Chapter - IV

Data Analysis and Interpretation

This chapter deals with the analysis and interpretation of data. The collected data were classified and tabulated according to the objectives of the study. The descriptions were presented in terms of the following variables: Family Environment, Stress, Anxiety and Academic Achievement of secondary school students. Inferences arrived at through the analysis of the tabulated data are at the end of analysis of each table.

4.1 Family Environment of the respondents

To fulfil the first objective, percentages of cases for favourable, moderate and unfavourable family environment were calculated for the total sample as well as for its sub-groups formed on the basis of sex, category, religion, rural/urban residence and types of family of the respondents.

4.1.1 Distribution of respondents' Family Environment by their Sex

Table 4.1.1 shows the respondents' family environment by their sex. Out of 1200 respondents, 688 (57.33%) were female and 512 (42.67%) were male. Among 1200 respondents, 71.33% had moderate family environment followed by 20.08% favourable and only 8.58% unfavourable family environment.

Table 4.1.1 *Distribution of respondents' Family Environment by their Sex*

Sex	Family Environment			Grand Total
	Favourable	Moderate	Unfavourable	
Male	131 (25.59)	330 (64.45)	51 (9.96)	512 (42.67)
Female	110 (15.99)	526 (76.45)	52 (7.56)	688 (57.33)
Total	241 (20.08)	856 (71.33)	103 (8.58)	1200

*Figures in Parentheses are percentages

Out of 688 female respondents, 76.45% had moderate family environment, whereas approximately 16% had favourable family environment and only 7.56% had unfavourable family environment. In case of 512 male respondents, 64.45% had moderate family environment followed by 25.59% favourable and 9.96% unfavourable.

An observation of table 4.1.1 depicts that majority of male and female respondents had moderate family environment. However, the data reflects that the proportion of females with moderate family environment was much higher than their male counterparts, while the proportions of respondents with favourable environment was much higher among the males than the females and the proportion with the unfavourable environment was also slightly higher among the males than the females.

4.1.2 Distribution of respondents' Family Environment by their Category

Table 4.1.2 represents the distribution of respondents' family environment by their category. Out of 1200 respondents, 658 (54.83%) were OBC/MOBC followed by 322 (26.83%) General, 123 (10.25%) ST and 97 (8.08%) SC.

Table 4.1.2 *Distribution of respondents' Family Environment by their Category*

Category	Family Environment			Grand Total
	Favourable	Moderate	Unfavourable	
General	100 (31.06)	197 (61.18)	25 (7.76)	322 (26.83)
OBC/MOBC	109 (16.57)	489 (74.32)	60 (9.12)	658 (54.83)
ST	22 (17.89)	92 (74.80)	9 (7.32)	123 (10.25)
SC	10 (10.31)	78 (80.41)	9 (9.28)	97 (8.08)
Total	241 (20.08)	856 (71.33)	103 (8.58)	1200

*Figures in Parentheses are percentages

Out of 658 OBC/MOBC respondents, 74.32% had moderate, 16.57% had favourable and 9.12% had unfavourable family environment. Among 322 General category respondents, 61.18% had moderate, 31.06% had favourable and 7.76% had unfavourable family environment. In case of 123 ST respondents, 74.80% had moderate family environment followed by 17.89% favourable and 7.32% unfavourable. In case of 97 SC respondents, 80.41% had moderate, 10.31% had favourable and 9.28% had unfavourable family environment.

The table reflects that while majority of the respondents from all categories had moderate family environment, this proportion was

highest among the SC's followed by ST's, and OBC/MOBC's. Among all categories, least proportion of General category respondents was from the moderate family environment. However, the proportion of the respondents with a favourable family environment was largest in the general category followed by ST's, OBC/MOBC's and the least proportion was of the SC's in this regard. The variations in unfavourable family environment were more or less similar among all categories.

4.1.3 Distribution of respondents' Family Environment by their Religion

Table 4.1.3 depicts the distribution of respondents' family environment by their religion. Out of 1200 respondents 980 (81.67%) were Hindus followed by 127 (10.58%) Muslims, 46 (3.83%) Christians, and 27 (2.25%) Buddhists and 20 (1.67%) were Sikhs.

Table 4.1.3 *Distribution of respondents' Family Environment by their Religion*

Religion	Family Environment			Grand Total
	Favourable	Moderate	Unfavourable	
Hinduism	218 (22.24)	696 (71.02)	66 (6.73)	980 (81.67)
Islam	14 (11.02)	80 (62.99)	33 (25.98)	127 (10.58)
Christianity	4 (8.70)	38 (82.61)	4 (8.70)	46 (3.83)
Buddhism	3 (11.11)	24 (88.89)	-	27 (2.25)
Sikhism	2 (10.00)	18 (90.00)	-	20 (1.67)
Total	241 (20.08)	856 (71.33)	103 (8.58)	1200

*Figures in Parentheses are percentages

Out of 980 Hindus, 71.02% had moderate family environment followed by 22.24% favourable and 6.73% unfavourable family

environment. Among 127 Muslims, approximately 63% had moderate, 11% had favourable and 26% had unfavourable family environment. Out of 46 Christians, 82.61% belong to the families with moderate family environment and 8.70% each belong to the families with favourable and unfavourable family environment. In case of 27 Buddhists, approximately 89% had moderate family environment followed by 11.11% favourable and none of them had an unfavourable family environment. Out of 20 Sikhs, while 90% had moderate and the other 10% had favourable family environment, none of them had an unfavourable family environment.

Overall observation of table 4.1.3 reflects that majority of the respondents from varied religious group had moderate family environment, this proportion was highest among the Sikhs followed by Buddhists, Christians and Hindus. Least proportion of respondents coming from the moderate family environment was from the Muslims. However, the proportion of the respondents with a favourable family environment was largest among Hindus followed by Buddhists, Muslims, Sikhs and the smallest proportion was of the Christians in this regard. The extent of unfavourable family environment was highest among Muslims followed by Christians and Hindus. None of the Buddhists and Sikhs had unfavourable family environment.

4.1.4   Distribution of respondents' Family Environment by their Rural/Urban residence

Table 4.1.4 shows the respondents' family environment by their rural/urban residence. Out of 1200 respondents, 830 (69.17%) were rural residents and 370 (30.83%) were urban residents.

Out of 830 rural resident respondents, 75.30% had moderate family environment followed by 13.49% favourable and 11.20%

unfavourable family environment. Similarly, amongst 370 urban resident respondents, 62.43% had moderate, 34.86% had favourable and only 2.70% had unfavourable family environment.

Table 4.1.4 *Distribution of respondents' Family Environment by their Rural/Urban residence*

Residence	Family Environment			Grand Total
	Favourable	Moderate	Unfavourable	
Rural	112 (13.49)	625 (75.30)	93 (11.20)	830 (69.17)
Urban	129 (34.86)	231 (62.43)	10 (2.70)	370 (30.83)
Total	241 (20.08)	856 (71.33)	103 (8.58)	1200

*Figures in Parentheses are percentages

An observation of the above table reflects that majority of the rural and urban respondents had moderate family environment. However, the data show that the proportion of rural respondents with moderate family environment was much higher than their urban counterparts, while the proportion of respondents with favourable environment was much higher among the urban respondents than the rural respondents and the proportion with unfavourable environment was much higher among the rural respondents than the urban respondents.

4.1.5 Distribution of respondents' Family Environment by their Types of family

The distribution of respondents' family environment and types of family has been shown in table 4.1.5. Out of 1200 respondents, 956 (79.67%) lives in nuclear family, 216 (18%) lives in joint family and 28 (2.33%) lives in extended family.

Table 4.1.5 *Distribution of respondents' Family Environment by their Types of Family*

Types of Family	Family Environment			Grand Total
	Favourable	Moderate	Unfavourable	
Nuclear	198 (20.71)	680 (71.13)	78 (8.16)	956 (79.67)
Joint	40 (18.52)	156 (72.22)	20 (9.26)	216 (18.00)
Extended	3 (10.71)	20 (71.43)	5 (17.86)	28 (2.33)
Total	241 (20.08)	856 (71.33)	103 (8.58)	1200

*Figures in Parentheses are percentages

Out of 956 respondents who live in nuclear family, 71.13% had moderate family environment followed by 20.71% favourable and 8.16% unfavourable. Amongst 216 joint family respondents, 72.22% had moderate, 18.52% had favourable and only 9.26% had unfavourable family environment. In case of 28 respondents who live in extended family, 71.43% had moderate family environment followed by 17.86% unfavourable and 10.71% favourable.

The above table further reflects that almost equal proportion of respondents from all type of family had moderate family environment. However, the proportion of the respondents with a favourable environment was largest in the nuclear family followed by joint and extended family. The extent of unfavourable family environment was found much different among the different types of families. Such kind of result indicates that nuclear family is more popular in the district.

4.2 Level of Stress of the respondents

To fulfil the second objective, percentages of cases for high, average and low levels of stress were calculated for the total sample as

well as for its sub-groups i.e. sex, category, religion, rural/urban residence and types of family.

4.2.1   Distribution of respondents' Level of Stress by their Sex

Table 4.2.1 exhibits the level of stress of male and female respondents. Out of 1200 respondents, 859 (71.58%) had average stress followed by 227 (18.92%) low and 114 (9.5%) high.

Out of 688 female respondents, 72.38% had average, 15.84% had low and 11.77% had high level of stress. Among 512 male respondents, 70.51% had average stress followed by 23.05% low and 6.45% high.

Table 4.2.1 *Distribution of respondents' Level of Stress by their Sex*

Sex	Level of Stress			Grand Total
	High	Average	Low	
Male	33 (6.45)	361 (70.51)	118 (23.05)	512 (42.67)
Female	81 (11.77)	498 (72.38)	109 (15.84)	688 (57.33)
Total	114 (9.5)	859 (71.58)	227 (18.92)	1200

*Figures in Parentheses are percentages

An observation of table 4.2.1 depicts that majority of male and female respondents had average level of stress. On the other hand, the data show that the proportion of female respondents with average stress was slightly higher than their male counterparts, while the proportion of respondents with high level of stress was much higher among the females than the males; and the proportion with low level of stress was much higher among males than the females.

4.2.2 Distribution of respondents' Level of Stress by their Category

Table 4.2.2 reveals the level of stress of respondents of various categories. Out of 658 OBC/MOBC respondents, 73.71% had average, 15.35% had low and 10.94% had high level of stress. Among 322 General category respondents, 62.11% had average stress followed by 29.81% low and 8.07% high. Out of 123 STs, 78.86% had average stress, 16.26% had low level of stress and only 4.88% had high level of stress. Among 97 SCs, 79.38% had average stress followed by 10.31% each has high and low level of stress.

