CHAPTER 3

RESULTS

RESULTS

The present study is a cross-sectional comparative study. This chapter presents a detailed analysis of the research results through descriptive and inferential analysis. In order to make sense of the data, the data was coded, organized, and entered into a spreadsheet. Statistical package for social sciences (SPSS) was used to analyze descriptive and inferential statistics. Following statistical methods was used for analysis:

1. Analysis of Variance (ANOVA) was used to find out the effect of independent variables like gender, area and regularity of students in the school on dependent variables like Problem Solving Ability, Creativity and Concentration among the selected sample.

2. Chi-square analysis was used to find the effect of independent variables (gender, area and regularity) on the Need for Achievement variable.

3. 'T' test was used to find whether there is a significant difference between gender, regularity and area of living of participants and Parents' Attitude Towards Education.

4. Further, the correlation statistics was conducted to find out the effect of parents' attitude towards education on motivational as well as cognitive variables.

5. Lastly, regression analysis was conducted to see if Parents' Attitude Towards Education predicts motivational and cognitive variables which were found to have significant difference (on conducting correlation analysis).

For purpose of null hypothesis acceptance or rejection p value ≤ 0.05 is considered as statistically significant. This chapter presents the results of the study in two parts. Part I discusses the demographic profile of the study participants. Part II provides statistical data analysis with inferences.

PART I

3.1 DEMOGRAPHIC PROFILE OF STUDY PARTICIPANTS

Table 3.1.1

Distribution of Participants' Sample Based on Area, Gender and Regularity [N=406]

Area		Gender		Regularity	
Tribal	Non-tribal	Female	Male	Regular	Irregular
204	202	203	203	204	202

Table 3.1.1 represents the distribution of an actual sample of participants obtained based on area, gender and regularity. The research covered 204 participants from Dabhoi (non-tribal block) and 202 participants from Naswadi (tribal block) area making a total sample of 406. There were 203 female participants and 203 male participants in the sample. Among the total participants, 204 participants were regular in their schools whereas 202 were irregular.

Table 3.1.2

Distribution of Parents' Sample Based on Area, Gender and Regularity [N=398]

Area		Gender		Regularity	
Non-Tribal	Tribal	Female	Male	Regular	Irregular
199	199	197	201	201	197

Table 3.1.2 presents distribution of an actual sample of parents obtained based on area, gender and regularity. Total 398 parents consisting of 199 students' parents from each of the areas were part of the study. Among 398 participants, there were 197 female participants' parents and 201 male participants' parents. There were 201 regular participants' parents and 197 irregular participants' parents as a sample of the study.

PART II

3.2 ANALYSIS OF NEED FOR ACHIEVEMENT VARIABLE

The data were subjected to Chi-square analysis in order to test whether or not gender, area and regularity of the participants in the school affect the Need for Achievement of participants.

Hypothesis $H_0 1$. There will no significant difference in the observed and expected Need for Achievement score of male and female participants.

Table 3.2.1

Descriptive Statistics for Gender and Need for Achievement

		Need For Achievement Score			Total
		(5ft)	(10ft)	(15ft)	
Gender	Female	47	88	68	203
	Male	42	82	79	203
Total		89	170	147	406

Table 3.2.1 shows 88 female and 82 male participants have selected 10ft distance. It also shows that there is not much difference between male and female participants who have high Need for Achievement. The participants who have selected 5ft distance are 47 female and 42 male participants. The participants who have selected 15ft distance are 68 female and 79 male participants.

Table 3.2.2

Difference in Need for Achievement of Male and Female Participants

	(X^2) Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	1.316	2	0.518

Table 3.2.2 provides the analysis of Chi-square. The value of Pearson chi-square is 1.316, which is significant at the 0.518 level where $p \geq 0.05$. This

shows that male and female participants do not differ on Need for Achievement. Therefore, the null hypothesis H_01 is accepted.

Hypothesis H_02. There will be no significant difference in the observed and expected Need for Achievement score of participants living in tribal and non-tribal areas.

Table 3.2.3

Descriptive Statistics for the Area and Need for Achievement

		Need For Achievement Score			Total
		(5ft)	(10ft)	(15ft)	
Area	Non-tribal	39	85	80	204
	Tribal	50	85	67	202
Total		89	170	147	406

Table 3.2.3 shows 85 non-tribal and 85 tribal participants have selected 10ft distance. It also shows equal number of tribal and non-tribal participants have high Need for Achievement. The participants who have selected 5ft distance are 39 non-tribal and 50 tribal participants. The participants who have selected 15ft distance are 80 non-tribal and 67 tribal participants.

