CHAPTER - 4

DISCUSSIONS AND INTERPRETATION

The present chapter deals with various results and their interpretations. As described in the preceeding chapter the Trade Union affiliation of three different Unions viz. All India Trade Union Congress, Indian National Trade Union Congress and Hind Mazdoor Sabha were studied with respect to five syndromes or factors of Union affiliation, eight motivational dimension and fifteen personal needs. From each union,120 Blue Collar and 120 White Collar employees were administered the following tools:

1 Trade Union affiliation questionnaire

2 Worker's motivation scale

3 Edwards Personal Preference Schedule (EPPS)

It should be noted that all the samples were drawn from various industries located in and around Baroda city; they are the members of their respective unions. The study of nature of job on the trade union affiliation is also an important part of the present research.

In the present study, a 2 x 3 factorial design was used. The data was arranged in a table containing two rows and three columns. The rows correspond to the type of job and the column the type of unions. The data was analysed in three

terms of levels of unions, two levels of employees and the interaction of both union and employee levels together . There are altogether 29 Anova tables depicting different results. Out of 29 Anova tables the first six Anova tables are pertaining to affiliation, tables seven to fourteen are pertaining to motivational aspects, and the remaining Anova tables are about EPPS needs. The data was processed in an I.B.M 360 Computer of the M.S.University, Baroda - Computer Centre. The design was used to study the main effect of unions, type of job, the interaction effects. Accordingly the analysis of variance was used for the affiliation dimensions. The results of security syndroms of trade union affiliation are presented in Anova table 1.

Anova Table 1 Effects of Union affiliation (Security Syndroms)

Source	df	SS_q	MSw	F
Union (U)	2	160.52	80.26	5.5*
Nature of Job(WxB)	1	99.15	99.15	6.81*
UxW,B	2	12.13	6.07	.42
Within	714	10386.38	14.55	-
Total	719	10494.50	-	-

* P $<$ .01

Supplementary calculations were also carried out to find the mean and the mean differences within groups. (To find out the mean differences Tukey's gap test was applied). Using the following formula

$$\sqrt{\frac{2\ MSw}{N}}$$

t.01 = 2.59 2.59 x.35 = .9065

t.05 = 1.96 1.96 x .35 = .686

Table 1.1 The mean differences and their significance

Mean	Mean differences
U1 = 24.00	U1 - U2 = .87 **
U2 = 23.13	U2 - U3 = 3.13 *
U3 = 20.00	U1 - U3 = 4.00 *

* P $<$ .01

** P $<$ .05

Henceforth the U1 stands for I.N.T.U.C.

U2 stands for A.I.T.U.C.

U3 stands for H. M. S.

As can be seen from the Anova table 1, the F ratio of 5.5 in case of Union is significant beyond .01 level of confidence. It means that different unions viz INTUC, AITUC and HMS differ significantly in respect of security

of trade union affiliation. The security syndrome or security aspect denotes the all round security of union members; it includes financial and non-financial aspects. Further the security syndrome denotes social security, the prosperity of the workers, the prosperity of the nation. Further it also indicates the job security and adequate financial security to meet the necessaries and comforts of the employees.

The mean score of this aspect for INTUC trade union is 24.00, AITUC is 23.13 and HMS is 20.00. The total possible score on security syndrome is 30. Thus the mean score of each union represents better than average position. Thus results indicate that unionwise all the three union members are showing significant affiliation in terms of security syndrome.

The mean difference between U1 and U2 is .87 which is significant at .05 level of confidence. Thus the results indicate that the security syndrome of INTUC union is better expressed than AITUC members. Both the mean difference between U2 -U3 and U1 - U3 is beyond .01 level of confidence, thereby indicating that security affiliation syndrome is more pronounced among AITUC union than HMS union and more in INTUC union as compared to HMS union.

The F ratio of 6.81 in case of nature of job i.e. blue collar and white collar employees are also significant

beyond .01 level of confidence. Thus blue collar and white collar employees differ in respect of security syndrome of union affiliation. The mean score of white collar employee is 22.55 and blue collar is 15.39. Thus white collar employees score is higher than that of the blue collar employees. The difference is 7.16 in favour of white collar employees. This implies that white collar employees give more weightage to prosperity, financial security, promotion policies, and adequate facilities than blue collar workers.

The results also shows no significance in the interaction of union and employees put together.

Anova table 2 Effects of union affiliation (Economic aspect)

Source	df	SSq	MSw	F
Union (U)	2	158.13	79.07	5.74 *
Nature of job	1	96.44	96.44	7.00 *
U x W,B	2	24.06	12.03	.87
Within	714	9829.06	13.77	-
Total	719	10016.94	-	-

* $P < .01$

2.59 x .33 = .854

1.96 x .33 = .646

Table 1.2 The mean differences and their significance

Mean	Mean differences
U1 - 22.00	U1 - U2 = 1.86 *
U2 - 23.86	U2 - U3 = 3.17 *
U3 - 20.69	U1 - U3 = 1.31 *

* P < .01

It can be seen from the Anova table 2 that the F ratio of 5.74 in case of union is significant beyond. 01 level of confidence. It indicates that the three union differ significantly in respect of economic aspect of trade union affiliation. Economic syndrome or economic aspect denotes beliefs in socialised means of production and distribution, workers right to hold the job in industry, participation of wage policy decision along with the management etc. Further the positive side of economic syndrome is of employees welfare, representation of judges from the workers side in the labour court etc. All these factors are in general contributing to the economic well being of the workers. The mean score of INTUC union is 22, AITUC is 23.87 and HMS is 20.69. Thus the mean score indicates that unionwise all the three unions are showing significant affiliation in terms of economic aspects. It means

that the members are interested in promoting socialised system of economy. Further the workers are conscious about their legitimate right in holding a job, alongwith participation in wage policy with the management.

The mean difference between U1 and U2, U2 and U3, U1 and U3 beyond significante of .01 level confidence. In promoting economic syndromes of union affiliation AITUC union is in better than INTUC and INTUC is better than HMS.

