CHAPTER - V

ANALYSIS AND INTERPRETATION I

Chapter No.5

ANALYSIS AND INTERPRETATION I

5.1 Introduction :

From the very inception of research endeavour and upto its completion, undoubtedly, all the phases have their own importance in the body of research, but the importance of the phase of analysis of data exceeds in comparison to other phases and even the choice of suitable statistics is most crucial part of the data analysis. Keeping this fact in mind necessity of appropriate measures was felt at the very outset of this chapter. After long discussion with experts and fellow researchers; the investigator decided to workout the following measures -

Computation of t-value for significance of difference between two means.

χ^2 value for tests of independence and normalcy of the sample.

r, for coefficient of correlation between two variables.

In the beginning of the present chapter a description of the sample has been made on the basis of age, sex, residence, status, experience and academic stream of the secondary school teachers. Following it, a graphical representation of the extent of frustration in the population of secondary school teachers and bar diagrams for extent of different patterns of reactions to frustration are given in this chapter. Besides these, the data has been analysed to seek the answers of following questions also in the same chapter:

Is there any sex difference in the extent of reactions to frustration?

Is there any difference due to age, sex, experience, status, residence or academic stream in the extent of reactions to frustration?

Is the distribution of extent of frustration in the population, normal or equal?

Are the different patterns of reactions to frustration dependent upon each other or independent attributes?

5.2 Description of the Sample :

The sample drawn from the population of secondary school teachers is described here in the following way depending upon their age, sex, residence, status, teaching experience and academic stream of their study.

Table No.5.1 : Distribution of Teachers on the basis of Age

Age group (years)	Number of teachers	Average Age	Standard deviation
56 - 60	14		
51 - 55	26		
46 - 50	27		
41 - 45	75	38.70	7.75
36 - 40	108		
31 - 35	100		
26 - 30	43		
21 - 25	7		
	N = 400		

The table No.5.1 given above, shows the range of the age of the teachers taken in the study. It ranges from 21 to 59 years which shows that in the sample, there are some teachers who have already completed their services and are on the verge of retirement and side by side some have just joined the services whose number is shown in the table. The average age of the sample is 38.70 years and standard deviation 7.75. The percentage of upper age group of teachers ie. between 56 to 60 years is 3.5% and that of lower age group of teachers ie. between 21 to 25 years is 1.75% which shows that upper group's percentage is higher than lower group. The sample of teachers was also classified according to the teaching experience which is shown in the table No.5.2. From the table, it is clear that the range of teaching experience is very high ie. it includes the teachers having teaching experience of one year to 40 years. Although there are only two teachers in the highest group ie. between 36 to 40 years of teaching experience but in the lowest group ie. between 1 to 5 years of experience, there are 41 teachers which are 0.5% and 10.25% respectively of the total sample taken in the study. The average teaching experience of the teachers in the sample is 15.59 years and the standard deviation of the distribution is 7.60.

Classification of the sample of teachers on the basis of dichotomized groups is shown below in the table No.5.3. The different variables taken for dichotomization were age, sex, status, teaching experience, residence and academic stream of the teachers.

Table No.5.2 : Distribution of Teachers on the basis of Teaching Experience.

Teaching experience	Number of teachers	Average experience (years)	Standard deviation
36 - 40	2		
31 - 35	13		
26 - 30	24		
21 - 25	55	15.59	7.60
16 - 20	106		
11 - 15	98		
6 - 10	61		
1 - 5	41		
	N = 400		

Table No.5.3 : Classification of the Teachers Dichotomized on the basis of Different Variables.

S.No.	Variables	Dichotomized groups	Number of teachers	Total
1.	Age	More than 35 years	250	400
		Less than 35 years	150	
2.	Sex	Male	350	400
		Female	50	
3.	Status	Lecturers	130	400
		Assistant Teachers	270	
4.	Experience	More than 15 years	200	400
		Less than 15 years	200	
5.	Residence	Rural	310	400
		Urban	90	
6.	Academic stream	Science Teachers	110	400
		Social Science Teachers	290	

From the observation of tables given above (From table No.5.1 to 5.3), it is obvious that out of four hundred teachers taken in the sample 350 ie. 87.5% was the number of male teachers and the remaining 50 ie. 12.50% were female teachers. Three hundred teachers ie. 77.50% were related to rural areas and 90 ie. 22.50% were from urban sectors. The sample was consisted of 130 lectures and 270 assistant teachers which are 32.50% and 67.50% of the total sample respectively. The classification of the sample on the basis of teaching experience reveals that fifty percent ie. 200 teachers were having teaching experience of more than 15 years and remaining fifty percent were having teaching experience of less than fifteen years. When classified according to the basis of their academic stream 110 teachers fell in the group of science teachers and remaining 290 were from the social science stream which are 27.5% and 72.5% respectively of the total sample of teachers taken in the study.

The total number of institutions including both the types ie. Intermediate colleges and High schools in the Ghazipur district was 100 up to the session 1983-84 as reported by the District Inspector of schools' office (Appendix A) while the number of institutions covered for the study was twenty nine which is 29% of the total institutions out of these institutions the number of girls institutions, which were approached, was five and that of other institutions was twenty four which is 45.5% and 27.0% respectively of the total number of respective institutions in the district, because number

of girls schools and colleges was 11 and that of other schools i.e. mixed was 89 in the district (Report of Shiksha Ki Pragati 1983-84).

The total number of teachers teaching in high schools and intermediate colleges was 2214 (Report of Shiksha Ki Pragati 1983-84), out of these teachers the number of teachers approached for the purpose of study was 600 which was 27.1% of the total population of teachers but the number of teachers who had furnished the required informations in a proper manner was four hundred only (After sorting the Frustration Study tool, Adjustment Inventory and Personal Information Blank) which is 18.67% of the total population of the teachers in the district. This is the number of teachers which was used in analysis of the data to arrive at different conclusions.

5.3 Frequency Distribution of the Frustration Scores :

Frequency distribution of the frustration scores is given in the Appendix C . After making frequency distribution the mean of the total frustration scores of the teachers was calculated, it was found to be 73.40. The minimum frustration score was 25 and the maximum was 96 in the distribution. The standard deviation of the scores as calculated from the distribution was 13.3 and the values of first, second and third quartiles were 66.32, 74.23 and 82.04 respectively. From the mean and standard deviation of the sample it can be calculated (Garrett, 66, p.190) that population mean of frustration scores will lie within the limits 73.4 ± 1.73 in 99% of the

Ogive drawn from the total Frustration Scores of the teachers

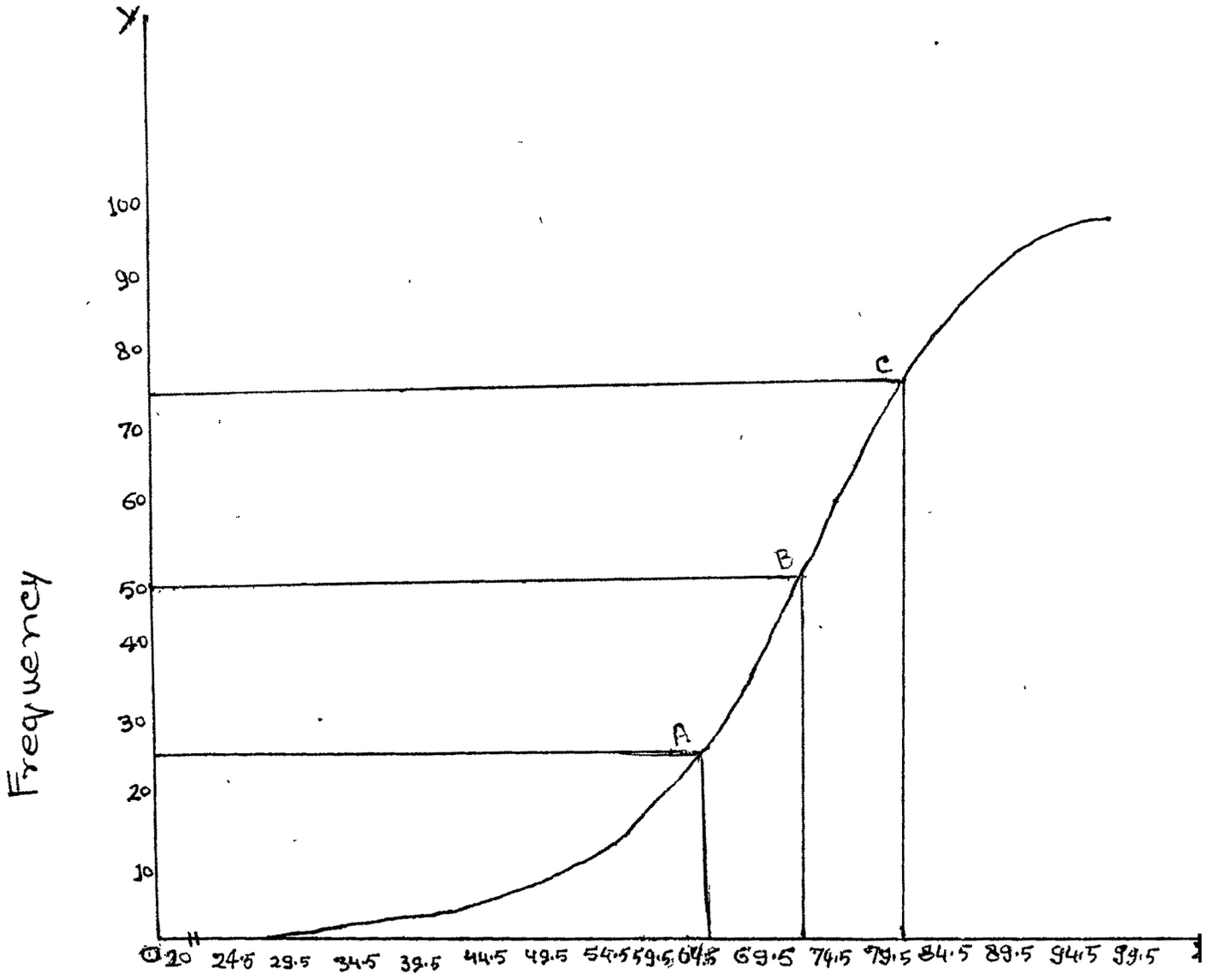

Figure N. 5.1

cases, which shows that the present sample is representative of the teacher's total population in the district.