Table 3.2.4

Difference in Need for Achievement for Participants Living in Tribal and Non-Tribal Areas

	(X^2) Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	2.499	2	0.287

According to table 3.2.4, the value of Pearson Chi-square is 2.499, which is significant at the 0.287 level where $p \geq 0.05$. This shows that there is no significant difference in Need for Achievement of participants living in tribal and non-tribal areas. Therefore, the null hypothesis is accepted.

Hypothesis H_03. There will be no significant difference in the observed and expected Need for Achievement score of regular and irregular participants.

Table 3.2.5

Descriptive Statistics for Regularity and Need for Achievement

		Need For Achievement Score			Total
		(5ft)	(10ft)	(15ft)	
Regularity	Regular	39	96	69	204
	Irregular	50	74	78	202
Total		89	170	147	406

Table 3.2.5 shows 96 regular and 74 irregular participants have selected 10ft distance. The participants who have selected 5ft distance are 39 regular and 50 irregular participants. The participants who have selected 15ft distance are 69 regular and 78 irregular participants.

Table 3.2.6

Difference in Need for Achievement of Regular and Irregular Participants

	(X^2) Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	4.748	2	0.093

Pearson statistical analysis indicates non-significant value. Table 3.2.6 shows the value of Pearson Chi-square is 4.748 is significant at the 0.093 level where $p \geq 0.05$. Hence, it shows that regular and irregular participants do not differ on Need for Achievement. Therefore, the null hypothesis is accepted.

Hypothesis H_04. There will be no significant difference in the observed and expected Need for Achievement score of different gender and area of living of participants.

Table 3.2.7

Descriptive Statistics of Need for Achievement in Relation to Area and Gender

		Need For Achievement Score			Total
		(5ft)	(10ft)	(15ft)	
Area*Gender	Tribal Female	25	43	32	100
	Non-tribal Female	21	44	37	102
	Tribal Male	25	42	35	102
	Non-tribal Male	18	41	43	102
Total		89	170	147	406

The above table 3.2.7 shows 44 non-tribal female, 43 tribal female, 42 tribal male and 41 non-tribal male participants have selected 10ft distance. It also shows there is not much difference among the participants who have high Need for Achievement. The total participants who have selected 5ft distance are 89 participants and total participants who have selected 15ft distance 147 participants.

Table 3.2.8

Difference in Gender and Area on Need for Achievement

	(X^2) Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	3.414	6	0.755

Table 3.2.8 indicates that Pearson Chi-square value 3.414 is significant at the 0.755 level where $p \geq 0.05$. Hence, the null hypothesis is accepted. It means that tribal and non-tribal male as well as tribal and non-tribal female participants do not differ on Need for Achievement.

Hypothesis H_05.There will be no significant difference in the observed and expected Need for Achievement score of different gender and regularity of participants.

Table 3.2.9

Descriptive Statistics of Need for Achievement in Relation to Regularity and Gender

		Need For Achievement Score			Total
		(5ft)	(10ft)	(15ft)	
Gender*Regularity	Female Regular	19	53	30	102
	Female Irregular	27	34	39	100
	Male Regular	20	43	39	102
	Male Irregular	23	40	39	102
Total		89	170	147	406

The above table 3.2.9 shows 53 regular female, 34 irregular female, 43 regular male and 40 irregular male participants have selected 10ft distance. It also shows among all the participants who have high Need for Achievement, maximum are regular female participants. The total participants who have selected 5ft distance are 89 participants and total participants who have selected 15ft distance 147 participants.

Table 3.2.10

Difference in Gender and Regularity on Need for Achievement

	(X^2) Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.830	6	0.251

Table 3.2.10 indicates that Pearson Chi-square value is 7.830 is significant at the 0.251 level where $p \geq 0.05$. Hence, it shows that gender and regularity do not affect the Need for Achievement. Therefore, the null hypothesis is accepted.

Hypothesis $H_0 6$. There will be no significant difference in the observed and expected Need for Achievement score of different area and regularity of participants.