Table 4.2.2 *Distribution of respondents' Level of Stress by their Category*

Category	Level of Stress			Grand Total
	High	Average	Low	
General	26 (8.07)	200 (62.11)	96 (29.81)	322 (26.83)
OBC/MOBC	72 (10.94)	485 (73.71)	101 (15.35)	658 (54.83)
ST	6 (4.88)	97 (78.86)	20 (16.26)	123 (10.25)
SC	10 (10.31)	77 (79.38)	10 (10.31)	97 (8.08)
Total	114 (9.5)	859 (71.58)	227 (18.92)	1200

*Figures in Parentheses are percentages

Overall observation of table 4.2.2 reveals that while majority of the respondents from all categories had average level of stress, this proportion was highest among the SC's followed by ST's, OBC/MOBC's and general category. The proportion of the respondents with high level stress was largest in the OBC/MOBC category followed by SC's and General category and the least proportion was of the ST's in this regard. The extent of low level of stress was much different among all categories.

4.2.3 Distribution of respondents' Level of Stress by their Religion

Table 4.2.3 depicts the distribution of respondents' level of stress by their religion. Out of 980 Hindus, 69.90% had average, 20.10% had low and 10% had high level of stress. Among 127 Muslims, 77.17% had average level of stress followed by 14.17% low and 8.66% high.

Table 4.2.3 *Distribution of respondents' Level of Stress by their Religion*

Religion	Level of Stress			Grand Total
	High	Average	Low	
Hinduism	98 (10.00)	685 (69.90)	197 (20.10)	980 (81.67)
Islam	11 (8.66)	98 (77.17)	18 (14.17)	127 (10.58)
Christianity	4 (8.70)	34 (73.91)	8 (17.39)	46 (3.83)
Buddhism	1 (3.70)	24 (88.89)	2 (7.41)	27 (2.25)
Sikhism	-	18 (90.00)	2 (10.00)	20 (1.67)
Total	114 (9.5)	859 (71.58)	227 (18.92)	1200

*Figures in Parentheses are percentages

In case of 46 Christians, 74% had average, 17.39% had low and only 8.70% had high level of stress. Out of 27 Buddhists, 88.89% had average level of stress followed by 7.41% low and 3.70% high. Among 20 Sikhs, 90% had average and only 10% had low level of stress, while none of the Sikh respondents had high level of stress.

Table 4.2.3 also reflects that majority of the respondents from various religious groups had average stress; this proportion was highest among the Sikhs than other religious groups. However, the proportion of the respondents with a high level of stress was highest among Hindus followed by Christians, Muslims and Buddhists and none of the Sikhs

had high level of stress. On the other hand, low level of stress was highest among Hindus followed by Christians, Muslims and Sikhs; least proportion of respondents was from the Buddhists in this regard.

4.2.4 Distribution of respondents' Level of Stress by their Rural/Urban residence

Table 4.2.4 shows the distribution of respondents' level of stress by their rural/urban residence. Out of 830 rural resident respondents, 73.73% had average stress followed by 15.54% low and 10.72% high. Among 370 urban resident respondents, 66.76% had average stress, 26.49% had low level of stress and 6.76% had high level of stress.

Table 4.2.4 *Distribution of respondents' Level of Stress by their Rural/Urban residence*

Residence	Level of Stress			Grand Total
	High	Average	Low	
Rural	89 (10.72)	612 (73.73)	129 (15.54)	830 (69.17)
Urban	25 (6.76)	247 (66.76)	98 (26.49)	370 (30.83)
Total	114 (9.5)	859 (71.58)	227 (18.92)	1200

*Figures in Parentheses are percentages

An observation of table 4.2.4 reflects that the proportions of rural respondents with average and high level of stress were much higher than their urban counterparts, while the proportion of respondents with low level of stress was much higher among the urban respondents than their rural counterparts.

4.2.5 Distribution of respondents' Level of Stress by their Types of Family

Table 4.2.5 shows the distribution of respondents' level of stress by their types of family. Out of 956 respondents who live in nuclear family, 70.61% had average, 19.46% had low and 9.94% had high level of stress. Among 216 respondents who live in joint family, 75.46% had average stress followed by 16.67% low and 7.87% high. In case of 28 respondents who live in extended family, 75% had average stress, 17.86% had low level of stress and 7.14% had high level of stress.

Table 4.2.5 *Distribution of respondents' Level of Stress by their Types of Family*

Types of Family	Level of Stress			Grand Total
	High	Average	Low	
Nuclear	95 (9.94)	675 (70.61)	186 (19.46)	956 (79.67)
Joint	17 (7.87)	163 (75.46)	36 (16.67)	216 (18.00)
Extended	2 (7.14)	21 (75.00)	5 (17.86)	28 (2.33)
Total	114 (9.5)	859 (71.58)	227 (18.92)	1200

*Figures in Parentheses are percentages

An examination of the table shows that higher proportions of respondents from all type of family had average level of stress. The proportion of the respondents with high level of stress was highest in the nuclear family followed by joint and extended, while the proportion of respondents with a low level of stress was largest in the nuclear family followed by extended and joint family.

4.3   Level of Anxiety of the respondents

To fulfil the third objective, percentages of cases for extremely high, high, normal, low and extremely low level of anxiety were calculated for the total sample as well as for its sub-groups i.e. sex, category, religion, rural/urban residence and types of family.

4.3.1   Distribution of respondents' Level of Anxiety by their Sex

Table 4.3.1 exhibits the level of anxiety of male and female respondents. Out of 1200 respondents, 760 (63.33%) had normal (moderate or average) anxiety followed by 182 (15.17%) high, 139 (11.58%) low, 79 (6.58%) extremely low and 40 (3.3%) extremely high.

Table 4.3.1 *Distribution of respondents' Level of Anxiety by their Sex*

Sex	Level of Anxiety					Grand Total
	Extremely High Anxiety	High Anxiety	Normal Anxiety	Low Anxiety	Extremely Low Anxiety	
Male	14 (2.73)	54 (10.55)	318 (62.11)	73 (14.26)	53 (10.35)	512 (42.67)
Female	26 (3.78)	128 (18.60)	442 (64.24)	66 (9.59)	26 (3.78)	688 (57.33)
Total	40 (3.33)	182 (15.17)	760 (63.33)	139 (11.58)	79 (6.58)	1200

*Figures in Parentheses are percentages

Out of 688 female respondents, 64.24% had normal, 18.60% had high, 9.59% had low, 3.78% each had extremely high and extremely low level of anxiety. In case of 512 male respondents, 62.11% had normal anxiety followed by 14.26% low, 10.55% high, 10.35% extremely low and 2.73% extremely high.

An observation of present table reveals that larger proportion of male and female respondents had normal anxiety. However, the data

reflects that the proportion of females with normal anxiety was slightly higher than the males. Moreover, the proportions of respondents with high and extremely high anxiety were also higher among the females than the males; while the proportion of respondents in case of low and extremely low level anxiety were larger among males than that of females.

4.3.2 Distribution of respondents' Level of Anxiety by their Category

Table 4.3.2 shows the level of anxiety of various categories. Out of 658 OBC/MOBC respondents, 65.50% had normal, 17.78% had high, 9.12% had low, 4.41% had extremely low and only 3.19% had extremely high level of anxiety. Among 322 General category respondents, 55.28% had normal anxiety followed by 16.77% low, 12.73% high, 11.49% extremely low and 3.73% extremely high.

Table 4.3.2 *Distribution of respondents' Level of Anxiety by their Category*

Category	Level of Anxiety					Grand Total
	Extremely High Anxiety	High Anxiety	Normal Anxiety	Low Anxiety	Extremely Low Anxiety	
General	12 (3.73)	41 (12.73)	178 (55.28)	54 (16.77)	37 (11.49)	322 (26.83)
OBC/ MOBC	21 (3.19)	117 (17.78)	431 (65.50)	60 (9.12)	29 (4.41)	658 (54.83)
ST	3 (2.44)	11 (8.94)	88 (71.54)	11 (8.94)	10 (8.13)	123 (10.25)
SC	4 (4.12)	13 (13.40)	63 (64.95)	14 (14.43)	3 (3.09)	97 (8.08)
Total	40 (3.33)	182 (15.17)	760 (63.33)	139 (11.58)	79 (6.58)	1200

*Figures in Parentheses are percentages

Out of 123 ST's, 71.54% had normal anxiety, 8.94% each had low and high anxiety, 8.13% had extremely low anxiety and only 2.44% had

extremely high level of anxiety. In case of 97 SC respondents, 64.95% had normal anxiety followed by 14.43% low, 13.40% high, 4.12% extremely high and 3.09% extremely low.

An observation of the above table reflects that majority of the respondents from all categories had normal anxiety and the proportion was highest among the ST's followed by OBC/MOBC's, SC's and General category. The proportion of the respondents with a high anxiety was largest in the OBC/MOBC's followed by SC's, General and ST's; while the extent of extremely high level anxiety was slightly different among all categories. However, the proportion of the respondents with a low level of anxiety was largest among in the General category followed by SC's, OBC/MOBC's, ST's; and the proportion of respondents with extremely low level of anxiety was much higher in the General category followed by ST's, OBC/MOBC's and SC's.

4.3.3   Distribution of respondents' Level of Anxiety by their Religion

Table 4.3.3 shows respondents' level of anxiety by their religion. Out of 980 Hindus, 63.06% had normal, 14.69% had high, 12.24% had low, 6.94% had extremely low and only 3.06% had extremely high level of anxiety. Among 127 Muslims, 60.63% had normal anxiety followed by 22.05% high, 7.87% low, 7.09% extremely high and 2.36% extremely low. Out of 46 Christians, 69.57% had normal anxiety followed by 13.04% each high and extremely low, 2.17% each extremely high and low level of anxiety. In case of 27 Buddhists, 70.37% had normal and 14.81% each had high and low level of anxiety. None of the Buddhists had extremely high and extremely low level of anxiety. Out of 20 Sikhs, 70% had normal anxiety followed by 20% low and 10% extremely low. None of the Sikhs had above normal level of anxiety.