The F ratio of 7.00 in case of level of employee is also significant beyond .01 level of confidence. It means that the blue collar and white collar employees differ in respect of economic syndromes of union affiliation. The mean score of white collar employee is 23.26 and that of blue collar employee is 15.36 . Thus white collar workers score is higher than that of blue collar employees. The difference is of 7.9 in favour of white collar employees. This is possible because the white collar employees are more conscious of wide spectrum of economic promotion than the blue collar employees.

The results show no significant difference in the interaction of union and workers put together.

Anova table -3 Effects of Union Affiliation
(Idiological aspects)

Source	df	SSq	MSw	F
Union	2	15.06	7.53	.55
Nature of job	1	3.38	3.38	.25
U x W,B	2	109.31	54.65	4.03 **
Within	714	9687.06	13.57	-
Total	719	9814.81	-	-

** P < .05

Table 1.3 The mean differences and their significance on ideological aspects

Mean	Mean difference between the groups
U1 = 22.45	U1 - U2 = 2.3 *
U2 = 24.75	U2 - U3 = 6.11 *
U3 = 18.64	U1 - U3 = 3.81 *
U1W = 24.52	U1W-U2W = .24
U2W = 24.28	U2W-U2W = 3.81 *
U3W = 25.52	U1W-U3W = 1.00 *
U1B = 24.92	U1B-U2B = .03
U2B = 25.22	U2B-U3B = 4.37 *
U3B = 20.85	U1B-U3B = 4.07 *
W.T = 24.77 B.T. =16.78	W.T - B.T = 7.99 *

* P < .01

As can be seen from the Anova table 3 the F ratio .55 for the three unions is not significant. In the same way, the F ratio of .25 is not significant with respect to the nature of job also. The F ratio of 4.03 in case of interaction effect is significant beyond .05 level of confidence. Thus the results indicate that the combined influence of union and nature of job have certain influence on ideological syndrome of trade union affiliation.

The positive side of ideological syndrome of trade union indicates a free stable and independent trade union movement for the progress of the employees, a common philosophy to safeguard the interest of the workers and workers unit to keep the identity. Further ideology denotes the moral, the intellectual, the social, the cultural developments of the members; trade union participation in the socio-economic upliftment of the society etc. And also ideologically it expresses the desire to keep the movement of trade union high above antagonistic forces like caste, creed, religion and language.

Mean difference between the union is beyond .01 level of confidence, thereby indicating that the AITUC members are more interested in promoting ideological syndromes than the INTUC members and the INTUC members are more affiliated in ideological syndrome than the HMS members.

Taking into consideration the white collar employees alone, the difference between AITUC white collar employees and INTUC white collar employees indicates no significant difference whereas the difference between AITUC and HMS and between INTUC and HMS is significant beyond .01 level of confidence, thereby indicating that AITUC white collar employees and INTUC white collar employees are more affiliated in the ideological syndromes of trade union affiliation, than HMS white collar employees.

In the same manner the difference between AITUC blue collar employees and INTUC blue collar employees indicates no significant difference whereas the difference between AITUC blue collar employees and HMS blue collar is beyond .01 level of confidence.

The mean score of the white collar employee is 24.77 and that of blue collar is 16.78. Thus the mean score of white collar employee is higher than that of blue collar employees. The difference is 7.99 in favour of white collar employees. We can conclude that white collar employees shows more affiliation in ideological syndrome than blue collar employees.

Next aspect of trade union affiliation is related to the political syndrome. Political syndrome of trade union affiliation as used to assess the political affiliation of

trade union is related to general political awareness rather than different political ideologies putforward by different political parties.

Referring to table 4 the F ratio in case of Union is 4.45 which is significant at .05 level of confidence. The political syndrome attributes a meaningful growth of democratic fibre in the trade union, working system and to a large extent establishment of democratic norms in the country. It also denotes the merger of all trade union in the country to get justice to the employees. Political exploitation, weekening the trade unity are other important aspects of political syndrome. At the union level the F ratio is significant at .05 level of confidence. It indicates that unionwise difference is significant in respect of political syndrome of trade union affiliation.

The mean score of INTUC union is 23.40, AITUC is 23.33 and HMS is (11.87). The total possible score in the political syndrome of trade union affiliation is 30. Thus the two unions viz. AITUC and INTUC mean score is considerably better than average position, whereas HMS mean score remains to the lowest level, thereby indicating that AITUC and INTUC union are better affiliated than HMS in respect of political syndrome of union affiliation.

The mean difference between U1 and U2 is .07 which is not significant where as the mean difference between U2 - U3

is (11.46) which is very much significant at .01 level of confidence. Some way the mean difference between U1 - U3 is also (11.53) which is significant at .01 level of confidence. It means that the political affiliation syndromes between INTUC and and AITUC union is not better pronounced over other union whereas AITUC members are better pronounced than HMS union members. In the same way INTUC members too are more pronounced in their political syndrome affiliation tendency than HMS union.

The F ratio in case of nature of job is 5.68 which is significant at .01 level of confidence, It indicates that the blue collar and white collar employees differ with each other in respect of political syndrome of union affiliation. The mean score of white collar employees is 23.19 and blue collar is 20.40. Thus the white collar employees score is more than that of blue collar employees. The mean difference is 2.79 in favour of white collar employees.

The results also show no significance in the interaction of union and employees put together.

Anova table 4 Effects of Union Affiliation (Political aspects)

Source	df	SSq	MSw	F
Union (U)	2	155.13	77.56	4.45 **
Nature of job	1	98.81	98.81	5.68 *
UxW,B	2	24.06	12.03	.87
Within	714	12428.75	17.40	-
Total	719	12614.38		

** P < .05 * P < .01

2.59 x .38 = .984

1.96 x .38 = .744

Table 1.4 The mean differences and their significance

Mean	Mean difference
U1 = 23.40	U1 - U2 = .07
U2 = 23.33	U2 - U3 = 11.87 *
U3 = 11.87	U1 - U3 = 11.53 *
W.T = 23.19	W.T. B.T. = 2.79
B.T.= 20.40	

* P < .01

The fifth Anova table is indicating the leadership syndrome of trade union affiliation. In a trade union set up the leader is an important organ who is interacting constantly with the organisational set up. Very often the members of the union look into their leader to solve their grievences.