Table 3.2.11

Descriptive statistics of Need for Achievement in Relation to Area and Regularity

		Need For Achievement Score			Total
		(5ft)	(10ft)	(15ft)	
Area*Regularity	Tribal Regular	18	53	31	102
	Tribal Irregular	32	32	36	100
	Non-tribal Regular	21	43	38	102
	Non-tribal Irregular	18	42	42	102
Total		89	170	147	406

The above table 3.2.11 shows 53 regular tribal, 32 irregular tribal, 43 regular non-tribal and 42 irregular non-tribal participants have selected 10ft distance. It also shows among all the participants who have high Need for Achievement, maximum are regular tribal participants. The total participants who have selected 5ft distance are 89 participants and total participants who have selected 15ft distance 147 participants.

Table 3.2.12

Difference in Area and Regularity on Need for Achievement

	(X^2) Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.918	6	0.044

Table 3.2.12 indicates that Pearson Chi-square value 12.918 is significant at the 0.044 level where p is $\leq$ 0.05. Therefore, the null hypothesis is not accepted. Results show that regular and irregular participants living in the tribal and non-tribal area differ in Need for Achievement. It can be inferred from table 3.2.11among all the participants who have high Need for Achievement, maximum are regular participants from tribal area (53) and the lowest number of participants who have high Need for Achievement are irregular tribal participants (32).

Hypothesis $H_0$7. There will be no significant difference in the observed and expected Need for Achievement score of different gender, area and regularity of participants.

Table 3.2.13

Descriptive Statistics of Need for Achievement in Relation to Area, Gender and Regularity

		Need For Achievement Score			Total
		(5ft)	(10ft)	(15ft)	
Area*Gender *Regularity	Tribal Female Regular	8	29	14	51
	Tribal Female Irregular	17	14	18	49
	Non-tribal Female Regular	11	24	16	51
	Non-tribal Female Irregular	10	20	21	51
	Tribal Male Regular	10	24	17	51
	Tribal Male Irregular	15	18	18	51
	Non-tribal Male Regular	10	19	22	51
	Non-tribal Male Irregular	8	22	21	51
Total		89	170	147	406

Table 3.2.13 shows among 170 participants who have high Need for Achievement maximum participants are regular tribal female (29) and the lowest number of participants who have selected 10ft distance is 14 irregular tribal female participants.

Table 3.2.14

Difference in Area, Gender and Regularity on Need for Achievement

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	16.405	6	0.289

Table 3.2.14 indicates that Pearson Chi-square value is 16.405 is significant at 0.289 where $p \geq 0.05$. Hence, it shows that regular boys, regular girls, irregular boys and irregular girls living in the tribal and non-tribal area do not differ on Need for Achievement. Therefore, the null hypothesis is accepted.

3.3 ANALYSIS OF CONCENTRATION VARIABLE

In order to test whether gender, area and regularity affect Concentration of students, the data were subjected to ANOVA analysis.

Table 3.3.1

Descriptive Statistics of Concentration in Relation to the Area, Gender and Regularity (for hypothesis $H_0 8$ to $H_0 14$)

Area	Gender	Regularity	Mean	Std. Deviation
Non-tribal	Female	Regular	99.69	17.210
		Irregular	87.90	22.145
		Total	93.79	20.602
	Male	Regular	83.06	25.784
		Irregular	77.35	20.975
		Total	80.21	23.561
	Total	Regular	91.37	23.357
		Irregular	82.63	22.106
		Total	87.00	23.104
Tribal	Female	Regular	81.20	25.573
		Irregular	72.54	24.125
		Total	76.91	25.122
	Male	Regular	81.00	24.897
		Irregular	66.64	29.640
		Total	73.89	28.151
	Total	Regular	81.10	25.113
		Irregular	69.59	27.050
		Total	75.40	26.656
Total	Female	Regular	90.44	23.595
		Irregular	80.30	24.289
		Total	85.39	24.419
	Male	Regular	82.03	25.240
		Irregular	72.05	26.066
		Total	77.06	26.075
	Total	Regular	86.24	24.733
		Irregular	76.17	25.468
		Total	81.23	25.571

The mean and standard deviation of the Concentration in relation to the area, gender and regularity is explained in table 3.3.1. It can be seen that female participants residing in non-tribal area have scored highest on Concentration scores (M=93.79) whereas the male participants from tribal area have scored the lowest on Concentration scores (M=73.89).

Hypothesis H$_0$ 8. There will be no significant effect of gender on Concentration.

