CHAPTER – V

Interpretation

CHAPTER – V :

ANALYSIS AND INTERPRETATION OF DATA:

QUANTITATIVE ANALYSIS

Analysis of data and tabulation provides systematically organized information that is precise and clear so as to yield answer to the research problem. It involves a number of clearly related, specific operations, to obtain sorted out facts and figures, placed in appropriate setting and consistent reliable relationship, for inference and verification of the hypothesis.

The present chapter covers 65 tables involving six sections. Section – I provides background profile of respondents. Section – II classifies students according to frequency of stress experienced. Section – III deals with distribution of students with higher stress according to various background variables. Bi – variate data analysis of background variables and level of stress for all the four components of stress (scale of stress administered) is given in Section – IV. Section – V deals with correlations between achievement and different types of stress (four scales of stress). In Section – IV factorial analysis is provided.

The primary data (information), collected from the respondents (students) through pre – tested questionnaire is presented in table form with frequency distribution and cross tabulation.

To check the association between two attributes statistical test named "Chi – Square test" is applied and corresponding p – value is also provided. Here the significance (l.o.s.) is fixed at 5% level (i.e. if p – value is less than 0.05, the null hypothesis is rejected and if p – value is more than or equal to 0.05, null hypothesis is accepted at 5% l.o.s.).

For testing relationship between different variable the bi-variate correlation is obtained and corresponding p-value is mentioned. To know the influence (dependency) of different variable on stress, the statistical analysis is extended to mixed factorial analysis and ANOVA (Analysis of Variance) test is obtained. Below the discussion is divided in to six parts.

Refer Chapter – 6 "Discussion" for comparison and detailed discussion of relationship between different variables which are analyzed in this chapter.

Section – I

- **Background profile of respondents**

Table – 1 : Taluka wise distribution of students in context to total sample size

Taluka	No. of students	Percentage
Anand	222	37.0
Borsad	188	31.3
Umreth	190	31.7
Total	600	100.0

In the present study 600 students are taken. The sample is selected from three talukas of Anand District, having a large number of schools. From Anand taluka 222 (37.0%), Borsad taluka 188 (31.3%) and Umreth taluka 190 (31.7%) student are taken.

Table – 2 : Habitat wise distribution of students in context to total sample size

Habitat	No. of students	Percentage
Rural	314	52.3
Urban	286	47.7
Total	600	100.0

Almost equal number of students are taken from urban & rural habitats. From Urban habitat 314 (52.3%) whereas from rural habitat 286 (47.7%) students are taken.

Figure – 1 : Distribution of respondents according to Habitat

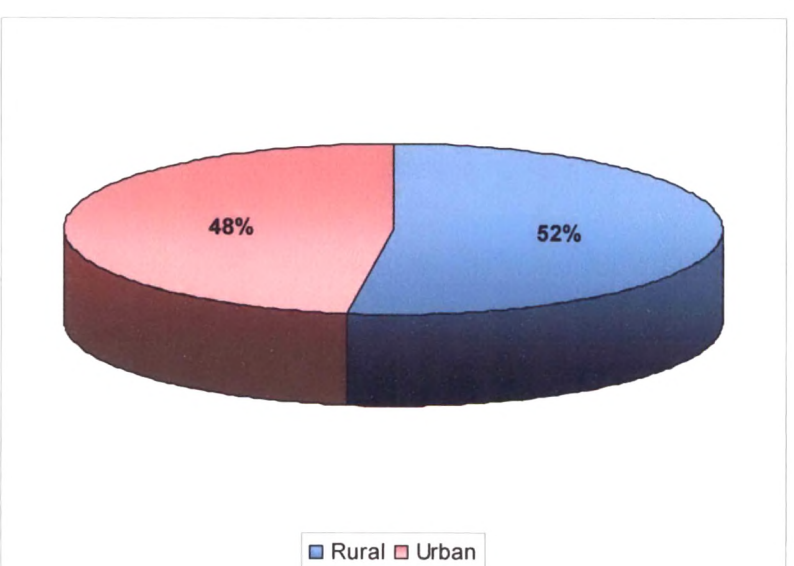


Table – 3 : Distribution of students according to their academic score of the previous year's final examination result in context to total sample size

Academic Score of the previous year's final examination	No. of students	Percentage
<65%	427	71.2
>=65%	173	28.8
Total	600	100.0

Out of the 600 students, 427 (71.2%) have low academic score (<65%) whereas 173 (28.8%) students have high academic score (>= 65 %).

Figure – 2 : Distribution of respondents according to their achievement score

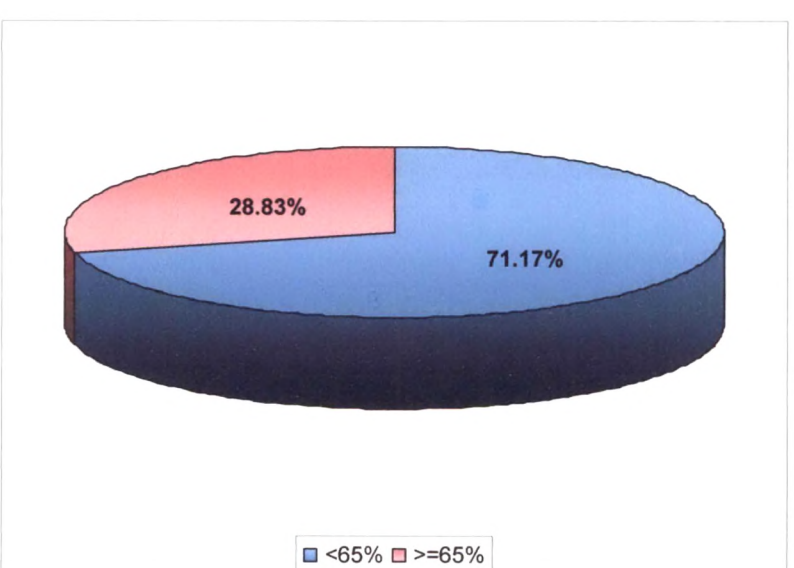


Table – 4 : Gender wise distribution of students in context to total sample size

Gender	No. of students	Percentage
Male	321	53.5
Female	279	46.5
Total	600	100.0

The gender proportion in this study is almost equal. There are 321 (53.5%) boys and 279 (46.5%) girls.

Table – 5 : Distribution of students according to their type of family in context to total sample size

Type of family	No. of students	Percentage
Joint	359	59.83
Nuclear	241	40.17
Total	600	100.0

Among the selected students higher proportion 359 (59.83%) are from joint families whereas 241 (40.17%) are from nuclear families, the reason may be the influence of rural society.

Figure – 3 : Distribution of students according to their type of family

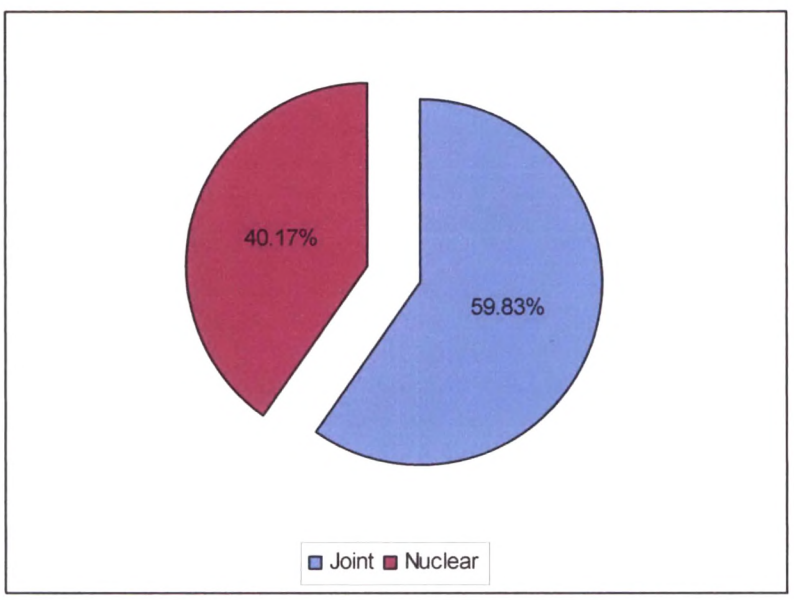


Table – 6 : Distribution of students according to the education of their parents in context to total sample size

Parent's education	No. of students	Percentage
Uneducated	122	20.33
Primary	263	43.83
Higher Secondary	118	19.67
Higher	97	16.17
Total	600	100.0

The above table depicts that, 122 (20.33%) students have parents who are uneducated whereas 263 (43.83%) student's parents have studied up to primary and 118 (19.67%) up to higher secondary. Only 97 (16.17%)of student's parents have higher education, the reason may be once again attributed to the rural society.

Figure – 4 : Distribution of respondents according to their parent's education

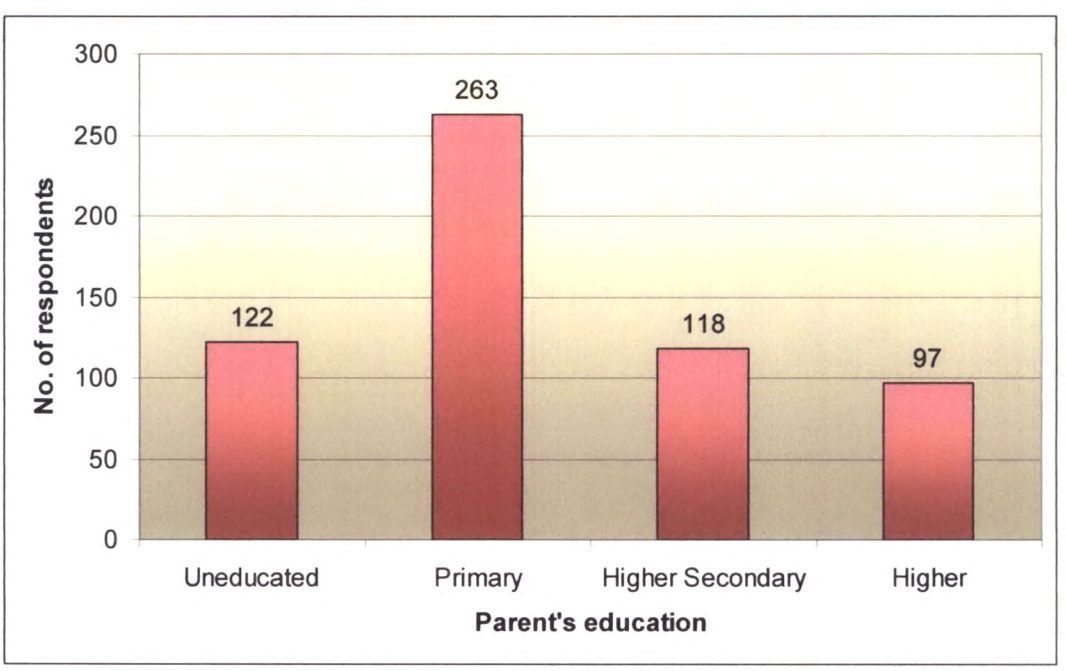


Table – 7 : Distribution of the students according to their Ordinal position in context to total sample size

Ordinal Position	No. of students	Percentage
Youngest	215	35.83
Middle	199	33.17
Eldest	186	31.00
Total	600	100.0

215 (35.83%) are youngest in their family whereas 199 (33.17) are the middle child or the second out of four children and 186 (31.00 %) are the eldest.

Figure – 5 : Distribution of respondents according to their ordinal position

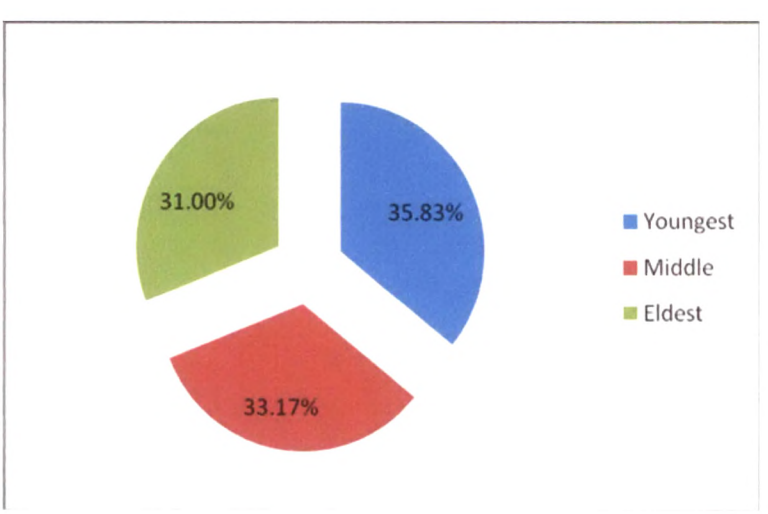
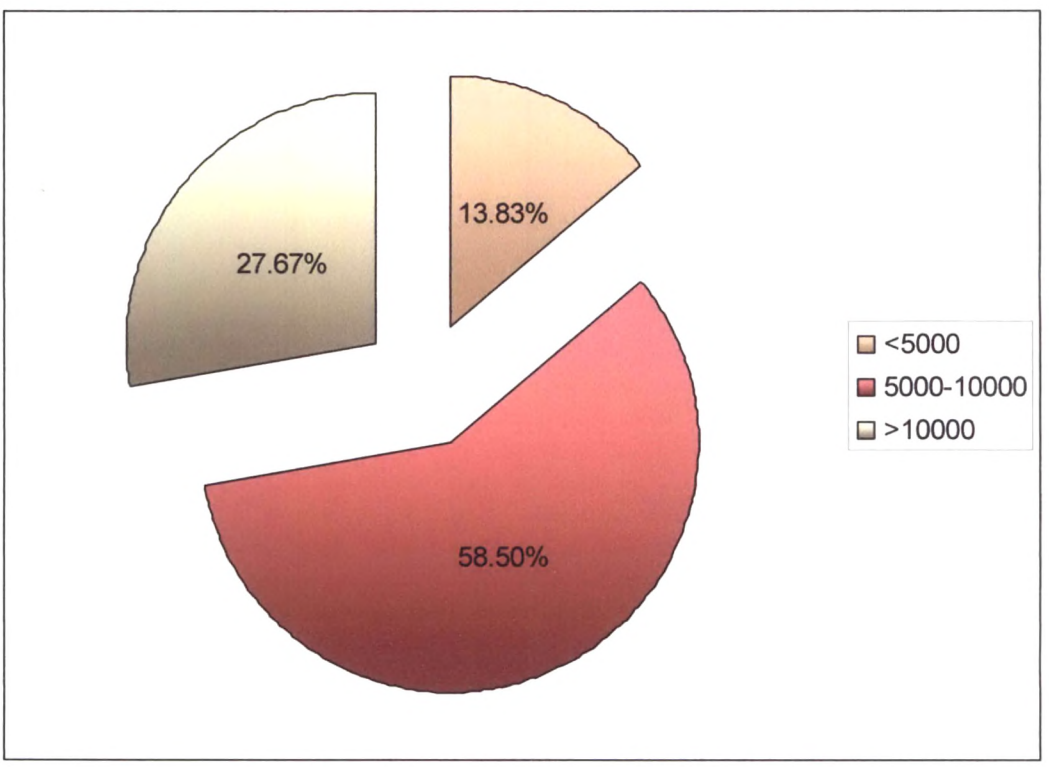


