Chapter-IV
Analysis of Data and Interpretation of Results

The scores obtained by using ICEQ, Achievement Motivation scale and attitude towards mathematics scale were tabulated. These served as a basis for calaculating different statistics such as for calculating such as coeffecient of correlation, t-Test and ANOVA techniques used for analysing in terms of the different objectives stated in chapter III.

Analysis of Variance of Classroom Environment

Hypothesis No.1

There will be on significant difference between different category of classroom environment in respect of attitude towards mathematics.

The above hypothesis was tested and results shown in table 4.

Table 4.0: Analysis of Varianece of Mean Scores of Different Categories of Classroom environment on Attitude.

Variable	Source of Variance	Sum of Sqaure	df	Mean Square	F	Significant
Attitude	Between groups	94.471	2	47.235	1.588	Not
	within groups	2528.984	85	29.753		significant

The value of 'F' was found to be not significant and hence the hypothesis was not rejected. This indicates that there was not significant difference between children belonging to high, moderate and low groups of perception or classroom environment in respect of their attitude towards mathematics.

From this it may be inferred that the perception of children about classroom environment do not influence their attitude towards mathematics.

Hypothesis 2:

There will be no significant difference between, between different categories of classroom environment in respects of achievement motivation.

The above was tested by 'F' scores and results shown in table.

Table 4.1 : Analays of variables of mean scores of different categories of classroom environment on achievement motivation.

Variable	Source of Variance	Sum of Square	df	Mean Square	F	Significant
Attitude	Between groups	360.548	2	180.274	2.164	Not
	within groups	7082.168	85	83.320		significant

The value of 'F' was found to be significant and hence the hypothesis was not rejected. This indicates that there was no significant difference between children belonging to high, moderate and low groups of perception on classrom environment in respect of their achievement motivation. From this it may be infered that the perception of children about classroom environment do not influnce their achievement motivation.

Analysis of Variance of Attitudes

Hypothesis No. 3

There will be no significant different between different categories of attitude towards mathematics in respect of achievement motivation.

The above hypothesis was tested by 'F Value' and the results shown in table 4.2

Table 4.2 : Analysis of Variance of mean scores of different categories of
attitude towards mathematics on achievement motivation.

Variable	Source of Variance	Sum of	df	Mean	F	Significant
Attitude	Between groups	147.345	2	73.673	.858	Not
	within groups	7295.371	85	85.282		significant

The 'F Value' was found to be not significant and hence the hypothesis was not rejected. This indicates thatat te was no significant difference between children belonging to high, moderate and low groups of perception of attitude towards mathematics in respect of their achievement motivation.

From this it may be inferred that the perception of children about attitude towards mathematics do not influence their achievement motivatoin.

Hypothesis No. 4:

There will be no significant difference between different categories of attitude towards mathematics in respect of classroom environment.

The above hypothesis was tested and shown in table.

Table 4.3 : Analysis of Variance of mean scores of different categories of attitude towards mathematics on classroom environment.

Variable	Source of Variance	Sum of Square	df	Mean Square	F	Significant
Attitude	Between groups	1322.337	2	661.169	3.08*	
	within groups	8244.526	85	214.641		significant

* Analysis is of variance is significant at 0.05 level.

The "F scores' was found to be significant and hence the hypothesis was rejected. This indicates that there was significant differenec between children

belonging to high, moderate and low groups of perception of attitude towards mathematics in respect of their classroom environment.

From this it may be infered that the perception of children about attitude towards mathematics influences on their classroom environment.

Analysis of Variance of Achievement Motivation

Hypothesis No. 5

There will be no significant difference between different categories of achievement motivation in respect of classroom environment.

The above hypothesis was tested and results shown in table 4.4

Table 4.4 : Analaysis of Variance of Mean Scores of Different Categories of Achievement Motivation on Classroom Environment.

Variable	Source of Variance	Sum of Square	df	Mean Square	F	Significant
Attitude	Between groups	585.737	2	292.869	1.312	Not
	within groups	18981.126	85	223.307		significant

The value of 'F' was found to be not significant and hance the hypothesis was not rejected. This indicates that there was no significant difference between children belonging to high, moderate and low groups of perception achievement. From this it may be inferred that the perception children about achievement motivation do not influence their classroom environment.

Hypothesis No. 6:

There will be no significant difference between different categories of achievement motivation in respect of attitude towards mathematics.

The above hypothesis was tested and shown in table.

Table 4.5 : Analysis is of is of varianccores of different categories of achievement motivation on classroom environment.