Table 3.3.2

Main effect of Gender on Concentration

	Variables	df	Mean Square	F	Sig.
Concentration	Gender	1	7022.411	12.161	0.001

According to Table 3.3.2, the F value 12.161 is significant at the 0.001 level where p is ≤ 0.05. Therefore, the null hypothesis is not accepted. It indicates that gender affects Concentration. Table 3.3.1 shows that the mean value (85.39) of female participants is more than the mean value (77.06) of male participants. It means that female participants have more Concentration ability than male participants.

Hypothesis H$_0$9. There will be no significant effect of living areas on Concentration.

Table 3.3.3

Main effect of Area on Concentration

	Variables	df	Mean Square	F	Sig.
Concentration	Block	1	13788.967	23.879	0.001

Table 3.3.3 shows that F value 23.879 is significant at the 0.001 level where p ≤ 0.05. Therefore, the null hypothesis is not accepted. It proves that area i.e. tribal or non-tribal has an effect on Concentration. Table 3.3.1 indicates that non-tribal area participants (M=87.0) have scored more on Concentration than the tribal area (M=75.40) participants.

Hypothesis H$_0$10. There will be no significant effect of regularity on Concentration.

Table 3.3.4

Main effect of Regularity on Concentration

	Variables	df	Mean Square	F	Sig.
Concentration	Regularity	1	10407.795	18.023	0.001

According to table 3.3.4, the F value 18.023 is significant at the 0.001 level where p ≤ 0.05. Therefore, the null hypothesis is not accepted. Table 3.3.1 shows that mean value of regular participants is 86.24 which is greater than the mean value of irregular participants (M=76.17) indicating that regular participants have more Concentration than irregular participants.

Hypothesis H$_0$11. There will be no significant interaction effect of gender and area on Concentration.
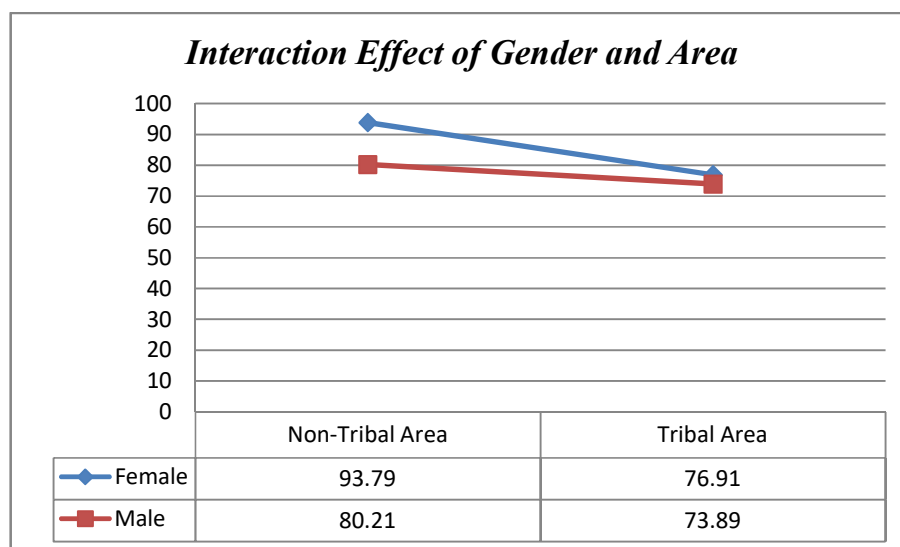
Table 3.3.5

Interaction Effect of Gender and Area on Concentration

	Variables	df	Mean Square	F	Sig.
Concentration	Gender * Area	1	2818.847	4.881	0.028

The above Table 3.3.5 indicates F value 4.881 is significant at 0.028 level where p ≤ 0.05. Therefore, the null hypothesis is not accepted. It means that there is an interaction effect of gender and area on Concentration. Table 3.3.1 indicates that female belonging to non-tribal area (M=93.79) have scored the highest mean score which means that their Concentration is the highest among the group and mean score 73.922 of tribal males is the lowest of all the scores.

Figure 3.1 Graphical representation of Interaction Effect of Gender and Area on Concentration

Hypothesis H_0 12. There will be no significant interaction effect of gender and regularity on Concentration.