Table – 8 : Distribution of the students according to the monthly family income in context to total sample size

Monthly Family Income (in Rs.)	No. of students	Percentage
<5000	83	13.83
5000-10000	351	58.50
>10000	166	27.67
Total	600	100.0

351 (58.50%) students have monthly family income less than Rs. 5000 whereas 166 (27.675) have between Rs. 5000 to Rs. 10000 and only 83 (13.83%) have monthly income more than Rs. 10000. The reason can be that many students have parents as landless labourers or some as are daily wage earners.

Figure – 6 : Distribution of respondents according to their monthly family income



Section - II

- **Classification of students according to frequency of stress experienced**

Table – 9 : Percentile of answers given by students

Percentiles	Value of coded answers
30	3.00
31	3.00
69	4.00
70	4.00

Various percentiles of the answer coding given by students are coded. 30% students have given 1, 2 or 3 code more frequently whereas 30% students have given codes 4 and 5 more frequently.

All answers of positive questions given by the respondents are coded on 1-5 scale and that of negative questions are coded on 5-1 scale. As here all answers of the questions are given in terms of codes (Scales) and our aim is to get information that which option (scale) is chosen by most of the

students. The most popular methods to analyze these types of qualitative data are "obtaining mode – values" and "sum – totals" of given answer codes. Hence, for each of the four types of stress, "mode – values" of answers (codes) for every respondent is calculated. Different percentiles of sum-totals is calculated respectively. On the basis of that the frequency (level) of stress is defined as below :

Low Stress : $<P_{30}$

Average Stress : Between $P_{30} - P_{70}$

High Stress : $>P_{70}$

Table – 10 : Distribution of students according to stress frequency

Stress	**No. of students**	**Percentage**
Lower (response showing never, rarely, sometimes)	385	64.2
Higher(response showing frequent and always)	215	35.8
Total	600	100.0

In the study, out of 600 students 215 (35.8) students have higher stress whereas 385 (64.2%) experience lesser frequency of stress.

Section - III

- **Distribution of students with higher stress according to various background variables (N = 215)**

Table – 11 : Distribution of respondents according to liability of family members who are ill / disabled

Family Illness	No. of students	Percentage
Pressure due to disabled / ill family member	11	5.11
No major illness / disability in family	204	94.89
Total	215	100.0

Among the students with higher stress, there are 11 (5.11%) students who have family members suffering from illness or disability whereas 204 (94.89%) having no family members who are ill / disabled.

Table – 12 : Distribution of respondents according to existence of mental illness in family

Mental Illness in family	**No. of students**	**Percentage**
Pressure due to disabled / ill family member	9	4.18
No major illness / disability in family	206	95.82
Total	215	100.0

Among the students with higher stress, there are 9 (4.18%) students having mental illness in family whereas 206 (95.82%) having no mental illness in family.

Table – 13 : A Distribution of high stressed respondents according to family atmosphere in Urban and Rural habitat (N = 215)

Family atmosphere	Rural		Urban	
	No. of students	Percentage	No. of students	Percentage
Quarrel in family	32/106	30.19	27/109	24.77
Alcoholism	41/106	38.68	49/109	44.95
Cohesiveness				
• Meets daily for meal/prayer/ chat	28/106	26.42	7/109	6.42
• Sitting together weekly	37/106	34.91	5/109	4.59
• Out going every year for trip	12/106	11.32	3/109	2.75
• Depends on the circumstance	85/106	80.19	88/109	80.74
Sharing				
• Pleasant events	58/106	54.72	62/109	56.88
• Unpleasant events	18/106	16.98	23/109	21.10

Among the students with higher stress, addiction of alcohol in family members is higher in Urban habitats as compared to Rural. There are 18 (16.98%) students in Rural habitats who has unpleasant events in family whereas in Urban habitats it is 23 (21.10%). The cohesiveness is higher in rural habitats as compared to urban.

Occurrence of quarrel in family is higher in rural habitat as compared to urban. The percentage of quarrel in rural is 30.19% against 24.77% in urban habitat.

Families going for outing every year in urban habitat is 2.75% against 11.32% in rural habitat. It depicts there is difference in proportion, of families going for outing every year, between habitats.

As far expressiveness is concern, in urban as well rural habitat, the percentage of students who share pleasant events is almost equal. In both urban and rural habitat few share unpleasant experience with family although in urban habitat the degree is slightly better (21.1%) as compared to rural habitat (16.98%).

Table – 14 : Distribution of high stressed respondents according to parent's age

Parent Age (in yrs.)	Rural		Urban	
	No. of students	Percentage	No. of students	Percentage
<40	43	40.57	39	35.78
40-50	31	29.25	48	44.04
>50	32	30.18	22	20.18
Total	106	100.0	109	100.0

In above table age distribution of parents of high stress students in Rural and Urban habitat is shown. Majority of parents fall in the age group of 40 – 50 yrs. in urban habitat whereas in rural habitat majority of parents have age less than 40 yrs. There are 30.18% of parents in rural habitat whose age is above 50 yrs whereas in urban it is 20.18%. This difference is significant.

Figure – 7 : Distribution of high stressed respondents according to their parent's age in urban and rural habitat

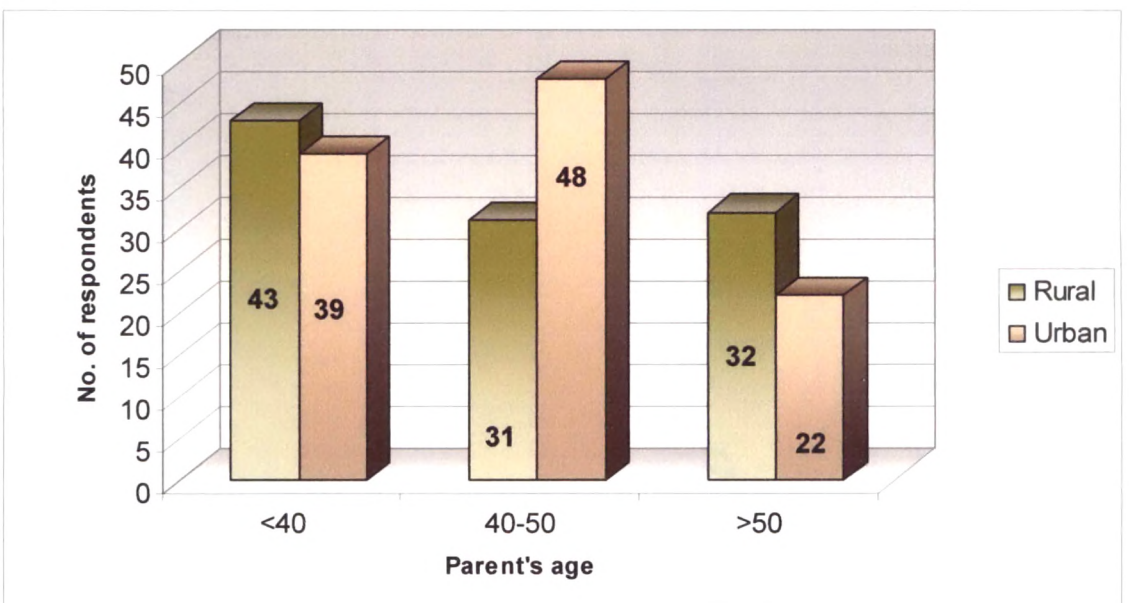


Table – 15 : Distribution of high stressed respondents according to mode of sharing views & feelings by students

Sharing	Rural		Urban	
	No. of students	Percentage	No. of students	Percentage
Share with sibs	30	28.30	25	22.94
Share with parent	6	5.66	4	3.67
Share outside family	58	54.72	59	54.13
Share with none	12	11.32	21	19.27
Total	106	100.0	109	100.0

Majority of students share their views and feelings outside family. There are very few students who share their views and feelings with their parents. There are some students who do not want to share with anyone. This proportion is higher in Urban habitats as compared to Rural.

Figure – 8 : Distribution of high stressed respondents according to their sharing with different people in urban and rural habitat

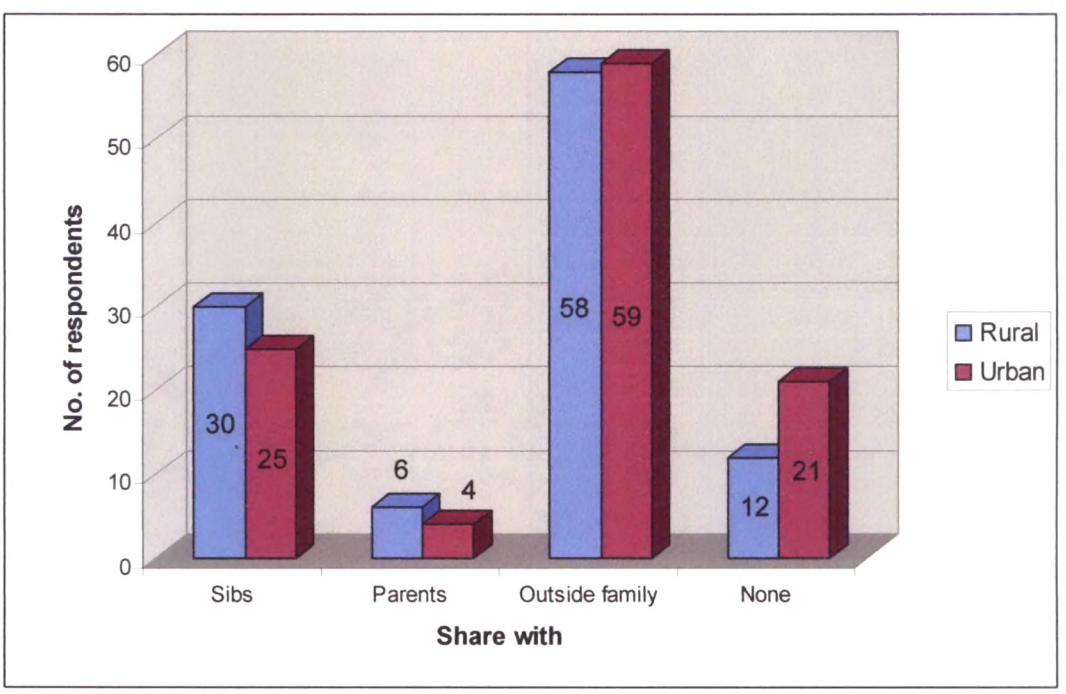


Table – 16 : Distribution of high stressed respondents according to family mode of disciplining (independence) of students

Family discipline	Rural		Urban	
	No. of students	Percentage	No. of students	Percentage
Too strict	51	48.11	48	44.04
Moderate	33	31.13	39	35.78
Too permissive	22	20.76	22	20.18
Total	106	100.0	109	100.0

Approximately 50% students in both Rural and Urban habitats think that their family environment is very strict whereas only 20% think that their family environment is permissive, probably indicating the assembled cultural aspect.