Variable	Source of Variance	Sum of Square	df	Mean Square	F	Significant
Attitude	Between groups	20.433	2	10.217	.334	Not significant
	within groups	2603.022	85	30.624		

The value of 'F' was found to be not significant and hence the hypothesis was not rejected. This indicates the hypothesis as not rejected. This indicates that there is was no significant different between children belonging to high, moderate and low groups of perception on achievement motivation in respect of their attitude towards mathematics.

From this it may be infered that the perception of children about achievement motivation do not influence their attitude towards mathematics.

Relationship between classroom environment and attitude towards mathematics

Hypothesis No. 7:

There will be no significant difference in classroom environment of urban area schools & rural area schools.

The above hypothesis was tested and results shown in table 4.6.

Table 4.6 : Coefficient of Correlation Between Classroom Environment and Attitude Towards Mathematics.

Variable	N	df	r	Siginficane
Classroom Environment Attitude towards mathematics	88	86	0.22*	0.05

* Coefficient of Correlation is significant at 0.05 level.

The value of 'r' was found to be significant at 0.05 level and hence the hypothesis was rejected. This indicates that there was significant difference between classroom environment and attitude towards mathematics.

From this it may be that there is significant relationship between classroom environment and attitude towards mathematics of the students.

Relationship between classroom environment and achievement motivation.

Hypothesis No. 8 :

There will be no significant difference in attitude of towards mathematics of area schools & rural area schools & rural area schools.

The above hypothesis was tested by pearson coefficient of correlation method and the results shown in table 4.7

Table 4.7 Coefficient of Correlation Between Classroom Environment and Achievement motivation.

Variable	N	df	r	Siginficane
Classroom Environment Attitude towards mathematics	88	86	0.24*	0.05

* Coefficient of Correlation is significant at 0.05 level.

The value of 'r' correlation was found to be significant at 0.05 level and hence the hypothesis was rejected. This indicates that there was significant difference between the classroom environment and achievement motivation. From this it may be infered that there is significant relationship between classroom environment & achievement motivation of the students.

Relationship between attitude towards mathematics and achievement motivation.

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Hypothesis No. 9:

There will be no significant difference in achievement motivation of urban area schools & rural area schools.

The above hypothesis was tested and results shown in the table 4.8.

Table 4.8 : Coefficient of correlation between attitude towards mathematics and achievement motivation.

Variable	N	df	r	Siginficane
Attitudes towards mathematics	88	86	0.12*	not
Attitude towards mathematics				significant

The value of r was found to be not significant and hence the hypothesis was rejected. This indicates that there as no significant difference between the children belonging to various schools is respect of attitude towards mathematics and achievement motivation.

From this it may be infered that there was no relationship between achievement motivation and attitude towards mathematics of the students.

Comparison of mean of urban and rural students.

Hypothesis No. 10 :

There will be no relationship between classroom environment and attitude towards mathematics.

The above hypothesis was tested by 't' value and results shown in table.

Table 4.9 : Comparison of mean between urban and rural students in respect of classroom environment.

Category	Mean	Standard	N	df	t	Significance
Urban	105.37	13.89	46	86	.83	Not significant
Rural	102.58	16.93	42			

The value of 't' was found to be not significant and hence the hypothesis was not rejected. This indicates that there was no significant difference between urban and rural students in respect of their perception about classroom environment. From ths it may be infered that the locality does not influenced the perception of about classroom environment.

Hypothesis No. 11

There will be no relationship between classroom environment and achievement motivation.

The above hypothesis was tested by applying t-test and results shown in table.

Table 4.10:Comparision of mean between urban and rural students in respect of their perception about attitutde towards mathematics.

Category	Mean	Standard Deviation	N	df	t'	Significance
Urban	53.60	5.06	46	86	2.05	Significant
Rural	51.13	5.96	42			

* t-value is signifcant at 0.05 level .

The value of 't' was found to be significant and hence the hypothesis was rejected. This indicates that there as no significant differnece between and rural students in respect of their perception about attitude towards mathematics from this it may be infered that locality influence attitude of students toward

mathematics. Further it is observed that urban students (mean   53.60) have more favrouable attitude towards methamatics than their rural (mean 51.13) counterparts.

Hypothesis No. 12 :

There will be no relationship between attitude towards mathematics & achievement motivation.

The above hypothesis was tested and the results shown in table 4.11

Table 4.11 : Comparision of mean between urban and rural students in respect of their perception, about achievement motivation.

Category	Mean	Standard Deviation	N	df	t'	Significance
Urban	133.21	9.18	46	86	.21	Not Significant
Rural	132.77	9.15	42			

The value of 't' was found to be not significant and hence the hypothesis was not rejected. This inidcates that there as no significant difference between urban and rural students in respect of their perception about achievement motivaiton.

From this it may be infered that students locality does not influence on their achievement motivatin.