5.4 Graphical Representation of the Distribution :

(1) Ogive drawn from the Frustration Scores :

Graphical representation of the frequency distribution is a better as well as very simple way to express the nature of the distribution in a clear cut manner. By a simple observation of the graphs, so many informations can be inferred very easily and instantly, without taking care of given explainations. Taking this fact in view an ogive from the obtained distribution was constructed and side by side some bar diagrams were also constructed from the scores obtained for different patterns of reactions to frustration.

On the basis of frequency distribution, cumulative frequencies were calculated for the respective - frequencies and from that cumulative percent frequencies were also calculated in different columns. Taking class interval on the x-axis and cumulative percentage on y-axis ogive was drawn which has been shown in the figure No.5.1 which is showing total frustration of the teachers. From the ogive (cumulative percentage curve) it is clear that in the sample, teachers having low frustration are more in number. The number of highly frustrated teachers is less than low frustrated. A majority of teachers are having moderate frustration. Around 10% of the teachers had scores between 24 to 50 and upper 20% teachers had scored between

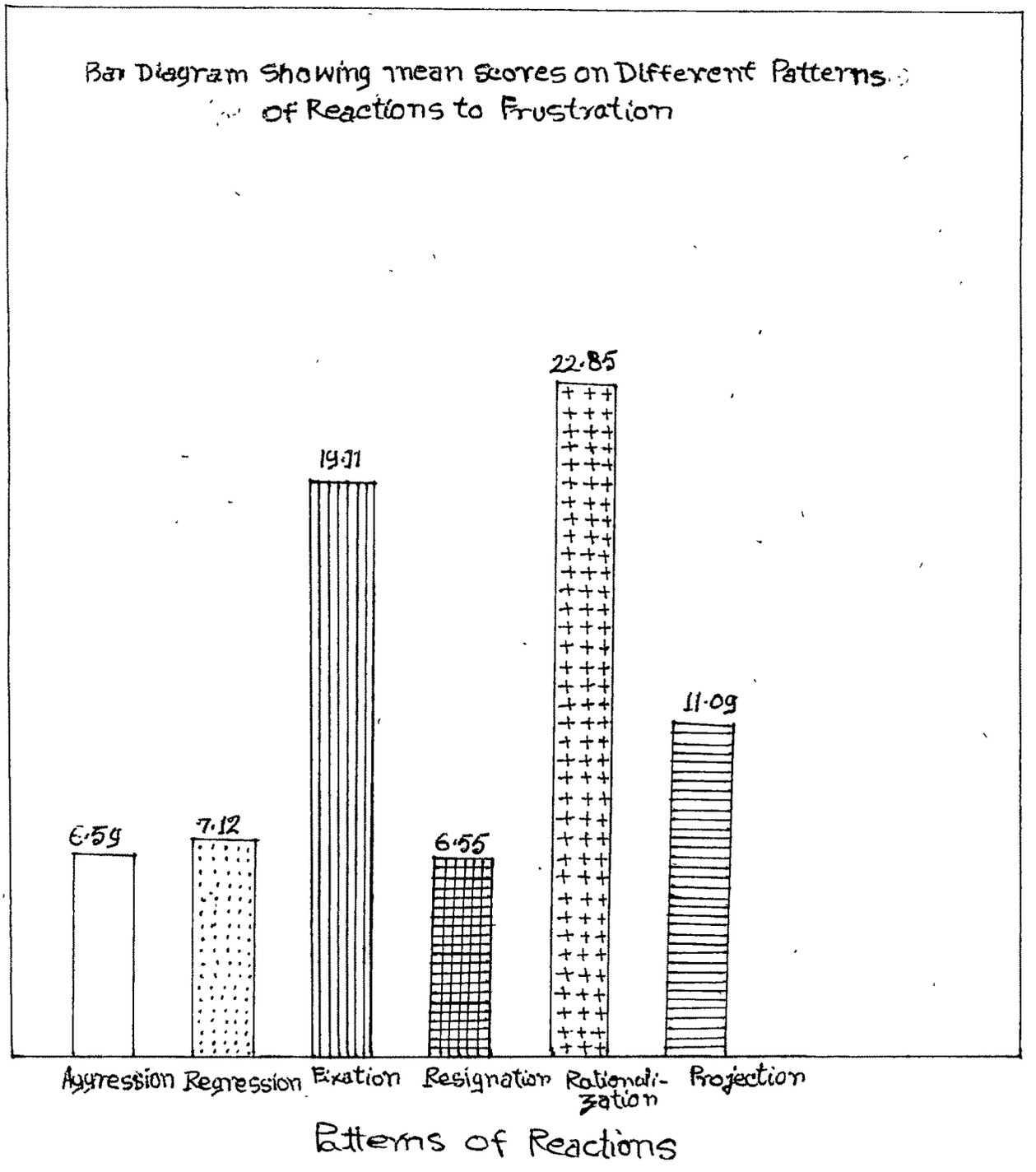
Bar Diagram showing mean scores on Different Patterns of Reactions to Frustration
Mean Scores
6·59
7·12
19·11
6·55
22·85
11·09
Aggression
Regression
Fixation
Resignation
Rationali-zation
Projection
Patterns of Reactions

Figure N. 5.2

85 to 96 which shows that frustration scores of lower 10% teachers are changing repidaly and has a high range but for that of upper 20% of the teachers it is distributed only between the scores 85 to 96. Around 70% of the teachers had scored between 50 to 85 whose slope is very high. From the observation of the curve it is clear that this is very near to normal curve. On the curve A, B and C are the points at first, second and third quartiles, from where it is apparent that these values are 66.32, 74.23 and 82.04 respectively which are nearly the same obtained from the calculation. Again the cases falling below first quartile have been taken as low frustrated, above third quartile as highly frustrated and cases in between these two points as having moderate extent of frustration.

(2) Bar Diagram drawn from Scores on Different Patterns :

Having a look on the figure No.5.2 which is a bar diagram showing different patterns of reactions to frustration (Aggression, Regression, Fixation, Resignation, Rationalization and Projection) in terms of mean scores, it can be concluded that in the sample of teachers, mean frustration score in resignation pattern is lowest which is 6.55. Mean of scores in aggression pattern is 6.59 and that of regression pattern is 7.12 which is almost third in the order. Mean score for projection pattern is 11.09 which is in the mid position. Mean scores in fixation and rationalization patterns are 19.11 and 22.95 respectively. Thus it is clear that in the sample of teachers, maximum of them are showing rationalization in

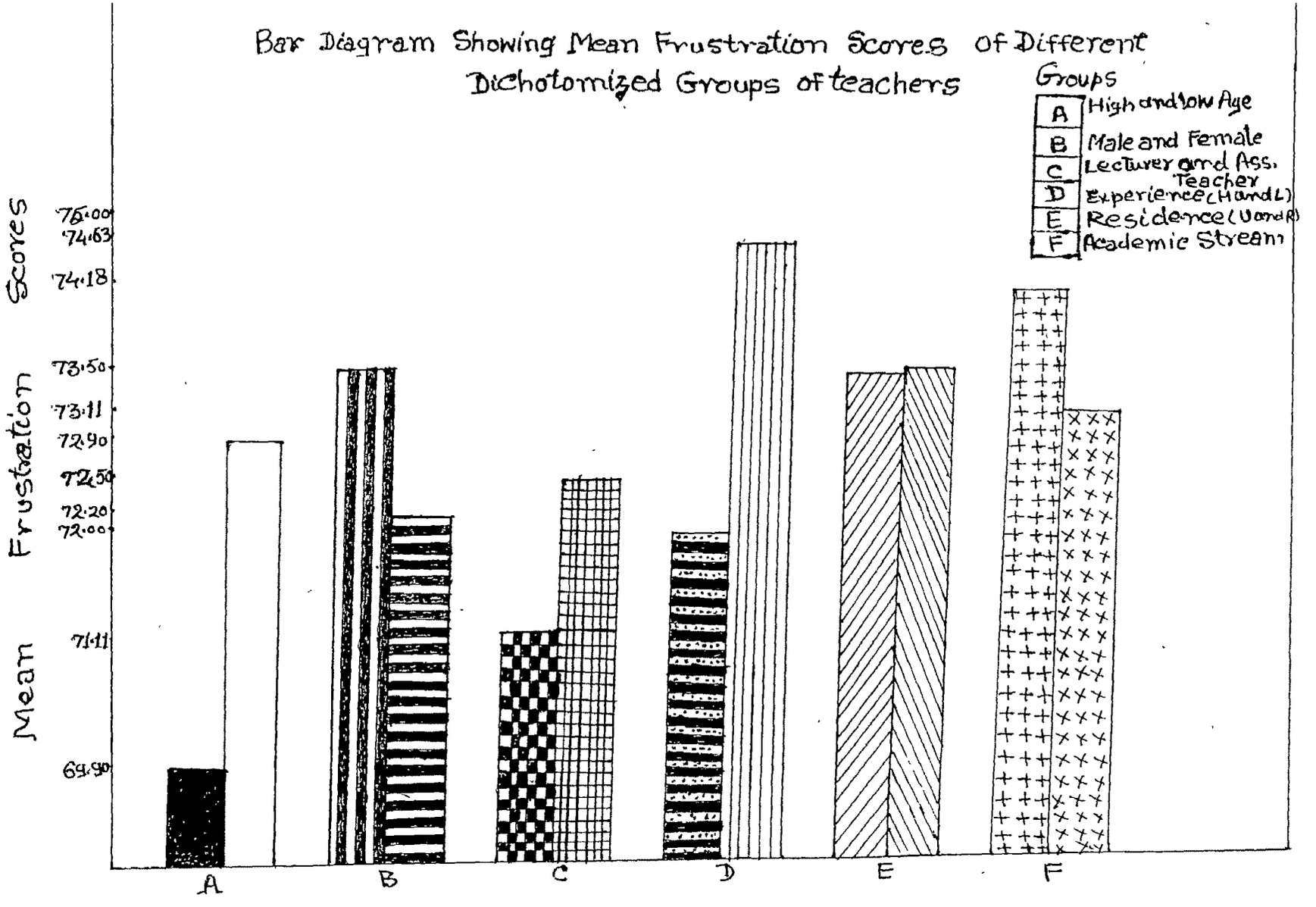
Bar Diagram Showing Mean Frustration Scores of Different Dichotomized Groups of teachers
Groups
A High and low Age
B Male and Female
C Lecturer and Ass. Teacher
D Experience (H and L)
E Residence (U and R)
F Academic Stream
Mean Frustration Scores
75.00
74.63
74.18
73.50
73.11
72.90
72.50
72.20
72.00
71.11
69.90
A
B
C
D
E
F

Figure N. 5.3

their behaviour in so many situations. In very few situations they are exhibiting aggressive, regressive or resignating behaviour. By and large, it can be said that rationalization and fixation patterns are very frequently adapted by teachers in frustrating situations.