Figure 9 : Distribution according to independence of students

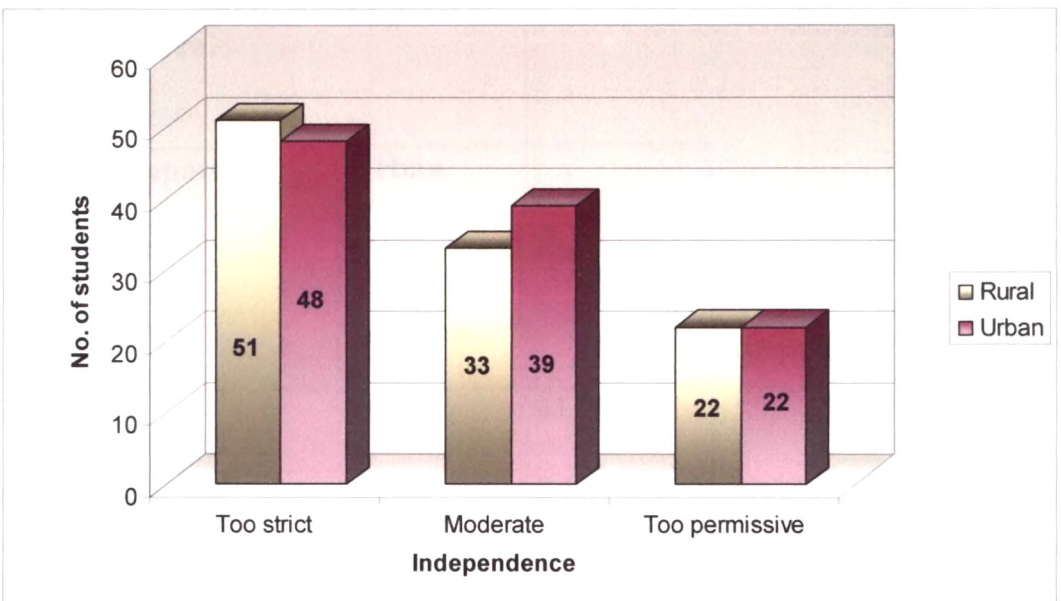


Table – 17(a) : Distribution of high stressed respondents according to parent's occupation in urban habitat

Parent's Occupation	Urban	
	No. of students	Percentage
Business	45	41.28
Govt. Servant	09	8.26
Professionals		
• **Engineer/Architect**	08	7.34
• **Doctor/Scientist**	12	11.0
• **Teacher**	28	25.69
• **Miscellaneous**	07	6.43
Total	109	100.0

There is large proportion of parents having service in urban habitat, out of which only 8.26% having government services, the rest are either professionals or people serving in private sectors. There are about 40% parents having business.

Figure – 10 : Distribution of high stressed respondents according to their parent's occupation in urban habitat

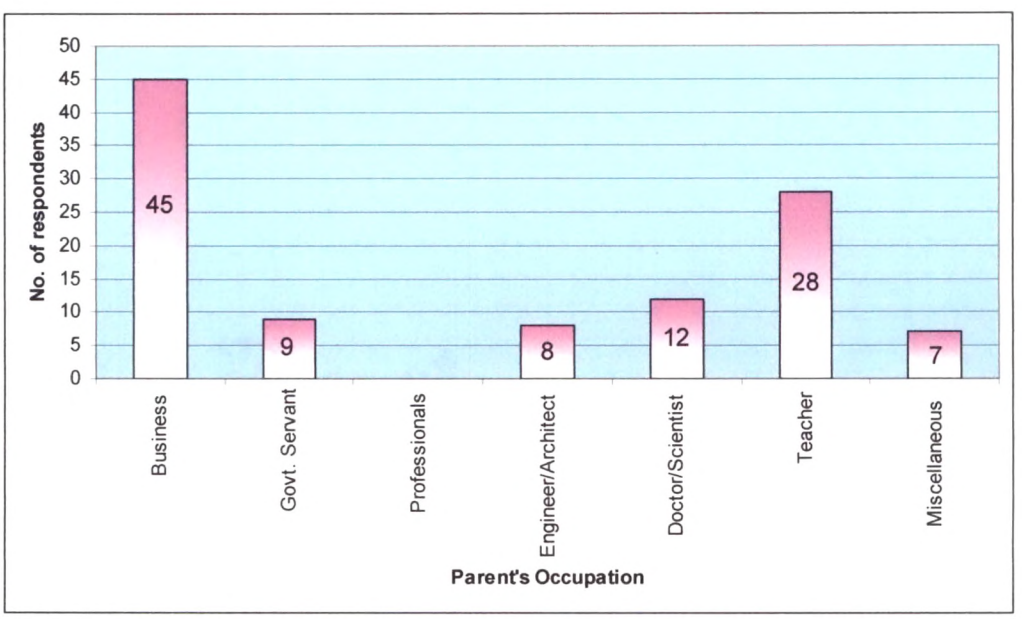


Table – 17 (b) : Distribution of high stressed respondents according to parent's occupation in rural habitat

Parent's Occupation	Rural	
	No. of students	Percentage
Large scale farmer	11	10.38
Landless farmer	27	25.47
Daily wage earner	42	39.62
NRI relative support	15	14.15
Govt. Servant	11	10.38
Total	106	100.0

In Rural habitat, about 75% parents are either landless farmer or daily wage earners. Only few parents have their own field or government service. This probably indicates the economic disparity.

Parent's Occupation

Figure – 11 : Distribution of high stressed respondents according to their parent's occupation in rural habitat

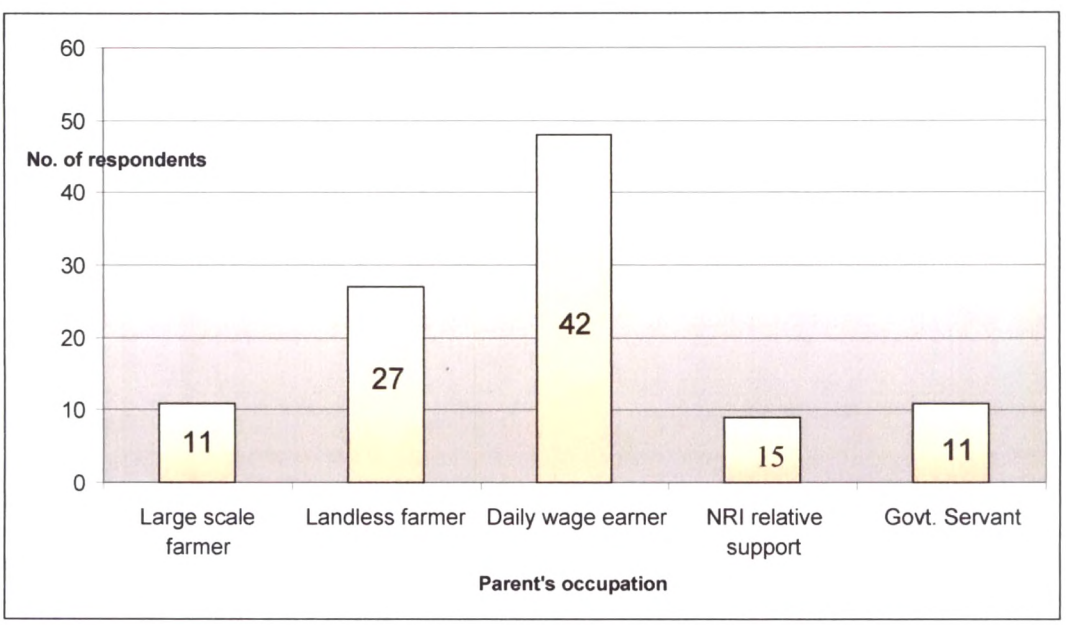


Table – 18 : Distribution of high stressed respondents according to caste

Caste	No. of students	Percentage
Gujarati Patel	37	17.21
Gujarati Brahmin	25	11.63
Gujarati Baniya	23	10.70
S.C./S.T.	21	9.77
O.B.C.	20	9.30
Others (miscellaneous)	89	41.39
Total	215	100.0

In this study, there are 89 (41.39%) students who are others(misc.) Among gujarati students, there are 20 (9.3%) are O.B.C., 21 (9.77%) are S.C./S.T. whereas rest are having open category. Here one can see that the proportion of others(misc.)is are very much higher as compared to Gujarati Patels. A significant fact brought out is that a large number of high stressed students belong to the others(misc.) category followed by OBC category.

Figure – 12 : Distribution of high stressed respondents according to their caste

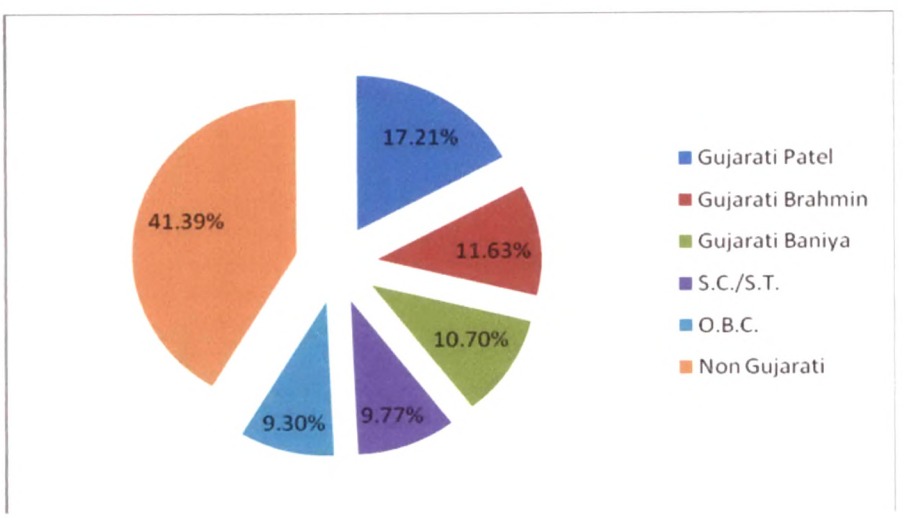


Table – 19 : Distribution of high stressed respondents according to type of family

Type of family	No. of students	Percentage
Joint	84	39.07
Nuclear	131	60.93
Total	215	100.0

Among students having higher stress, 131 (60.93%) are from nuclear and the rest 84 (39.07%) are form joint families. This depicts that trend towards nuclear family.

Figure – 13 : Distribution of high stressed respondents according their type of family

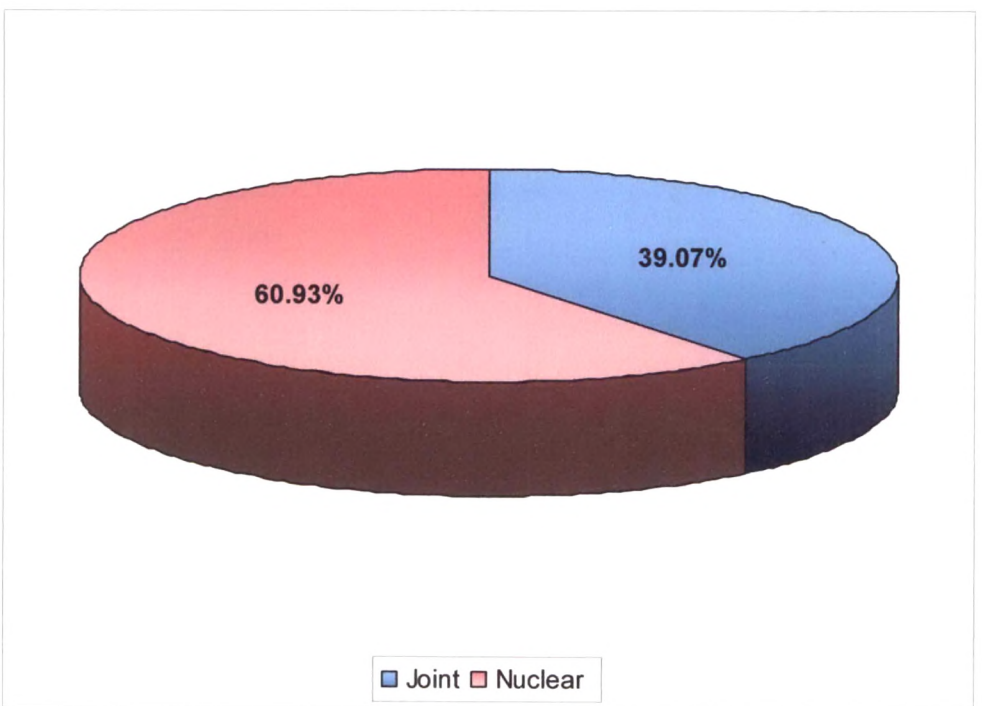
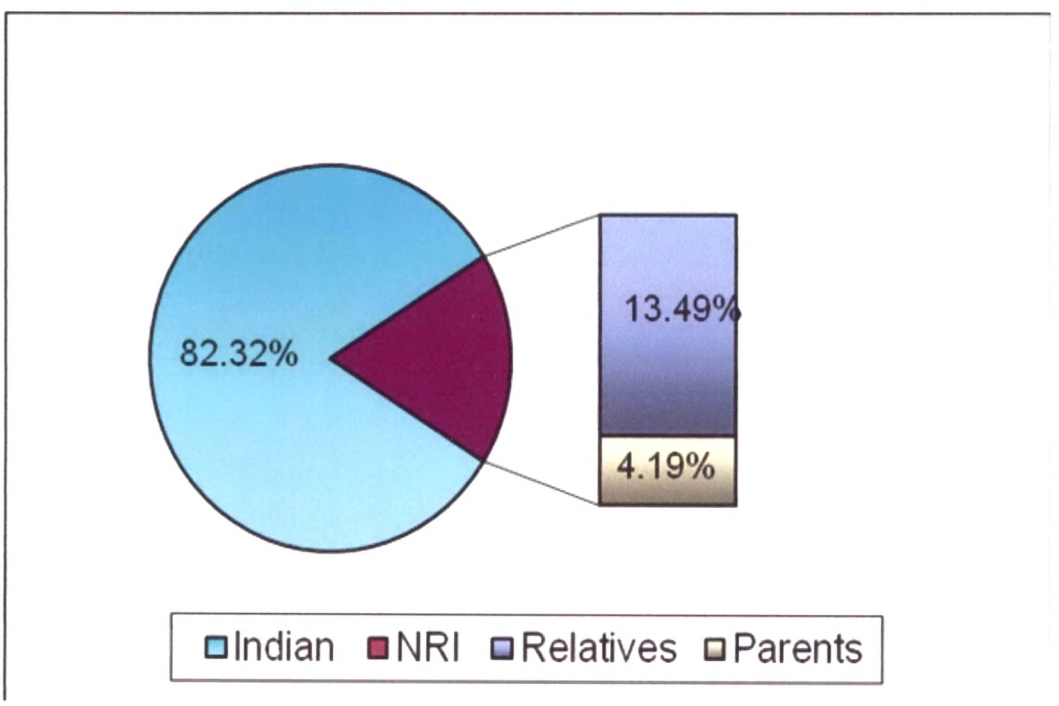


Table – 20 : Distribution of high stressed students according to residence

Residence/Nationality		No. of students	Percentage
Only Indian		177	82.32
Total NRI students	**Staying with Relatives**	29	13.49
	Having relatives as NRIs	9	4.19
Total		215	100.0

Among 215 students having higher stress, there are 29 (13.49%) students whose guardians are NRIs. The important fact indicated is that among NRI's children, a grater proportion of students live with relatives.

