

## CHAPTER – 4

### ANALYSIS AND INTERPRETATION



#### 4.1 INTRODUCTION :

Analysis of data means studying the tabulated material in order to determine inherent facts or meanings. It involves breaking down existing complex factors into simpler parts and putting the parts together in new arrangements for purpose of interpretation.

Interpretation is by no means a mechanical process. It calls for a critical examination of the result of one's analysis in the light of all the limitations of his data gathering.

In this chapter the data collected on achievement motivation scale is processed, results are obtained and then interpreted and discussed.

The hypotheses are considered separately one by one and then the results obtained are highlighted through discussion of the findings.

In order to state the result of the study effectively, it is necessary to work out the data separately in respect to each variable.

**Table 4.1**

**Frequency distribution of scores on achievement motivation scale.**

Class Interval	't'	Percentage
181-195	03	1.47
166-180	22	10.83
151-165	41	20.19
136-150	66	32.51
121-135	38	18.71
106-120	23	11.33
91-105	05	2.46
76-90	05	2.46
61-75	00	0.00
46-60	00	0.0
	N = 203	100%



Pratibha Deo and Asha Mohan conducted research for standardisation of Deo-Mohan Achievement-Motivation (n-ach) scale for a group of N=635. It was found that the mean of total population was 148.95, S.D. was 22.85.

Whereas the researcher conducted study on sample of 203, mean for total population was 135.4 and S.D. was 21.08 which is less than norms established by Deo-Mohan achievement motivation scale.

According to the norms 54 percent students were found to be highly motivated 44 percent average and 2 percent under achievers.

Whereas findings of the ~~this~~ study indicate, 33 percent students as over achievers, 65 percent average and 3 percent underachievers.



## 4.2 ANALYSIS AND INTERPRETATION :

### 4.2.1 Locale :

#### Hypothesis -1

There is significant difference in the achievement motivation between students studying rural area and urban area.

1.1 There is a significant difference in the achievement-motivation between the urban students and rural students.

1.2 There is significant difference in the achievement motivation between urban boys and rural boys.

1.3 There is significant difference in the achievement motivation between urban girls and rural girls.

**Table 4.2**

**Significance of difference between means of urban and rural students**

Groups	N	Mean	SD	't'	Level of significance
1. Urban Student	104	141.18	20.51	4.39	Significant (0.01)
Rural Student	99	128.06	21.94		
2. Urban Boys	49	140.06	20.37	5.01	Significant (0.01)
Rural Boys	50	128.60	21.40		
3. Urban Girls	55	146.56	13.58	2.70	Significant (0.01)
Rural Girls	49	128.43	22.28		

From the above table we find that the computed value of CR is 4.39 and the table value of CR is 1.97 at 0.05 level, 201 degree of freedom of total urban students and total rural students.

This mean computed value of CR is more than table value of CR. Thus we conclude that difference in achievement-motivation between urban students and rural students is significant in favour of urban students as mean of urban students is 141.18. Hence the hypothesis No. 1.1 is accepted.

It is observed that urban students are highly motivated than rural student. The reasons behind the fact could be

- 1) Urban students get more facilities for studies
- 2) Majority of them come from middle class family where their parent are educated.

**Similarly for two other groups :**

- 1) Urban Boys - Rural Boys
- 2) Urban Girls - Rural Girls

Computed values of CR are 5.01 and 2.07 and table values are 1.98 and 1.97 respectively. This means that computed values of CR are more than their respective table values of 't'. Thus we conclude that difference in the achievement motivation between urban boys and rural boys, and urban girls and rural girls is significant. Hence hypotheses 1.2 and 1.3 are accepted.





## 4.2-2 Caste

### Hypothesis- 2

There is a significant difference in the achievement motivation among students belonging to general and other disadvantaged groups.

- 2.1 There is significant difference in the achievement motivation between rural disadvantage students and rural general students.
- 2.2 There is a significant difference in the achievement motivation between rural disadvantaged boys and rural general boys.
- 2.3 There is a significant difference in the achievement motivation between rural disadvantaged girls and rural general girls.
- 2.4 There is a significant difference in the achievement – motivation between urban disadvantaged students and urban general students.
- 2.5 There is a significant difference in the achievement motivation between urban disadvantaged boys and urban general boys.
- 2.6 There is a significant difference in the achievement motivation between the urban disadvantaged girls and urban general girls.