(3) Bar Diagram Shwoing Mean Frustration Scores of Different Dichotomized Groups :

Bar diagram constructed, taking mean frustration scores of different dichotomized groups of teachers, is shown in Figure No.5.3 From the bar diagram following conclusion can be drawn -

(a) The mean frustration scores of all the six groups of teachers taken in study are more than 70 and below 80 ie. in between 70-80.

(b) Difference between means of frustration scores of lecturers and Assistant teachers is 0.39 and those of urban and rural teachers is 0.05 which are too low to be significant.

(c) Difference between mean frustration scores of male and female teachers is 1.36 and those of science and social science teachers is 1.07 which are also very low.

(d) Difference between mean frustration scores of low and high age group of teachers is 3.00 and those of high and low experienced teachers is 2.63 which are appreciable.

5.5 Significance of Difference between Mean Frustration Scores of Different Dichotomized Groups :

(a) Difference between means of Total Frustration Scores -

The variables taken for the study of frustration were age, sex, teaching experience, status, residence and academic stream of the teachers. For the purpose of convenience all the variables were divided into dichotomized groups viz - Upper age group of teachers - Lower age group of teachers, Male - Female, High experienced - Low experienced, Lecturers - Assistant teachers, Urban - Rural and Science teachers - Social science teachers (Table 5.3). The mean, standard deviation and significance of difference between means of the two dichotomized groups were calculated which are given in the table No.5.4.

It is obvious from the table No.5.4 that the difference between means of the frustration scores of upper age group and lower age group of teachers is significant at .05 level of significance which rejects the hypothesis of no effect of age on the frustration of teachers and proves that upper age group of teachers are more frustrated than lower age group of teachers. This may be due to the fact that, these teachers may be finding themselves unable to cope with the demands of present generation of students in the form of pupil - teacher interaction, side by side so many changes might have been occurred in the syllabus which must be creating some difficulties.

Difference between means of frustration scores of high and low experienced teachers is also high but not significant

Table No.5.4 : t-values of Total Frustration Scores

S.N.	Variables	Dichotomized groups	N.	Mean	S.D.	$S.E._{D.}$	t-value	Significance at .05 level
1.	Age	Upper Age group	250	72.90	13.93	1.37	2.19	Sig.
		Lower Age group	150	69.90	12.07			
2.	Sex	Male	350	73.56	13.30	1.98	0.65	Not Sig.
		Female	50	72.20	13.00			
3.	Experience	High experienced	200	72.00	13.65	1.35	1.20	Not Sig.
		Low experienced	200	74.63	13.15			
4.	Status	Lecturer	130	71.11	15.00	1.50	0.93	Not Sig.
		Assistant teachers	270	72.50	12.20			
5.	Residence	Urban	90	73.50	11.95	1.46	0.21	Not Sig.
		Rural	310	73.21	13.05			
6.	Academic stream	Science teachers	110	74.18	12.10	1.46	0.73	Not Sig.
		Social Science teachers	290	73.11	13.70			

thus accepting the hypothesis of no effect of teaching experience on the frustration of teachers.

Similarly differences between means of scores on frustration of Male and female teachers, urban and rural teachers, lecturers and assistant teachers, science teachers and social science teachers are quite low and not significant at .05 level of significance, which accepts the hypothesis of no effect of these variables on the frustration of teachers and shows that the sex, status, residence and academic stream haveno significant effect upon the total frustration of teachers.

(b) Significance of difference between means of Scores on Aggression of different groups :

The purpose of the present study was to know the different patterns of reactions to frustration evoked by the teachers, therefore after having the knowledge of total frustration, it was thought to explore in detail, the different patterns of reactions and their effect on different dichotomized groups of the teachers. Therefore mean, standard deviation and t-values for all the variables were computed for all the six patterns of reactions to frustration. In table No.5.5 difference between means of scores on Aggression of Teachers has been shown, taking all the dichotomized groups at the same time.

Table No.5.5 : t-values of Scores on Aggression of Teachers.

S.N.	Variables	Dichotomized groups	N	Mean	S.D.	S.E.$_{D.}$	t value	Significance at .05 level
1.	Age	Upper Age group	202	7.97	8.80	0.75	1.16	Not Sig.
		Lower Age group	118	7.14	7.10			
2.	Sex	Male	278	7.86	6.80	0.70	2.80	Significant
		Female	42	5.93	3.80			
3.	Experience	High experienced	172	7.70	6.36	0.74	0.27	Not Sig.
		Low experienced	148	7.50	6.80			
4.	Status	Lecturers	102	8.15	7.00	0.76	0.85	Not Sig.
		Assistant teachers	218	7.50	6.00			
5.	Residence	Urban	75	7.14	5.81	0.80	0.75	Not Sig.
		Rural	245	7.74	6.80			
6.	Academic stream	Science teachers	92	8.37	7.24	1.40	0.77	Not Sig.
		Social science teachers	228	7.29	6.26			

From the above table it can be concluded that

i) Difference of means of the scores on Aggression of male and female teachers is significant at 0.05 level of significance which rejects the hypothesis of no effect of sex on aggression of the teachers and confirms that there is sex difference in the aggression pattern of reactions to frustration. At the same time , the mean score of male teachers is higher than females, therefore it can be said that ~~it can be said that~~ male teachers are more aggressive than female teachers. This may be due to their dominant nature which creates frustration if not fulfilled properly. But females in Indian society are not supposed to show off their desires and needs. Therefore they try to adjust even in adverse situations. This is reason of their low aggression.

ii) The t-values of aggression scores of upper and lower age group of teachers is also high which is 1.16 although not significant. Therefore, it can be said that the upper age group of teachers are insignificantly more aggressive than the lower age group of teachers. Here the null hypothesis is not rejected.

iii) There is no significant difference between means of aggression scores of lecturers and assistant teachers, highly and low experienced teachers, urban and rural teachers, and science teachers and social science teachers thus accepting the hypothesis of no effect of these variables on aggression of teachers. From this result it is implied that status, experience (teaching), residence

and academic stream have no significant effect on the aggression of secondary school teachers.

(c) Regression of Dichotomized Groups of Teachers

Scores of all the six dichotomized groups of teachers on regression were worked out for mean, standard deviation and t-values which are shown in the table No.5.6.

From the table, it can be observed that the difference between means of scores, of lecturers and Assistant teachers on regression pattern is not significant at .05 level of significance but it is high, therefore, it can be said that assistant teachers are more regressive than lecturers but difference is not significant.

From the table, it is again observed that values of t's are too less to be significant at .05 level for all the groups of teachers which shows that there is no significant difference between the means of scores on regression of males and females, rural teachers and urban teachers, science teachers and social science teachers, high and low experienced teachers, upper age group and lower age group of teachers, which accepts the hypothesis of no effect of these variables on the regression of teachers. Thus it is confirmed that age, sex, experience, dwelling situation, status and academic stream of teachers have no effect on their regressive pattern of reaction to frustration.

Table No.5.6 : t-values of Scores on Regression of Teachers.

S.No.	Variables	Dichotomized groups	N	Mean	S.D.	$S.E._{D.}$	t-value	Significance at .05 level
1.	Age	Upper age group	236	8.75	5.87	0.61	0.98	Not Sig.
		Lower age group	144	8.15	5.39			
2.	Sex	Male	332	8.70	5.44	0.80	0.70	Not Sig.
		Female	48	8.17	5.10			
3.	Experience	High experienced	190	8.78	6.00	0.58	1.07	Not Sig.
		Low experienced	190	8.18	5.32			
4.	Status	Lecturers	118	7.86	5.04	0.63	1.44	Not Sig.
		Assistant teachers	262	8.77	5.96			
5.	Residence	Rural	292	8.58	5.80	0.67	0.60	Not Sig.
		Urban	88	8.19	5.35			
6.	Academic Stream	Science teachers	110	8.35	5.80	0.62	0.40	Not Sig.
		Social Science teachers	270	8.55	5.64			

(d) Fixation of Dichotomized Groups of Teachers :

The means, standard deviations and t-values calculated for the fixation scores of all the six dichotomized groups of teachers have also been shown in the table No.5.7 given on the next page.

It is apparent from the observation of the table No.5.7 that -

(i) Difference between means of the scores on fixation of upper and lower age group of teachers is significant at .05 level of significance. Thus the hypothesis of no effect of age on the fixation of teachers is rejected and it is confirmed that age has a significant effect on the fixation of teachers. Upper age group of teachers are less fixating in their behaviour than the teachers of lower age group. It may be probably because the teachers of high age group are having balanced behaviour and not going to be rigid in some situations while the teachers of low age group are showing fixating behaviour in so many situations due to their emotional unstability and less prospect for better job.

(ii) There is no effect of sex, residential situation, status, academic stream and teaching experience on the fixation of teachers, because the differences of means of the scores on fixation of these groups is not significant at .05 level of significance. Thus the null hypothesis of no effect of these variables on the fixation of teachers is retained and it is proved that fixating behaviour is independent of sex,

Table No.5.7 : t-values of Scores on Fixation of Teachers

S.N.	Variables	Dichotomized group	N	Mean	S.D.	$S.E._{D.}$	t-value	Significance at .05 level
1.		Upper age group	250	18.30	8.69	0.74	2.87	Sig.
		Lower age group	150	20.43	6.25			
2.	Sex	Male	350	19.47	8.00	1.30	0.56	Not Sig.
		Female	50	20.20	8.50			
3.	Experience	High experienced	200	19.20	8.50	0.85	0.57	Not Sig.
		Low experienced	200	19.70	8.35			
4.	Status	Lecturers	130	17.86	9.15	0.91	0.87	Not Sig.
		Assistant teachers	270	19.70	8.35			
5.	Residence	Rural	90	19.10	8.55	1.04	0.03	Not Sig.
		Urban	310	19.13	8.90			
6.	Academic stream	Science teachers	110	18.26	8.35	0.99	0.14	Not Sig.
		Social Science teachers	290	18.40	9.05			

experience, status, residence and academic stream of teachers. If it is shown any where it may be due to chance factors.