Figure – 14 : Distribution of high stressed respondents according their residence



Section - IV

- **Bi – variate data analysis of background variables and level of stress for all the four components of stress (scale of stress administered)**

Bi-variate tables (Cross table) showing different variables, to establish / explore the association or difference between two attributes is illustrated in the following tables.

Stress & its sub – components :

As mentioned in methodology chapter, stress scales have four component namely : achievement, academic, family pressure and financial stress. The background variables and each component of stress is analysed. Chi-square analysis is done to find out the association between the variables and level of stress. The corresponding p – values for all the tests are also given. The acceptance / rejection criterion is fixed at 0.05% level of significance.

Note :

* Indicates there is significant association between given variables.

** Indicates there is high significant association between given variables.

H : There is association between different stress and Talukas

Table – 21 : Distribution of total sample of students according to achievement stress in different Talukas

Taluka	Stress		Total
	Lower	Higher	
Anand	132 (59.46)	90 (40.54)	222 (100.0)
Borsad	140 (74.47)	48 (25.53)	188 (100.0)
Umreth	113 (59.47)	77 (40.53)	190 (100.0)
Total	385 (64.17)	215 (35.83)	600 (100.0)

Chi-Square Value	d.f.	P-value
12.64	2	0.0018**

The proportion of high achievement stressed students is more in Anand and Umreth talukas as compared to Borsad. The difference in proportion of students having higher stress in three talukas is statistically significant. The chi – square value is 12.64 and p-value is 0.0018, thus indicating the impact of urbanization perhaps which functions as a specific factor in terms of achievement orientation. Thus there is association between achievement stress and talukas.

Figure – 15 : Distribution of students according to level of Achievement stress

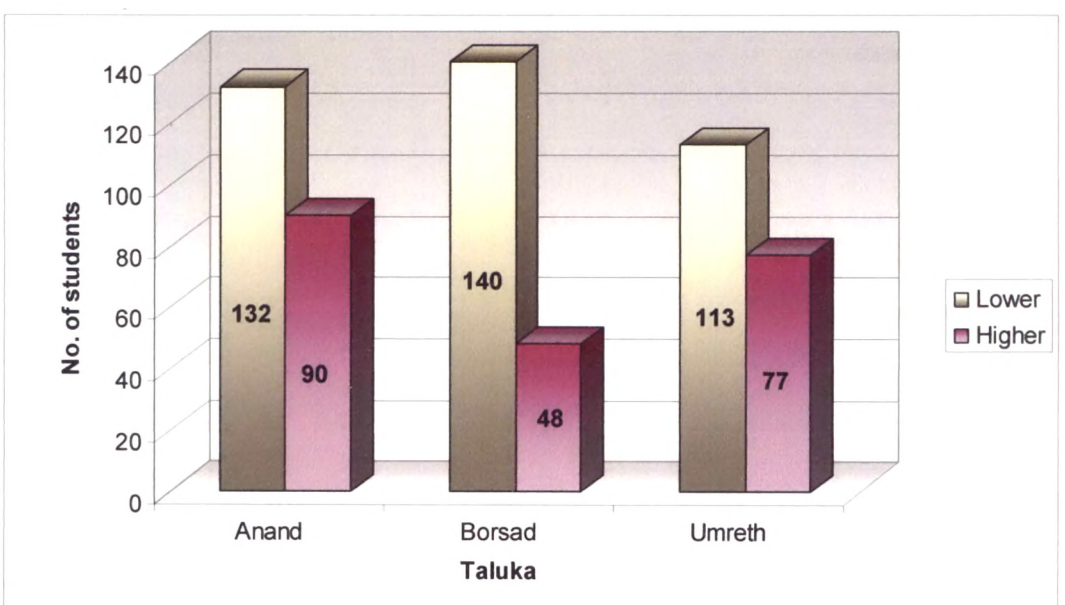


Table – 22 : Distribution of total sample of students according to academic stress in different Talukas

Taluka	Stress		Total
	Lower	Higher	
Anand	136 (61.26)	86 (38.74)	222 (100.0)
Borsad	148 (78.72)	40 (21.28)	188 (100.0)
Umreth	120 (63.16)	70 (36.84)	190 (100.0)
Total	404 (67.33)	196 (32.67)	600 (100.0)

Chi-Square Value	d.f.	P-value
16.32	2	0.00029**

The proportion of high academic stressed students is more in Anand and Umreth talukas as compared to Borsad, indicating the influence of urbanization perhaps. The difference in proportion of students having higher stress in three talukas is statistically significant. The chi – square value is 16.32 and p-value is 0.00029. Thus there is association between academic stress and talukas.

Figure – 16 : Distribution of students according to level of Academic stress

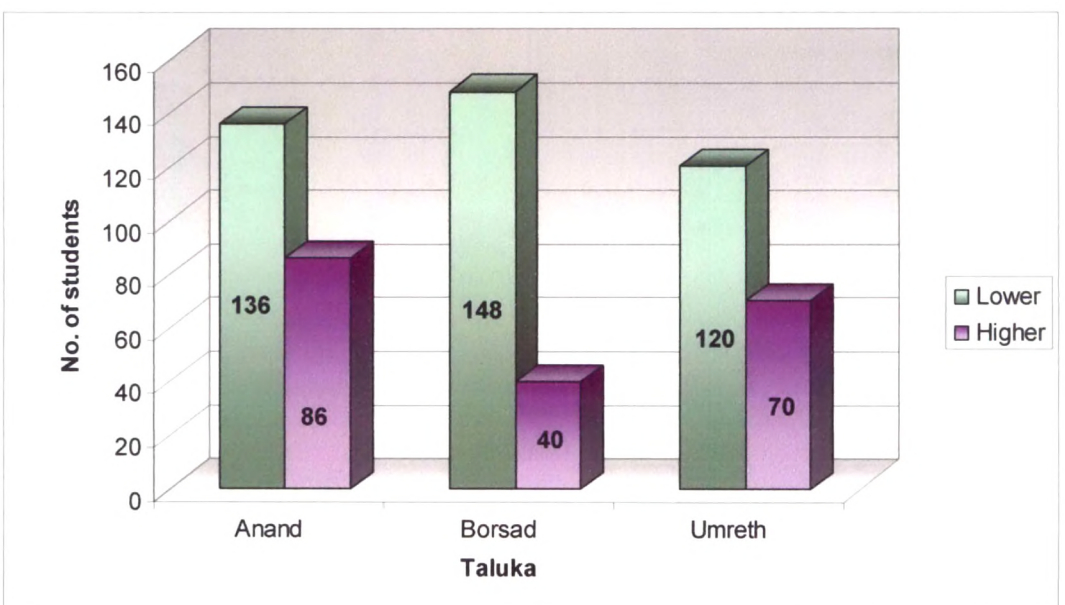


Table – 23 : Distribution of total sample of students according to due to family stress in different Talukas

Taluka	Stress		Total
	Lower	Higher	
Anand	142 (63.96)	80 (36.04)	222 (100.0)
Borsad	158 (84.04)	30 (15.96)	188 (100.0)
Umreth	108 (56.84)	82 (43.16)	190 (100.0)
Total	408 (68.00)	192 (32.00)	600 (100.0)

Chi-Square Value	d.f.	P-value
34.77	2	0.000**

The proportion of high stressed students is more in Umreth taluka as compared to Borsad and Anand talukas. The difference in proportion of students having higher stress in three talukas is statistically significant. The chi – square value is 34.77 and p-value is 0.000. This depicts that family stress is perhaps more in the urbanized sector that induces stress. Thus there is association between family stress and talukas.

Figure – 17 : Distribution of students according to level of stress due to family stress

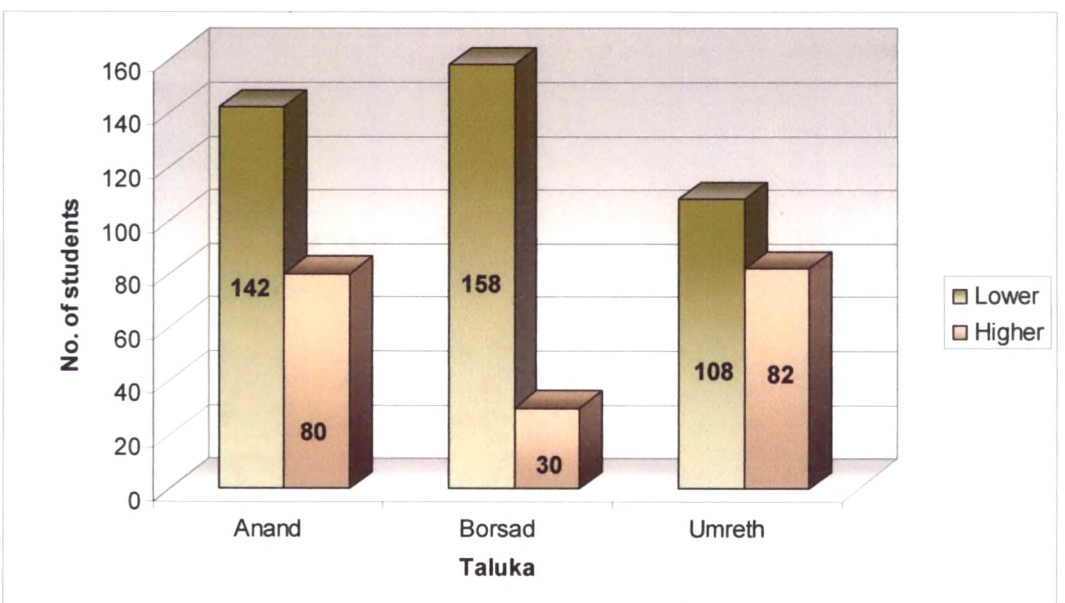


Table – 24 : Distribution of total sample of students according to financial stress in different Talukas

Taluka	Stress		Total
	Lower	Higher	
Anand	133 (59.91)	89 (40.01)	222 (100.0)
Borsad	128 (68.09)	60 (31.91)	188 (100.0)
Umreth	89 (46.84)	101 (53.16)	190 (100.0)
Total	350 (58.33)	250 (41.67)	600 (100.0)

Chi-Square Value	d.f.	P-value
17.91	2	0.00013**

The proportion of high financial stressed students is more in Umreth taluka as compared to Borsad and Anand talukas. The difference in proportion of students having higher stress in three talukas is statistically significant. The chi – square value is 17.91 and p-value is 0.00013, revealing that probably financial stress influences the stress frequency depending on other circumstances and combined social factors. Thus there is association between finiancial stress and talukas.

Figure – 18 : Distribution of students according to level of financial stress

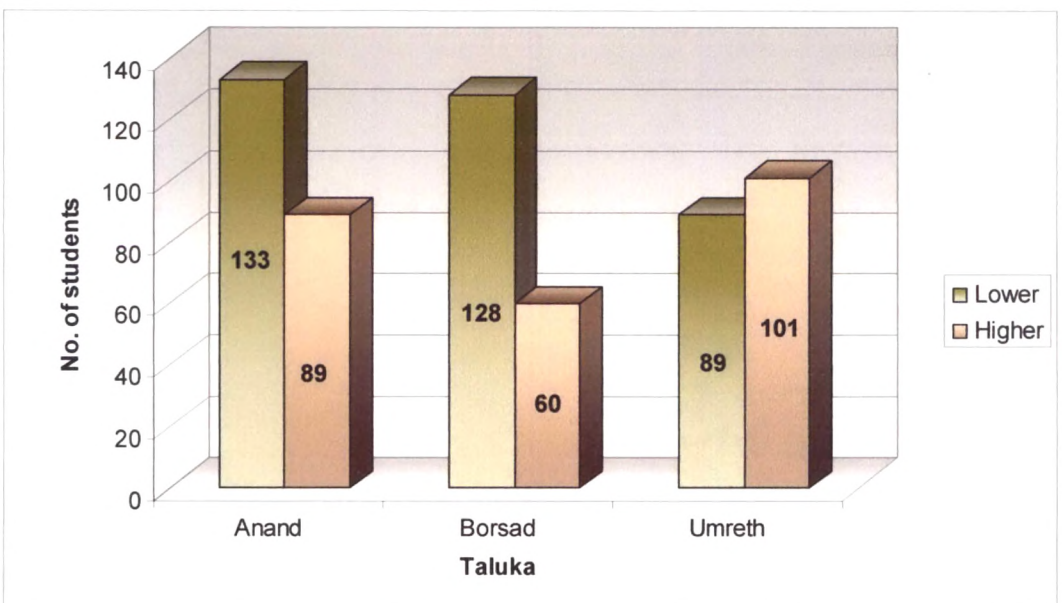
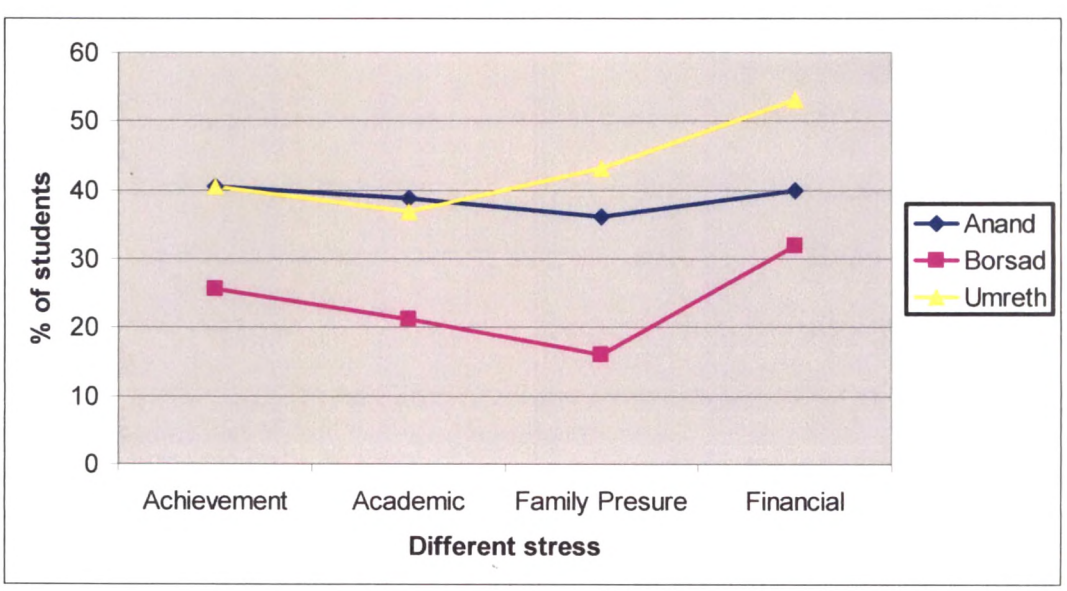


