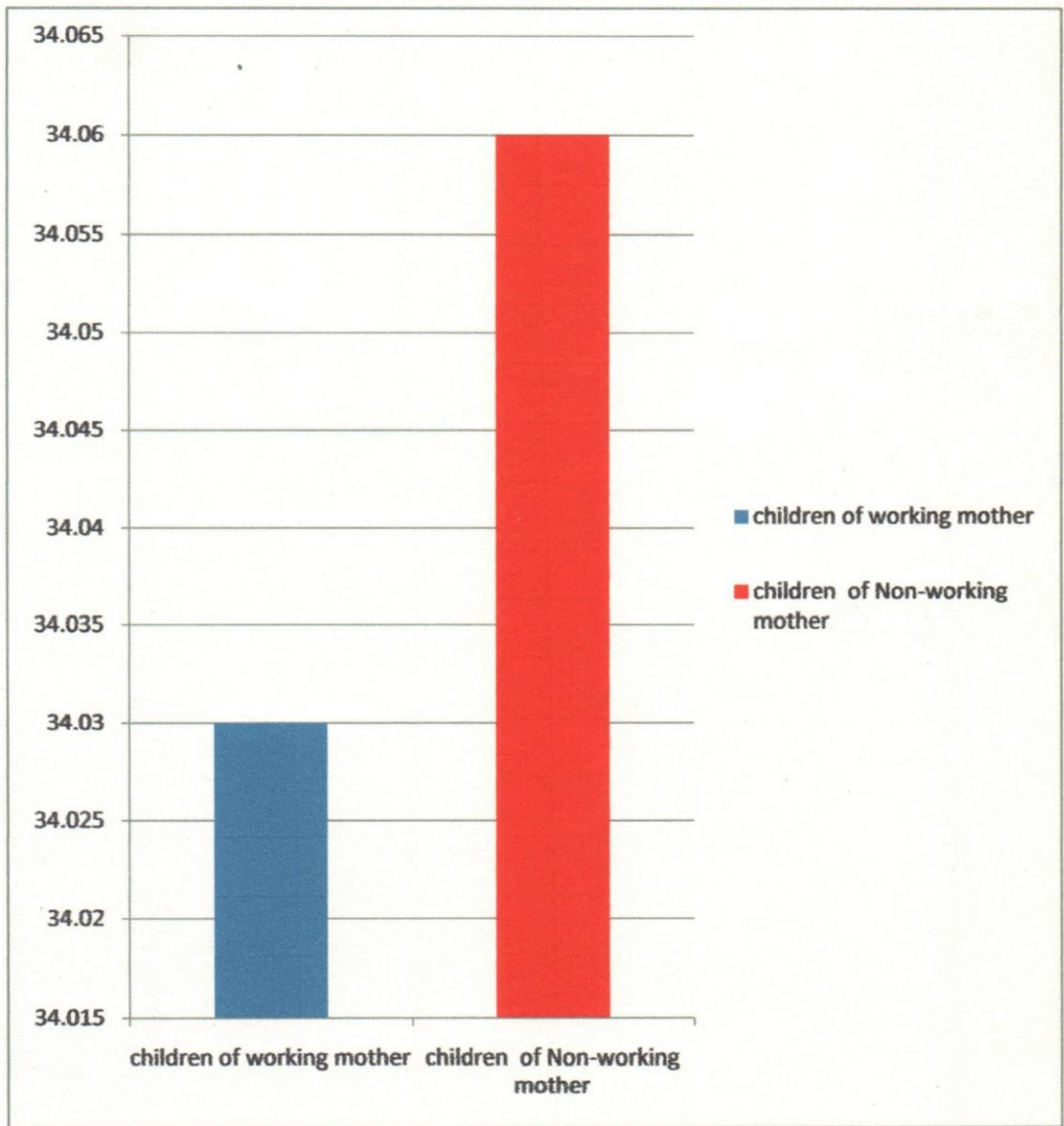
Note: \*\* Not significant at 0.05 level of confidence

Demographic Variables	N	Peer Adjustment		Mean difference	t value	Remark
		Mean	SD			
Children of working mother	30	269.63	57.40	5.44	0.34	**
Children of non- working mother	30	275.2	51.96			

The value of t to be significant at 0.05 level of confidence with 58 degree of freedom is 2.00

Table 4.2.7 reveals that the obtained value of t' is 0.34 the obtained value of t is less than the table value (2.00). Hence the hypothesis that there will be no significant difference between academic achievement of children of working mother and non-working mother is accepted, this indicate that there is no difference between academic achievement of children of working mother and non-working mother.





Graph 4.2

Mean score of academic achievement of children of working  
and non-working mother

### 4.3 Discussion of Finding

- No significant relationship found between peer adjustment and academic achievement of students of class X.

Study of Olle ten Catelrene van de –Sjoukje van de Broek (2012) also suggested that students are not put advantage when being tutored by their peer. It appears that near-peer tutoring has least benefits on student's academic achievement. Because it is not necessary that if a child adjusted very well with their peer he will perform academically high. There are other factors also which affect student's academic achievement like locus of control. Anxiety, power of recalling of a child, level of intelligence etc. which is supported by Gupta (1987) in his study relationship between locus of control, anxiety and academic achievement of secondary school students found that locus of control, anxiety was correlated negatively with academic achievement; socio economic status had significant positive correlation with academic achievement. Study of Tripathi (1991) "Scholastic achievement of children of working and non-working mother" found that achievement motivation and its correlates of high school students also support that boys were generally better adjusted; achievement motivation of boys was highly correlated with intelligence and achievement. Among the other correlates of achievement motivation, academic achievement was proved to be the most dominant factor. So after discussing we can conclude that peer adjustment is not only factor of academic achievement.

Research scholar found no significant relationship between peer adjustment and academic achievement so she analyzed relationship between peer adjustment in different situation and academic achievement also. But still after analysis result showed in table 4.2.2; 4.2.3; 4.2.4; 4.2.5 reveals that academic achievement is not directly related with peer adjustment in different situation.

- No significant difference in the mean scores of peer adjustment of children of working and non-working mother.

Therefore peer adjustment of children of working mother and non working mother has no differences. Cohen (1978), Jain and Jandu (1998) in their study "The school adjustment of adolescent girls and boys of employed and non-employed mothers" also studied on

differences of child's behavior related to mother's employment status and reveals that there exist little or no difference in child behavior whose mothers are employed. So they do not show difference in their adjustment with society and peer.

- No difference between academic achievement of children of working mother and non-working mother.

Previous researches i.e. Ramachandran (1981) find that children of working mothers did not differ in any way from children of non-working mother in terms of their social maturity, achievement in language. Query and Kuruvilla(1988), also did not find a significant difference in the performance in school of male and female adolescent whose mothers were not employed. Rothman and Anne Fay (1994), Panda and Samel (1995), Ayishabi and Kuruvilla (1998) from their study concluded that there was no overall effect of maternal employment on adolescent children with respect to their academic achievement. After analysis it can be concluded that employment status of mother's is not a single factor which is responsible for academic achievement. It is also affected by their thinking style , creativity , educational motivation etc of a child.

Research scholar found that the findings of the present study are contradicted by the researches i.e.i.e. Powell (1963), Poznanski et al. (1970), Sultana (1988), Trivedi (1988), Kaur (1992) where differences in achievement among children of working and non-working mother was reported. But there is a gap in findings and only status of mothers' employment is not responsible for children's academic growth so researcher studied on peer adjustment as a correlate of academic achievement amongst the students of working and non-working mother.