(e) Resignation of Dichotomized Groups of Teachers :

In the table No.5.8 given below means, standard deviations and t-values of scores on resignation of secondary school teachers are given -

From the table it is indicated that -

There is no significant difference between means of the scores on resignation pattern of different dichotomized groups of teachers. Thus the hypothesis of no effect of these variables on the resignation of teachers is retained and it is concluded that there is no significant effect of age, sex, status, teaching experience, residence and academic stream on the resignating behaviour of teachers. Thus, it is implied from here that although teachers might not be satisfied in their profession but they are not showing resignating behaviour ie. they are trying to adjust themselves.

(f) Rationalization of Dichotomized Groups of Teachers :

Table constructed, to study the significance of difference between means of scores of different groups related to rationalizing tendencies of teachers is given here.

From the observation of table No.5.9, it is obvious that -

Table No.5.8 : t-values of Scores on Resignation of Teachers.

S.N.	Variables	Dichotomized groups	N	Mean	S.D.	S.E.$_{D.}$	t-value	Significance at .05 level
1.	Age	Upper age group	224	6.82	4.85	0.55	0.69	Not Sig.
		Lower age group	132	6.44	5.26			
2.	Sex	Male	310	7.17	5.12	0.8	0.25	Not Sig.
		Female	46	7.37	5.14			
3.	Experience	High experienced	180	6.57	4.94	0.14	0.70	Not Sig.
		Low experienced	176	7.55	5.04			
4.	Status	Lecturers	114	7.38	5.32	0.56	0.50	Not Sig.
		Assistant teachers	242	7.10	4.84			
5.	Residence	Rural	272	7.11	4.96	0.60	0.25	Not Sig.
		Urban	84	7.26	5.20			
6.	Academic stream	Science teachers	108	6.69	4.84	0.56	0.93	Not Sig.
		Social Science teachers	248	7.21	5.04			

Table No.5.9 : t-values of Scores on Rationalization of Teachers.

S.N.	Variables	Dichotomized groups	N	Mean	S.D.	$S.E._D$	t-value	Significance at .05 level
1.	Age	Upper age group	250	22.76	10.45	0.33	0.79	Not Sig.
		Lower age group	150	23.03	9.95			
2.	Sex	Male	350	21.50	9.10	1.56	0.96	Not Sig.
		Female	50	23.01	10.50			
3.	Experience	High experienced	200	22.07	10.30	0.32	5.2	Significant
		Low experienced	200	23.80	10.20			
4.	Status	Lecturer	130	22.72	9.70	1.03	0.17	Not Sig.
		Assistant teachers	270	22.90	10.50			
5.	Residence	Urban	90	23.00	9.60	1.16	0.25	Not Sig.
		Rural	310	22.80	9.90			
6.	Academic stream	Science teachers	110	23.40	10.50	1.15	0.67	Not Sig.
		Social Science teachers	290	22.60	10.35			

1) Difference between means of scores on rationalization of low and high experienced teachers is significant at .05 level of significance, thus rejecting the hypothesis of no effect of experience on the rationalization of teachers. This confirms that low experienced teachers are more rationalizing than the teachers having high experience. This may be due to the fact that the teachers having less teaching experience are more prone in rationalizing their behaviour patterns and thus trying to adjust in the situations. High experienced teachers being more mature in the profession may be avoiding to take the help of rationalization to justify their faulty behaviours. This finding also reflects the present real picture of unemployment, although new comers might not be well adjusted in this profession but they are showing by rationalization that they are happy.

2) Differences between means of scores on rationalization of male and female teachers, upper and lower age group of teachers, lecturers and Assistant teachers, urban and rural teachers, science teachers and social science teachers are not significant at .05 level of significance. Thus the hypothesis of no effect of these variables on the rationalization pattern is retained and it is proved that there is no effect of these variables ie. age, status, sex, residence and academic stream, on the rationalization of secondary school teachers.

Table No.510 : t-values of Scores on Projection of Teachers.

S.N.	Variables	Dichotomized groups	N	Mean	S.D.	$S.E._{D}$	t-value	Significance at .05 level
1.	Age	Upper age group	244	11.04	5.35	0.62	0.25	Not Sig.
		Lower age group	144	10.88	6.55			
2.	Sex	Male	339	12.12	5.50	0.96	1.49	Not Sig.
		Female	49	10.80	6.10			
3.	Experience	High Experienced	196	11.34	5.75	1.23	0.61	Not Sig.
		Low Experienced	192	10.6	6.40			
4.	Status	Lecturers	126	10.06	5.85	0.66	2.06	Sig.
		Assistant Teachers	262	11.42	6.25			
5.	Residence	Urban	90	11.32	6.12	0.74	1.78	Not Sig.
		Rural	298	10.00	6.25			
6.	Academic stream	Science Teachers	108	10.60	6.40	0.79	0.67	Not Sig.
		Social Science teachers	280	11.12	7.15			

(g) Projection of Dichotomized Groups of Teachers.

Means, standard deviations and t-values calculated from the scores on projection of dichotomized groups is also shown in the table No.5.10.

On the basis of above table following conclusions can be drawn.

i) The difference between means of the scores on projection of Lecturers and Assistant Teachers is significant at .05 level of significance. Thus the hypothesis of no effect of status on the projection pattern of teachers is rejected and it is proved that assistant teachers are more projecting in nature than the lectures ie. status is affecting the projection pattern of teachers. This result reflects the present feeling, regarding status, of the teachers. The teachers who are in the status of lecturers are having superiority in themselves due to which assistant teachers are feeling inferiority complex and therefore by projecting their thinking they try to adjust in the profession. Less salary drawn by them might also be one of the reasons.

ii) The difference between means of the scores on projection of male and female teachers and those of urban and rural teachers is not significant at .05 level of significance but they are approaching to be significant which shows that male teachers are more projecting than female teachers and urban teachers are also more projecting than rural teachers. Although the null hypothesis of no effect of

sex and residence on the projection of teachers is not rejected even then it can be said that these factors are contributing to the some extent on the projection pattern of teachers but effect is insignificant.

iii) Other groups of teachers dichotomized on the basis of age, experience, and academic stream have no effect on the projection pattern of frustration because the differences between means of scores on projection of all these groups of teachers are not significant at .05 level of significance. Thus the hypothesis of no effect of age, experience and academic stream of teachers on their projection pattern is retained.

5.6 Extent of Frustration Amongst Teachers :

One of the objectives of the investigation was to study the extent of frustration amongst secondary school teachers. Here, the term extent conveys the meaning - different levels of frustration in which all the scores of the subjects could be categorized in the terms of high average and low levels of frustration. Although for categorization of extent of frustration there are so many ways but the one, adopted here, is taking standard deviation as the point of reference ie. subjects coming in the category of one standard deviation above the mean have been taken as high frustrated, those coming in the category one standard deviation below the mean score as low frustrated and those coming in between these two categories as average frustrated or mediocre. After deciding the way of categorization of extent

of frustration, the overall frustration scores of the subjects were worked out in frequency distribution. From there mean and standard deviation were calculated and on the basis of categorization, discussed above, three levels of extent of frustration for all the subjects were made.

The mean of the total frustration scores was 73.4 with standard deviation 13.3. Thus the scores between mean $\pm$ 6 were found to be 87 and 60 respectively. Now the number of teachers who had scored 87 or above and those who had scored 60 or below it were calculated from the data sheet. These are shown below in the table No.5.11.

Table No.5.11 : Extent of Frustration Amongst Teachers.

S.N.	Extent of frustration	Number of Teachers	Percentage
1.	Highly Frustrated	60	15%
2.	Average	280	70%
3.	Less Frustrated	60	15%

N = 400

Looking to the table No.5.11 given above, it is clear that in the total sample of teachers chosen 60 teachers are more frustrated which is 15% of the sample, 280 teachers ie. 70% are having average frustration and 60 teachers ie. 15% are less frustrated.

5.6.1 Test of Significance of the Extent of Frustration :

The levels of frustration determined in the above manner have also been tested for their significance by χ^2 -test (Chisquare). There might be two ways to test the significance of the etexnts of frustration amongst, Secondary school teachers. Firstly, by assuming that the extents of frustration in all the three categories (High, Average and Low) are equally distributed in the sample and secondaly, assuming that extents of frustration in all the three categories are normally distributed in the sample of teachers. After deciding the ways, expected frequencies can be calculated and χ^2 can be determined easily. The investigator had calculated the χ^2 values for both the ways ie. on assumption of, equal probability and normal probability which are shown below.

Table No.5.12 : χ^2-values on the Assumption of Equal Probability of Extent of Frustration

S.N.	Extent of Frustration	Observed Frequency fo	Expected Frequency fe	$\frac{(fo-fe)^2}{fe}$	χ^2value
1.	High Frustrated	60	133.33	40.29	
2.	Average	280	133.33	161.9	242.48*
3.	Less Frustrated	60	133.33	40.29	

* Significant at .05 level, df = 2.

In the above table, it has been assumed that, out of 400 teachers, the number of high, average and less frustrated teachers is equal ie. extent of frustration is equally distributed in the sample of teachers. In this way the expected frequencies for all the three categories should come same ie. 133.33, which is shown in the column of expected frequency.

The χ^2 value obtained in the above way is 242.48 which is very high and beyond the range of all the levels of significance for two degrees of freedom. This result rejects the hypothesis that extents of frustration are equally distributed in the sample. Thus it can be concluded that extents of frustration are not equally distributed in the sample but some teachers might be more frustrated some in average level and some may be in less frustrated level. In other way it is inappropriate to categorize the extent of frustration on the assumption of equal probability.

When the equal probability of extent of frustration in the sample was discarded the investigator tried to test the significance of extent of frustration on the basis of normal occurrence of extent of frustration, which is shown in the table No.5.13. In this table the expected frequencies have been calculated by assuming that extent of frustration is normally distributed in the sample of teachers. Thus on the basis of method given by Garrett (66, p.257) expected frequencies have been calculated which are 64. 272 and 64 for high, average and low frustrated groups respectively.