Table 4.3.3 *Distribution of respondents' Level of Anxiety by their Religion*

Religion	Level of Anxiety					Grand Total
	Extremely High Anxiety	High Anxiety	Normal Anxiety	Low Anxiety	Extremely Low Anxiety	
Hinduism	30 (3.06)	144 (14.69)	618 (63.06)	120 (12.24)	68 (6.94)	980 (81.67)
Islam	9 (7.09)	28 (22.05)	77 (60.63)	10 (7.87)	3 (2.36)	127 (10.58)
Christianity	1 (2.17)	6 (13.04)	32 (69.57)	1 (2.17)	6 (13.04)	46 (3.83)
Buddhism	-	4 (14.81)	19 (70.37)	4 (14.81)	-	27 (2.25)
Sikhism	-	-	14 (70.00)	4 (20.00)	2 (10.00)	20 (1.67)
Total	40 (3.33)	182 (15.17)	760 (63.33)	139 (11.58)	79 (6.58)	1200

*Figures in Parentheses are percentages

An observation of table 4.3.3 reflects that larger proportion of respondents from varied religious group had normal anxiety. However, the proportion of the respondents with high and extremely high level of anxiety were largest among Muslims than other religious group; while the extent of below normal anxiety was highest among Sikhs followed by Hindus, Christians, Buddhists, and Muslims.

4.3.4 Distribution of respondents' Level of Anxiety by their Rural/Urban residence

Table 4.3.4 exhibits the distribution of respondents' level of anxiety by their rural/urban residence. Out of 830 rural resident respondents, 65.54% had normal, 18.80% had high, 7.83% had low, 4.10% had extremely low and 3.73% had extremely high level of anxiety. Among 370 urban resident respondents, 58.38% had normal anxiety followed by 20% low, 12.16% extremely low, 7.03% high and 2.43% extremely high.

Table 4.3.4 *Distribution of respondents' Level of Anxiety by their Rural/Urban residence*

Residence	Level of Anxiety					Grand Total
	Extremely High Anxiety	High Anxiety	Normal Anxiety	Low Anxiety	Extremely Low Anxiety	
Rural	31 (3.73)	156 (18.80)	544 (65.54)	65 (7.83)	34 (4.10)	830 (69.17)
Urban	9 (2.43)	26 (7.03)	216 (58.38)	74 (20.00)	45 (12.16)	370 (30.83)
Total	40 (3.33)	182 (15.17)	760 (63.33)	139 (11.58)	79 (6.58)	1200

*Figures in Parentheses are percentages

An observation of table 4.3.4 reflects that majority of the rural and urban respondents had normal anxiety, and the proportion of respondents among rural resident was higher than the urban resident. The data reflects that the proportion of respondents with above normal anxiety was higher among rural resident than the urban resident, while the proportion of respondents with below normal anxiety was much higher among urban resident respondents than their rural counterparts.

4.3.5 Distribution of respondents' Level of Anxiety by their Types of Family

Table 4.3.5 shows respondents' level of anxiety by their types of family. Out of 956 respondents who live in nuclear family, 62.66% had normal anxiety followed by 14.85% high, 12.45% low, 7.22% extremely low and 2.82% extremely high. Among 216 respondents who live in joint family, 64.81% had normal, 17.59% had high, 8.33% had low, 5.09% had extremely high and 4.17% had extremely low level of anxiety. In case of those respondents who live in extended family, 75% had normal anxiety followed by 7.14% each low, high and extremely high; while only 3.57% had extremely low level of anxiety.

Table 4.3.5 *Distribution of respondents' Level of Anxiety by their Types of Family*

Types of Family	Level of Anxiety					Grand Total
	Extremely High Anxiety	High Anxiety	Normal Anxiety	Low Anxiety	Extremely Low Anxiety	
Nuclear	27 (2.82)	142 (14.85)	599 (62.66)	119 (12.45)	69 (7.22)	956 (79.67)
Joint	11 (5.09)	38 (17.59)	140 (64.81)	18 (8.33)	9 (4.17)	216 (18.00)
Extended	2 (7.14)	2 (7.14)	21 (75.00)	2 (7.14)	1 (3.57)	28 (2.33)
Total	40 (3.33)	182 (15.17)	760 (63.33)	139 (11.58)	79 (6.58)	1200

*Figures in Parentheses are percentages

Table 4.3.5 further reflects that higher proportions of respondents from all types of family had normal anxiety, but the proportion was highest among the respondents with extended family followed by joint and nuclear. However, the proportion of respondents with above normal anxiety was largest among joint family respondents followed by nuclear and extended. In case of below normal anxiety, the proportion of respondents was highest among nuclear family respondents followed by joint and extended.

Extremely high or extremely low level of anxiety is devastating for any individual. It has a negative effect on all spheres of life. It can affect mental health and physical health, consequently the performance also will affect.

4.4 Family Environment and Academic Achievement of the respondents

To fulfil the fourth objective, the relationship between family environment and academic achievement of the respondents, the percentages and coefficient of correlation were computed.

4.4.1 Distribution of respondents' Family Environment by their Academic Achievement

Table 4.4.1 shows the distribution of respondents' family environment and their academic achievement. Out of 1200 respondent, 475 (39.58%) were average achievers, 414 (34.5%) were low achievers and 311 (25.92%) were high achievers.

Out of 311 respondents who had achieved high in academics, 63.67% had favourable family environment followed by 34.73% moderate and 1.61% unfavourable. Among 475 average academic achievers, 87.58% had moderate, 7.16% had favourable and 5.26% had unfavourable family environment. In case of 424 low academic achievers, 80.19% had moderate family environment followed by 17.63% unfavourable and 2.17% favourable.

Table 4.4.1 *Distribution of respondents' Family Environment* by their *Academic Achievement*

Academic Achievement	Family Environment			Grand Total
	Favourable	Moderate	Unfavourable	
High	198 (63.67)	108 (34.73)	05 (1.61)	311 (25.92)
Average	34 (7.16)	416 (87.58)	25 (5.26)	475 (39.58)
Low	9 (2.17)	332 (80.19)	73 (17.63)	414 (34.5)
Total	241 (20.08)	856 (71.33)	103 (8.58)	1200

*Figures in Parentheses are percentages

An observation of the table reflects that those respondents who had achieved high in academics, approximately 64% had favourable family environment. Therefore, it can be inferred that a favourable family environment is conducive for high academic achievement that and if the

family environment is unfavourable then the academic achievement will be low.

4.4.2 Relationship between Family Environment and Academic Achievement of the respondents

Table 4.4.2 summaries the relationship between family environment and academic achievement of the respondents. The value of 'ɤ' is 0.67. This value reflects that the family environment and academic achievement are positively and significantly related to each other. It means, if the family environment is favourable then the students will certainly perform better in academics. Therefore, H_1 is accepted.

Table 4.4.2 *Relationship between Family Environment and Academic Achievement of the respondents*

Variable Correlated	'ɤ' Value N = 1200	Level of significance
Family Environment and Academic Achievement	.67	.01 level

Similar results were also reported by Salunke, R. B. (1979); Daulta (2008); Kamaruddin, *et al.* (2009); Muola (2010); Nyarko (2010); Chawla (2012); Mishra, *et al.* (2012); and Singh (2013). All of them have reported a positive relationship between family environment/home environment and academic achievement.

4.4.3 Distribution of respondents' Family Environment and Academic Achievement by their category

Table 4.4.3 shows the distribution of respondents' family environment and academic achievement by their category. Out of 322 General category respondents, 125 (38.82%) had achieved high in

academics followed by 106 (32.92%) average and 91 (28.26%) low. Among 125 high achievers of this category, 64.8% had favourable, 33.6% had moderate and 1.6% had unfavourable family environment. Out of 106 General category respondents with average in academics, 82.08% had moderate family environment followed by 12.26% favourable and 5.66% unfavourable. In case of 91 General category respondents with low in academics, 74.73% had moderate, 18.68% had unfavourable and 6.59% had favourable family environment. The data indicates that among the general category respondent family environment affects academic achievement marginally.

Out of 658 OBC/MOBC respondents, 261 (39.67%) had achieved low in academics followed by 259 (39.36%) average and 138 (20.97%) high. Among 261 low achievers of this category, 81.99% had moderate, 17.24% had unfavourable and very negligible percent (.77%) of respondents had favourable family environment. Out of 259 average achievers, 88.80% had moderate family environment followed by 5.79% favourable and 5.41% unfavourable. In case of 138 OBC/MOBC's high achievers, 66.67% had favourable, 32.61% had moderate and only .72% had unfavourable family environment. This shows that in this category favourable home environment enhances the academic achievement of the children while the unfavourable environment contributes to lower academic achievement.

Out of 123 respondents who belonged to ST category, 66 (53.66%) had achieved average in academics followed by 30 (24.39%) high and 27 (21.95%) low. Among 66 average academic achievers of this category, 89.39% had moderate, 7.58% had favourable and 3.03% had unfavourable family environment. Out of 30 ST's respondents with high in academics, 56.67% had favourable and 43.33% had moderate family environment; while none of the ST's high achievers had an unfavourable

Table 4.4.3 *Distribution of respondents' Family Environment and Academic Achievement by their category*

Academic Achievement	Family Environment															
	General				OBC/MOBC				ST				SC			
	Favourable	Moderate	Unfavourable	Total	Favourable	Moderate	Unfavourable	Total	Favourable	Moderate	Unfavourable	Total	Favourable	Moderate	Unfavourable	Total
High	81 (64.8) N = 125	42 (33.6) N = 125	2 (1.6) N = 125	125 (38.82) N = 322	92 (66.67) N = 138	45 (32.61) N = 138	1 (0.72) N = 138	138 (20.97) N = 658	17 (56.67) N = 30	13 (43.33) N = 30	-	30 (24.39) N = 123	8 (44.44) N = 18	8 (44.44) N = 18	2 (11.11) N = 18	18 (18.56) N = 97
Average	13 (12.26) N = 106	87 (82.08) N = 106	6 (5.66) N = 106	106 (32.92) N = 322	15 (5.79) N = 259	230 (88.80) N = 259	14 (5.41) N = 259	259 (39.36) N = 658	5 (7.58) N = 66	59 (89.39) N = 66	2 (3.03) N = 66	66 (53.66) N = 123	1 (2.27) N = 44	40 (90.91) N = 44	3 (6.82) N = 44	44 (45.36) N = 97
Low	6 (6.59) N = 91	68 (74.73) N = 91	17 (18.68) N = 91	91 (28.26) N = 322	2 (0.77) N = 261	214 (81.99) N = 261	45 (17.24) N = 261	261 (39.67) N = 658	-	20 (74.07) N = 27	7 (25.93) N = 27	27 (21.95) N = 123	1 (2.86) N = 35	30 (85.71) N = 35	4 (11.43) N = 35	35 (36.08) N = 97
Total	100 (31.06) N = 322	197 (61.18) N = 322	25 (7.76) N = 322	322 (26.83) N =1200	109 (16.57) N = 658	489 (74.32) N = 658	60 (9.12) N = 658	658 (54.83) N = 1200	22 (17.89) N = 123	92 (74.80) N = 123	9 (7.32) N = 123	123 (10.25) N =1200	10 (10.31) N = 97	78 (80.41) N = 97	9 (9.28) N = 97	97 (8.08) N=1200

*Figures in Parentheses are percentages

family environment. In case of 27 ST's low academic achievers, 74.07% had moderate and 25.93% had unfavourable family environment. None of the ST's low achievers had favourable family environment.