Table 3.3.6

Interaction Effect of Gender and Regularity on Concentration

	Variables	df	Mean Square	F	Sig.
Concentration	Gender * Regularity	1	0.890	0.002	0.969

According to Table 3.3.6, F value 0.002 is significant at the 0.969 level where p ≥0.05. It means that there is no interaction effect of gender and regularity on Concentration. Hence, the null hypothesis is accepted.

Hypothesis H_0 13. There will be no significant interaction effect of area and regularity on Concentration.

Table 3.3.7

Interaction Effect of Area and Regularity on Concentration

	Variables	df	Mean Square	F	Sig.
Concentration	Area * Regularity	1	193.695	0.335	0.563

Table 3.3.7 shows that F value 0.335 is significant at the 0.563 level where $p \geq 0.05$. It indicates that there is no interaction effect of area and regularity on Concentration. Hence, the null hypothesis is accepted.

Hypothesis H_0 14. There will be no significant interaction effect of gender, area and regularity on Concentration.

Table 3.3.8

Interaction Effect of Area, Gender and Regularity on Concentration

	Variables	df	Mean Square	F	Sig.
Concentration	Area * Regularity* Gender	1	880.599	1.525	0.218

According to Table 3.3.8, F value 1.525 is significant at the 0.218 level where $p \geq 0.05$. Hence, it shows that there is no interaction effect of area, gender and regularity on Concentration. Therefore, the null hypothesis is accepted.

3.4 ANALYSIS OF CREATIVITY VARIABLE

In order to test whether gender, area and regularity affect Creativity of students, the data were subjected to ANOVA analysis.

Table 3.4.1

Descriptive Statistics of Creativity in Relation to Area, Gender and Regularity (for hypothesis H_015 to H_021)

Area	Gender	Regularity	Mean	Std. Deviation
Non-tribal	Female	Regular	18.78	9.326
		Irregular	11.08	8.922
	Male	Regular	19.51	12.637
		Irregular	13.10	11.838
	Total	Regular	19.15	11.056
		Irregular	12.09	10.479
		Total	15.62	11.312
Tribal	Female	Regular	11.43	8.693
		Irregular	7.28	5.963
	Male	Regular	15.10	10.341
		Irregular	6.82	5.710
	Total	Regular	13.26	9.682
		Irregular	7.05	5.813
		Total	10.19	8.570
Total	Female	Regular	15.11	9.701
		Irregular	9.20	7.801
		Total	12.17	9.272
	Male	Regular	17.30	11.701
		Irregular	9.99	9.797
		Total	13.67	11.376
	Total	Regular	16.21	10.777
		Irregular	9.59	8.843
		Total	12.92	10.391

Table 3.4.1 shows mean values and standard deviation values of Creativity in the context of the area, gender and regularity. It can be seen that regular male participants from non-tribal area have the highest mean value of

19.15 and irregular male participants from tribal area have the lowest mean value 7.05 among the group.

Hypothesis H$_0$15. There will be no significant effect of gender on Creativity.

Table 3.4.2

Main effect of Gender on Creativity

	Variables	df	Mean Square	F	Sig.
Creativity	Gender	1	224.701	2.499	0.115

According to Table 3.4.2, F value is 2.499 is significant at the 0.115 level where $p \geq 0.05$. It indicates that male and female participants do not differ in Creativity. Therefore, the null hypothesis is accepted.

Hypothesis H$_0$16. There will be no significant effect of living areas on Creativity.

Table 3.4.3

Main effect of Area on Creativity

	Variables	df	Mean Square	F	Sig.
Creativity	Area	1	3025.981	33.656	0.001

Table 3.4.3 shows that F value 33.656 is significant at the 0.001 level where $p \leq 0.05$. Therefore, the null hypothesis is not accepted. It proves that area i.e. tribal or non-tribal has an effect on Creativity. Table 3.4.1 indicates that non-tribal area participants have higher mean value (M=15.62) than the tribal area participants (M=10.16). It means that participants living in the non-tribal area are more creative than the tribal area participants.

Hypothesis H$_0$17. There will be no significant effect of regularity on Creativity.

Table 3.4.4

Main Effect of Regularity on Creativity

	Variables	df	Mean Square	F	Sig.
Creativity	Regularity	1	4470.406	49.721	0.001

According to Table 3.4.4, the F value 49.721 is significant at the 0.001 level where $p \leq 0.05$. Therefore, the null hypothesis is not accepted. It indicates that regularity affects Creativity. Table 3.4.1 shows that the mean value of regular participants (M= 16.21) is greater than the mean value of irregular participants (M=9.59). Regular participants are thus more creative than the irregular participants.