Table No.5.13 : χ^2-value on the Assumption of Normal Occurrence of Extent of Frustration.

S.N.	Extent of Frustration	Observed Frequency fo	Expected Frequency fe	$\frac{(fo-fe)^2}{fe}$	χ^2 value
1.	More frustrated	60	64	0.25	
2.	Average	280	272	0.24	0.74*
3.	Less frustrated	60	64	0.25	

* Not significant at .01 level, df = 2

From the above table, it is observed that the value of χ^2 at 2-degrees of freedom is 0.74 which is very less to be significant at any level of significance. Therefore, it can be concluded that the observed values are very near to expected values, if it is assumed that the extent of frustration is normally distributed in the sample of teachers. Now it is proved that in the sample of teachers the extent of frustration is normally distributed ie. 15% of the teachers are in high frustrated group, 70% in average group and remaining 15% in less frustrated group and the hypothesis that extent of frustration is normally distributed in the sample of teachers is retained.

Investigator has also made an attempt to calculate the χ^2 values, for all the six patterns of reactions to frustration, on the assumption of normal occurrence of extent of frustration in the sample of teachers which are given below.

5.6.2. Extent of Aggression Amongst Teachers:

The extents of Aggression amongst teachers have been shown in the following table.

Table No.5.14 : Extent of Aggression Amongst Teachers.

S.N.	Extent of Aggression	Observed frequencies fo	Expected frequencies fe	$\frac{(fo-fe)^2}{fe}$	χ^2value
1.	Highly Aggressive	66	64	0.06	
2.	Average	198	272	20.10	101.16*
3.	Less Aggressive	136	64	81.00	

* Significant at .01 level, df=2.

The above table has been constructed on the assumption that aggression is normally distributed in the sample. The obtained value of χ^2 is 101.16 at 2-degrees of freedom which is very high from the table value for .01 level of significance ie. it is highly significant at .01 level. Therefore, it is evident that the observed values are very far from the expected values on the basis of normal distribution and it is concluded that the Extent of Aggression is not normally distributed in the sample. Thus the hypothesis that extent of aggression is normally distributed in the sample of teachers is rejected which confirms that aggressiveness is not a normal behaviour. Some teachers are more aggressive and some are less. In the present investigation 66 teachers ie. 16.50% were found to be more aggressive, 198 ie. 49.5% average and 136 ie. 34% were found to

be less aggressive. Here it is necessary to note that the number of teachers who are highly aggressive is very near to normal value but those of less aggressive is very high in comparision to normal value which is not a good sign this affects the adjustment in negative direction.

5.6.3. Extent of Regression Amongst Teachers :

Extent of Regression Amongst Teachers is shown in the following table which has been constructed on the assumption of normal occurrence of extent of regression in the sample.

Table No.5.15 : Extent of Regression Amongst Teachers.

S.N.	Extent of Regression	Observed frequencies fo	Expected frequencies fe	$\frac{(fo-fe)^2}{fe}$	χ^2 value
1.	Highly regressive	70	64	0.56	
2.	Average	286	272	0.73	7.54*
3.	Less regressive	64	64	6.25	

* Not significant at .01 level, df=2.

The obtained value of χ^2, on 2-degrees of freedom, on assumption of normal distribution of extent of regression is 7.54, which is not significant at .01 level of significance. This shows that observed values, of extent of regression, are very near to the expected values on the assumption of normal distribution ie. regression is normally distributed in the teachers. Thus the hypothesis that the extent of regression is

normally alistributed in the sample of teachers is retained. From the table it is clear that 70 teachers ie. 17.5% are more regressive, 286 ie. 71.5% average and 44 ie. 11% less regressive.

5.6.4 Extent of Fixation Amongst Teachers :

Extent of fixation amongst teachers is shown below in the Table No.5.16.

Table No.5.16 : Extent of Fixation Amongst Teachers.

S.N.	Extent of Fixation	Observed frequencies fo	Expected frequencies fe	$\frac{(fo-fe)^2}{fe}$	χ^2 value
1.	Highly fixating	94	64	14.10	
2.	Average	233	272	5.60	20.96*
3.	Less fixating	73	64	1.26	

* Not significant at .01 level, df = 2.

From the above table it is indicated that χ^2 value for extent of fixation in the sample at 2-degrees of freedom is 20.96 which is significant at .01 level of significance. This shows that the obtained values for extent of fixation are deviated from the values expected on the basis of normal distribution of fixation. From here it is confirmed that the extent of fixation is not normally distributed in the sample. Thus the hypothesis of normal distribution of extent of fixation in the sample is rejected and it is accepted that the fixating tendency is not normal in the sample of teachers. The observed number of highly fixating teachers is 94 ie. 23.5%

those of average and less fixating are 233 ie 58.25% and 73 ie. 18.25% respectively. This result shows that, in the categories of average and less fixating, observed values are very near to expected values.

5.6.5 Extent of Resignation Amongst Teachers :

Extents of Resignation amongst teachers have been shown in the table No.5.17 which has been constructed on the assumption of normal occurrence of resignation in the sample of teachers.

Table No.5.17 : Extent of Resignation Amongst Teachers :

S.N.	Extent of Resignation	observed Frequencies fo	Expected Frequencies fe	$\frac{(fo-fe)^2}{fe}$	χ^2 value
1.	Highly resignating	45	64	5.64	
2.	Average	267	272	0.10	14.74*
3.	Less resignating	88	64	9.00	

* Significant at .01 level ,df = 2.

From above table, it is clear that the obtained value of χ^2 is 14.74 at 2 degrees of freedom which is significant at .01 level of significance. This shows that the obtained values for extent of resignation are not near to the expected values for the same on the basis of normal distribution of resignation. From here it is confirmed that the extent of resignation is not normally distributed in the sample of teachers. Thus the hypothesis that the extent of resignation is normally distributed

is rejected. The observed number of teachers falling in the extent of highly resignation is 45 ie. 11.25%. Similarly the number of teachers falling in average group is 267 ie. 66.75% and those of falling in the less resignating group is 88 which is 22% of the total sample.

5.6.6 Extent of Rationalization Amongst Teachers :

Extent of rationalization, on the basis of assumption of normal occurrence of rationalization amongst teachers, is shown in the Table No.5.18.

Table No.5.18 : Extent of Rationalization Amongst Teachers.

S.N.	Extent of Rationalization	Observed frequencies fo	Expected frequencies fe	$\frac{(fo-fe)^2}{fe}$	χ^2 value
1.	Highly Rationalizing	61	64	0.15	
2.	Average	275	272	0.04	0.019*
3.	Less Rationalizing	64	64	0.00	

* Not significant at any level, df = 2.

The χ^2 value obtained from the above table at 2-degrees of freedom is 0.019 which is too low to be significant at .01 level on 2-df. which shows that the observed values for extent of rationalization are very near to the expected values for the same on the assumption of normal distribution of rationalization. From here, it is confirmed that the extent of rationalization is normally distributed in the sample of the teachers. Thus

the hypothesis, that, the extent of rationalization is normally distributed in the sample is retained. The observed numbers of the teachers falling in the extent, highly rationalizing is 61 which is 15.25% of the sample, similarly the number of teachers coming in the levels average and less rationalizing are 275 and 64 which are 68.75% and 16% respectively, of the total sample. The present finding shows that so far as rationalization is concerned these teachers are showing normal rationalizing behaviour which is sign of good adjustment.

5.6.7 Extent of Projection Amongst Teachers :

The extents of projection amongst the teachers have been shown in the table given below. In this table the extents of projection have been calculated on the basis of assumption of normal occurrence of the projection pattern in the sample of teachers.

Table No.5.19 : Extent of Projection Amongst Teachers.

S.N.	Extent of projection	Observed Frequencies fo	Expected Frequencies fe	$\frac{(fo-fe)^2}{fe}$	χ^2 value
1.	Highly projecting	47	64	4.51	
2.	Average	266	272	0.14	12.91*
3.	Less Projecting	87	64	8.26	

* significant at .01 level, df = 2

χ^2 value obtained from the table No.5.19 is 12.91 which is significant at .01 level of significance for 2 degrees of freedom.

This result proves that the observed values for extent of projection are not in coincidence with the expected values for the same on the assumption of normal distribution of projection in the sample and thus extent of projection is not normally distributed in the teacher's sample. Thus the hypothesis, that the extent of projection is normally distributed in the sample is rejected. The observed number of teachers coming in, highly projecting, average and less projecting groups are 47, 266 and 87 which are 11.75%, 66.5% and 21.75% respectively of the total population.

5.7 Interdependence among different Patterns of Reactions of Frustration :

It is but natural and logical to arise in the mind of any one, whether, different patterns of reactions to frustration are independent to each other or is there any dependence among each other? The same doubt came in the mind of investigator also and therefore he has tried here to seek the answers of these questions in proceeding lines. To have the knowledge of inter-dependence of all the different patterns of reactions to frustration (aggression, regression, fixation, resignation, rationalization and projection) following procedure was adopted which is illustrated in different steps:

(a) The total scores in different categories were broken in three parts ie. High, Medium and low. This was done taking the quartile values as point of reference. Scores below first quartile were taken as low, between first and third as medium and above the third quartile as high.

(b) Two patterns of reactions were taken at one time and their scores were put in different cells according to high, medium and low levels.

(c) Expected frequencies were calculated on assumption of independence.

(d) χ^2 values were calculated from the observed and expected values and their significance was tested on the basis of null hypothesis.

All these steps were followed as given in Garrett's book (66, p.262).

The tables and χ^2 values for different pairs are given below separately.

5.7.1 Independence between Aggression and Regression :

Test of independence was carried out to decide, whether one pattern of reaction to frustration was independent or dependent upon other patterns. This was done by taking two patterns at one time. In the case of aggression and regression, first of all three categories of the sample were made viz. high, medium and low for both the patterns. The number of teachers coming in these categories for aggression were 104, 126 and 170 and for that of regression were 150, 130 and 120 respectively. Now, out of 104 high aggressive teachers, those coming in the categories of high regressive, medium regressive and less regressive were also calculated. In the same way number of teachers for other categories in the case

of both the patterns were calculated. After completing all the cells expected frequencies or independent values were also calculated and with the help of these values χ^2 value was calculated. In the following table (and in other tables also) only summary of the computations is given to avoid big tables.