Out of 97 SC respondents, 44 (45.36%) had achieved average in academics followed by 35 (36.08%) low and 18 (18.56%) high. Among 44 SC respondents with average in academics, 90.91% had moderate, 6.82% had unfavourable and 2.77% had favourable family environment. Out of 35 low achievers of this category, 85.71% had moderate family environment followed by 11.43% unfavourable and 2.86% favourable. In case of 18 SC respondents who had achieved high in academics, 44.4% each had moderate and favourable family environment; while 11.11% had an unfavourable family environment. Thus in this category also favourable family environment is conducive to higher academic achievement.

An overall observation of table 4.4.3 reflects that in general high academic achievers had favourable and moderate family environment implying thereby that family environment influences a person's academic achievement. However, the general category is an exception where as vast majority of even the low achievers had moderate family environment.

4.4.4 Relationship between Family Environment and Academic Achievement of the respondents of various categories

Table 4.4.4 shows the coefficient of correlation between family environment and academic achievement of the respondents of various categories. The obtained 'ɤ' value of these variables in case of General category respondents is .66, which is positive and significant beyond .01 level of confidence. The calculated coefficient of correlation between these two variables in case of OBC/MOBC is .70, which is positive and significant at .01 level of confidence. It indicates that there is a high

positive relationship between these two variables. In case of ST respondents, the 'ɤ' value is .64, which is positive and significant at .01 level of confidence. The coefficient of correlation between these two variables of SC respondents is .44, which is positive and significant at .01 level.

Table 4.4.4 *Relationship between Family Environment and Academic Achievement of the respondents of various categories*

Category	Variables Correlated	N	'ɤ' Value	Level of significance
General	Family Environment and Academic Achievement	322	.66	.01 level
OBC/MOBC	Family Environment and Academic Achievement	658	.70	.01 level
ST	Family Environment and Academic Achievement	123	.64	.01 level
SC	Family Environment and Academic Achievement	97	.44	.01 level

The overall observation of table 4.4.4 indicates high positive and significant relationship between family environment and academic achievement among the General, OBC/MOBC, and ST categories but in the case of SC's though the relationship is positive it is slightly weak. It means that generally if the family environment is favourable then students' academic achievement also will be high and if the family environment is unfavourable then the academic achievement will be low. However in case of SC's this is not true, implying thereby that in this category some other factors than the home environment seem to influence academic achievement more strongly.

4.4.5 Comparison of means of High and Low academic achiever groups on Family Environment Inventory

Table 4.4.5 shows the mean difference between high and low academic achiever groups on family environment inventory. The mean value of high academic achievers is 73.96 and standard deviation is 12.01; while the mean value of low academic achievers is 42.97 with a corresponding standard deviation of 13.88. The obtained 't' value is 30.38 which is significant at .01 level. It means that the groups of high and low academic achievers significantly differ in their family environment.

Table 4.4.5   *Comparison of means of High and Low academic achiever groups on Family Environment Inventory*

Family Environment	Academic Achievers				't' Value	Degrees of freedom	Level of significance
	High N=324		Low N=324				
	Mean	SD	Mean	SD			
	73.96	12.01	42.97	13.88	30.38	646	.01 level

The result reveals that the mean value of high academic achievers is higher than the mean value of low achievers on their family environment scores. Therefore, it can be concluded that high academic achievers differ significantly on their family environment scores than the low academic achievers. It appears that favourable family environment motivates the adolescents to excel in academic attainment.

Similar results have also been reported by Sarkar (1983) who found a significant difference between high and low achievers in the area of home variables such as educational environment, income, spatial environment, social background, provision of facilities and parent-child relationship.

4.5 Stress and Academic Achievement of the respondents

To fulfil the fifth objective, the relationship between stress and academic achievement of the respondents, the percentages and coefficient of correlation were computed.

4.5.1 Distribution of respondents' Level of Stress by their Academic Achievement

Table 4.5.1 shows the respondents' level of stress by their academic achievement. Out of 311 respondents who had achieved high in academics, 49.20% had average level of stress followed by 46.62% low and 4.18% high. Among 475 respondents with average academic achievement, 84.63% had average, 11.79% had low and 3.58% had high level of stress. In case of 414 low achievers, 73.43% had average level of stress followed by 20.29% high and 6% low.

Table 4.5.1 *Distribution of respondents' Level of Stress by their Academic Achievement*

Academic Achievement	Level of Stress			Grand Total
	High	Average	Low	
High	13 (4.18)	153 (49.20)	145 (46.62)	311 (25.92)
Average	17 (3.58)	402 (84.63)	56 (11.79)	475 (39.58)
Low	84 (20.29)	304 (73.43)	26 (6.28)	414 (34.5)
Total	114 (9.5)	859 (71.58)	227 (18.92)	1200

*Figures in Parentheses are percentages

Table 4.5.1 depicts that highest proportions of high, average and low achievers had average level of stress. However, the data reflects that proportion of respondents with average stress was largest among average

academic achievers followed by low and high academic achievers. The proportion of respondents with high level of stress was higher among low achievers followed by high and average academic achievers, while the proportion of respondents with low level of stress was much higher among the high academic achievers followed by average and low academic achievers. This kind of result indicates that average stress certainly help the students to enhance their academic achievement.

4.5.2 Relationship between Stress and Academic Achievement of the respondents

Table 4.5.2 summaries the relationship between stress and academic achievement of the respondents. The value of coefficient of correlation is -.41, which is significant at .01 level of confidence. The 'ɤ' value indicates that stress and academic achievement are negatively and significantly related to each other. It means if the level of stress is low then the academic achievement will be high and if the level of stress is high then the academic achievement will be low. Extreme level of stress may influence the academic achievement of the students. Therefore, H_2 is retained.

Table 4.5.2 *Relationship between Stress and Academic Achievement of the respondents*

Variable Correlated	'ɤ' Value N = 1200	Level of significance
Stress and Academic Achievement	-.41	.01 level

Similar kind of relationship reported by Ranganathan (1988); Zajacova, *et al.* (2005); Malik and Balda (2006); Shah, *et al.* (2010); Elias, *et al.* (2011); and Schraml, *et al.* (2012).

4.5.3 Distribution of respondents' Level of Stress and Academic Achievement by their category

Table 4.5.3 shows the respondents' level of stress and academic achievement by their category. Out of 125 General category respondents who had achieved high in academics, 56% had low level of stress followed 37.6% average and 6.4% high. Among 106 average academic achievers of this category, 80.19% had average level of stress, 18.87% had low and only 0.94% had high level of stress. In case of 91 respondents with low academic achievement, 74.73% had average, 18.68% had high and only 6.59% had low level of stress.

Out of 261 OBC/MOBC respondents with low academic achievement, 72.80% had average stress followed by 21.84% high and 5.36% low. Among 259 average academic achievers, 84.94% had average, 10.42% had low and 4.63% had high level of stress. Out of 138 OBC/MOBC respondents who had achieved high in academics, 54.35% had average stress followed by 43.48% low and 2.17% high.

Among 66 ST respondents with average academic achievement, 86.36% had average, 10.61% had low and only 3.03% had high level of stress. Out of 30 respondents who had achieved high in academics, 63.33% had average level of stress followed by 33.33% low and 3.33% high. In case of 27 low academic achievers of this category, 77.78% had average stress, while 11.11% each had low and high level of stress.

Out of 44 SC respondents with average academic achievement, 90.91% had average level of stress; whereas 4.55% each had high and low level of stress. Among 97 low academic achievers of this category, 71.43% had average stress followed by 20% high and 8.57% low. Only 18 SC respondents had achieved high in academics, among them, 66.67% had average, 27.78% had low and 5.56% had high level of stress.

Table 4.5.3 *Distribution of respondents' Level of Stress and Academic Achievement by their category*

Academic Achievement	Level of Stress															
	General				**OBC/MOBC**				**ST**				**SC**			
	High	Average	Low	Total	High	Average	Low	Total	High	Average	Low	Total	High	Average	Low	Total
High	8 (6.4) N = 125	47 (37.6) N = 125	70 (56.00) N = 125	125 (38.82) N=322	3 (2.17) N = 138	75 (54.35) N = 138	60 (43.48) N = 138	138 (20.97) N = 658	1 (3.33) N = 30	19 (63.33) N = 30	10 (33.33) N = 30	30 (24.39) N = 123	1 (5.56) N = 18	12 (66.67) N = 18	5 (27.78) N = 18	18 (18.56) N = 97
Average	1 (0.94) N = 106	85 (80.19) N = 106	20 (18.87) N = 106	106 (32.92) N=322	12 (4.63) N = 259	220 (84.94) N = 259	27 (10.42) N = 259	259 (39.36) N = 658	2 (3.03) N = 66	57 (86.36) N = 66	7 (10.61) N = 66	66 (53.66) N = 123	2 (4.55) N = 44	40 (90.91) N = 44	2 (4.55) N = 44	44 (45.36) N = 97
Low	17 (18.68) N = 91	68 (74.73) N = 91	6 (6.59) N = 91	91 (28.26) N=322	57 (21.84) N = 261	190 (72.80) N = 261	14 (5.36) N = 261	261 (39.67) N = 658	3 (11.11) N = 27	21 (77.78) N = 27	3 (11.11) N = 27	27 (21.95) N = 123	7 (20.00) N = 35	25 (71.43) N = 35	3 (8.57) N = 35	35 (36.08) N = 97
Total	26 (8.07) N=322	200 (62.11) N = 322	96 (29.81) N=322	322 (26.83) N=1200	72 (10.94) N = 658	485 (73.71) N = 658	101 (15.35) N = 658	658 (54.83) N=1200	6 (4.88) N = 123	97 (78.86) N = 123	20 (16.26) N = 123	123 (10.25) N=1200	10 (10.31) N = 97	77 (79.38) N = 97	10 (10.31) N = 97	97 (8.08) N=1200

*Figures in Parentheses are percentages

An examination of the table 4.5.3 reflects higher proportions of respondents belong to various categories had average level of stress, and this proportion was highest among SC's followed by ST's, OBC/MOBC's and general category. Stress is considered one of the variables which have a negative effect on academic achievement and a certain amount of stress acts as stimulant and increases efficiency of the students in their learning situation.