Hypothesis $H_0$18. There will be no significant interaction effect of gender and area on Creativity.

Table 3.4.5

Interaction Effect of Gender and Area on Creativity

	Variables	df	Mean Square	F	Sig.
Creativity	Gender * Area	1	1.351	0.015	0.902

The above Table 3.4.5 indicates F value 0.015 is significant at the 0.902 level where $p \geq 0.05$. It means that there is no interaction effect of gender and area on Creativity. Therefore, the null hypothesis is accepted.

Hypothesis $H_0$19. There will be no significant interaction effect of gender and regularity on Creativity.

Table 3.4.6

Interaction Effect of Gender and Regularity on Creativity

	Variables	df	Mean Square	F	Sig.
Creativity	Gender * Regularity	1	50.894	0.566	0.452

According to Table 3.4.6, F value 0.566 is significant at the 0.452 level where $p \geq 0.05$. It means that there is no interaction effect of gender and regularity on Creativity. Hence, the null hypothesis is accepted.

Hypothesis H_0 20. There will be no significant interaction effect of area and regularity on Creativity.

Table 3.4.7

Interaction Effect of Area and Regularity on Creativity

	Variables	df	Mean Square	F	Sig.
Creativity	Area * Regularity	1	18.079	0.201	0.654

Table 3.4.7 shows that F value 0.201 is significant at the 0.654 level where $p \geq 0.05$. It indicates that there is no interaction effect of area and regularity on Creativity. Hence, the null hypothesis is accepted.

Hypothesis $H_0$21. There will be no significant interaction effect of gender, area and regularity on Creativity.

Table 3.4.8

Interaction Effect of Area, Gender and Regularity on Creativity

	Variables	df	Mean Square	F	Sig.
Creativity	Area * Regularity* Gender	1	186.397	2.073	0.151

According to Table 3.4.8, F value is 2.073 is significant at the 0.151 level where $p \geq 0.05$, implying that there is no interaction effect of area, gender and regularity on Creativity. Therefore, the null hypothesis is accepted.

3.5 ANALYSIS OF PROBLEM SOLVING ABILITY VARIABLE

In order to test whether gender, area and regularity affect Problem Solving Ability of students, the data were subjected to ANOVA analysis.

Table 3.5.1

Descriptive Statistics of Problem Solving Ability in Relation to Area, Gender and Regularity (for hypothesis H_022 to H_028)

Area	Gender	Regularity	Mean	Std. Deviation
Non-tribal	Female	Regular	2.490	1.580
		Irregular	1.941	1.190
	Male	Regular	3.078	1.787
		Irregular	2.235	1.716
		Total	2.44	1.628
Tribal	Female	Regular	2.333	1.904
		Irregular	1.820	1.273
	Male	Regular	2.902	1.688
		Irregular	1.780	1.200
		Total	2.41	1.743
Total	Female	Regular	2.41	1.743
		Irregular	1.88	1.227
		Total	2.15	1.528
	Male	Regular	2.99	1.732
		Irregular	2.01	1.493
		Total	2.50	1.687
	Total	Regular	2.70	1.757
		Irregular	1.95	1.365
		Total	2.33	1.617

Table 3.5.1 shows the mean and standard deviation values of Problem Solving Ability of participants in relation to the area, gender and regularity. It can be seen that regular male participants from non-tribal area have the highest mean value (M=3.078) and irregular male participants from tribal area have the lowest mean value (M=1.780).

Hypothesis H_022. There will be no significant effect of gender on Problem Solving Ability.

Table 3.5.2

Main effect of Gender on Problem Solving Ability

	Variables	df	Mean Square	F	Sig.
Problem Solving Ability	Gender	1	12.629	5.149	0.024

According to Table 3.5.2, F value is 5.149 is significant at the 0.024 level where $p \leq 0.05$. It indicates that male and female participants differ in Problem Solving Ability. Thus, the null hypothesis is not accepted. Mean value of male participants (M=2.50) is higher than the mean value of female participants (M=2.15). Table 3.5.1 indicates that male participants have better Problem Solving Ability than female participants.

Hypothesis $H_0 23$. There will be no significant effect of living areas on Problem Solving Ability.