Referring to the table 5 the F ratio in case of union is 9.73 which is significant beyond .01 level of confidence. It means that all the three unions differ significantly in respect of leadership syndrome of trade union affiliation. The leadership syndrome denotes number of affiliation tendencies, such as democratic leadership, democratic method of selection of the leader in the union set up a

care taking leader in the union level to solve the problems of the workers etc. Further leadership syndrome denotes the establishment of good industrial relation, a full time dedicated leader for the upliftment of the worker.

The mean score of leadership syndrome of the three union is as follows:

I.N.T.U.C. - 23.40
A.I.T.U.C. - 23.05
H.M.S - 20.18

The average position of the mean score is higher in all the three unions, but I.N.T.U.C. and A.I.T.U.C unions are projecting better affiliation tendency than H.M.S members in leadership syndrome.

The mean difference between U1 and U2 is .35, between U2-U3 is 2.87 and between U1-U3 is 3.22. Thus the results indicate that the obtained value between I.N.T.U.C. and A.I.T.U.C union is not significant, whereas between I.N.T.U.C. and H.M.S is significant at .01 level, indicating I.N.T.U.C members are more affiliative than H.M.S in leadership syndrome of union affiliation. Same way 2.87 is the mean difference between A.I.T.U.C. and H.M.S which is significant at .01 level of confidence.

The F ratio of 27.16 in case of nature of job is also significant beyond .01 level of confidence. Thus blue collar

and white collar employees differ in projecting leadership syndrome of trade union affiliation. The mean score of white collar employee is 22.64 where as blue collar is 24.05. Thus blue collar employees score is higher than that of white collar employees. The difference is 1.36 in favour of white collar employee.

The results also show no significance in the interaction of union and employees put together.

Anova table 5 Effects of union affiliation (leadership aspects)

Source	df	SSq	MSw	F
Union (U)	2	300.05	150.22	9.73 *
Nature of job (WxB)	1	418.56	418.56	27.16 *
U x W,B	2	72.56	36.28	2.35
Within	714	11004.00	15.41	-
Total	719	11597.19	-	-

* P $<$ .01

2.59 x .35 = .9065

1.96 x .35 = .686

Table 1.5 The mean difference of leadership aspects

Mean	Mean difference
U1 = 23.40	U1 - U2 = .35
U2 = 23.05	U2 - U3 = 2.87 *
U3 = 20.08	U1 - U3 = 3.32 *

* P $<$ .01

Anova table - 6 Indicates the union affiliation in general (combined together all the five areas of union affiliation syndromes)

Source	df	SSq	MSw	F
Union (U)	2	210.00	105	55
Nature of job	1	1541.00	1541.00	8.09*
U x W, B	2	344.00	172.00	.90
Within	714	136109.00	190.62	-
Total	719	138204.00	-	-

* $P < .01$

Mean score of B.T. = 116.14

Mean score of W.T. = 79.80

Difference 36.34

Referring to the table 6 the F ratio in case of union is .55 which is not significant, where as that in case of type of job it is significant at .01 level of confidence. The general trade union affiliation is obtained by combining scores of all the five syndromes. This general syndrome includes security, economic well-being ideological aspects and political leadership of union affiliation. It is assumed that all these syndromes are projecting trade union affiliation.

The mean score of white collar is 116.14, whereas that for blue collar is 79.80. Thus the difference of 36.34 score

point is in favour of white collar employees, implying that white collar employees show more trade union affiliation as compared to blue collar employees.

The F ratio for interaction effect is .90 which is not significant.

One of the hypothesis to be tested in the present research was that

> the degree of trade union affiliation with respect to union ideology, economic, security, political and leadership aspects will vary according to the type of union.

If this hypothesis is to be tested with present statistical parameters, then each affiliation syndromes must show significant F ratios at different union levels. The results indicate that there are significant differences among unions on all the five affiliation syndromes except the ideological syndrome. The ideological syndrome of trade union affiliation is significant at the interaction level the combination of union and nature of job put together.

Thus the results show that the trade union affiliation syndrome vary according to the type of union.

1. The security syndrome of trade union affiliation denotes the security aspects of union members. The perception of I.N.T.U.C., A.I.T.U.C and H.M.S members on security syndromes of union affiliation differ from each other according to the type of union they belong to.

The security syndrome of trade union affiliation of I.N.T.U.C. members is better expressed than A.I.T.U.C. members. So also A.I.T.U.C. members are in better position than H.M.S members and I.N.T.U.C is better than H.M.S members. The mean score of each union represents better position, because the maximum possible score is only 30. Thus all the three union members [illegible] show[illegible] significant affiliation in terms of security syndromes.

2. The Economic syndrome of trade union affiliation too differ significantly according to the type of union. The economic syndrome of trade union affiliation of A.I.T.U.C. members is more pronounced than I.N.T.U.C and H.M.S. union, whereas I.N.T.U.C is comparatively better than H.M.S. members.

The mean score of A.I.T.U.C - I.N.T.U.C and H.M.S. shows better than average position indicating that all the three unions are showing more affiliation in terms of economic syndromes of trade union affiliation.

3. In terms of ideological syndrome of trade union affiliation all the three unions differ from each other, but A.I.T.U.C members are more interested in promotions and ideological syndrome than I.N.T.U.C. and H.M.S. members.

4. The difference also hold true in the case of political syndrome of trade union affiliation. The political syndrome of trade union affiliation between I.N.T.U.C and A.I.T.U.C is not significant. But A.I.T.U.C and I.N.T.U.C members differ from H.M.S members.

5. The results indicate that the obtained value between A.I.T.U.C and I.N.T.U.C is not significant on leadership syndrome of trade union affiliation. Where as there is significant difference between A.I.T.U.C and H.M.S and I.N.T.U.C and H.M.S members.