Table No.5.20 : Test of Independence between Aggression & Regression.

Patterns	High	Medium	Low	Total
Aggression	104	126	170	400
Regression	150	130	120	400

$\chi^2 = 8.86$ * df = 4

(* Not significant at .05 level)

From the above table it is clear that the χ^2 value of 8.86 at 4-degrees of freedom is not significant at .05 level of significance but it is approaching to be significant. Therefore, it can be said that there is insignificant association between aggression and regression ie. if anybody is highly aggressive then it is not certain that he will always be highly regressive and vice versa. In other words both are, to the some extent, dependent upon each other. Therefore, the hypothesis of no dependence of aggression on regression is partly rejected.

5.7.2 Interdependence of Aggression on remaining Patterns of Reactions :

In the following table χ^2 values for interdependence of aggression with fixation, resignation, retionalization and projection are shown seperately (calculations have been avoided).

Table No.5.21: Interdependence of Aggression on Fixation, Resignation, Rationalization & Projection Aggression.

Patterns	χ^2	Significance at .05 level	
Aggression & Fixation	14.08	Significant	df=4
Aggression & Resignation	10.52	Significant	
Aggression & Rationalization	38.15	Significant	
Aggression & Projection	12.59	Significant	

From the above table following conclusions can be drawn -

(i) χ^2-value of 14.08 at 4-df between aggression and fixation is significant at .05 level of significance which shows that aggressiveness and Fixating behaviours are related to each other ie. they are dependent upon one another. In other words the teachers who are more aggressive in nature are also showing high fixating tendency and vice versa. Thus the hypothesis of no dependence of aggression upon fixating behaviour is rejected.

(ii) χ^2-value between aggression and resignation is 10.52 at 4-degrees of freedom which is also significant at .05

level which shows that observed values and independent values are not close together. Therefore the hypothesis of no dependence of aggression upon resignation is rejected and it is concluded that aggressiveness and resignating tendencies of teachers are dependent upon each other ie. teachers who are more aggressive are more resignating also.

(iii) χ^2-value between aggression and rationalization is 38.15 at 4-df. which is significant at .05 level of significance. Therefore the hypothesis of no dependence of aggression on rationalization is rejected. Thus it is accepted that aggression and rationalization are dependent upon each other ie. the teachers who are more aggressive are showing the tendency of high rationalization also and vice-versa.

(iv) χ^2-value between aggression and projection is 12.59 at 4 degrees of freedom which is significant at .05 level of significance. Therefore the hypothesis of no dependence of aggression on projection is rejected and it is concluded that aggression and projection are dependent upon each other. In other words more aggressive teachers are more projecting in their behaviour and vice versa.

5.7.3 Interdependence of Regression on Fixation, Resignation, Rationalization and Projection :

For the test of interdependence of regression with fixation, resignation, rationalization and projection, χ^2-values on the basis of independent values were calculated which are given in the following table.

Table No.5.22 : Interdependence of regression on Fixation, Resignation, Rationalization and Projection.

Patterns of reactions	χ^2-values	Significance at .05 level
Regression & Fixation	14.58	Significant
Regression & Resignation	2.13	Not Sig.
Regression & Rationalization	17.06	Sig.
Regression & Projection	4.58	Not Sig.

df = 4

From the above table following conclusions can be drawn -

(i) χ^2-value between regression and fixation is 14.58 at 4 df. which is significant at .05 level of significance. Hence the hypothesis that, there is no dependence of regression upon fixation is rejected ie. there is high association of regression with fixation. Thus the teachers who are more regressive are also showing the tendencies of more fixation.

(ii) χ^2-value between regression and resignation and between regression and projection are not significant at .05 level of significance. Therefore, the hypothesis of no dependence of regression on resignation and projection is not rejected. This shows that regression is not related with resignation and projection. Thus the teachers who are more regressive may not be more resignating and more projecting.

(iii) χ^2-value between regression and rationalization at 4-degrees of freedom is 17.06 which is significant at .05 level of significance. Therefore the hypothesis of

no dependence of regression upon rationalization is rejected and it is proved that both are dependent upon each other. In other words the teachers who are more regressive are also more rationalizing and vice-versa.

5.7.4. Interdependence of Fixation on Resignation, Rationalization and Projection :

χ^2-values for independence of fixation on resignation, rationalization and projection were calculated which are shown in the table below.

Table No.5.23 : Interdependence of fixation on resignation, rationalization and Projection.

Patterns of reactions	χ^2-values	Significance at .05 levels
Fixation & Resignation	11.5	Significant
Fixation & Rationalization	17.46	Significant
Fixation & Projection	5.4	Not Sig.

df = 4

From above table following conclusions may be drawn -

(i) χ^2-value between fixation and resignation at 4-degrees of freedom is 11.5 which is significant at .05 level of significance. Therefore the hypothesis of no dependence of fixation on resignation is rejected which proves that both are dependent upon each other. So if any teacher is more fixating in nature it is necessary that he must be more resignating also.

(ii) χ^2-value between fixation and rationalization is 17.46 which is significant at .05 level of significance for 4-degrees of freedom. Therefore, the hypothesis of no dependence of fixation upon rationalization is rejected. From this result it is obvious that there is dependence between fixation and rationalization. This is why teachers who are more fixating are showing more rationalizing behaviour also.

(iii) χ^2-value between fixation and projection is 5.40 which is not significant at .05 level for 4 degrees of freedom. Thus the hypothesis of no dependence of fixation on projection is retained. Thus it is concluded that the teachers who are more or less fixating are not affected in their projecting behaviour.

5.7.5 Inter dependence of Resignation on Rationalization and Projection :

χ^2-values obtained on the basis of independence of resignation on rationalization and projection are shown in the following table -

Table No.5.24 : Interdependence of Resignation on Rationalization and Projection.

Patterns of Reactions	χ^2-values	Significant at .05 level	
Resignation & Rationalization	23.14	Sig.	df=4
Resignation & Projection	8.36	Not Sig.	

The conclusions drawn from the above table may be summarized as -

(i) χ^2 value between resignation and rationalization is 23.14 which is significant at .05 level for 4-degrees of freedom. Therefore the hypothesis of no dependence of resignation upon rationalization is rejected which means that resignation and rationalization are related to each other. Thus the teachers who are more resignating are showing more rationalizing tendency and vice versa.

(ii) χ^2 value between resignation and projection is 8.36 which is not significant at .05 level for 4-degrees of freedom. Therefore, the hypothesis of no dependence of resignation on projection is retained and it is accepted that both are not associated with each other. Thus the teachers who are more resignating are not showing any tendency of projection in their behaviour.

5.7.6 Interdependence of Rationalization & Projection :

χ^2 value between rationalization and projection on the assumption of independence is shown in following table.

Table 5.25 : Interdependence of Rationalization and Projection.

Patterns of Reactions	χ^2-value	Significance at .05 level
Rationalization & Projection	6.23	Not Sig. df=4

From the above table, it is clear that the χ^2 value of 6.23 for 4-degrees of freedom is not significant at .05 level of significance. This result does not reject the hypothesis of

no dependence of rationalization on projection and confirms that both are not associated with one another. So if any teacher is using more rationalizing tendency in his behaviour it is not necessary that he must be showing projecting tendency also because rationalization is independent of projection.

5.8 Effect of one Pattern on the Other Patterns of Reactions to Frustration :

In preceding pages dependency of different patterns of reactions to frustration upon each other has been discussed thoroughly by taking χ^2 as the measure. But this study was carried out taking only two patterns of reactions at a time because it was not easy to take all the patterns at the same time. In proceeding section the investigator has made an effort to study the nature of patterns of reaction to frustration taking one pattern of reaction in terms of high and low and observing its effect on the respective means of the scores on other patterns of reactions for the same subjects. The process is repeated by changing the patterns of reactions alternatively and observing its effect on the other patterns. At this stage t-values have been computed and by judging their significance at .05 level decisions have been taken for generalizations.

5.8.1 Effect of High and Low Aggression on the other Patterns and Adjustment of Teachers :

To study the effect of different variables on high and low aggressive teachers, the overall scores on aggression were arranged in decreasing order by making frequency distribution

of the scores. The first, second and third quartile values were calculated. The number of teachers falling below first quartile were taken as low aggressive and above third quartile as highly aggressive. After this the respective scores in other patterns of reactions were counted for high and low aggression separately ie. the scores of high and low aggressive teachers in other patterns of reactions were recorded. Now from these scores, means and standard deviations with respect to high and low aggressive teachers for all the other remaining categories (ie. regression, fixation, resignation, rationalization and projection) were calculated. From these values, their t-values were also computed. Same process was repeated for all the t-values for other patterns of reactions. In this way significance of difference between means was judged, taking the help of table No. D. (Garrett, 66, p.461), which is shown below.

Table No.5.26 : Difference between means of different patterns of High and Low Aggressive Teachers.

S.N.	Patterns of Reactions	Mean		S.D.		$S.E._{D.}$	t-value	Significance at .05 level
		Upper	Lower	Upper	Lower			
1.	Regression	9.22	7.80	5.74	5.35	0.69	2.08	Sig.
2.	Fixation	16.96	20.08	7.84	8.59	1.00	3.12	Sig.
3.	Resignation	7.47	6.17	5.26	5.00	0.61	2.13	Sig.
4.	Rationalization	16.31	24.23	8.55	9.29	0.88	9.00	Sig.
5.	Projection	8.92	10.95	5.59	6.89	0.77	2.64	Sig.
6.	Adjustment	17.04	19.13	3.85	4.24	0.51	4.17	Sig.

From the observation of above table following conclusions can be drawn -

(i) The means of regression scores of high and low aggressive teachers are 9.22 and 7.80, the difference of which is significant at .05 level of significance because t-value is 2.08. Thus the hypothesis of no effect of aggression on regression is rejected. It means, those teachers who are highly aggressive are highly regressive also and vice versa. In daily life it is observed frequently that the people who are more aggressive in some situations they also get regressed easily which is seen in the ease of teachers also.