Table 3.5.3

Main effect of Area on Problem Solving Ability

	Variables	df	Mean Square	F	Sig.
Problem Solving Ability	Area	1	5.251	2.141	0.144

Table 3.5.3 suggests that F value is 2.241 which is significant at the 0.144 level where $p \geq 0.05$ level. Hence, it proves that students staying in tribal or non-tribal areas do not differ on Problem Solving Ability. Therefore, the null hypothesis is accepted.

Hypothesis $H_0 24$. There will be no significant effect of regularity on Problem Solving Ability.

Table 3.5.4

Main effect of Regularity on Problem Solving Ability

	Variables	df	Mean Square	F	Sig.

Problem Solving Ability	Regularity	1	58.139	23.703	0.001

According to Table 3.5.4, the F value 23.703 is significant at the 0.001 level where $p \leq 0.05$. Therefore, the null hypothesis is not accepted. Table 3.5.1 shows that the mean value (M=2.701) of regular participants is greater than the mean value of irregular participants (M=1.95). It indicates that regular participants have better Problem Solving Ability than irregular participants.

Hypothesis $H_0 25$. There will be no significant interaction effect of gender and area on Problem Solving Ability.

Table 3.5.5

Interaction Effect of Gender and Area on Problem Solving Ability

	Variables	df	Mean Square	F	Sig.
Problem Solving Ability	Gender * Area	1	0.794	0.324	0.570

The above Table 3.5.5 indicates F value 0.324 is significant at the 0.570 level where $p \geq 0.05$. It means that there is no interaction effect of gender and area on Problem Solving Ability. Therefore, the null hypothesis is accepted.

Hypothesis $H_0 26$. There will be no significant interaction effect of gender and regularity on Problem Solving Ability.

Table 3.5.6

Interaction Effect of Gender and Regularity on Problem Solving Ability

	Variables	df	Mean Square	F	Sig.
Problem Solving Ability	Gender * Regularity	1	6.047	2.462	0.117

According to Table 3.5.6, F value 2.462 is significant at the 0.117 level where $p \geq 0.05$. It means that there is no interaction effect of gender and regularity on Problem Solving Ability. Hence, the null hypothesis is accepted.

Hypothesis H$_0$27. There will be no significant interaction effect of area and regularity on Problem Solving Ability.

Table 3.5.7

Interaction Effect of Area and Regularity on Problem Solving Ability

	Variables	df	Mean Square	F	Sig.
Problem Solving Ability	Area * Regularity	1	0.375	0.153	0.696

Table 3.5.7 shows that F value 0.153 is significant at the 0.696 level where p ≥0.05. It indicates that there is no interaction effect of area and regularity on Problem Solving Ability. Hence, the null hypothesis is accepted.

Hypothesis H$_0$28. There will be no significant interaction effect of gender, area and regularity on Problem Solving Ability.

Table 3.5.8

Interaction Effect of Area, Gender and Regularity on Problem Solving Ability

	Variables	df	Mean Square	F	Sig.
Problem Solving Ability	Area * Regularity* Gender	1	0.627	0.256	0.613

According to Table 3.5.8, F value is 0.256 which is significant at the 0.613 level p ≥0.05. There is no interaction effect of area, gender and regularity on Problem Solving Ability. Therefore, the null hypothesis is accepted.

3.6 ANALYSIS OF PARENTS' ATTITUDE TOWARDS EDUCATION (PATE) QUESTIONNAIRE

In order to find whether there is a significant difference between gender, regularity and area of living of participants and Parents' Attitude Towards Education, 'T' test was used.

Hypothesis H₀ 29. There will be no significant difference in Attitude Towards Education among Parents of male and female participants.

Table 3.6.1

Mean Scores of Parents' Attitude towards Education Based on Gender of Participants

	Gender	N	Mean	Std. Deviation
Parents' Attitude Towards Education	Female	113	24.54	4.340
	Male	110	25.04	3.498

Table 3.6.1 shows the mean value of parents' attitude towards education having a female child is 24.54 (SD=4.340) and that of male child is 25.04 (SD= 3.498).

Table 3.6.2

Independent T-test of *Parents' Attitude towards Education Based on Gender of Participants*

	Variables	t-value	Sig.
Parents' Attitude Towards Education	Gender	0.939	0.349

According to Table 3.6.2, the t-value 0.939 is not significant at the 0.349 level where p ≥0.05. This shows that Parents' Attitude Towards Education is the not different for the male and female child. Therefore, the null hypothesis is accepted.