II. The second hypothesis was to be tested was

Trade union affiliation will vary according to the nature of job (white collar employees and blue collar employees).

The obtained results indicate that this hypothesis is accepted. The white collar employees and blue collar employees differ in relation to the trade union affiliation. White collar employees are more affiliated than blue collar employees. This result indicates against the conventional view that blue collar employees are more concerned with trade union.

There is also variation of all the syndromes of trade union affiliation among the white collar employees and blue collar employees.

White collar employees are better in expressing their union affiliation on factors like security, and economic ideological and political aspects than blue collar employees; Where as blue collar employees have an edge over white collar employees on leadership syndrome of trade union affiliation.

III. The third hypothesis was to be tested was

the degree of trade union affiliation will be influenced by the combined effect of type of union and nature of job.

This hypothesis is rejected on the basis of obtained results. In general the trade union affiliation is not influenced by the interaction effect of union and nature of the job put together. In the same way the affiliation with respect to security, economic, political and leadership aspects is not influenced by the interaction effect of union and nature of job put together.

The ideological syndrome of trade union affiliation is influenced by the interaction effect of union and nature of job put together. The A.I.T.U.C. members are more interested in promoting ideological aspects of union, than I.N.T.U.C members. I.N.T.U.C. members are more than that of H.M.S. members.

The second part of the analysis of variance is related to motivational aspects of employees. As it is stated earlier, all together eight motivational aspects are taken for the present study. They are motivation for (1) Adequate earning ,(2) Work achievement (3) opportunity for promotion (4) Suitable type of job (5) Comfortable working condition (6) Opportunity to learn a job (7) Job security and (8) Competition.

Anova table - 7 Effects of motivation for adequate earning

Source	df	SSq	MSw	F
Union	2	7.68	3.84	1.61
Nature of job	1	15.51	15.51	6.51 *
U x W, B	2	2.33	1.16	.49
Within	714	1705.77	2.38	-
Total	719	1721.29	-	-

* P $<$ .01

Mean - white collar employees - 4.22
blue collar employees - 5.00
Mean difference - .78

As can be seen from the above table, the F ratio in case of union level is 1.61 is not significant, whereas F ratio 6.51 in case of nature of job is significant at .01 level of confidence. It indicates that there is significant

difference between white collar and blue collar employees with respect to adequate earning as a dimension of motivation - getting a highly paid job, or aspiring to be very rich, and so on. Mainly the financial benefits are projecting in the motivational side of adequate earning.

Positive side of the motivation for adequate earning indicates honest means of getting money, earning money by hard work, and according to the basic needs.

The mean score of white collar employees is 4.22 and blue collar is of 5.00. Thus blue collar employees score is higher than that of white collar employees. The difference is only .78 in favour of blue collar employees.

The results also show no significant difference in the interaction of union and category of employees put together.

Next area of motivational aspects of trade union is related to work achievement, which can be seen in chapter III as work achievement quoted as industrial nature, hard working qualities, man with a wounderful aspiration and achievement and so on.

By referring the Anova table 8 it is observed that the F ratio of 1.85 is not significant at the union level, whereas the F ratio of 15.92 is significant at .01 level of

confidence in case of nature of job. It means that blue collar employees and white collar employees differ in respect of motivation for work achievement. The mean difference of white collar employee and blue collar employee is of 1.26. The white collar employees are able to score more, thereby indicating that white collar employees are better in work achievement than blue collar employees. Work achievement means to undertake a difficult task, to work hard, to be a successful man and to establish glorious records of achievement etc.

The results also show the F ratio of 4.05 which is significant beyond .05 level of confidence in case of interaction of union and employees.

The mean score of Union 1, Union 2 Union 3 is 3.00, 4.55 and 5.00 respectively. The total possible score in work achievement is 8. Thus the mean score of AITUC and HMS represents better average position than INTUC union.

The mean difference between U1-U2, U2-U3, U1-U3 is significant at .01 level. It means that AITUC union members work achievement motivation is better pronounced than INTUC members, and HMS members are better motivated in work achievement than both AITUC and INTUC members.

The mean difference between blue collar employees of U1 and U2 is not significant, whereas U1-U3, U2-U3 is significant

beyond .01 level of confidence. Thus H.M.S blue collar employees are better in work achievement than that of A.I.T.U.C and I.N.T.U.C blue collar employees.

The mean differences of white collar employees of these unions are not significant.

Anova table -8 Effects of motivation for work achievement

Source	df	SSq	MSW	F
Union	2	7.61	3.80	1.85
Nature of job	1	32.64	32.64	15.92 *
U x W B	2	18.50	9.25	4.05 **
Within	714	1467.46	2.05	-
Total	719	1516.21	-	-

2.59x.106 =.2745 * P < .01

1.96x.106 =.2077 ** P < .05

Table 1.8 The mean and the mean difference and their significance

Mean	Mean Differences
U1 = 3.00	U1 - U2 = 1.55 *
U2 = 4.55	U2 - U3 = .45 *
U3 = 5.00	U1 - U3 = 2.00 *
U1 W = 4.32	U1 W - U2 W = .13
U2 W = 4.45	U2 W - U3 W = .08
U3 W = 4.37	U1W - U3 W = .05
U1 B = 4.66	U1 B - U2B = .00

U2 B = 4.66 U2 B - U3 B = .34 *

U3 B = 5.00 U1 B - U3 B = .34 *

W.T. = 4.38 W.T -B.T = 1.26 *

B.T = 3.12

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* P < .01

Anova table - 9 Effects of motivation for promotion opportunity

Source	df	SSq	MSw	F
Union	2	1.23	.61	.41
Nature of job	1	6.95	6.95	4.63 **
U x W1 B	2	1.99	.99	1.33
Within	714	1073.34	1.50	-
Total	719	1077.57	-	-

** P < .05

Mean W.T = 4.43

B.T = 2.94

Difference = 1.49

Referring to the above table the F ratio in case of union is not significant. Whereas the F ratio of 4.63 in case of nature of job is significant beyond .05 level of confidence. Thus results indicate that unionwise there is no variation for the motivation for the promotion opportunity, but at the level of worker the variation exists.