Figure – 19 : Students with high stress in different Talukas



- **Distribution of students according to level of stress in Rural and Urban habitat**

H : There is association between different stress and habitat

Table – 25 : Achievement Stress v/s Habitat

Habitat	**Stress**		**Total**
	Lower	**Higher**	
Rural	218 (69.43)	96 (30.57)	314 (100.0)
Urban	167 (58.39)	119 (41.61)	286 (100.0)
Total	385 (64.17)	215 (35.83)	600 (100.0)

Chi-Square Value	**d.f.**	**P-value**
7.46	1	0.006**

The proportion of high achievement stressed students is quite more in Urban habitats as compared to Rural. The difference in proportion of students having higher stress in these habitats is statistically significant. The chi – square value is 7.45 and p-value is 0.006. Thus there is association between achievement stress and habitat.

Table – 26 : Academic Stress v/s Habitat

Habitat	Stress		Total
	Lower	Higher	
Rural	231 (73.57)	83 (26.43)	314 (100.0)
Urban	173 (60.49)	113 (39.51)	286 (100.0)
Total	404 (67.33)	196 (32.67)	600 (100.0)

Chi-Square Value	d.f.	P-value
11.05	1	0.0009**

The proportion of high academic stressed students is more in Urban habitats as compared to Rural. The difference in proportion of students having higher stress in these habitats is statistically significant. The chi – square value is 11.05 and p-value is 0.0009. Thus there is association between academic stress and habitat

Table – 27 : Stress due to family pressure v/s Habitat

Habitat	Stress		Total
	Lower	Higher	
Rural	216 (68.79)	98 (31.21)	314 (100.0)
Urban	192 (67.13)	94 (32.87)	286 (100.0)
Total	408 (68.00)	192 (32.00)	600 (100.0)

Chi-Square Value	d.f.	P-value
0.12	1	0.729

The proportion of high stressed students is almost equal in Urban and Rural habitats. Hence, the difference in proportion of students having higher stress in these habitats is not statistically significant. The chi – square value is 0.12 and p-value is 0.729. Thus there is no association between family stress and habitat

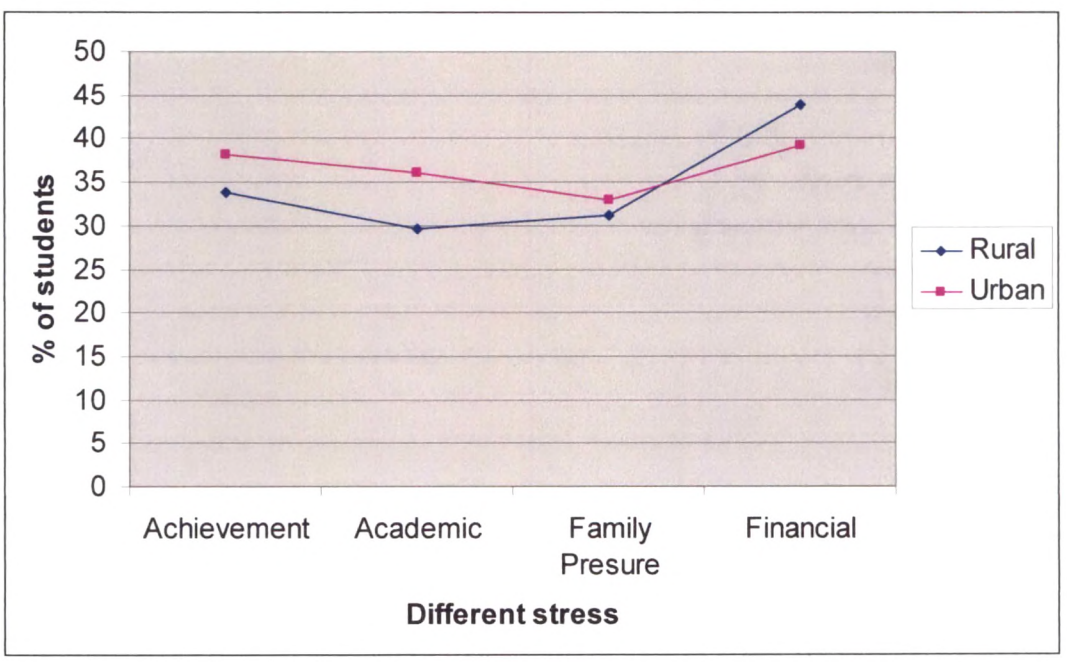
Table – 28 : Financial Stress v/s Habitat

Habitat	Stress		Total
	Lower	Higher	
Rural	176 (56.05)	138 (43.95)	314 (100.0)
Urban	174 (60.84)	112 (39.16)	286 (100.0)
Total	350 (58.33)	250 (41.67)	600 (100.0)

Chi-Square Value	d.f.	P-value
1.22	1	0.269

The proportion of high financial stressed students is quite more in Rural habitats as compared to Urban. But the difference in proportion of students having higher stress in these habitats is not statistically significant. The chi – square value is 1.22 and p-value is 0.269. Thus there is association between financial stress and habitat

Figure – 20 : Students with high stress in Urban and Rural habitats



- **Distribution of students according to stress and parent's education**

H : There is association between different stress and parent's education

Table – 29 : Achievement Stress v/s Parent's education

Parent's education	**Stress**		**Total**
	Lower	**Higher**	
Uneducated	104 (85.25)	18 (14.75)	122 (100.0)
Primary	218 (82.89)	45 (17.11)	263 (100.0)
HSE	49 (41.53)	69 (58.47)	118 (100.0)
Higher	14 (14.43)	83 (85.57)	97 (100.0)
Total	385 (64.17)	215 (35.83)	600 (100.0)

Chi-Square Value	**d.f.**	**P-value**
194.33	3	0.000**

As the education of parents is higher, there is more achievement stress in their children. It means that the proportion of higher stressed students is more whose parents are more educated as compared to parents who are uneducated or less educated. The difference is statistically significant. The Chi – Square value is 194.33 with p – value 0.000. Thus there is association between achievement stress and parent education.

Table – 30 : Academic Stress v/s Parent's education

Parent's education	Stress		Total
	Lower	Higher	
Uneducated	110 (90.16)	12 (9.84)	122 (100.0)
Primary	230 (87.45)	33 (12.55)	263 (100.0)
HSE	46 (38.98)	72 (61.02)	118 (100.0)
Higher	18 (18.56)	79 (81.44)	97 (100.0)
Total	404 (67.33)	196 (32.67)	600 (100.0)

Chi-Square Value	d.f.	P-value
225.35	3	0.000**

As the education of parents is higher, there is more academic stress in their children. It means that the proportion of higher stressed students is more whose parents are more educated as compared to parents who are uneducated or less educated. The difference is statistically significant. The Chi – Square value is 225.35 with p – value 0.000. Thus there is association between academic stress and parent education.

Table –31 : Family pressure v/s Parent's education

Parent's education	Stress		Total
	Lower	Higher	
Uneducated	108 (88.53)	14 (11.47)	122 (100.0)
Primary	232 (88.21)	31 (11.79)	263 (100.0)
HSE	45 (38.14)	73 (61.86)	118 (100.0)
Higher	23 (23.71)	74 (76.29)	97 (100.0)
Total	408 (68.00)	192 (32.00)	600 (100.0)

Chi-Square Value	d.f.	P-value
208.8	3	0.000**

As the education of parents is higher, there is more stress in their children. It means that the proportion of higher stressed students is more whose parents are more educated as compared to parents who are uneducated or less educated. The difference is statistically significant. The Chi – Square value is 208.8 with p – value 0.000. Thus there is association between family stress and parent education.

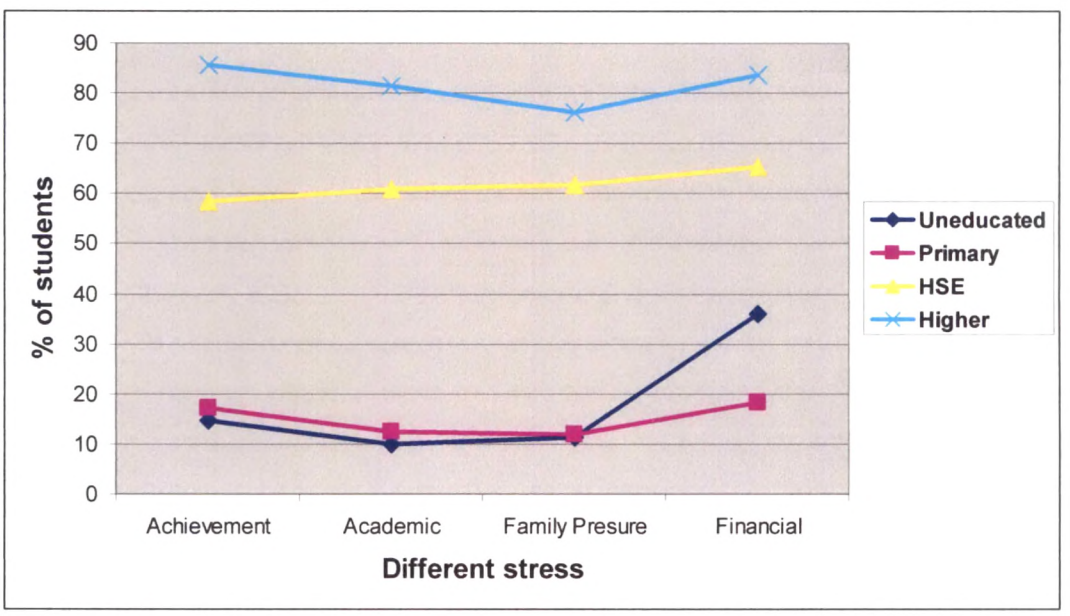
Table – 32 : Financial Stress v/s Parent's education

Parent's education	Stress		Total
	Lower	Higher	
Uneducated	78 (63.93)	44 (36.07)	122 (100.0)
Primary	215 (81.75)	48 (18.25)	263 (100.0)
HSE	41 (34.75)	77 (65.25)	118 (100.0)
Higher	16 (16.49)	81 (83.51)	97 (100.0)
Total	350 (58.33)	250 (41.67)	600 (100.0)

Chi-Square Value	d.f.	P-value
157.77	3	0.000**

As the education of parents is higher, there is more financial stress in their children. It means that the proportion of higher stressed students is more whose parents are more educated as compared to parents who are uneducated or less educated. The difference is statistically significant. The Chi – Square value is 157.77 with p – value 0.000. Thus there is association between financial stress and parent education.

Figure – 21 : Students with high stress according to their parent's education



- **Distribution of students according to stress and ordinal position**

H : There is association between different stress and ordinal position

Table – 33 : Achievement Stress v/s Ordinal position

Ordinal position	Stress		Total
	Lower	Higher	
Youngest	181 (84.19)	34 (15.81)	215 (100.0)
Middle	120 (60.30)	79 (39.70)	199 (100.0)
Eldest	84 (45.16)	102 (54.84)	186 (100.0)
Total	385 (64.17)	215 (35.83)	600 (100.0)

Chi-Square Value	d.f.	P-value
67.99	2	0.000**

There is significant difference in proportion of students with high achievement stress with respect to their ordinal position. The students who are youngest have lesser susceptibility of high stress as compared to students who are eldest. The chi – square value is 67.99 with p – value 0.000. Thus there is association between achievement stress and ordinal position.