(ii) The difference between means, of high and low aggressive teachers, on fixation is significant at .05 level of significance. Therefore, the hypothesis of no dependence of aggression on fixation is rejected, which shows that teachers who are more aggressive are showing less fixating behaviour and vice versa.

(iii) The difference between means of scores on resignation of high and low aggressive teachers is significant at .05 level of significance. Therefore, the hypothesis of no dependence of aggression on resignation is rejected ie. aggressiveness and resignating qualities are related to each other. Thus the teachers who are more aggressive are more resignating also and vice versa.

(iv) Similarly the differences between means of scores on rationalization, projection and adjustment of high and low aggressive teachers are significant at .05 level of

significance. Therefore the hypothesis of no dependence of aggression on rationalization, projection and adjustment is rejected and it is confirmed that aggression is related with these variables but the relation is inverse. Thus the teachers who are more aggressive are less projecting, less rationalizing and less adjustive in their nature, because in all these cases means of lower groups are higher than upper groups.

5.8.2 Effect of High and Low Regression, on the other Patterns of reaction and Adjustment of Teachers:

The procedure adapted to calculate the significance of difference between means of scores on different patterns and on the adjustment of high and low regressive teachers is same as discussed in the case of aggression. Therefore it is not repeated here and also for other patterns given latter. The table showing t-values is given below.

The conclusions drawn from the table No.5.27 are summarized below:

i) Difference between means of scores on Aggression of high and low regressive teachers is not significant, but it is very near to be significant ie. approaching, at .05 level of significance. Thus the hypothesis of no dependence of regression on aggression is retained which means that aggression and regression are insignificantly associated to each other. Thus the teachers who are aggressive, are also showing regressive tendencies but not always . It is interesting to note here that the dependence value

Table No.5.27 : Difference between Means of different Patterns of, high and low Regressive Teachers.

Number of Subjects

Highly Regressive = 150

Low Regressive = 120

S. N.	Patterns of Reactions	Mean		S.D.		$S.E._{D.}$	t-values	Significance at .05 level
		Upper group	Lower group	Upper group	Lower group			
1.	Aggression	6.98	5.39	6.57	5.89	0.84	1.89	Not Sig.
2.	Fixation	17.81	21.36	8.06	5.89	0.88	3.12	Sig.
3.	Resignation	6.72	6.42	5.15	5.21	0.63	0.19	Not Sig.
4.	Rationalization	21.13	25.04	9.80	11.28	1.28	3.05	Sig.
5.	Projection	10.13	11.48	5.67	6.14	0.72	1.88	Not Sig.
6.	Adjustment	18.25	18.5	4.45	4.54	0.55	0.45	Not Sig.

calculated between highly and low aggressive teachers in case of regression (table 5.26) is significant but for high and low regressive teachers in case of aggression (table 5.27) is approaching to be significant. This shows that there are some teachers who are highly aggressive but less regressive and some are highly regressive but less aggressive.

ii) The differences between means of scores on resignation, projection and adjustment of high and low regressive teachers are not significant at .05 level of significance, which retains the hypothesis that there is no dependence of

of regression on, resignation, projection and adjustment. Therefore the teachers who are more regressive may or may not be more resignating, more projecting and more adjustive and vice versa. There is no effect of these variables on regression.

iii) The difference between means of scores on fixation and rationalization of high and low regressive teachers are significant at .05 level of significance which rejects the hypothesis of no dependence of regression on rationalization and fixation and confirms that regression is associated with fixation and rationalization. Therefore, the teachers who are more regressive are less fixating and less rationalizing while those who are less regressive are showing high fixating and high rationalizing tendency in their behaviour. This reverse relationship is due to the fact that the means of lower groups are greater than means of higher groups in these patterns.

5.8.3 Effect of High and Low Fixation, on the other Patterns and on the Adjustment of Teachers:

The significance of differences between mean scores of high and low fixating teachers on different patterns as well as on adjustment have been tested which are shown in the following table.

Table No.5.28 : Difference between means of Different Patterns of High and Low Fixating Teachers.

Number of subjects

Highly Fixating = 125

Low Fixating = 91

S. N.	Patterns of Reactions	Mean		S.D.		$S.E._{D.}$	t-value	Significance at .05 level
		Upper group	Lower group	Upper group	Lower group			
1.	Aggression	4.72	8.20	4.44	8.61	0.90	3.87	Sig.
2.	Regression	6.87	9.81	4.87	6.26	0.74	3.97	Sig.
3.	Resignation	5.44	7.42	4.61	6.42	0.75	2.64	Sig.
4.	Rationalization	23.29	20.56	9.53	10.02	1.34	2.04	Sig.
5.	Projection	10.67	11.01	6.46	5.95	0.86	0.39	Not Sig.
6.	Adjustment	17.6	18.5	4.43	4.16	0.60	0.06	Not Sig.

From the observation of above table following conclusions can be drawn -

i) The differences between means of scores on aggression, regression and resignation of highly fixating and low fixating teachers are significant at .05 level of significance. Therefore, the hypothesis of no dependence of fixation on aggression, regression and resignation is rejected and it is accepted that they are related to each other. In this way the teachers who are more fixating are less aggressive less resignating and less regressive because the means of scores on aggression, regression and

resignation for high fixating teachers are less than means of low fixating teachers. In other way it can be said that fixation is inversely associated with aggression, regression and resignation.

ii) The differences between means of scores on projection and adjustment of high and low fixating teachers are not significant at .05 level of significance, which accepts the hypothesis of no dependence of projection and adjustment upon fixation. Thus fixation has no effect on projection and adjustment of the teachers.

iii) The difference between means of scores on rationalization of high and low fixating teachers is significant at .05 level of significance. This rejects the hypothesis of no dependence of fixation upon rationalization and proves that both are associated. But the mean of scores on rationalization of high fixating group is higher than mean of lower fixating group which shows that their association is direct ie. high fixating teachers are high rationalizing and vice versa.

5.8.4 Effect of High and Low Resignation on the other Patterns as well as on Adjustment of Teachers :

To study the effect of high and low resignation of teachers on their other reactions to frustration, significance of differences between mean scores were tested according to the table given below -

Table No.5.29 : Difference between Means of Different Patterns of High and Low Resignating Teachers.

Number of subjects

High Resignating = 106

Low Resignating = 120

S. N.	Patterns of Reactions	Mean		S.D.		S.E.$_D$.	t-value	Significance at .05 level
		Upper group	Lower group	Upper group	Lower group			
1.	Aggression	7.34	5.65	7.07	5.62	0.82	2.06	Sig.
2.	Regression	8.52	7.94	5.82	5.86	0.76	0.76	Not Sig.
3.	Fixation	17.65	21.16	7.85	9.27	1.12	3.13	Sig.
4.	Rationalization	21.73	24.77	8.98	8.46	0.87	3.50	Sig.
5.	Projection	9.35	10.42	5.87	6.01	0.57	1.88	Not Sig.
6.	Adjustment	16.88	19.30	4.28	4.28	0.57	4.25	Sig.

From the above table following informations can be drawn -

i) Difference between means of scores on aggression of high and low resignating teachers is significant at .05 level of significance which rejects the hypothesis of no dependence of resignation on aggression and proves that both are related to one another. Thus the teachers who are more resignating are more aggressive also and vice versa.

ii) The difference between means of scores on regression and projection of high and low resignating teachers are not significant at .05 level of significance. Therefore, the hypothesis of no dependence of regression and projection on resignation is retained ie. there is no effect of the tendency of resignation on regression and projection.

iii) The differences between means of scores on fixation, rationalization and adjustment of high and low resignating teachers are significant at .05 level of significance. Therefore the hypothesis of no dependence of fixation, rationalization and adjustment on resignation is rejected which proves that these are related to each other. But the means of scores on fixation, rationalization and adjustment of high resignating teachers are less than those of less resignating teachers. It means, the teachers who are more resignating are showing less fixating, less rationalizing and less adjustive tandencies and vice-versa.

5.8.5 Effect of High and Low Rationalization on the other Patterns as well as on Adjustment of Teachers :

Difference between means of high and low rationalizing teachers on different patterns and on their adjustment was studied according to the following table.

Table No.5.30 : Difference between means of different patterns of high and low Rationalizing Teachers.

Number of subjects
High Rationalizing =140
Low Rationalizing =105

S. N.	Patterns of Reactions	Mean		S.D.		$S.E._{D.}$	t-value	Significance at .05 level
		Upper group	Lower group	Upper group	Lower group			
1.	Aggression	4.77	9.32	4.65	7.97	0.81	5.62	Sig.
2.	Regression	7.41	9.75	7.68	7.01	0.96	2.44	Sig.
3.	Fixation	19.32	16.92	8.37	7.67	1.05	2.30	Sig.
4.	Resignation	5.91	7.46	4.46	5.98	0.67	2.31	Sig.
5.	Projection	9.60	10.06	5.39	6.58	0.73	0.63	Not Sig.
6.	Adjustment	19.00	17.81	4.00	4.30	0.52	2.30	Sig.

The conclusions drawn from the above table are given below:

i) The differences between means of scores on aggression, regression and resignation of high and low rationalizing teachers are significant at .05 level of significance which rejects the hypothesis of no dependence of aggression, regression and resignation on rationalization and confirms that these are related to rationalization. Therefore, the teachers who are high rationalizing are showing less aggressive, less regressive and less resignating behaviour because they are inversely related to rationalization.

ii) The differences between means of scores on fixation and adjustment of high and low rationalizing teachers are significant at .05 level of significance. Thus the hypothesis of no dependence of fixation and adjustment on rationalization is rejected and it is accepted that these are directly related to each other. In other words teachers who are more and more rationalizing they are more and more fixating as well as adjustive in nature and vice versa.

iii) The difference between means of scores on projection of high and low rationalizing teachers is not significant at .05 level of significance which accepts the hypothesis of no dependence of projection on rationalization ie. rationalization and projection are not related to one another. Thus the teachers who are more rationalizing in their behaviour may or may not be more projecting depending upon situation not on rationalizing tendency.

5.8.6 Effect of High and Low Projection on the other Patterns as well as on Adjustment of Teachers :

Difference between means of high and low projecting teachers on different patterns and on their adjustment was studied according to the following table -

Table No.5.31 : Difference between means of different patterns, of High and Low Projecting Teachers.

Number of subjects.