Opportunity for promotion indicates the professional advancement, aspiration for the promotion, the promotion opportunities within the industries etc. Further it states to aspire to get better training, proper qualification for promotion, to discharge the duties effectively and so on. The results indicate that blue collar employees and white collar employees differ in respect of motivation for opportunity for promotion. The mean score of white collar employee is 4.43, the blue collar is of 2.94. Thus white collar employees score is higher than that of blue collar employees. Thus the difference is 1.49 in favour of white collar employees.

The results also show no significance in the interaction of union and workers put together.

Anova table -10 Effects of motivation for suitable type of job

Source	df	SSq	MSw	F
Union	2	4.29	2.14	1.06
Nature of job	1	32.93	32.93	16.38 *
U x W1 B	2	10.75	5.37	2.67
Within	714	1437.52	2.01	-
Total	719	1455.49	-	-

* $P < .01$

Mean W.T = 2.22 Difference

B.T = 3.61 1.39

As can be seen from the Anova table 10, the F ratio in case of union level is 1.06 which is not significant. The F ratio of 16.31 in case of nature of job is highly significant at .01 level of confidence.

The motivation for the suitable type of job indicates keen interest in the job, having the work according to the taste and talent, feeling prestige in the job and devotion for the job etc.

The results indicate that the blue collar and white collar employees differ in terms of motivation for suitable type of job. The mean score of white collar employee is 2.22 whereas the blue collar employee is of 3.61. The difference is (1.39) in favour of blue collar employees.

The results show that there is no significant difference in the interaction of union and employees when put together,

The next motivational aspect is related to comfortable working condition which is characterised by good hygienic conditions in the factory, operation of free accident prone machines, legal help for the improvement of working condition etc.

Anova table - 11 The effects of motivation for comfortable working condition

Source	df	SSq	MSw	F
Union	2	9.37	4.68	2.34
Nature of job	1	87.53	87.53	43.77 *
U x W1 B	2	3.66	1.83	.91
Within	714	1433.25	2.00	-
Total	719	1533.81	-	-

* P $<$ .01

Mean white collar employee = 2.76

Blue coller employee = 4.71

Difference = 1.95

As can be seen from the above table the F ratio of 2.34 in the case of unions is not significant.

The F ratio of 43.77 in case of nature of job is highly significant at .01 level of confidence. It means that the white collar employees and blue collar employees differ significantly in terms of motivation for comfortable working conditions. The mean score of blue collar is higher than that of white collar. The difference is of 1.95 in favour of blue collar employees. This difference is possible because blue collar employees are always in a machine shop where accidents and health hazards are likely to create problems in day to day working conditions.

The results also show no significant difference in the interaction of union and employees when put together.

Anova table - 12 Effects of motivation to learn a job

Source	df	SSQ	MSw	F
Union	2	25.42	12.71	6.36 *
Nature of job	1	0.56	.50	.28
U x W1 B	2	2.05	1.02	.51
Within	714	1430.24	2.00	-
Total	719	1458.28	-	-

* P $<$ .01

2.59 x .129 = .3341

1.96 x .129 = .2528

Table 1.12 The mean and mean difference and their significance

Mean	Mean difference
U1 = 2.00	U1 - U2 = 2.23 *
U2 = 4.23	U2 - U3 = 1.86 *
U3 = 2.37	U1 - U3 = 0.37 *

* P < .01

The F ratio of Anova table 12 at union level is significant beyond .01 level of confidence. It means that different unions A.I.T.U.C, I.N.T.U.C and H.M.S differ significantly in motivational aspects of learning job. The motivation to learn a job indicates the aspiration to learn a new thing, try to learn more about current development from seniors, and colleagues, to show interest in a new work situation.

The mean score of I.N.T.U.C is 2.00, A.I.T.U.C is 4.23 and H.M.S is 2.37. The possible maximum score is 8. Thus the mean score of A.I.T.U.C. represents a better position, as compared to another two unions.

The mean difference between U1 - U2, U2-U3, U1 - U3 is significant at .01 level of confidence; thereby indicating that A.I.T.U.C members are more motivated than I.N.T.U.C and H.M.S members.

The results show no significance in difference with respect to nature of job interaction between union and nature of job.

Anova table -13 Effects of motivation for job security

Source	df	SSq	MSw	F
Union	2	4.25	2.12	.96
Nature of job	1	128.36	128.36	57.81 *
U x B W	2	51.50	25.75	11.60 *
Within	714	1583.41	2.22	-
Total	719	1595.81	-	-

* P < .01

2.59 x .111 = .287

1.96 x .111 = .217

Table 1.13 The mean , mean difference and their significance

Mean			Mean Difference
U1	=	3.00	U1 - U2 = .66 *
U2	=	2.34	U2 - U3 = 2.14 *
U3	=	4.48	U1 - U3 = 1.48 *
U1 W	=	3.59	U1 W - U2 W = .03
U2 W	=	3.56	U2 W - U3W = .11
U3 W	=	3.67	U1 W - U3 W = .08
U1 B	=	3.27	U1 B - U2 B = .09
U2 B	=	3.80	U2 B - U3 B = .44 .
U3 B	=	3.80	U1 - U3 B = .53 .
W.T.	=	2.22	W.T - B.T = 1.39
B.T.	=	3.61	

* P < .01

As can be seen from the anova table 13 the F ratio of .96 is not significant for unions. But the F ratio of 28.36 in case of nature of job is significant. Thus results indicate that the motivation for job security is significantly differs among white collar employees and blue collar employees.

The job security aspect indicates the guarantee of the job, protection by the trade union, Government mediation to protect the job etc.

The mean score of white collar employees is (2.22) and that of blue collar employees is (3.61). Thus blue collar employees is able to score 1.34 more than that of white collar empboyees.