4.5.4 Relationship between Stress and Academic Achievement of the respondents of various categories

Table 4.5.4 presents the relationship between stress and academic achievement of the respondents belonging to various categories. To examine the relationship between these two variables, Pearson's coefficient of correlation was used. The 'ɤ' value of these variables in case of General category respondents is -.38, which is negative and significant beyond .01 level of confidence. It means with the increase of level of stress, academic achievement will decrease and with the decrease of stress, academic achievement will increase.

Table 4.5.4 *Relationship between Stress and Academic Achievement of the respondents of various Categories*

Category	Variable Correlated	N	'ɤ' Value	Level of Significance
General	Stress and Academic Achievement	322	-.38	.01 level
OBC/MOBC	Stress and Academic Achievement	658	-.43	.01 level
ST	Stress and Academic Achievement	123	-.25	.01 level
SC	Stress and Academic Achievement	97	-.36	.01 level

The obtained coefficient of correlation value between stress and academic achievement of OBC/MOBC is -.43, which is significant at .01 level. It implies that both the variables are negatively related to each other. The obtained value of 'ɤ' between these two variables in case of ST is -.25, which is significant at .01 level. It indicates a low negative relationship between these two variables of this category. In case of SC respondents, the calculated 'ɤ' value is -.36, which is negative and significant at .01 level of confidence. This indicates that stress is negatively and significantly related with academic achievement.

An overall observation of table 4.5.4 indicates that stress is negatively related with academic achievement of the respondents of various categories. It means if the level of stress of the students' increase then academic achievement will certainly decrease.

4.5.5 Comparison of means of High and Low academic achiever groups on Stress

Table 4.5.5 reveals the comparison of high and low academic achiever groups on their stress inventory. The obtained mean value of high academic achievers is 82.68 with corresponding SD of 18.40 and the mean value of low academic achievers is 106.45 and SD of 18.04.

Table 4.5.5 *Comparison of means of High and Low academic achiever groups on Stress*

Stress	Academic Achievers				't' Value	Degrees of freedom	Level of significance
	High N=324		Low N=324				
	Mean	SD	Mean	SD			
	82.68	18.40	106.45	18.04	16.61	646	.01 level

The value of 't' is 16.61, which is significant at .01 level. The mean values of high and low academic achievers are compared and it is found that low academic achievers yielded higher mean score on stress as compare to high academic achievers. It indicates that low academic achiever group has more stress than the high academic achiever group.

Similar kind of results were observed by earlier researchers (Bhasin, *et al.*, 2010; Yasin, *et al.*, 2011; and Kumari, *et al.*, 2012); they reported a significant difference between the high and low academic achievers in the area of stress.

4.6 Anxiety and Academic Achievement of the respondents

To fulfil the sixth objective, the relationship between anxiety and academic achievement of the respondents, the percentages and coefficient of correlation were computed.

4.6.1 Distribution of respondents' Level of Anxiety by their Academic Achievement

Table 4.6.1 shows respondents' level of anxiety by their academic achievement. Out of 1200 respondents, 63.33% had normal anxiety, 15.17% had high anxiety, 11.58% had low anxiety, 6.58% had extremely low anxiety and 3.33% had extremely high level of anxiety.

Out of 311 respondents who had achieved high in academics, 41.16% had normal anxiety followed by 29.90% low, 23.47% extremely low, 4.18% high and 1.29% extremely high. Among 475 respondents with average academic achievement, 77.26% had normal, 11.79% had high, 7.37% had low, 2.53% had extremely high and only 1.05% had extremely

low level of anxiety. Among 414 low academic achievers, 64.01% had normal anxiety followed by 27.29% high, 5.80% extremely high, 2.66% low and 0.24% extremely low.

Table 4.6.1 *Distribution of respondents' Level of Anxiety by their Academic Achievement*

Academic Achievement	Level of Anxiety					Grand Total
	Extremely High Anxiety	High Anxiety	Normal Anxiety	Low Anxiety	Extremely Low Anxiety	
High	4 (1.29)	13 (4.18)	128 (41.16)	93 (29.90)	73 (23.47)	311 (25.92)
Average	12 (2.53)	56 (11.79)	367 (77.26)	35 (7.37)	5 (1.05)	475 (39.58)
Low	24 (5.80)	113 (27.29)	265 (64.01)	11 (2.66)	1 (0.24)	414 (34.5)
Total	40 (3.33)	182 (15.17)	760 (63.33)	139 (11.58)	79 (6.58)	1200

*Figures in Parentheses are percentages

An observation of the above table reflects that majority of the students possess average level of anxiety which is normally desirable in any learning situation. Extremely high and extremely low levels of anxiety both are harmful and functions as hindrance in the path of learning. Moderate level of anxiety helps a child to perform better in academics.

4.6.2 Relationship between Anxiety and Academic Achievement of the respondents

Table 4.6.2 shows the relationship between anxiety and academic achievement of the respondents. The value of coefficient of correlation is -.54, which is significant at .01 level. The 'γ' value denotes that anxiety and academic achievement is negatively related to each other. It means if

the level of anxiety increase then students academic achievement will decrease and if the level of anxiety decrease then the academic achievement will increase. Therefore, H_3 is retained.

Table 4.6.2   *Relationship between Anxiety and Academic Achievement of the respondents*

Variable Correlated	'ɤ' Value N = 1200	Level of Significance
Anxiety and Academic Achievement	-.54	.01 level

Gupta (1987); Checcung, *et al.*, 1984; Thilagavathi, 1990; Ramachandran, 1990; Cassady, *et al.*, 2002; Singh, 2009; Rezazadeh, *et al.* 2009; Mokashi, *et al.*, 2010; Rana, *et al.*, 2010; Yousefi, *et al.*, 2010; Ergene, 2011; Ahmed, *et al.*, 2012; Jain, 2012; Nadeem, *et al.*, 2012; Singh, *et al.*, 2013; Dhyani, *et al.* (n.d) reported a significant negative correlation between anxiety and academic achievement of the students.

4.6.3   Distribution of respondents' Level of Anxiety and Academic Achievement by their Category

Table 4.6.3 shows the distribution of respondents' level of anxiety and academic achievement by their category. Out of 106 General category respondents with average academic achievement, 69.81% had normal, 13.21% had high, 11.32% had low, 3.77% had extremely high and only 1.89% had extremely low level of anxiety. Among 125 respondents who had achieved high in academics, 40.8% had normal anxiety followed by 28.8% low, 27.2% extremely low, 2.4% high and 0.8% extremely high. In case of 91 low academic achievers of this category, 58.24% had normal, 26.37% had high, 7.69% had extremely high, 6.59% had low and only 1.10% had extremely low level of anxiety.

Table 4.6.3 *Distribution of respondents' Level of Anxiety and Academic Achievement by their Category*

Academic Achievement	General						OBC/MOBC						ST						SC					
	EHA	HA	NA	LA	ELA	Total	EHA	HA	NA	LA	ELA	Total	EHA	HA	NA	LA	ELA	Total	EHA	HA	NA	LA	ELA	Total
High	1 (0.8) N=125	3 (2.4) N=125	51 (40.8) N=125	36 (28.8) N=125	34 (27.2) N=125	125 (38.82) N=322	2 (1.45) N=138	9 (6.52) N=138	57 (41.30) N=138	43 (31.16) N=138	27 (19.57) N=138	138 (20.97) N=658	1 (3.33) N=30	-	12 (40.00) N=30	8 (26.67) N=30	9 (30.00) N=30	30 (24.39) N=123	-	1 (5.56) N=18	8 (44.44) N=18	6 (33.33) N=18	3 (16.67) N=18	18 (18.56) N=97
Average	4 (3.77) N=106	14 (13.21) N=106	74 (69.81) N=106	12 (11.32) N=106	2 (1.89) N=106	106 (32.92) N=322	5 (1.93) N=259	37 (14.29) N=259	201 (77.61) N=259	14 (5.41) N=259	2 (0.77) N=259	259 (39.36) N=658	2 (3.03) N=66	4 (6.06) N=66	56 (84.85) N=66	3 (4.55) N=66	1 (1.52) N=66	66 (53.66) N=123	1 (2.27) N=44	1 (2.27) N=44	36 (81.82) N=44	6 (13.64) N=44	-	44 (45.36) N=97
Low	7 (7.69) N=91	24 (26.37) N=91	53 (58.24) N=91	6 (6.59) N=91	1 (1.10) N=91	91 (28.26) N=322	14 (5.36) N=261	71 (27.20) N=261	173 (66.28) N=261	3 (1.15) N=261	-	261 (39.67) N=658	-	7 (25.93) N=27	20 (74.07) N=27	-	-	27 (21.95) N=123	3 (8.57) N=35	11 (31.43) N=35	19 (54.29) N=35	2 (5.71) N=35	-	35 (36.08) N=97
Total	12 (3.73) N=322	41 (12.73) N=322	178 (55.28) N=322	54 (16.77) N=322	37 (11.49) N=322	322 (26.83) N=1200	21 (3.19) N=658	117 (17.78) N=658	431 (65.50) N=658	60 (9.12) N=658	29 (4.41) N=658	658 (54.83) N=1200	3 (2.44) N=123	11 (8.94) N=123	88 (71.54) N=123	11 (8.94) N=123	10 (8.13) N=123	123 (10.25) N=1200	4 (4.12) N=97	13 (13.40) N=97	63 (64.95) N=97	14 (14.43) N=97	3 (3.09) N=97	97 (8.08) N=1200

*Figures in Parentheses are percentages

EHA = Extremely High Anxiety,
HA = High Anxiety,
NA = Normal Anxiety,
LA = Low Anxiety,
ELA = Extremely Low Anxiety

Among 261 OBC/MOBC respondents with low academic achievement, 66.28% had normal, 27.20% had high, 5.36% had extremely high and 1.15% had low level of anxiety, while none of them had extremely low level of anxiety. Out of 259 average academic achievers of this category, 77.61% have normal anxiety followed by 14.29% high, 5.41% low, 1.93% extremely high and 0.77% extremely low. Among 138 OBC/MOBC respondents who had achieved high in their academics, 41.30% had normal, 31.16% had low, 19.57% had extremely low, 6.52% had high and only 1.45% had extremely high level of anxiety.