High Projecting = 165

Low Projecting = 114

S. N.	Patterns of Reactions	Mean		S.D.		$S.E._{D.}$	t-value	Significance at .05 level
		Upper group	Lower group	Upper group	Lower group			
1.	Aggression	5.03	7.28	5.09	8.34	0.79	2.85	Sig.
2.	Regression	7.76	8.25	5.63	5.13	0.63	0.75	Not Sig.
3.	Fixation	19.71	19.55	9.03	8.83	1.07	0.75	Not Sig.
4.	Resignation	6.64	7.57	4.76	6.04	0.64	1.45	Not Sig.
5.	Rationalization	22.88	23.56	10.22	10.85	1.26	0.54	Not Sig.
6.	Adjustment	19.21	18.90	4.61	4.22	0.54	0.57	Not Sig.

From the above table following informations can be drawn:

i) Difference between means of scores on aggression of high and low projecting teachers is significant at .05 level of significance which rejects the hypothesis of no dependence of aggression on projection and confirms that

aggression is associated with projection. Therefore it can be said that teachers who are more projecting in nature are less aggressive and vice versa. This opposite relationship is due to the fact that the mean of higher group is less than the mean of lower group in the aggression category.

ii) Differences between means of scores on regression, fixation, resignation, rationalization and adjustment of high and low projecting teachers are not significant at .05 level of significance which accepts the hypothesis of no dependence of regression, fixation, resignation, rationalization and adjustment on projection. Thus projection has no effect upon these patterns.

5.8.7 Effect of High and Low Adjustment on other Patterns of Reactions of Teachers :

The emphasis of the research was also to study the effect of different patterns of reactions to frustration on high and low adjustment of teachers. Therefore, difference between means of high and low adjusted teachers on different patterns was also studied and t-values were computed which are shown in the following table.

From the observation of the above table following conclusions were drawn:

i) Differences between the means of scores on aggression and resignation of high and low adjusted teachers are significant at .05 level of significance which rejects the hypothesis of no dependence of aggression and

Table No.5.32 : Difference between means of different patterns of High and Low Adjusted Teachers.

Number of Teachers

High Adjusting = 85

Low Adjusting = 100

S. No.	Patterns of Reactions	Mean		S.D.		S.E.D.	t-value	Significance at .05 level
		Upper group	Lower group	Upper group	Lower group			
1.	Aggression	4.52	7.90	3.52	6.76	0.69	4.90	Sig.
2.	Regression	8.05	8.50	5.68	5.88	0.81	0.56	Not Sig.
3.	Fixation	18.76	19.10	7.85	8.80	1.18	0.28	Not Sig.
4.	Resignation	4.99	8.94	3.64	5.64	0.67	5.89	Sig.
5.	Rationalization	24.35	20.85	10.10	9.95	1.38	2.54	Sig.
6.	Projection	10.59	10.80	6.55	5.55	0.85	0.25	Not Sig.

resignation on adjustment and confirmes that these are related with adjustment. Again, the means of higher groups are less than means of lower groups in both the categories. Therefore, it can be said that highly adjusted teachers are less aggressive and less resignating and vice versa.

ii) Difference between means of scores on Rationalization of high and low adjusted teachers is significant at .05 level of significance, which also rejects the hypothesis of no dependence of rationalization on adjustment and proves that adjustment and rationalization are related to each

other. Thus the teachers who are highly adjusted are highly rationalizing also and vice versa.

iii) Difference between means of scores on regression, fixation and projection of high and low adjusted teachers are not significant at .05 level of significance. Thus it accepts the hypothesis of no dependence of regression, fixation and projection on adjustment. Therefore it is concluded that regression, fixation and projection are not related to adjustment.

5.9 Findings at a Glance :

A brief account, of the findings, to which are arrived at in the present chapter is following -

1) The average age of the sample of teachers selected for the study was 38.70 years with standard deviation 7.75.

2) The average teaching experience of the teachers selected was 15.59 years with standard deviation 7.60.

3) a) Difference between means of frustration scores of upper and lower age group of teachers was significant at .05 level of significance.

b) Differences between means of frustration scores of male and female teachers, highly and low experienced teachers, rural and urban teachers, lecturers and assistant teachers, science teachers and social-science teachers were not significant at .05 level of significance.

4) (a) Difference between means of scores on aggression of male and female teachers was significant at .05 level of significance showing sex difference in aggressive pattern of reactions to frustration.

(b) Differences between means of scores on aggression of upper and lower age group of teachers, highly and low experienced teachers, lecturers and assistant teachers, rural and urban teachers, science teachers and social-science teachers were not significant at .05 level of significance.

5) (a) Difference between means of scores on regression of lecturers and assistant teachers, highly and low experienced teachers was high but not significant at .05 level of significance.

(b) Differences between means of scores on regression of upper and lower age group of teachers, male and female teachers, rural and urban teachers, science teachers and social-science teachers were not significant showing no significant effect of these variables on regression pattern of teachers.

6) (a) Difference between means of scores on fixation of upper and lower age group of teachers, was significant at .05 level of significance, showing age difference in fixation of teachers.

(b) Differences between means of scores on fixation of male and female teachers, highly and low experienced teachers, lecturer and assistant teachers, rural and

urban teachers, science and social-science teachers were not significant at .05 level of significance showing no significant effect of these variables on fixation of teachers.

7. Differences between means of scores on resignation of upper and lower age group of teachers, male and female teachers, highly and less experienced teachers, lecturers and assistant teachers, rural and urban teachers, science teachers and social -science teachers were not significant at .05 level of significance showing no significant effect of these variables on resignation.

8. (a) Difference between means of scores on rationalization of highly and low experienced teachers was highly significant at .05 level of significance showing effect of teaching experience on rationalization.

(b) Differences between means of scores on rationalization of upper and lower age group of teachers, male and female teachers, rural and urban teachers, lecturers and assistant teachers, science teachers and social-science teachers were not significant at .05 level showing no significant effect of these variables on rationalization of teachers.

9. (a) Differences between the means of scores on projection of male and female teachers, upper and lower age group of teachers, highly and low experienced teachers, rural and urban teachers, science and social-science teachers were not significant at .05 level of significance showing insignificant effect of these variables on projection of teachers.

(b) Difference between the means of scores on projection of lecturers and assistant teachers was significant at .05 level of significance.

10. Extent of frustration in teachers was found as - 15% highly frustrated, 70% average and 15% less frustrated.

11. (a) χ^2-value on assumption of equal probability of extent of frustration was highly significant at .01 level of significance showing that frustration was not equally distributed in the sample of teachers.

(b) χ^2-value on the assumption of normal occurrence of extent of frustration in the sample was too less to be significant at .05 level of significance, showing that extent of frustration was normally distributed in the sample of teachers.

12. (a) χ^2-values, on the assumption of normal occurrence of aggression, fixation, resignation and projection in the sample were significant at .01 level proving that these patterns were not normally distributed in the sample.

(b) χ^2-values, on the assumption of normal occurrence of regression and rationalization, in the sample were not significant at .01 level, showing that these patterns were normally distributed in the sample of teachers.

Findings drawn from χ^2 test :

13. (a) χ^2-value on test of independence between aggression and regression was not significant but approaching to be significant at .05 level showing insignificant association between aggression and regression.

(b) χ^2-value on test of independence of aggression on resignation and projection was significant at .05 level showing association of aggression on resignation and projection. Similarly aggression was found to be associated with fixation and rationalization also.

14. (a) χ^2-values on test of independence of regression on fixation and rationalization were significant at .05 level showing association of regression with fixation and Rationalization.

(b) χ^2 values on the test of independence of regression on resignation and projection were not significant at .05 level showing no significant association of regression with resignation and projection.

15. (a) χ^2-values on the test of independence of fixation on resignation and rationalization was significant at .05 level of significance showing association of fixation with resignation and rationalization.

(b) χ^2-value on test of independence of fixation on projection; was not significant at .05 level showing no association of fixation with projection.

16. (a) χ^2-value on the test of independence of resignation on rationalization was significant at .05 level showing association of resignation with rationalization.

(b) χ^2-value on test of independence of resignation on projection was not significant at .05 level showing no association of resignation with projection.

17. χ^2-value on test of independence of rationalization on projection was not significant at .05 level showing no significant association of rationalization with projection.

Findings drawn from t-test :

18. Differences between means of scores on regression, fixation, resignation, rationalization, projection and adjustment of high and low aggressive teachers were significant at .05 level showing association of aggression with these variables.

19. (a) Difference between means of scores on aggression of high and low regressive teachers was approaching to be significant showing association of aggression with regression.

(b) Differences between means of scores on fixation and rationalization of high and low regressive teachers was significant at .05 level showing association of regression with fixation and rationalization.

(c) Differences between means of scores on resignation, projection and adjustment of high and low regressive teachers were not significant at .05 level showing no association of regression with these reactions.

20. (a) Differences between means of scores on aggression, regression, resignation and rationalization of high and low fixating teachers were significant at .05 level of significance showing association of fixation with these variables.

(b) Differences between means of scores on projection and adjustment of high and low fixating teachers were not significant at .05 level showing no association of fixation with projection and adjustment.

21. (a) Differences between means of scores on regression and projection of high and low resignating teachers were not significant at .05 level showing no association of resignation with regression and projection.

(b) Differences between means of scores on aggression, fixation rationalization and adjustment of high and low resignating teachers were significant at .05 level of significance showing association of resignation with these variables.

22. (a) Differences between means of scores on aggression, regression, fixation, resignation and adjustment of high and low rationalizing teachers were significant at .05 level showing association of rationalization with these variables.

(b) Difference between means of scores on projection of high and low rationalizing teachers was not significant at .05 level showing no association of projection on rationalization.

23. (a) Difference between means of scores on aggression of high and low projecting teachers was significant at .05 level showing association of projection on aggression of teachers.

(b) Differences between means of scores on regression, fixation, resignation, rationalization and adjustment of high and low projecting teachers were not significant at .05 level showing no association of projection with these variables.

24 (a) Differences between means of scores on aggression, resignation and rationalization of high and low adjusted teachers were significant showing association of adjustment with aggression, resignation and rationalization of teachers.

(b) Differences between means of scores on regression, fixation and projection of high and low adjusted were not significant at .05 level showing no association of adjustment with regression, fixation and projection of teachers.