The F ratio of 11.60 in the interaction level is also significant .01 level of confidence. It indicates that the nature of the job and union put together influence the motivation for job security. The mean score of I.N.T.U.C is 3, A.I.T.U.C is 2.34 and H.M.S is 4.48. The mean difference between I.N.T.U.C, A.I.T.U.C. and H.M.S is significant beyond .01 level of confidence. It means that I.N.T.U.C members' motivation for job security is more pronounced than A.I.T.U.C members. Same way H.M.S. members are more concerned with job security aspects than I.N.T.U.C and A.I.T.U.C. members.

The mean score of I.N.T.U.C. white collar employee is 3.59, A.I.T.U.C white collar employee is (3.56), and H.M.S white

collar employee is 3.80. The total possible score in motivation for job security is 8. Thus the mean score of each white collar employee is less than average score position. The mean difference between the U1W - U2W is 0.03, U2-U3 .11 and U1W -U3W .08 is not significant.

The mean difference between U1B-U2B is .09 which is not significant. Whereas the difference between U2B-U3B is .44 and U1B-U3B is .53 which is significant beyond .01 level of confidence. Thus results indicate that H.M.S blue collar employees are more motivated in job security aspects than A.I.T.U.C. and I.N.T.U.C blue collar employee. On the other hand A.I.T.U.C. blue collar employees are more concerned with job security than I.N.T.U.C. members.

The last part of motivational analysis is related to the 'competition'.

Anova table -14 Effects of motivation for competition

Source	df	SSq	MSw	F
Union	2	11.46	4.73	2.17
Nature of job	1	2.69	2.69	1.09
U x W, B	2	42.37	21.18	8.02 *
Within	714	1889.07	2.64	-
Total	719	1945.59	-	-

* $P < .01$

2.59 x .121 = .3133

1.96 x .121 = .2371

Table 1.14 The mean and the mean difference

Mean		Mean difference	
U1	= 2.00	U1 U2	= 1.35 *
U2	= 3.35	U2 -U3	= .81 *
U3	= 4.16	U1 -U3	= 2.16 *
U1W	= 3.44	U1W-U2W	= .32 **
U2W	= 3.76	U2W-U3W	= .21
U3W	= 3.55	U1W-U3W	= .11
U1B	= 3.67	U1B-U2B	= .72*
U2B	= 2.95	U2B-U3B	= .85*
U3B	= 3.80	U1B-U3B	= .13
W.T	= 3.58	W.T -B.T	= 1.36
B.T	= 2.22		

* P < .01

* P < .05

By referring Anova table 14 the F ratio of 2.17 in case of union is not significant. In the same way the F ratio of 1.09 in case of nature of job too is not significant.

The F ratio of 8.02 in case of interaction effect is significant at .01 level of confidence. The positive side of motivation for the competition stands for healthy competitive spirit in the industry, liking for the competitive fellow

workers, and having insight into the advantages of competitive spirit etc.

The mean score of I.N.T.U.C is 2.00, A.I.T.U.C is 3.35 and H.M.S is 4.16. The H.M.S members average position is better than A.I.T.U.C and I.N.T.U.C members. The mean difference between the three unions is significant at .01 level of confidence. A.I.T.U.C members are relatively more competitive than I.N.T.U.C. members. Whereas H.M.S members are more competitive than of I.N.T.U.C and A.I.T.U.C members.

The mean score of U1W is (3.44), U2W is (3.76) and U3W is (3.55). The mean difference between U1W - U2W is .32 and U2W-U3W is .21. It is significant at .05 level of confidence. A.I.T.U.C. white collar employees are more competitive than I.N.T.U.C white collar employees. So also A.I.T.U.C. white collar employees are more competitive than H.M.S white collar employees. But the mean difference between U1-U3 is not significant.

The mean difference between U1B-U2B and U2B-U3B is significant beyond .01 level of confidence. It means that I.N.T.U.C. blue collar employees are more competitive than A.I.T.U.C. blue collar employees ; A.I.T.U.C. members are more competitive than H.M.S. members.

The mean score of white collar employees is 3.58, and blue collar is 2.22. Thus white collar employees are more

competitive than blue collar employees. The mean difference is 1.36 in favour of white collar employees.

The forth hypothesis to be tested was that

> The general motivational aspects of the employees will vary according to the type of union which they belong.

If this hypothesis is correct, the F value should be significant at various levels of union. The results indicate that the F value is significant only in case of motivation to learn a new job. Thus unionwise difference is found only in one motivating factor whereas the remaining motivating factors are not significant. So unionwise influence is not very much on different motivational factors that are taken for the present study. Motivation for adequate earning, work achievement, opportunity for promotion, suitable type of job, comfortable working conditions, job security and competition is not at all influenced by the type of union.

In the light of these results it is inferred that the A.I.T.U.C. members are more motivated to learn a job than I.N.T.U.C. and H.M.S members, where as H.M.S union members are more motivated than I.N.T.U.C. members.

The fifth hypothesis is that " the motivation of employees will vary according to the nature of job or work".

On the basis of obtained results this hypothesis is accepted. The motivation for adequate earning, work achievement, opportunity for promotion, suitable type of job, comfortable

working condition, and job security is significant with respect to nature of job. Thereby indicating that white collar employees and blue collar employees differ from each other in case of different motivational factors.

The difference between the blue collar employees in case of motivation for adequate earning is more than that of white collar employees, whereas in case of work achievement the white collar employees are better motivated than that of blue collar employees.

In case of opportunity for promotion, white collar employees are more motivated than blue collar, but in case of motivation for suitable type of job,blue collar employees are more motivated than that of white collar employees.

White collar employees are more motivated in case of opportunity for promotion, and comfortable working condition than blue collar employees. In case of job security blue collar employees are more motivated than white collar employees.

In case of competition too, white collar employees are better motivated than blue collar employees.

Next hypothesis tested to be was the general motivation level will be influenced by the combined effect of type of union and nature of job. This hypothesis is partially accepted.