Out of 66 ST respondents who performed average in their academics, 84.85% had normal, 6.06% had high, 4.55% had low, 3.03% had extremely high and 1.52% had extremely low level of anxiety. Among 30 ST respondents who had achieved high in academics, 40% had normal, 30% had extremely low, 26.67% had low and only 3.33% had above normal anxiety. In case of 27 ST's low academic achievers, approximately 74% had normal and 26% had high; while none of the ST's low achievers had below normal and extremely high level of anxiety.

Among 44 SC respondents with average academic achievement, 81.82% had normal followed by 13.64% had low, 2.27% each had high and extremely high level of anxiety, while none of the SC's average achievers had extremely low level of anxiety. Out of 35 SC's low academic achievers, 54.29% had normal, 31.43% had high, 8.57% had extremely high and 5.71% had low level of anxiety. Among 18 respondents who had performed high in their academics, 44.44% had normal anxiety followed by 33.33% had low, 16.67% had extremely low and only 5.56% had high level of anxiety, while none of the SC's high achievers had extremely high level of anxiety.

Overall observation of the above table reflects that maximum number of average academic achievers belong to various categories

possess normal anxiety. Anxiety is a very common symptom and a certain amount is useful to the students as it acts as a stimulant and increases efficiency in their learning situation.

4.6.4 Relationship between Anxiety and Academic Achievement of the respondents of various categories

Table 4.6.4 presents the relationship between anxiety and academic achievement of the respondents belongs to various categories. The coefficient of correlation the above mentioned variables of General category is 'ɤ' -.55. This value indicates a negative and significant relationship. It means anxiety is negatively related to academic achievement of General category students. The calculated 'ɤ' value of OBC/MOBC respondents is -.54 and it is significant at .01 level of confidence. It indicates that anxiety is negatively related with academic achievement of this category student.

Table 4.6.4 *Relationship between Anxiety and Academic Achievement of the respondents of various categories*

Category	Variable Correlated	N	'ɤ' Value	Level of Significance
General	Anxiety and Academic Achievement	322	-.55	.01 level
OBC/MOBC	Anxiety and Academic Achievement	658	-.54	.01 level
ST	Anxiety and Academic Achievement	123	-.44	.01 level
SC	Anxiety and Academic Achievement	97	-.55	.01 level

The obtained 'ɤ' value between these two variables in case of ST respondents is -.44, which is significant at .01 level of confidence. The 'ɤ'

value of this category indicates that anxiety is negatively related to academic achievement of the students, but the degree of relationship is slightly low. In case of SC respondents, the obtained 'ɤ' value is -.55, which is significant at .01 level of confidence. It means both the variables are negatively related to each other.

The overall result in table 4.6.4 reflects that anxiety and academic achievement of the respondents are negatively related to each other. The negative correlation states that if the level of anxiety increase then the academic achievement of the students will decrease.

4.6.5 Comparison of means of High and Low academic achiever groups on Anxiety

To examine the significance of mean difference between high and low academic achievers on anxiety, 't' test was employed. Table 4.6.5 depicts the significance of difference between two means of high and low academic achiever groups on their anxiety.

Table 4.6.5 *Comparison of means of High and Low academic achiever groups on Anxiety*

Anxiety	Academic Achievers				't' Value	Degrees of freedom	Level of significance
	High N=324		Low N=324				
	Mean	SD	Mean	SD			
	32.91	15.88	55.95	10.93	21.52	646	.01 level

The mean and SD of high academic achievers' are 32.91 and 15.88; while the mean and SD of low achievers' are 55.95 and 10.93. The obtained 't' value is 21.52 which is significant at .01 level of confidence. It means these two groups differ significantly on anxiety.

Similar results were reported by Ravinder, 1977; Thilagavathi, 1990; and Yasin, *et al.,* 2011.

4.7 Relationship between Academic Achievement and other Socio-economic variables of the respondents

To fulfill the objective seven, the relationships between various socio-economic variables i.e. category, religion, types of family, parental education, sex and rural/urban residence of the respondents and academic achievement, the percentages were calculated and to find out the relationship between per capita income and academic achievement the coefficient of correlation was computed.

4.7.1 Distribution of respondents' Academic Achievement by their Category

Table 4.7.1 shows the distribution of respondents' academic achievement by their category. Out of 1200 respondents, 54.83% were OBC/MOBC followed by 26.83% General, 10.25% ST and 8.08% SC. Among all, 39.58% were average academic achievers, 34.5% were low academic achievers and 25.92% were high academic achievers.

Out of 658 OBC/MOBC respondents, 39.67% were low, 39.36% were average and 20.97% were high academic achievers. Among general category respondents, 38.82% had achieved high in academics followed by 32.92% average and 28.26% low. Out of 123 ST respondents, 53.66% were average academic achievers, 24.39% were high and 21.95% low academic achievers. In case of 97 SC respondents, 45.36% were average achievers, 36.08% were low achievers and 18.56% were high academic achievers.

Table 4.7.1 *Distribution of respondents' Academic Achievement by their Category*

Category	Academic Achievement			Grand Total
	High	Average	Low	
General	125 (38.82)	106 (32.92)	91 (28.26)	322 (26.83)
OBC/MOBC	138 (20.97)	259 (39.36)	261 (39.67)	658 (54.83)
ST	30 (24.39)	66 (53.66)	27 (21.95)	123 (10.25)
SC	18 (18.56)	44 (45.36)	35 (36.08)	97 (8.08)
Total	311 (25.92)	475 (39.58)	414 (34.5)	1200

*Figures in Parentheses are percentages

Amongst all categories, the academic achievement (Average & above) of ST was approximately 78% followed by General category 72%, SC 63% and OBC/MOBC 60%. In other words, the largest proportion of OBC/MOBC category respondents had low level of academic achievement followed by SC, General and ST. The data in table 4.7.1 reflects that respondents' academic achievement has no relation with their social categories. Therefore, H_4 is accepted.

4.7.2 Distribution of respondents' Academic Achievement by their Religion

Table 4.7.2 shows the distribution of respondents' academic achievement by their religion. Out of 1200 respondents, 81.67% were Hindu followed by 10.58% Muslim, 3.83% Christian, 2.25% Buddhist and 1.67% Sikh. Among all, 39.58% were average, 34.5% were low and 25.92% were high academic achievers.

Out of 980 Hindus, 36.53% were average academic achievers, 36.22% were low academic achievers and 27.24% were high academic achievers. Among 127 Muslims, 48.82% were average academic

achievers followed by 33.86% low and 17.24% high. Out of 46 Christians, 58.70% were average academic achievers, 21.73% were low and 19.57% were high academic achievers. In case of 27 Buddhist respondents, 55.56% were average academic achievers followed by 25.93% high and 18.52% low. Out of 20 Sikhs, 65% were average, 30% were high and 5% were low academic achievers.

Table 4.7.2 *Distribution of respondents' Academic Achievement by their Religion*

Religion	Academic Achievement			Grand Total
	High	Average	Low	
Hinduism	267 (27.24)	358 (36.53)	355 (36.22)	980 (81.67)
Islam	22 (17.24)	62 (48.82)	43 (33.86)	127 (10.58)
Christianity	9 (19.57)	27 (58.70)	10 (21.73)	46 (3.83)
Buddhism	7 (25.93)	15 (55.56)	5 (18.52)	27 (2.25)
Sikhism	6 (30.00)	13 (65.00)	1 (5.00)	20 (1.67)
Total	311 (25.92)	475 (39.58)	414 (34.5)	1200

*Figures in Parentheses are percentages

Table 4.7.2 reflects that 95% Sikhs were average and above in academic achievement, followed by approximately 81% Buddhists, 78% Christians, 66% Muslims and 64% Hindus. It means largest proportions of Hindus are low in academic achievement followed by Muslim, Christian, Buddhist and Sikhs. Though the representation of Sikh, Buddhist and Christian is negligible in the sample (approximately 8% in total sample of the study), who are probably migrated from other states/places, either for job, or for business purpose. Obviously, three religious communities have better socio-economic and educational conditions than that of indigenous native groups, who are mainly engaged either in agriculture/labour or in small scale business and have

poor socio- economic- educational conditions than Christian, Buddhist and Sikhs. The effect of these religious groups who can provide better opportunities and amenities for educating their children and are also adaptive to modern technologies, increases the proportion respondent's academic achievement. Table 4.7.2 also reflects that religion has no relation with respondents' level of academic achievement. Hence, H$_4$ is accepted.

4.7.3 Distribution of respondents' Academic Achievement by their types of Family

Table 4.7.3 shows the distribution of respondents' academic achievement by their types of family. Out of 1200 respondents, 79.67% lives in nuclear family, 18% lives in joint family and 2.33% lives in extended family. Among all, 39.58% had achieved average in academics followed by 34.5% low and 25.92% high.

Table 4.7.3 *Distribution of respondents' Academic Achievement by their types of Family*

Types of Family	Academic Achievement			Grand Total
	High	Average	Low	
Nuclear	261 (27.30)	378 (39.54)	317 (33.16)	956 (79.67)
Joint	44 (20.37)	86 (39.81)	86 (39.81)	216 (18.00)
Extended	6 (21.43)	11 (39.29)	11 (39.29)	28 (2.33)
Total	311 (25.92)	475 (39.58)	414 (34.5)	1200

*Figures in Parentheses are percentages

Out of 956 respondents who live in nuclear family, 39.54% were average academic achievers, 33.16% were low academic achievers and 27.30% were high academic achievers. Among 216 respondents who live in joint family, 39.81% were average, 39.81% were low and 20.37% were

high academic achievers. In case of 28 respondents who live in extended family, 39.29% each were average and low academic achievers followed by 21.43% high academic achievers.

An observation of table 4.7.3 reflects that larger proportion of respondents belongs to nuclear family had achieved high in academics (67%, average & above) followed by extended (61%, average & above) and Joint (60%, average & above), while the proportions of respondents with low academic achievement were larger in case of joint, extended and nuclear family. The academic achievement of the respondents living in nuclear family is better than joint & extended family, perhaps the parents of such family can provide more attention, proper guidance and close supervision to their children's studies and can spend more money and arrange better educational environment at home. It appears that respondents' level of academic achievement has no relation with their types of family. Hence, H_4 is accepted.

Egunsola (2014) reported that family type and family size have significant influence on students' academic performance.