Table – 34 : Academic Stress v/s Ordinal position

Ordinal position	Stress		Total
	Lower	Higher	
Youngest	166 (77.21)	49 (22.79)	215 (100.0)
Middle	135 (67.84)	64 (32.16)	199 (100.0)
Eldest	103 (55.38)	83 (44.62)	186 (100.0)
Total	404 (67.33)	196 (32.67)	600 (100.0)

Chi-Square Value	d.f.	P-value
21.65	2	0.000**

There is significant difference in proportion of students with high academic stress with respect to their ordinal position. The students who are youngest have less problem of high stress as compared to students who are elders. The chi – square value is 21.65 with p – value 0.000. Thus there is association between academic stress and ordinal position

Table – 35 : Stress due to family pressure v/s Ordinal position

Ordinal position	Stress		Total
	Lower	Higher	
Youngest	191 (88.84)	24 (11.16)	215 (100.0)
Middle	132 (66.33)	67 (33.67)	199 (100.0)
Eldest	85 (45.70)	101 (54.30)	186 (100.0)
Total	408 (68.00)	192 (32.00)	600 (100.0)

Chi-Square Value	d.f.	P-value
85.67	2	0.000**

There is significant difference in proportion of students with high stress with respect to their ordinal position. The students who are youngest have lesser problem of high stress as compared to students who are eldest. The chi – square value is 85.67 with p – value 0.000. Thus there is association between family stress and ordinal position

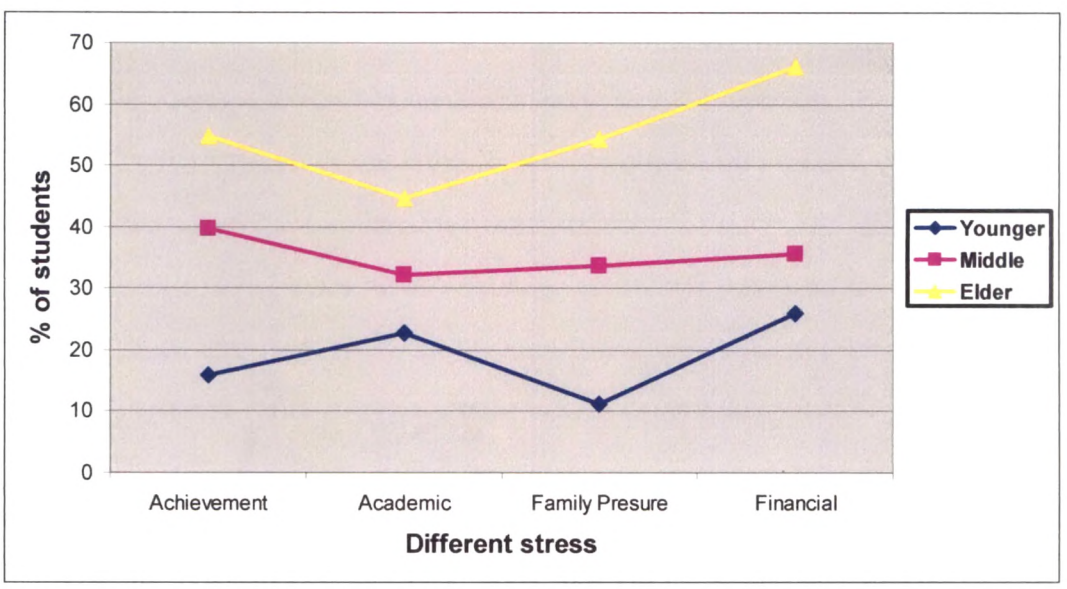
Table – 36 : Financial Stress v/s Ordinal position

Ordinal position	Stress		Total
	Lower	Higher	
Youngest	159 (73.95)	56 (26.05)	215 (100.0)
Middle	128 (64.32)	71 (35.68)	199 (100.0)
Eldest	63 (33.87)	123 (66.13)	186 (100.0)
Total	350 (58.33)	250 (41.67)	600 (100.0)

Chi-Square Value	d.f.	P-value
70.31	2	0.000**

There is significant difference in proportion of students with high financial stress with respect to their ordinal position. The students who are youngest have less problem of high stressed as compared to students who are eldest. The chi – square value is 70.31 with p – value 0.000. Thus there is association between financial stress and ordinal position

Figure – 22 : Students with high stress according to their ordinal position



- **Distribution of students according to stress and their gender**

H : There is association between different stress and gender

Table – 37 : Achievement Stress v/s Gender

a) Rural Habitat

Gender	**Stress**		**Total**
	Lower	**Higher**	
Male	85 (53.46)	74 (46.54)	159 (100.0)
Female	123 (79.35)	32 (20.65)	155 (100.0)
Total	208 (66.24)	106 (33.76)	314 (100.0)

Chi-Square Value	**d.f.**	**P-value**
22.39	1	0.000**

As it can be seen in above table, there is more achievement stress in males in Rural habitats as compared to females. Chi – square value is 22.39 with p – value 0.000. Thus there is association between achievement stress and gender.

b) Urban Habitat

Gender	Stress		Total
	Lower	Higher	
Male	122 (75.31)	40 (24.69)	162 (100.0)
Female	55 (44.35)	69 (55.65)	124 (100.0)
Total	177 (61.89)	109 (38.11)	286 (100.0)

Chi-Square Value	d.f.	P-value
27.23	1	0.000**

As it can be seen in above table, there is more achievement stress in females in Urban habitats as compared to males. Chi – square value is 27.23 with p – value 0.000. Thus there is association between achievement stress and gender.

Table – 38 : Academic Stress v/s Gender

a) Rural Habitat

Gender	Stress		Total
	Lower	Higher	
Male	91 (57.23)	68 (42.77)	159 (100.0)
Female	130 (83.87)	25 (16.13)	155 (100.0)
Total	221 (70.38)	93 (29.62)	314 (100.0)

Chi-Square Value	d.f.	P-value
25.45	1	0.000**

There is more academic stress in males in Rural habitats as compared to females. Chi – square value is 25.45 with p – value 0.000. Thus there is association between academic stress and gender.

b) Urban Habitat

Gender	Stress		Total
	Lower	Higher	
Male	122 (75.31)	40 (24.69)	162 (100.0)
Female	61 (49.19)	63 (50.81)	124 (100.0)
Total	183 (63.99)	103 (36.01)	286 (100.0)

Chi-Square Value	d.f.	P-value
19.67	1	0.000**

There is more academic stress in females in Urban habitats as compared to males. Chi – square value is 19.67 with p – value 0.000. Thus there is association between academic stress and gender.

Table – 39 : Stress due to family pressure v/s Gender

a) Rural Habitat

Gender	**Stress**		**Total**
	Lower	**Higher**	
Female	82 (51.57)	77 (48.43)	159 (100.0)
Male	134 (86.45)	21 (13.55)	155 (100.0)
Total	216 (68.79)	98 (31.21)	314 (100.0)

Chi-Square Value	**d.f.**	**P-value**
42.87	1	0.000**

The proportion of students with higher stress is more in females in Rural habitats as compared to females. Chi – square value is 42.87 with p – value 0.000. Thus there is association between family stress and gender.

b) Urban Habitat

Gender	Stress		Total
	Lower	Higher	
Female	130 (80.25)	32 (19.75)	162 (100.0)
Male	62 (50.00)	62 (50.00)	124 (100.0)
Total	192 (67.13)	94 (32.87)	286 (100.0)

Chi-Square Value	d.f.	P-value
27.77	1	0.000**

The proportion of students with higher stress is more in males in Urban habitats as compared to males. Chi – square value is 27.77 with p – value 0.000. Thus there is association between family stress and gender.

Table – 40 : Financial Stress v/s Gender

a) Rural Habitat

Gender	Stress		Total
	Lower	Higher	
Female	73 (45.91)	86 (54.09)	159 (100.0)
Male	103 (66.45)	52 (33.55)	155 (100.0)
Total	176 (56.05)	138 (43.95)	314 (100.0)

Chi-Square Value	d.f.	P-value
12.62	1	0.0003**

The proportion of students with higher financial stress is more in females in Rural habitats as compared to females. Chi – square value is 12.62 with p – value 0.000. Thus there is association between financial stress and gender.

b) Urban Habitat

Gender	Stress		Total
	Lower	Higher	
Female	124 (76.54)	38 (23.46)	162 (100.0)
Male	50 (40.32)	74 (59.68)	124 (100.0)
Total	174 (60.84)	112 (39.16)	286 (100.0)

Chi-Square Value	d.f.	P-value
37.17	1	0.000**

The proportion of students with higher financial stress is more in males in Urban habitats as compared to males. Chi – square value is 37.17 with p – value 0.000. Thus there is association between financial stress and gender.

- **Distribution of students according to stress, type of family and habitat**

H : There is association between different stress and type of family

Table –41 : Achievement Stress v/s Type of family

a) Rural Habitat

Type of family	Stress		Total
	Lower	Higher	
Joint	109 (89.34)	13 (10.66)	122 (100.0)
Nuclear	99 (51.56)	93 (48.44)	192 (100.0)
Total	208 (66.24)	106 (33.76)	314 (100.0)

Chi-Square Value	d.f.	P-value
45.95	1	0.000**

In Rural habitats, the students coming from nuclear families are having higher achievement stress as compared to the students coming from joint families. The difference between proportion of students with higher stress in joint and nuclear families is statistically significant. The Chi – square value is 45.95 with p – value 0.000. Thus there is association between achievement stress and type of family.

b) Urban Habitat

Type of family	Stress		Total
	Lower	Higher	
Joint	166 (70.04)	71 (29.96)	237 (100.0)
Nuclear	11 (22.45)	38 (77.55)	49 (100.0)
Total	177 (61.89)	109 (38.11)	286 (100.0)

Chi-Square Value	d.f.	P-value
37.00	1	0.000**

In Urban habitats, the students coming from nuclear families are having higher achievement stress as compared to the students coming from joint families. The difference between proportion of students with higher stress in joint and nuclear families is statistically significant. The Chi – square value is 37.00 with p – value 0.000. Thus there is association between achievement stress and type of family.

Table – 42 : Academic Stress v/s Type of family

a) Rural Habitat

Type of family	Stress		Total
	Lower	Higher	
Joint	113 (92.62)	9 (7.38)	122 (100.0)
Nuclear	108 (56.25)	84 (43.75)	192 (100.0)
Total	221 (70.38)	93 (29.62)	314 (100.0)

Chi-Square Value	d.f.	P-value
45.62	1	0.000**

In Rural habitats, the students coming from nuclear families are having higher academic stress as compared to the students coming from joint families. The difference between proportion of students with higher stress in joint and nuclear families is statistically significant. The Chi – square value is 45.62 with p – value 0.000. Thus there is association between academic stress and type of family.

b) Urban Habitat

Type of family	Stress		Total
	Lower	Higher	
Joint	174 (73.42)	63 (26.58)	237 (100.0)
Nuclear	9 (18.37)	40 (81.63)	49 (100.0)
Total	183 (63.99)	103 (36.01)	286 (100.0)

Chi-Square Value	d.f.	P-value
51.04	1	0.000**

In Urban habitats, the students coming from nuclear families are having higher academic stress as compared to the students coming from joint families. The difference between proportion of students with higher stress in joint and nuclear families is statistically significant. The Chi – square value is 51.04 with p – value 0.000. Thus there is association between academic stress and type of family.

Table – 43 : Stress due to family pressure v/s Type of family

a) Rural Habitat

Type of family	Stress		Total
	Lower	Higher	
Joint	115 (94.26)	7 (5.74)	122 (100.0)
Nuclear	101 (52.60)	91 (47.40)	192 (100.0)
Total	216 (68.79)	98 (31.21)	314 (100.0)

Chi-Square Value	d.f.	P-value
58.37	1	0.000**

In Rural habitats, the students coming from nuclear families are having higher stress as compared to the students coming from joint families. The difference between proportion of students with higher stress in joint and nuclear families is statistically significant. The Chi – square value is 58.37 with p – value 0.000. Thus there is association between family stress and type of family.

b) Urban Habitat

Type of family	Stress		Total
	Lower	Higher	
Joint	182 (76.79)	55 (23.21)	237 (100.0)
Nuclear	10 (20.41)	39 (79.59)	49 (100.0)
Total	192 (67.13)	94 (32.87)	286 (100.0)

Chi-Square Value	d.f.	P-value
55.98	1	0.000**

In Urban habitats, the students coming from nuclear families are having higher stress as compared to the students coming from joint families. The difference between proportion of students with higher stress in joint and nuclear families is statistically significant. The Chi – square value is 55.98 with p – value 0.000. Thus there is association between family stress and type of family.

Table – 44 : Financial Stress v/s Type of family

a) Rural Habitat

Type of family	Stress		Total
	Lower	Higher	
Joint	96 (78.69)	26 (21.31)	122 (100.0)
Nuclear	80 (41.67)	112 (58.33)	192 (100.0)
Total	176 (56.05)	138 (43.95)	314 (100.0)

Chi-Square Value	d.f.	P-value
40.02	1	0.000**

In Rural habitats, the students coming from nuclear families are having higher financial stress as compared to the students coming from joint families. The difference between proportion of students with higher stress in joint and nuclear families is statistically significant. The Chi – square value is 40.02 with p – value 0.000. Thus there is association between financial stress and type of family.

b) Urban Habitat

Type of family	Stress		Total
	Lower	Higher	
Joint	163 (68.78)	74 (31.22)	237 (100.0)
Nuclear	11 (22.45)	38 (77.55)	49 (100.0)
Total	174 (60.84)	112 (39.16)	286 (100.0)

Chi-Square Value	d.f.	P-value
34.66	1	0.000**

In Urban habitats, the students coming from nuclear families are having higher financial stress as compared to the students coming from joint families. The difference between proportion of students with higher stress in joint and nuclear families is statistically significant. The Chi – square value is 34.66 with p – value 0.000. Thus there is association between financial stress and type of family.