The obtained results indicate that the joint influence of type of union and nature of job affects the motivation for work achievement, job security, and competition. The other motivational factors like adequate earning, work achievement, comfortable working condition, opportunity for promotion, suitable type of job are not influenced by the joint effect.

(1) The A.I.T.U.C. union members work achievement motivation is more pronounced than the I.N.T.U.C. members. Similarly the H.M.S. members are better motivated in work achievement than the A.I.T.U.C and I.N.T.U.C. members.

Among the white collar employees of different unions does not show any significant differences. However, it is not the case about the blue collar employees. The mean differences between the blue collar employees of different unions show significant differences. The H.M.S. blue collar employees are more motivated to work achievement than the A.I.T.U.C. and the I.N.T.U.C. members.

(2) Both the motivation for job security and the competition too is significant at the interaction level. H.M.S members are more concerned with job security than the A.I.T.U.C. and the I.N.T.U.C members. The mean differences between the white collar employees of different unions are not significant. Thus the white collar employees

of different unions does not indicate any variation for the motivation of job security. But this is not true in case of blue collar employees. The H.M.S. blue collar employees are more concerned with job security aspects than the A.I.T.U.C. and the I.N.T.U.C blue collar employees. Similarly the A.I.T.U.C. blue collar employees are more concerned about job security than I.N.T.U.C. blue collar employees.

(3) The motivation for the competition too differ significantly at the interaction level. The A.I.T.U.C members are relatively more competitive than I.N.T.U.C members; whereas the H.M.S members are more competitive than I.N.T.U.C. and the A.I.T.U.C. members.

(4) The mean differences between the white collar employees of different unions are significant. Thus the A.I.T.U.C. white collar employees are more competitive than I.N.T.U.C, H.M.S white collar employees. However, the I.N.T.U.C. blue collar employees are more competitive than the A.I.T.U.C. blue collar employees.

The third part of analysis of variance is related to the assessment of needs measured by E.P.P.S. The test assesses altogether 15 needs. These needs are treated as a force in the organism and directs the behaviour. The description of the fifteen needs is given in appendix A. Anova table 15 to Anova table 29 are related to the analysis of needs as measured by E.P.P.S.

Anova table 15 Effects of needs for achievement

Source	df	SSq	MSw	F
Union of job	2	57.32	28.68	7.26 *
Nature of job	1	8.69	8.69	.93
U x W, B	2	1.47	.73	.73
Within	714	2820.93	3.95	3.95
Total	719	2880.4	-	-

* P < .01

t .01 = 2.59 2.59 x .181 = .468

t .05 = 1.96 1.96 x .181 = .354

Table 1.15 The mean and the mean difference

Mean	Mean difference
U1 = 8.70	U1 - U2 = .09
U2 = 9.60	U1 - U3 = 2.00 *
U3 = 6.70	U2 - U3 = 2.90*

* P < .01

As can be seen from the Anova table 15 the F ratio of 7.26 in case of union is significant beyond .01 level of confidence. It means that different unions namely I,N.T.U.C., A.I.T.U.C. and H.M.S. differ significantly in the need for achievement. The need for achievement means to do difficult job well, to solve difficult problems and puzzles, to be able to do things better than others.

The mean score on this aspect for I.N.T.U.C. union is (8.70) A.I.T.U.C is (9.60) and H.M.S is (10.70). The possible total score is 15. Thus the mean score of each union represents better than average position. Thus results indicate that unionwise all the three union members are showing significant achievement needs.

The mean difference between U1 - U2 is .09 which is not significant. While the mean difference between U2-U3, U1-U3 is significant beyond .01 level of confidence, thereby indicating that A.I.T.U.C members have more need for achievement than H,M.S. members and more in I.N.T.U.C. members as compared to H.M.S. But there is no difference between I.N.T.U.C. members as compared to A.I.T.U.C. members in terms of need for achievement.

The results shows no significant difference in need achievement with respect to nature of job. The interaction of union and workers is also not significant.

Anova table - 16 Effects of need for difference

Source	df	SSq	MSw	F
Union	2	12.13	12.13	.94
Nature of job	1	26.42	26.42	2.06
U x W, B	2	63.73	31.86	2.48
Within	714	9165.71	12.83	
Total	719	9280.82		

The Anova table 16 results indicate no significant difference at any one of the levels.

Anova table -17 Effects of need for order

Source	df	SSq	MSw	F
Union	2	42.65	21.32	1.38
Nature of job	1	3.36	3.36	.22
U x W,B	2	96.93	48.46	3.15 **
Within	714	10989.25	15.39	-
Total	719	11132.19	-	

** $P < .05$

2.59 x .292 = .756

1.96 x .292 = .572

Table 1.17 Showing the mean score and mean difference of need for order

Mean		Mean difference	
U1	= 9.22	U1-U2	= .46
U2	= 8.76	U2-U3	= 1.94*
U3	= 10.75	U1-U3	= 1.53*
U1W	= 8.41	U1-U2	= .77*
U2W	= 9.18	U2-U3	= .45
U3W	= 8.73	U1-U3	= .35
U1B	= 8.80	U1B-U2B	= .47
U2B	= 8.33	U2B-U3B	= .67*
U3B	= 9.00	U1B-U2B	= .02
W.T.	= 8.77	W.T -B.T.	= 3.03
B.T.	= 5.74		

* P $<$ .01

By referring to anova table 17 we find that the F ratio of 1.38 in case of unions is not significant. In the same way the F ratio of .22 is not significant in case of nature of job.

The F ratio of 3.15 in case of interaction effect is significant at .05 level of confidence. It means that the need for order is influenced by the combined effect of union and nature of job put together.

The need for order indicates to keep things neat and orderly, to organise details of work, to make plans before starting on difficult task, to have things arranged so that they run smoothly without change. The higher score indicates more order in the life.

The mean score of U1, U2 and U3 is 9.22, 8.76 and 10.75 respectively. These scores indicates that the three unions differ from each other in relation to the need for order. The mean score of H.M.S is higher than that of I.N.T.U.C. and A.I.T.U.C. members.