4.7.4 Distribution of respondents' Academic Achievement by their Father's level of education

Table 4.7.4 shows the respondents' academic achievement by their father's level of education. Out of 1200, 486 (40.5%) respondents father's level of education was up to the high school followed by 285 (23.75%) Higher Secondary/Intermediate, 365 (30.42%) graduate and onwards degree holders, and 64 (5.33%) were either illiterate or literate without formal education.

Among those whose father's level of education was up to the high school, 54.94% were low academic achievers followed by 38.48% average and 6.58% high. Out of 365 respondents with highly educated father,

56.71% were high academic achievers, 33.70% were average academic achievers and 9.59% were low academic achievers. Among 285 respondents whose father was Higher Secondary/Intermediate, 51.23% were average academic achievers followed by 24.91% low achievers and 23.86% high achievers. In case of those respondents whose father was either illiterate or literate without formal education, among them, 64.06% were low academic achievers followed by 29.69% average and 6.25% high academic achievers.

Table 4.7.4 *Distribution of respondents' Academic Achievement by their Father's level of education*

Father's Level of Education	Academic Achievement			Grand Total
	High	Average	Low	
Illiterate/ Literate (without formal education)	4 (6.25)	19 (29.69)	41 (64.06)	64 (5.33)
Up to High School	32 (6.58)	187 (38.48)	267 (54.94)	486 (40.5)
Higher Secondary/ Intermediate	68 (23.86)	146 (51.23)	71 (24.91)	285 (23.75)
Graduate & onwards	207 (56.71)	123 (33.70)	35 (9.59)	365 (30.42)
Total	311 (25.92)	475 (39.58)	414 (34.5)	1200

*Figures in Parentheses are percentages

The above table reflects that academic achievement of the respondent's increases with the increase of father's level of education. Hence, H4 is rejected. Since, educated father has a wide experience, knowledge and information, therefore, it becomes easier for them to handle their adolescent children. As and when it is required, such fathers can guide and counsel them to achieve better in academics.

Similar results were reported by Eccless, 2005; Farooq, *et al.* 2011; and Diaz, (n.d.).

4.7.5 Distribution of respondents' Academic Achievement by their Mother's level of education

Table 4.7.5 shows the distribution of respondents' academic achievement by their mother's level of education. Out of 1200, 601 (59.08%) respondents mother's level of education was up to high school, 253 (21.08%) were Higher Secondary/Intermediate, 220 (18.33%) were graduate and onward degree holders, while 126 (10.5%) were either illiterate or literate without formal education.

Table 4.7.5 *Distribution of respondents' Academic Achievement by their Mother's level of education*

Mother's Level of Education	Academic Achievement			Grand Total
	High	Average	Low	
Illiterate/ Literate (without formal education)	12 (9.52)	51 (40.48)	63 (50.00)	126 (10.5)
Up to High School	71 (11.81)	251 (41.76)	279 (46.42)	601 (50.08)
Higher Secondary/ Intermediate	82 (32.41)	112 (44.27)	59 (23.32)	253 (21.08)
Graduate & onwards	146 (66.36)	61 (27.73)	13 (5.91)	220 (18.33)
Total	311 (25.92)	475 (39.58)	414 (34.5)	1200

*Figures in Parentheses are percentages

Among 601 respondents whose mother's level of education was up to the high school, 46.42% were low academic achievers, 41.76% were average academic achievers and 11.81% were high academic achievers. Out of 253 respondents whose mother was Higher Secondary/ Intermediate passed, 44.27% were average academic achievers followed by 32.41% high and 23.32% low. Among those respondents with highly educated mother, 66.36% were high academic achievers, 27.73% were average and 5.91% were low academic achievers. In case of 126 respondents with illiterate or just literate mother, 50% were low

academic achievers followed by 40.48% average and 9.52% high academic achievers.

Table 4.7.5 reflects that mother's level of education is positively related to the respondents' academic achievement. It is observed that with the increase of level of education of mothers, the academic achievement of the respondents' also increase. Hence, H_4 is rejected. There is a saying that if 'you educate a female/girl you educate the whole family'. Educated mothers keep on encouraging & influencing their children throughout the life. Generally, highly educated mother spends more time to help their children in academics than the less educated or uneducated mothers. The adolescents learn better at home under the guidance of educated mother. Consequently, educated mother's children perform better in examination and achieve greater success in academics.

Similar results were reported by Englund, *et al.* 2004; Parveen & Alam, 2008; Bala, 2011; and Reza, *et al.* 2011.

4.7.6 Distribution of respondents' Academic Achievement by their Sex

Table 4.7.6 shows the distribution of respondents' academic achievement by their sex. Out of 1200 respondents, 57.33% were female and 42.67% were male, among them, 39.58% had achieved average in academics followed by 34.5% low and 25.92% high. Among 688 female respondents, 39.83% were low academic achievers, 39.68% were average academic achievers and 20.49% were high academic achievers. In case of 512 male respondents, 39.45% were average in academics followed by 33.20% high and 27.34% low.

Table 4.7.6 *Distribution of respondents' Academic Achievement by their Sex*

Sex	Academic Achievement			Grand Total
	High	Average	Low	
Male	170 (33.20)	202 (39.45)	140 (27.34)	512 (42.67)
Female	141 (20.49)	273 (39.68)	274 (39.83)	688 (57.33)
Total	311 (25.92)	475 (39.58)	414 (34.5)	1200

*Figures in Parentheses are percentages

An observation of table 4.7.6 reflects that the proportion of male respondents with high academic achievement was higher than the female respondents; while the proportions of female respondents with average and low academic achievement were much higher than that of male respondents, therefore, it can be concluded that in comparison to females (60.17%, average & high academic achievement), males (72.66% average & above) perform better in academics in Jorhat district. The data in table 4.7.6 further reflects that sex has no relation with respondents' academic achievement. Therefore, H_4 is accepted.

4.7.7 Comparison of means of Male and Female respondents in their Academic achievement

Table 4.7.7 reveals the mean, standard deviation and 't' value of male and female respondents on their academic achievement. The mean value of male respondents is 54.96 and SD is 13.83, while the mean

Table 4.7.7 *Comparison of means of Male and Female respondents in their Academic Achievement*

	Sex				't' Value	Degrees of freedom	Level of significance
	Male N=512		Female N=688				
Academic Achievement	Mean	SD	Mean	SD			
	54.96	13.83	50.88	12.86	5.23	1198	.01 level

value of female respondents is 50.88 and SD is 12.86.

The obtained value of 't' is 5.23 which is significant at .01 level of confidence. The result reflects that male and female respondents differ significantly in their academics. The table further indicates that male respondents of Jorhat district are better in their academics than their female counterparts.

4.7.8 Distribution of respondents' Academic Achievement by their Rural/Urban residence

Table 4.7.8 shows the distribution of respondents' academic achievement by their rural/urban residence. Out of 1200 respondents, approximately 69% were rural residents and 31% were urban residents, among them, 39.58% were average academic achievers followed by 34.5% low and 25.92% high academic achievers. Among 830 rural resident respondents, 44.22% were low academic achievers, 37.47% were average academic achievers and 18.31% were high academic achievers. In case of 370 urban residents, 44.32% were average academic achievers followed by 42.97% high and 12.70% low academic achievers.

Table 4.7.8 *Distribution of respondents' Academic Achievement by their Rural/Urban residence*

Residence	Academic Achievement			Grand Total
	High	Average	Low	
Rural	152 (18.31)	311 (37.47)	367 (44.22)	830 (69.17)
Urban	159 (42.97)	164 (44.32)	47 (12.70)	370 (30.83)
Total	311 (25.92)	475 (39.58)	414 (34.5)	1200

*Figures in Parentheses are percentages

An observation of table 4.7.8 reveals that higher proportion (approximately 87%, average & above in academics) of urban residents

had achieved high in academics than that of rural residents (approximately 56%, average & above); while the proportions of rural residents with low academic achievement were larger than the urban residents. Table 4.7.8 also reflects that respondents' rural/urban residence has no relation with their academic achievement. Hence, H_4 is accepted.

4.7.9 Comparison of means of Rural and Urban respondents in their Academic Achievement

Table 4.7.9 shows the comparison of means and SDs of rural and urban respondents in their academic achievement. The mean value of rural respondents is 49.68 and SD is 12.63; while the mean value of urban respondents is 59.22 and SD is 12.83. The calculated 't' value is 11.93 which is significant at .01 level of confidence. It means both the groups of respondents i.e. rural and urban differ significantly in their academics.

Table 4.7.9 *Comparison of means of Rural and Urban respondents in their Academic Achievement*

Academic Achievement	Rural/Urban Residence				't' Value	Degrees of freedom	Level of significance
	Rural N=830		Urban N=370				
	Mean	SD	Mean	SD			
	49.68	12.63	59.22	12.85	11.93	1198	.01 level

The table reveals that urban respondents' Mean is 59.22 and rural respondents' Mean is 49.68. Since, the Mean value of Urban respondents academic achievement are greater than the Mean value of Rural respondents, therefore, it can be safely concluded that Urban

respondents of Jorhat District show better performance in academics than that of Rural respondents.

4.7.10 Relationship between Per capita Income and Academic Achievement of the respondents

Table 4.7.10 shows the relationship between per capita income and academic achievement of the respondents. The value of coefficient of correlation is .51, which is significant at .01 level.

Table 4.7.10 *Relationship between Per capita Income and Academic Achievement of the respondents*

Variable Correlated	'ɤ' Value N=1200	Level of Significance
Per capita income and Academic Achievement	.51	.01 level

The 'ɤ' value denotes that per capita income and academic achievement is positively related to each other. It means family per capita income certainly influences students' academic performance. Therefore, H_4 is rejected.

In the twenty first century, education is considered as an investment. Perhaps, the families with low per capita income are unable to afford the entire necessity for the academic attainment of their young child. Adolescents' from poor family background generally support their family in earning the bread and butter and also support in household activities. They are forced to assist their parents, consequently their achievement in academics declines. In turn, the adolescents, whose family's per capita income is more, can afford the necessary hardware as well as software materials, tuitions and are well exposed to electronic &

print media for their studies and get full cooperation and support from the family members, which make them to perform well in examination.

Similar results were reported by Juma, *et al.*, 2012; and Okioga, 2013.

4.8 Family Environment, Stress and Academic Achievement of the respondents

To fulfil the objective eight, the interrelationship between family environment, stress and academic achievement of the respondents, the percentages were calculated and to find out the interaction effects of these variables, ANCOVA was used.