Hypothesis H₀ 30. There will be no significant difference in Attitude Towards Education among Parents of tribal and non-tribal area participants.

Table 3.6.3

Mean Scores of Parent' Attitude towards Education Based on Area of Participants

	Area	N	Mean	Std. Deviation
Parents' Attitude Towards Education	Non-tribal	109	25.46	4.031
	Tribal	114	24.14	3.770

Table 3.6.3 shows that the mean value of parents' attitude towards education belonging to non-tribal area is 25.46 which is higher than the mean value of parents' attitude towards education residing in tribal area (M=24.14).This shows that parents residing in non-tribal area have more positive attitude towards education than the parents' staying in tribal area.

Table 3.6.4

Independent T-test of Parents' Attitude towards Education Based on Area of Participants

	Variables	t-value	Sig.
Parents' Attitude Towards Education	Area	2.524	0.012

Table 3.6.4 shows that t-value 2.524 is significant at the 0.012 level where p ≤0.05. It means that parents' staying in the tribal area and parents staying in non-tribal area have difference in attitude towards education. Thus, the hypothesis is not accepted.

Hypothesis H_0 31. There will be no significant difference in Attitude Towards Education among Parents' of regular and irregular participants.

Table 3.6.5

Mean Scores of Parents' Attitude towards Education Based on Regularity of Participants

	Regularity	N	Mean	Std. Deviation
Parents' Attitude Towards Education	Regular	127	25.38	3.718
	Irregular	96	24.00	4.119

According to Table 3.6.5, the mean value of attitude towards education of the parents' of regular participants is 25.38 (SD=3.718) and mean value of attitude towards education of the parents 'of irregular participants is 24.00 (SD=4.119). This shows that parents of participants who are regular in school have higher mean value than the parents of irregular participants.

Table 3.6.6

Independent T-test of Parents' Attitude towards Education Based on Regularity of Participants

	Variables	t-value	Sig.
Parents' Attitude Towards Education	Regularity	2.615	0.010

Table 3.6.6 shows that t-value 2.615 is significant at the 0.010 level where $p \leq 0.05$. This indicates that there is a difference in attitude towards education of parents of regular and irregular participants. Thus, the hypothesis is not accepted. Previous Table 3.6.5 indicates that mean value of regular participants is high (25.38) which implies that parents with a positive attitude towards education send their children regularly to school.

Table 3.6.7

Correlation Analysis of Parents Attitude towards Education with the variables in study

	NA	PSA	CRE	CONC	PATE
Parents Attitude Towards Education (PATE)	-0.061	0.144[*]	0.280[**]	0.117	1

P< .05; **P< .01

Table 3.6.7 shows the correlation analysis between Parents' Attitude towards Education score and other variables in study. The above table suggests that there are significant correlation between Parents' Attitude towards Education and Problem Solving Ability at 0.05 level and Creativity at 0.01 level.

To further explore to what extent Parents' Attitude Towards Education score predict the Problem Solving Ability and Creativity among the participants, regression analysis was conducted.

Hypothesis H$_0$ 34. The parental attitude towards education will not significantly predict the Creativity of participants.

Table 3.6.8

Regression Analysis of Parents' Attitude towards Education and Creativity

	β	F.	Sig.	R²	Adjusted R²
PATE	0.280	18.772	0.001	0.280	0.074

Table 3.6.8 shows that R²-value 0.280 is significant at the 0.001 level where p ≤0.05. Therefore, the hypothesis is not accepted. The regression analysis shows that 7% of the variance in Creativity is due to Parents' Attitude Towards Education. There exists a causal relationship between Creativity and Parents' Attitude Towards Education although the strength of the prediction is low.

Hypothesis H$_0$ 35. The parental attitude towards education will not significantly predict the Problem Solving Ability of participants.

Table 3.6.9

Regression Analysis of Parents' Attitude towards Education and Problem Solving Ability

	β	F.	Sig.	R²	Adjusted R²
PATE	0.144	4.701	0.031	0.144	0.016

Table 3.6.9 shows that R²-value 0.144 is significant at the 0.031 level where p ≤0.05. Therefore, the hypothesis is not accepted. The regression analysis shows that 16% of the variance in Problem Solving Ability is due to Parents' Attitude towards Education. There exists a causal relationship between Problem Solving Ability and Parents' Attitude towards Education although the strength of the relationship is not very high.