**Table 4.3**

**Significance of difference between means of general and disadvantaged population of total sample.**

Group	N	Mean	SD	t	Level of Significance
Rural disadvantaged Student	51	128.4	23.24	0.133	Insignificant
Rural General Student	48	127.8	21.59		



Rural disadvantaged Boys	25	130.4	16.5	0.754	Insignificant
Rural General Boys	26	126.2	22.5		
Rural disadvantaged Girls	26	126.2	22.70	0.513	Insignificant
Rural General Girls	23	130.4	28.46		
Urban disadvantaged Student	53	138.1	23.28	1.88	Insignificant
Urban general Student	50	145.7	17.55		
Urban disadvantaged Boys	23	126.0	24.11	3.532	Significant (0.01)
Urban General Boys	26	145.0	12.36		
Urban disadvantaged Girls	31	146.6	12.76	1.348	Insignificant
Urban General Girls	34	146.3	15.00		

Table No. 4.3 shows that in case of rural disadvantage student and rural general students, obtained value of 't' 0.133 which is less than the table value of 't' i.e. 1.98 at 0.05 level. Thus there is no difference between these group with respected to their achievement motivation.

Same is the situation with the rural disadvantage boys and rural general boys. The computed value of 't' is 0.794 which is less than table value of 't' i.e. 2.01. Thus there is no difference in the achievement motivation of these two groups.

Similar results are obtained in the following three groups.

- a) Rural disadvantaged girls and rural general girls.
- b) Urban disadvantaged students urban general students.
- c) Urban disadvantaged girls and urban general girls.



Where computed 't' values are less than their respective table value of 't'.

Hence in above cases hypotheses 2.3, 2.4, 2.6 are rejected.

But there is significant difference found in the achievement motivation between urban disadvantage boys and urban, general boys. Computed value of 't' for these group is 3.532 which is greater than table value of 't' i.e. 2.02 at 0.05 level for 47 degree of freedom hypothesis made is accepted. Hence hypothesis 2.5 is accepted.

#### **4.2.3 Gender**

##### **Hypothesis – 3**

There is no significant difference in the achievement motivation between boys and girls in urban area.

- 3.1 There is no significant difference in the achievement motivation between urban boys and urban girls.
- 3.2 There is no significant difference in the achievement motivation between disadvantage boys and disadvantage girls.
- 3.3 There is no significant difference in the achievement motivation between *general boys and general girls.*



**Table 4.4**

**Significance of difference between means of boys and girls in urban area.**

Group	N	Mean	SD	't'	Level of Significance
1. Urban Boys	49	140.6	20.37	2.84	Significant (0.01)
Urban Girls	55	146.5	13.58		
2. Urban Disadvantaged boys	23	137.6	22.50	2.17	Significant (0.05)
Urban Disadvantaged Girls	31	147.6	12.76		
3. Urban General Boys	26	145.50	18.24	0.274	Insignificant
Urban general Girls	23	146.3	15.01		

From this table we find that the computed value of 't' is 2.84 at 0.05 level for 102 degree of freedom of total urban boys and total urban girls group. This means that computed value of CR is more than the table value of CR.

Thus, we conclude that difference in achievement motivation between these two group is significant. Hence the hypothesis 3.1 is rejected. Thus we can say that there is significant difference in achievement motivation of the total urban boys and total urban girls.

Same in the case with another group, urban disadvantaged boys and disadvantaged girls. The computed value of 't' is more than table value 2.01 for degree of freedom 52. Hence the hypothesis 3.2. rejected.

But from above table we also find out that computed value of 't' 0.27 is less than table value of 't' 2.01 at 0.05 level for 48 degree of freedom of urban general boys and urban general girls.

Thus we concluded that difference between these group with respect to their achievement motivation is insignificant.

Hence the hypothesis 3.3 is accepted.





**Hypothesis-4**

There is no significant difference in the achievement motivation between boys and girls studying in rural area.

- 4.1 There is no significant difference in the achievement motivation between general boys and general girls studying in the rural area.
- 4.2 There is no significant difference in the achievement motivation between disadvantaged boys and disadvantaged girls studying in rural area.
- 4.3 There is no significant difference in the achievement motivation between total boys and girls studying in rural area.

**Table 4.5**

**Significance of difference between means of boys and girls in rural area**

<b>Group</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>'t'</b>	<b>Level of Significance</b>
Total Rural Boys	50	128.6	21.6	0.045	Insignificant
Total rural girls	49	128.4	22.2		
Rural General Boys	25	126.2	22.5	0.570	Insignificant
Rural General Girls	23	130.4	28.4		
Rural disadvantaged Boys	25	130.4	15.6	0.694	Insignificant
Rural disadvantaged Girls	26	126.6	22.6		



The above table shows that in all three cases the computed value of 't' is less than their respective value of 't'.

In first group i.e. total rural boys and total rural gurls. Computed value of 't' 0.045 at 0.05 level for 97 degree of freedom which is less than its table value which is 1.98 at 0.05 level.

For second group i.e. rural general boys and rural general girls, computed value of 't' is 0.510 at 0.05 level for 46 degree of freedom which is less than its table value is 2.02 at 0.05 level.

In third group also computed value of 't' is 0.694 and table value of 't' is 2.01 of 0.05 level for 49 degree of freedom.

This leads us to conclusions that difference in achievement motivation within these groups is insignificant.

Hence hypotheses 4.1, 4.2, 4.3, are accepted.