- **Distribution of students according to stress, monthly family income and habitat**

H : There is association between different stress and family income

Table –45 : Achievement Stress v/s Monthly Income

a) Rural Habitat

Monthly family income	**Stress**		**Total**
	Lower	**Higher**	
<5000	65(97.01)	2(2.99)	67 (100.0)
5000-10,000	74(46.84)	84(53.16)	158 (100.0)
>10,000	69(77.53)	20(22.47)	89 (100.0)
Total	208 (66.24)	106 (33.76)	314 (100.0)

Chi-Square Value	**d.f.**	**P-value**
60.05	2	0.000**

There is significant association between monthly income and level of achievement stress of students. Students coming from middle class families have more stress as compared to the students coming from lower and upper class families. Chi – square value is 60.05 with p – value 0.000. Thus there is association between achievement stress and monthly income.

b) Urban Habitat

Monthly family income	Stress		Total
	Lower	Higher	
<5000	13 (81.25)	3 (18.75)	16 (100.0)
5000-10,000	107 (55.44)	86 (44.56)	193 (100.0)
>10,000	57 (74.03)	20 (25.97)	77 (100.0)
Total	177 (61.89)	109 (38.11)	286 (100.0)

Chi-Square Value	d.f.	P-value
52.79	2	0.000**

There is significant association between monthly income and level of achievement stress of students. Students coming from middle class families have more stress as compared to the students coming from lower and upper class families. Chi – square value is 10.75 with p – value 0.004. Thus there is association between achievement stress and monthly income.

Table – 46 : Academic Stress v/s Monthly Income

a) Rural Habitat

Monthly family income	**Stress**		**Total**
	Lower	**Higher**	
<5000	60(89.55)	7(10.45)	67 (100.0)
5000-10,000	102(64.56)	56(35.44)	158 (100.0)
>10,000	59(66.29)	30(33.71)	89 (100.0)
Total	221 (70.38)	93 (29.62)	314 (100.0)

Chi-Square Value	**d.f.**	**P-value**
15.10	2	0.000**

There is significant association between monthly income and level of achievement stress of students. Students coming from middle class families have more stress as compared to the students coming from lower and upper class families. Chi – square value is 15.10 with p – value 0.000. Thus there is association between academic stress and monthly income.

b) Urban Habitat

Monthly family income	Stress		Total
	Lower	Higher	
<5000	14 (87.5)	2 (12.5)	16 (100.0)
5000-10,000	110 (57.0)	83 (43.0)	193 (100.0)
>10,000	59 (76.62)	18 (23.38)	77 (100.0)
Total	183 (63.99)	103 (36.01)	286 (100.0)

Chi-Square Value	d.f.	P-value
45.22	2	0.000**

There is significant association between monthly income and level of achievement stress of students. Students coming from middle class families have more stress as compared to the students coming from lower and upper class families. Chi – square value is 13.27 with p – value 0.0013. Thus there is association between academic stress and monthly income.

Table – 47 : Stress due to family pressure v/s Monthly Income

a) Rural Habitat

Monthly family income	**Stress**		**Total**
	Lower	**Higher**	
<5000	59(88.06)	8(11.94)	67 (100.0)
5000-10,000	100(63.29)	58(36.71)	158 (100.0)
>10,000	57(64.05)	32(35.95)	89 (100.0)
Total	216 (68.79)	98 (31.21)	314 (100.0)

Chi-Square Value	**d.f.**	**P-value**
14.75	2	0.000**

There is significant association between monthly income and level of achievement stress of students. Students coming from middle class families have more stress as compared to the students coming from lower and upper class families. Chi – square value is 14.75 with p – value 0.000. Thus there is association between family stress and monthly income.

b) Urban Habitat

Monthly family income	Stress		Total
	Lower	Higher	
<5000	15 (93.75)	1 (6.25)	16 (100.0)
5000-10,000	121 (62.69)	72 (37.3)	193 (100.0)
>10,000	56 (72.73)	21 (27.27)	77 (100.0)
Total	192 (67.13)	94 (32.87)	286 (100.0)

Chi-Square Value	d.f.	P-value
103.69	2	0.000**

There is significant association between monthly income and level of achievement stress of students. Students coming from middle class families have more stress as compared to the students coming from lower and upper class families. Chi – square value is 7.95 with p – value 0.018. Thus there is association between family stress and monthly income.

Table – 48 : Financial Stress v/s Monthly Income

a) Rural Habitat

Monthly family income	**Stress**		**Total**
	Lower	**Higher**	
<5000	47(70.15)	20(29.85)	67 (100.0)
5000-10,000	78(49.37)	80(50.63)	158 (100.0)
>10,000	51(57.30)	38(42.70)	89 (100.0)
Total	176 (56.05)	138 (43.95)	314 (100.0)

Chi-Square Value	**d.f.**	**P-value**
8.33	2	0.015*

There is significant association between monthly income and level of achievement stress of students. Students coming from middle class families have more stress as compared to the students coming from lower and upper class families. Chi – square value is 8.33 with p – value 0.015. Thus there is association between financial stress and monthly income.

b) Urban Habitat

Monthly family income	Stress		Total
	Lower	Higher	
<5000	12 (75.0)	4 (25.0)	16 (100.0)
5000-10,000	105 (54.40)	88 (45.60)	193 (100.0)
>10,000	57 (74.03)	20 (25.97)	77 (100.0)
Total	174 (60.84)	112 (39.16)	286 (100.0)

Chi-Square Value	d.f.	P-value
50.87	2	0.000**

There is significant association between monthly income and level of achievement stress of students. Students coming from middle class families have more stress as compared to the students coming from lower and upper class families. Chi – square value is 10.32 with p – value 0.0057. Thus there is association between financial stress and monthly income.

- **Distribution of students according to stress, size of family and habitat**

H : There is association between different stress and family size

Table – 49 : Achievement Stress v/s Size of family

a) Rural Habitat

Size of family	Stress		Total
	Lower	Higher	
<5 members	99 (51.56)	93 (48.44)	192 (100.0)
5-10 members	80 (88.89)	10 (11.11)	90 (100.0)
>10 members	29 (90.62)	3 (9.38)	32 (100.0)
Total	208 (66.24)	106 (33.76)	314 (100.0)

Chi-Square Value	d.f.	P-value
47.95	2	0.000**

In Rural habitats, the students coming from small sized families are having higher achievement stress as compared to the students coming from large sized families. The difference between proportion of students with higher stress in small and large sized families is statistically significant. The Chi – square value is 47.95 with p – value 0.000. Thus there is association between achievement stress and size of family.

b) Urban Habitat

Size of family	Stress		Total
	Lower	Higher	
<5 members	11 (22.45)	38 (77.55)	49 (100.0)
5-10 members	106 (63.86)	60 (36.14)	166 (100.0)
>10 members	60 (84.51)	11 (15.49)	71 (100.0)
Total	177 (61.89)	109 (38.11)	286 (100.0)

Chi-Square Value	d.f.	P-value
47.99	2	0.000**

In Urban habitats, the students coming from small sized families are having higher achievement stress as compared to large sized families. The difference between proportion of students with higher stress in large sized and small sized families is statistically significant. The Chi – square value is 47.99 with p – value 0.000. Thus there is association between achievement stress and size of family.

Table – 50 : Academic Stress v/s Size of family

a) Rural Habitat

Size of family	Stress		Total
	Lower	Higher	
<5 members	108 (56.25)	84 (43.75)	192 (100.0)
5-10 members	88 (97.77)	2 (2.33)	90 (100.0)
>10 members	25 (78.12)	7 (21.88)	32 (100.0)
Total	221 (70.38)	93 (29.62)	314 (100.0)

Chi-Square Value	d.f.	P-value
51.72	2	0.000**

In Rural habitats, the students coming from small sized families are having higher academic stress as compared to large sized families. The difference between proportion of students with higher stress in large sized and small sized families is statistically significant. The Chi – square value is 51.72 with p – value 0.000. Thus there is association between academic stress and size of family.

b) Urban Habitat

Size of family	Stress		Total
	Lower	Higher	
<5 members	19 (38.78)	30 (61.22)	49 (100.0)
5-10 members	104 (62.65)	62 (37.35)	166 (100.0)
>10 members	60 (84.51)	11 (15.49)	71 (100.0)
Total	183 (63.99)	103 (36.01)	286 (100.0)

Chi-Square Value	d.f.	P-value
26.62	2	0.000**

In Urban habitats, the students coming from small sized families are having higher academic stress as compared to large sized families. The difference between proportion of students with higher stress in large sized and small sized families is statistically significant. The Chi – square value is 26.62 with p – value 0.000. Thus there is association between academic stress and size of family.

Table – 51 : Stress due to family pressure v/s Size of family

a) Rural Habitat

Size of family	Stress		Total
	Lower	Higher	
<5 members	101 (52.60)	91 (47.40)	192 (100.0)
5-10 members	88 (97.77)	2 (2.33)	90 (100.0)
>10 members	27 (84.38)	5 (15.62)	32 (100.0)
Total	216 (68.79)	98 (31.21)	314 (100.0)

Chi-Square Value	d.f.	P-value
62.27	2	0.000**

In Rural habitats, the students coming from small sized families are having higher stress as compared to large sized families. The difference between proportion of students with higher stress in large sized and small sized families is statistically significant. The Chi – square value is 62.27 with p – value 0.000. Thus there is association between family stress and size of family.

b) Urban Habitat

Size of family	Stress		Total
	Lower	Higher	
<5 members	10 (20.41)	39 (79.59)	49 (100.0)
5-10 members	133 (80.12)	33 (19.88)	166 (100.0)
>10 members	49 (69.01)	22 (30.99)	71 (100.0)
Total	192 (67.13)	94 (32.87)	286 (100.0)

Chi-Square Value	d.f.	P-value
61.29	2	0.000**

In Urban habitats, the students coming from small sized families are having higher stress as compared to large sized families. The difference between proportion of students with higher stress in large sized and small sized families is statistically significant. The Chi – square value is 61.29 with p – value 0.000. Thus there is association between family stress and size of family.

Table – 52 : Financial Stress v/s Size of family

a) Rural Habitat

Size of family	Stress		Total
	Lower	Higher	
<5 members	80 (41.67)	112 (58.33)	192 (100.0)
5-10 members	76 (84.44)	14 (15.56)	90 (100.0)
>10 members	20 (62.5)	12 (37.5)	32 (100.0)
Total	176 (56.05)	138 (43.95)	314 (100.0)

Chi-Square Value	d.f.	P-value
46.12	2	0.000**

In Rural habitats, the students coming from small sized families are having higher financial stress as compared to large sized families. The difference between proportion of students with higher stress in large sized and small sized families is statistically significant. The Chi – square value is 46.12 with p – value 0.000. Thus there is association between financial stress and size of family.

b) Urban Habitat

Size of family	Stress		Total
	Lower	Higher	
<5 members	11 (22.45)	38 (77.55)	49 (100.0)
5-10 members	113 (68.07)	53 (31.93)	166 (100.0)
>10 members	50 (70.42)	21 (29.58)	71 (100.0)
Total	174 (60.84)	112 (39.16)	286 (100.0)

Chi-Square Value	d.f.	P-value
36.69	2	0.000**

In Urban habitats, the students coming from small sized families are having higher financial stress as compared to large sized families. The difference between proportion of students with higher stress in large sized and small sized families is statistically significant. The Chi – square value is 36.69 with p – value 0.000. Thus there is association between financial stress and size of family.

- **Distribution of students according to stress, their achievement (marks/percentage) score at the previous year final exam and habitat**

H : There is association between different stress and achievement score

Table – 53 : Achievement Stress v/s Achievement score in previous year final examination

a) Rural Habitat

Achievement score	**Stress**		**Total**
	Lower	**Higher**	
<65%	118(53.88)	101(46.12)	219 (100.0)
≥65%	90(94.74)	5(5.26)	95 (100.0)
Total	208 (66.24)	106 (33.76)	314 (100.0)

Chi-Square Value	**d.f.**	**P-value**
49.46	1	0.000**

There is significant relationship between achievement and achievement stress among students in Rural habitats. Students with lower achievement are more proven to have high stress as compared students with high achievement. Chi – square value is 49.46 with p – value 0.000. Thus there is association between achievement stress and achievement score.

b) Urban Habitat

Achievement score	Stress		Total
	Lower	Higher	
<65%	107(51.44)	101(48.56)	208 (100.0)
≥65%	70(89.74)	8(10.26	78 (100.0)
Total	177 (61.89)	109 (38.11)	286 (100.0)

Chi-Square Value	d.f.	P-value
35.28	1	0.000**

There is significant relationship between achievement and achievement stress among students in Urban habitats. Students with lower achievement are more proven to have high stress as compared students with high achievement. Chi – square value is 35.28 with p – value 0.000. Thus there is association between achievement stress and achievement score.

Table – 54 : Academic Stress v/s Achievement score in previous year final examination

a) Rural Habitat

Achievement score	Stress		Total
	Lower	Higher	
<65%	150(68.49)	69(31.51)	219 (100.0)
≥65%	71(74.74)	24(25.26)	95 (100.0)
Total	221 (70.38)	93 (29.62)	314 (100.0)

Chi-Square Value	d.f.	P-value
1.24	1	0.265

There is no significant relationship between achievement and academic stress among students in Rural habitats. Students with lower achievement are more proven to have high stress as compared students with high achievement. Chi – square value is 1.24 with p – value 0.265. Thus there is no association between academic stress and achievement score.

b) Urban Habitat

Achievement score	**Stress**		**Total**
	Lower	**Higher**	
<65%	117(56.25)	91(43.75)	208 (100.0)
≥65%	66(84.61)	12(15.39)	78 (100.0)
Total	183 (63.99)	103 (36.01)	286 (100.0)

Chi-Square Value	d.f.	P-value
19.81	1	0.000**

There is significant relationship between achievement and academic stress among students in Urban habitats. Students with lower achievement have higher stress as compared students with high achievement. Chi – square value is 19.81 with p – value 0.000. Thus there is association between academic stress and achievement score.