4.8.1 Relationship between Family Environment, Stress and Academic Achievement of the respondents

Table 4.8.1 shows the interrelationship between family environment, stress and academic achievement of the respondents. Out of 1200 respondents, 475 (39.58%) were average academic achievers, 414 (34.5%) were low achievers and 311 (25.92%) were high achievers.

Out of 311 respondents who performed high in academics, 63.67% had favourable family environment followed by 34.73% moderate and 1.61% unfavourable, whereas 49.20% had average, 46.62% had low and 4.18% had high level of stress. Among 198 high academic achievers with favourable family environment, 49.49% had average level of stress followed by 45.96% low and 4.55% high. Out of 108 high academic achievers with moderate family environment, 49.07% each had average and low level of stress and only 1.85% had high level of stress. Among 5 respondents with unfavourable family environment but they had achieved high in academics, 40% each had high and average level of stress, and 20% had low level of stress.

Table 4.8.1 *Relationship between Family Environment, Stress and Academic Achievement of the respondents*

Stress	Academic Achievement											
	High N= 311				Average N = 475				Low N = 414			
	Family Environment				Family Environment				Family Environment			
	Favourable	Moderate	Unfavourable	Total	Favourable	Moderate	Unfavourable	Total	Favourable	Moderate	Unfavourable	Total
High	9 (4.55) N = 198	2 (1.85) N = 108	2 (40.00) N = 5	13 (4.18) N = 311	-	14 (3.37) N = 416	3 (12.00) N = 25	17 (3.58) N = 475	1 (11.11) N = 9	68 (20.48) N = 332	15 (20.55) N = 73	84 (20.29) N = 414
Average	98 (49.49) N = 198	53 (49.07) N = 108	2 (40.00) N = 5	153 (49.20) N = 311	24 (70.59) N = 34	358 (86.06) N = 416	20 (80.00) N = 25	402 (84.63) N = 475	7 (77.78) N = 9	242 (72.89) N = 332	55 (75.34) N = 73	304 (73.43) N = 414
Low	91 (45.96) N = 198	53 (49.07) N = 108	1 (20.00) N = 5	145 (46.62) N = 311	10 (29.41) N = 34	44 (10.58) N = 416	2 (8.00) N = 25	56 (11.79) N = 475	1 (11.11) N = 9	22 (6.63) N = 332	3 (4.11) N = 73	26 (6.28) N = 414
Total	198 (63.67) N = 311	108 (34.73) N = 311	5 (1.61) N = 311	311 25.92 N = 1200	34 (7.16) N = 475	416 (87.58) N = 475	25 (5.26) N = 475	475 (39.58) N = 1200	9 (2.17) N = 414	332 (80.19) N = 414	73 (17.63) N = 414	414 (34.5) N = 1200

*Figures in Parentheses are percentages

Out of 475 average academic achievers, 87.58% had moderate, 7.16% had favourable and 5.26% had unfavourable family environment; whereas 84.63% had average level of stress followed by 11.79% low and 3.58% high. Among 416 average academic achievers with moderate family environment, 86.06% had average, 10.58% had low and 3.37% had high level of stress. Out of 34 average academic achievers with favourable family environment, 70.59% had average and 29.41% had low level of stress; while none of them had high level of stress. In case of 25 average achievers with unfavourable family environment, 80% had average stress followed by 12% high and 8% low. The percentage reflects that the maximum students i.e. 86.06% who had moderate family environment also had average level of stress.

Out 414 low academic achievers, 80.19% had moderate, 17.63% had unfavourable and only 2.17% had favourable family environment; among them, 73.43% had average level of stress followed by 20.29% high and 6.28% low. Among 332 low academic achievers with moderate family environment, 72.89% had average, 20.48% had high and 6.63% had low level of stress. Out of 73 respondents who performed low in academics and they live in the families with unfavourable environment, 75.34% had average level of stress followed by 20.55% high and 4.11% low. In case of 9 low academic achievers with favourable family environment, 77.78% had average and 11.11% each had high and low level of stress.

4.8.2 Interaction effects of Family Environment and Stress on Academic Achievement of the respondents

Table 4.8.2 shows the interaction effects of family environment and stress on academic achievement of the respondents. The obtained 'F' value of variable 'family environment' is 18.23, which is significant at .01 level. The 'F' value of 'Stress' is 2.93, which is significant at .01 level of

confidence. It indicates that both variables significantly affect the academic achievement of the students.

Table 4.8.2 *Interaction effects of Family Environment and Stress on Academic Achievement of the respondents*

Source of variation	df	F	Sig.
'A' (Family Environment)	74	18.23	.01 level
'B' (Stress)	88	2.93	.01 level
'A' x 'B' (Family environment x Stress)	852	1.48	.01 level

The interaction effects of variable 'A' x 'B', family environment and stress have significant effect on academic achievement of the students. Thus, H_5 is retained.

4.9 Family Environment, Anxiety and Academic Achievement of the respondents

To fulfil the objective nine, the interrelationship between family environment, anxiety and academic achievement of the respondents, the percentages were calculated and to find out the interaction effects of these variables, ANCOVA was used.

4.9.1 Relationship between Family Environment, Anxiety and Academic Achievement of the respondents

Table 4.9.1 reflects interrelationship between family environment, anxiety and academic achievement of the respondents. Out of 311 respondents who had performed high in academics, 53.37% had below

Table 4.9.1 *Relationship between Family Environment, Anxiety and Academic Achievement of the respondents*

Level of Anxiety	Academic Achievement											
	High N= 311				Average N = 475				Low N = 414			
	Family Environment				Family Environment				Family Environment			
	Favourable	Moderate	Unfavourable	Total	Favourable	Moderate	Unfavourable	Total	Favourable	Moderate	Unfavourable	Total
Extremely High Anxiety	4 (2.02) N = 198	-	-	4 (1.29) N = 311	6 (17.65) N = 34	6 (1.44) N = 416	-	12 (2.53) N = 475	1 (11.11) N = 9	20 (6.02) N = 332	3 (4.11) N = 73	24 (5.80) N = 414
High Anxiety	12 (6.06) N = 198	1 (0.93) N = 108	-	13 (4.18) N = 311	5 (14.71) N = 34	50 (12.02) N = 416	1 (4.00) N = 25	56 (11.79) N = 475	3 (33.33) N = 9	75 (22.59) N = 332	35 (47.95) N = 73	113 (27.29) N = 414
Normal Anxiety	67 (33.84) N = 198	60 (55.56) N = 108	1 (20.00) N = 5	128 (41.16) N = 311	18 (52.94) N = 34	329 (79.09) N = 416	20 (80.00) N = 25	367 (77.26) N = 475	5 (55.56) N = 9	227 (68.37) N = 332	33 (45.21) N = 73	265 (64.01) N = 414
Low Anxiety	57 (28.79) N = 198	34 (31.48) N = 108	2 (40.00) N = 5	93 (29.90) N = 311	3 (8.82) N = 34	29 (6.97) N = 416	3 (12.00) N = 25	35 (7.37) N = 475	-	10 (3.01) N = 332	1 (1.37) N = 73	11 (2.66) N = 414
Extremely Low Anxiety	58 (29.29) N = 198	13 (12.04) N = 108	2 (40.00) N = 5	73 (23.47) N = 311	2 (5.88) N = 34	2 (0.48) N = 416	1 (4.00) N = 25	5 (1.05) N = 475	-	-	1 (1.37) N = 73	1 (0.24) N = 414
Total	198 (63.67) N = 311	108 (34.73) N = 311	5 (1.61) N = 311	311 (25.92) N = 1200	34 (7.16) N = 475	416 (87.58) N = 475	25 (5.26) N = 475	475 (39.58) N = 1200	9 (2.17) N = 414	332 (80.19) N = 414	73 (17.63) N = 414	414 (34.5) N = 1200

*Figures in Parentheses are percentages

normal anxiety followed by 41.16% normal and 5.47% above normal anxiety. Among 198 high academic achievers with favourable family environment, 58.08% had below normal, 33.84% had normal, and 8.08% had above normal anxiety. In case of 108 high academic achievers with moderate family environment, 55.56% had normal, 43.52% had below normal and only 0.93% had above normal anxiety. Out of 5 respondents who had achieved high in academics but they belong to the families with unfavourable environment, 80% had below normal anxiety and 20% had normal anxiety, while none of them had above normal anxiety. Since there is a very less representation shown in this category, therefore it would not be wise to draw any conclusion.

Out of 475 average academic achievers, 77.26% had normal anxiety followed by 14.32% above normal and 8.42 below normal anxiety. Among 416 average academic achievers with moderate family environment, 79.09% had normal, 13.46% had above normal and 7.45% had below normal anxiety. Out of 34 average academic achievers with favourable family environment, 52.94% had normal anxiety followed 32.36% above normal and 14.7% below normal anxiety. In case of 25 average academic achievers who belong to the families with unfavourable environment, 80% had normal, 16% had below normal and only 4% had above normal anxiety.

Out of 414 low academic achievers, 64.1% had normal, 33.09% had above normal and only 2.9% had below normal anxiety. Among 332 low academic achievers with moderate family environment, 68.37% had normal anxiety followed by 28.61% above normal and 3.01% below normal. In case of 73 low academic achievers with unfavourable family environment, 52.06% had above normal anxiety followed by 45.21% normal anxiety and 2.74% below normal anxiety. Among 9 low academic achievers who belong to the families with favourable environment,

55.56% had normal and 44.44% had above normal anxiety; while none of them had below normal anxiety.

4.9.2 Interaction effects of Family Environment and Anxiety on Academic Achievement of the respondents

Table 4.9.2 reveals the interaction effects between family environment, anxiety on academic achievement of the respondents. The 'F' value shows that the main effects of 'A' family environment and 'B' anxiety. The 'F' value of family environment is 10.60, which is significant at .01 level. It means that variable 'A', family environment significantly affects the academic achievement of the students. The obtained 'F' value of variable 'B', anxiety is 3.68, which is significant beyond .01 level of confidence. The result shows that anxiety has a significant effect on academic achievement of the students.

Table 4.9.2 *Interaction effects of Family Environment and Anxiety on Academic Achievement of the respondents*

Source of variation	df	F	Sig.
'A' (Family Environment)	74	10.60	.01 level
'B' (Anxiety)	83	3.68	.01 level
'A' x 'B' (Family Environment x Anxiety)	843	1.07	Not Significant

The interaction effects of variable 'A' x 'B', family environment and anxiety shows insignificant result. It means both variables separately affect the academic achievement of the students and no joint interaction effect was seen. Therefore, H_6 is partially retained.