Table – 55 : Stress due to family pressure v/s Achievement score in previous year final examination

a) Rural Habitat

Achievement score	Stress		Total
	Lower	Higher	
<65%	128(58.45)	91(41.55)	219 (100.0)
≥65%	88(92.63)	7(7.37)	95 (100.0)
Total	216 (68.79)	98 (31.21)	314 (100.0)

Chi-Square Value	d.f.	P-value
36.06	1	0.000**

There is significant relationship between achievement and stress among students in Rural habitats. Students with lower achievement are more proven to have high stress as compared students with high achievement. Chi – square value is 36.06 with p – value 0.000. Thus there is no association between family stress and achievement score.

b) Urban Habitat

Achievement score	**Stress**		**Total**
	Lower	**Higher**	
<65%	126(60.58)	82(39.42)	208 (100.0)
≥65%	66(84.61)	12(15.39)	78 (100.0)
Total	192 (67.13)	94 (32.87)	286 (100.0)

Chi-Square Value	d.f.	P-value
14.86	1	0.000**

There is significant relationship between achievement and stress among students in Urban habitats. Students with lower achievement are more proven to have high stress as compared students with high achievement. Chi – square value is 14.86 with p – value 0.000. Thus there is no association between family stress and achievement score.

Table – 56 : Financial Stress v/s Achievement score in previous year final examination

a) Rural Habitat

Achievement score	Stress		Total
	Lower	Higher	
<65%	94(42.92)	125(57.08)	219 (100.0)
≥65%	82(86.32)	13(13.68)	95 (100.0)
Total	176 (56.05)	138 (43.95)	314 (100.0)

Chi-Square Value	d.f.	P-value
50.65	1	0.0003**

There is significant relationship between achievement and financial stress among students in Rural habitats. Students with lower achievement are more proven to have high stress as compared students with high achievement. Chi – square value is 50.65 with p – value 0.000. Thus there is no association between financial stress and achievement score.

b) Urban Habitat

Achievement score	Stress		Total
	Lower	Higher	
<65%	111(53.37)	97(46.63)	208 (100.0)
≥65%	63(80.77)	15(19.23)	78 (100.0)
Total	174 (60.84)	112 (39.16)	286 (100.0)

Chi-Square Value	d.f.	P-value
17.88	1	0.000**

There is significant relationship between achievement and financial stress among students in Urban habitats. Students with lower achievement are more proven to have high stress as compared students with high achievement. Chi – square value is 17.88 with p – value 0.000. Thus there is no association between financial stress and achievement score.

Section - V

- **Correlations between achievement and different types of stress (four scales of stress)**

Below tables are provided relationship between achievement and different types of stress experienced by students. Statistical tool "Correlation Coefficient" is used to check correlation. The corresponding p – value is also obtained. We have taken 0.05 (5%) significance level.

Table – 57 : Achievement stress

Taluka	Correlation Coefficient	P-value
Anand	-0.590	0.00
Borsad	-0.589	0.00
Umreth	-0.634	0.00

In all the three talukas, selected in the study, the negative correlation between achievement and achievement stress is statistically significant. It means that as for lower achievement, the stress is higher. It supports the

results mentioned above with chi – square test. In Umreth taluka there is higher correlation as compared to Anand and Borsad talukas. P – value is 0.000.

Table – 58 : Academic stress

Taluka	Correlation Coefficient	P-value
Anand	-0.405	0.00
Borsad	-0.389	0.00
Umreth	-0.376	0.00

In all the three talukas, selected in the study, the negative correlation between achievement and academic stress is statistically significant. It means that as for lower achievement, the stress is higher. It supports the results mentioned above with chi – square test. In Anand taluka there is higher correlation as compared to Umreth and Borsad talukas. P – value is 0.000.

Table –59 : Stress due to family pressure

Taluka	Correlation Coefficient	P-value
Anand	-0.609	0.00
Borsad	-0.441	0.00
Umreth	-0.411	0.00

In all the three talukas, selected in the study, the negative correlation between achievement and stress due to family pressure is statistically significant. It means that as for lower achievement, the stress is higher. It supports the results mentioned above with chi – square test. In Anand taluka there is higher correlation as compared to Umreth and Borsad talukas. P – value is 0.000.

Table – 60 : Financial stress

Taluka	Correlation Coefficient	P-value
Anand	-0.415	0.00
Borsad	-0.335	0.00
Umreth	-0.508	0.00

In all the three talukas, selected in the study, the negative correlation between achievement and financial stress is statistically significant. It means that as for lower achievement, the stress is higher. It supports the results mentioned above with chi – square test. In Umreth taluka there is higher correlation as compared to Anand and Borsad talukas. P – value is 0.000.

Below the factorial analysis is done to get the idea of significant contribution of factors causing stress (stressors).

Section - VI

- **Mixed Level Factorial Analysis**

Table – 61 : Achievement stress

Factor	Type	Levels	Values
Taluka	fixed	3	1, 2, 3
U/R	fixed	2	1, 2
Score	fixed	2	1, 2
Sex	fixed	2	1, 2

S = 0.617559 R-Sq = 19.79% R-Sq(adj) = 13.11%

Analysis of Variance for Ans_Mode, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
Taluka	2	2.4247	3.2167	1.6083	4.22	0.016*
U/R	1	0.5011	0.8437	0.8437	2.21	0.138
Score	1	6.7652	3.3899	3.3899	8.89	0.003**
Sex	1	0.0003	0.0172	0.0172	0.05	0.832
Taluka*U/R	2	1.8195	2.3648	1.1824	3.10	0.047
Taluka*Score	2	5.1971	6.0524	3.0262	7.93	0.000**
Taluka*Sex	2	1.1067	2.2486	1.1243	2.95	0.054
U/R*Score	1	1.0997	0.9792	0.9792	2.57	0.110
U/R*Sex	1	1.0093	0.8994	0.8994	2.36	0.126
Score*Sex	1	0.4958	0.2927	0.2927	0.77	0.382
Taluka*U/R*Score	2	2.1422	2.2084	1.1042	2.90	0.057
Taluka*U/R*Sex	2	1.6863	1.7712	0.8856	2.32	0.100
Taluka*Score*Sex	2	1.6076	1.6029	0.8014	2.10	0.124
U/R*Score*Sex	1	0.0171	0.0108	0.0108	0.03	0.867
Taluka*U/R*Score*Sex	2	0.1034	0.1034	0.0517	0.14	0.873
Error	276	105.2606	105.2606	0.3814		
Total	299	131.2367				

From above factorial analysis it can be concluded that there is significant independent effects of factors "Taluka" (p-value is 0.016) and "Achievement score" (p-value is 0.003) on stress. Whereas there is significant combined effects of some factors – like – Taluka and score (p-value is 0.000), taluka and habitat (p-value is 0.047) on achievement stress.

Table – 62 : Academic stress

Factor	Type	Levels	Values
Taluka	fixed	3	1, 2, 3
U/R	fixed	2	1, 2
Score	fixed	2	1, 2
Sex	fixed	2	1, 2

S = 0.521098 R-Sq = 22.13% R-Sq(adj) = 15.65%

Analysis of Variance for Ans_Mode, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
Taluka	2	2.1187	0.5299	0.2650	0.98	0.378
U/R	1	0.6771	0.4743	0.4743	1.75	0.187
Score	1	1.0726	0.8539	0.8539	3.14	0.077
Sex	1	4.6185	3.2757	3.2757	12.06	0.001**
Taluka*U/R	2	0.8246	0.8188	0.4094	1.51	0.223
Taluka*Score	2	1.9296	0.7544	0.3772	1.39	0.251
Taluka*Sex	2	4.7366	1.9136	0.9568	3.52	0.031*
U/R*Score	1	0.6106	0.5167	0.5167	1.90	0.169
U/R*Sex	1	0.2547	0.2855	0.2855	1.05	0.306
Score*Sex	1	1.3307	0.7892	0.7892	2.91	0.089
Taluka*U/R*Score	2	0.6952	0.6265	0.3132	1.15	0.317
Taluka*U/R*Sex	2	0.8193	0.6966	0.3483	1.28	0.279
Taluka*Score*Sex	2	0.6036	1.2603	0.6302	2.32	0.100
U/R*Score*Sex	1	0.2686	0.2027	0.2027	0.75	0.388
Taluka*U/R*Score*Sex	2	0.7438	0.7438	0.3719	1.37	0.256
Error	276	74.9458	74.9458	0.2715		
Total	299	96.2500				

From above factorial analysis it can be concluded that there is significant independent effect of factor "Sex" (p-value is 0.001) on stress. Whereas there is significant combined effects of some Taluka and Sex (p-value is 0.031) on academic stress.

Table – 63 : Stress due to family pressure

Factor	Type	Levels	Values
Taluka	fixed	3	1, 2, 3
U/R	fixed	2	1, 2
Score	fixed	2	1, 2
Sex	fixed	2	1, 2

S = 0.422210 R-Sq = 37.38% R-Sq(adj) = 32.16%

Analysis of Variance for Ans_Mode, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
Taluka	2	2.0888	0.4908	0.2454	1.38	0.254
U/R	1	0.0090	0.0311	0.0311	0.17	0.677
Score	1	1.7482	0.7477	0.7477	4.19	0.041*
Sex	1	0.2200	0.1063	0.1063	0.60	0.441
Taluka*U/R	2	0.1432	0.0237	0.0119	0.07	0.936
Taluka*Score	2	9.9430	4.9511	2.4756	13.89	0.000**
Taluka*Sex	2	3.2046	2.1958	1.0979	6.16	0.002**
U/R*Score	1	0.0024	0.0000	0.0000	0.00	0.988
U/R*Sex	1	0.9014	0.3643	0.3643	2.04	0.154
Score*Sex	1	3.5670	2.0963	2.0963	11.76	0.001**
Taluka*U/R*Score	2	0.8059	0.9202	0.4601	2.58	0.078
Taluka*U/R*Sex	2	0.1008	0.3596	0.1798	1.01	0.366
Taluka*Score*Sex	2	5.9246	6.0493	3.0246	16.97	0.000**
U/R*Score*Sex	1	0.3152	0.4542	0.4542	2.55	0.112
Taluka*U/R*Score*Sex	2	0.3960	0.3960	0.1980	1.11	0.331
Error	276	49.2000	49.2000	0.1783		
Total	299	78.5700				

From above factorial analysis it can be concluded that there is significant independent effect of factor "Achievement score" (p-value is 0.041) on stress. Whereas there is significant combined effects of some factors – like – Taluka and achievement score (p-value is 0.000), taluka and sex (p-value is 0.002) on stress due to family pressure.

Table – 64 : Financial stress

Factor	Type	Levels	Values
Taluka	fixed	3	1, 2, 3
U/R	fixed	2	1, 2
Score	fixed	2	1, 2
Sex	fixed	2	1, 2

S = 0.512655 R-Sq = 15.84% R-Sq(adj) = 8.82%

Analysis of Variance for Ans_Mode, using Adjusted SS for Tests

Source	DF	Seq SS	Adj SS	Adj MS	F	P
Taluka	2	2.6844	1.3451	0.6725	2.56	0.079
U/R	1	0.1571	0.1891	0.1891	0.72	0.397
Score	1	0.8806	0.1881	0.1881	0.72	0.398
Sex	1	0.0913	0.1562	0.1562	0.59	0.441
Taluka*U/R	2	0.1708	0.2525	0.1262	0.48	0.619
Taluka*Score	2	0.9204	0.3140	0.1570	0.60	0.551
Taluka*Sex	2	0.9523	1.5796	0.7898	3.01	0.051
U/R*Score	1	1.6633	1.5578	1.5578	5.93	0.016*
U/R*Sex	1	0.5589	0.9267	0.9267	3.53	0.061
Score*Sex	1	0.6882	1.2436	1.2436	4.73	0.030*
Taluka*U/R*Score	2	0.0759	0.0207	0.0104	0.04	0.961
Taluka*U/R*Sex	2	0.1780	0.1133	0.0567	0.22	0.806
Taluka*Score*Sex	2	3.9426	1.8770	0.9385	3.57	0.029*
U/R*Score*Sex	1	0.1894	0.3895	0.3895	1.48	0.224
Taluka*U/R*Score*Sex	2	0.4966	0.4966	0.2483	0.94	0.390
Error	276	72.5370	72.5370	0.2628		
Total	299	86.1867				

From above factorial analysis it can be concluded that there is no significant independent effects of any factors on stress. But there is significant combined effects of some factors – like – habitat and score (p-value is 0.016), score and sex (p-value is 0.030) on financial stress.

From above factorial analysis we can conclude that there is significant effect of taluka and achievement score on achievement stress of the students. Further, there is significant effect of gender on academic stress of students. There is no direct effect of taluka on academic stress but the combine effect of taluka with gender is significant on academic stress of students. Family stress of students have no direct effect of any variables (taluka, achievement sore, gender and habitat) but the combine effect of taluka with achievement score and gender has significant effect on family stress of students. Financial stress of students have no direct effect of any variables (taluka, achievement sore, gender and habitat) but the combine effect of habitat with achievement score and gender has significant effect on financial stress of students.

Here we note that these results support the results obtained in section – IV using chi – square test.