The mean difference between U1-U2 is .46 which is not significant. Whereas U1-U3 is 1.99 and U1-U3 is 1.53 which is significant at .01 level of confidence. Thus the results show no difference between A.I.T.U.C. and I.N.T.U.C. members on need for order, whereas I.N.T.U.C. , A.I.T.U.C. union differ from H.M.S.

Mean score of A.I.T.U.C. white collar employees is 9.18, I.N.T.U.C. white collar is (8.41), H.M.S. white collar is (8.73). Thus A.I.T.U.C. white collar employees mean score is more than that of other two unions. The mean difference between U1W - U2W is .77 which is significant at .01 level of confidence. But the mean difference between U2W-U3W and U1W-U3W is not significant. It shows that A.I.T.U.C. white collar members differ from I.N.T.U.C. white collar members, in terms of need for order; but A.I.T.U.C., I.N.T.U.C. white collar members are not differing from H.M.S. union.

The mean difference between U2B-U3B is .67 which is significant at .05 level of confidence. But the mean difference between U1B-U2B, U1B-U3B is not significant. Thus results indicate that A.I.T.U.C blue collar employees differ from H.M.S. blue collar employees, in relation to the need for order. But there is no difference between I.N.T.U.C. and A.I.T.U.C., I.N.T.U.C. and H.M.S. members.

The mean score of white collar employees is 8.77 and blue collar is 5.74. Thus white collar employees score is (3.03) more than that of blue collar employee in case of need for order.

Anova table - 18 Effects of need for exhibition

Source	df	SSq	MSw	F
Union	2	13.01	6.50	.65
Nature of job	1	0.36	0.36	.03
U x W,B	2	1.30	4.15	.41
Within	714	7171.28	10.04	
Total	719	7192.94		

The F ratio of .65 at union level is not significant. Same way the F ratio of .03 is not significant with respect to the nature of job. The interaction effect is also not significant.

From the anova table 19 we can see that the F ratio of 1.49 in case of union is not significant. The F ratio of 4.63 in case of nature of job is significant beyond .05 level of confidence. It means that unionwise there is no difference for the need for

autonomy, whereas at worker level it does exists.

The need for autonomy means to be independent of others in making decisions, to feel free, to do what one wants to do such as things that are unconventional, to be able to come and go as desired, to say what one thinks about things, to criticise those in position of authority. Higher score on need for autonomy indicates more independence.

The results indicate that there is difference between white collar employees and blue collar employees in relation to the need for autonomy. The mean score of white collar employee is 4.43 and blue collar is 6.67. Thus blue collar employees score (2.24) more than that of white collar employees, thereby indicating that blue collar employees show more concern about need for autonomy than white collar employees.

The results show no significant difference in the interaction of union and employees put together.

Anova table - 19 The effect of need for autonomy

Source	df	SSq	MSw	F
Union	2	28.06	14.03	1.49
Nature of job	1	45.21	45.21	4.63**
U x W,B	2	13.53	6.76	.72
Within	714	6703.77	9.38	
Total	719	6745.56		

** P < .05

Mean white collar = 4.45 Difference

Blue collar = 6.67 (2.24)

Anova table - 20 The effect of need for affiliation

Source	df	SSq	MSw	F
Union	2	91.48	45.74	5.31 *
Nature of job	1	36.78	36.78	4.26 **
U x B, W	2	15.94	7.97	.92
Within	714	6159.32	8.62	
Total	719	6273.52		

* P < .01 ** P < .05

2.59 x .265 = .694

1.96 x .265 = .519

Table 1.20 Showing the mean and mean difference of need for affiliation

Mean	Mean difference
U1 = 5.00	U1-U2 = 1.46 *
U2 = 6.46	U2-U3 = 1.63 *
U3 = 4.83	U1-U3 = .17
U.W = 8.00	
U.B = 6.88 = 1.12	

* P < .01

The need for the affiliation is another dimension of E.P.P.S. The need for affiliation indicates the affiliation tendency of the people. The affiliation need is characterized by tendency to be loyal to friends to participate in friendly groups, to do

things for friends, to form new friendship, to make as many friends as possible, to share things with friends, to form a strong attachment, to write letters to friends etc.

By referring to the Anova table 20 we find that the F ratio of 5.31 is significant at .01 level of confidence for unions. It means that unionwise difference doesexist on need for affiliation.

The mean score of U1 is 5.6 U2 is 6.46, U3 is 4.03. Thus U2 the A.I.T.U.C. union is able to score more than that of I.N.T.U.C. and H.M.S unions.

The mean difference between U1-U2 is 1.46, and U2-U3 is 1.63. Both are significant beyond .01 level of confidence. Thus results indicate that A.I.T.U.C union members show more affiliative needs than I.N.T.U.C. and H.M.S. union members. The mean difference between U1-U3 is not significant. This means that there is no difference between I.N.T.U.C. members and H.M.S. members in the affiliation needs.

The F ratio of 4.63 in case of nature of job is also significant at .05 level of confidence. It means that the white collar employees and blue collar employees differ in affiliation need. The mean score of white collar employees is 6.88 and that of blue collar is 8.00. Thus blue collar employees are exhibiting more affiliation need.

The results show no significant difference in the interaction of union and employees on affiliation need.

Anova table - 21 The effect of need for intraception

Source	df	SSq	MSw	F
Union	2	19.71	9.55	1.22
Nature of job	1	106.20	106.20	13.16 *
U x B, W	2	6.50	3.25	.40
Within	714	5763.99	8.07	
Total	719	5896.40		

* P $<$ .01

Mean score		Difference
W.T	= 6.99	
B.T.	= 6.10	(0.89)

Anova table 21 is pertaining to need for intraception. It is observed that the F ratio of 1.22 in case of different unions is not significant, while the F ratio of 13.16 in case of nature of job is significant at .01 level of confidence.

The positive side of the need for intraception means to analyse one's motives and feelings, to observe others, to understand how others feel about problems, to analyse the behaviour of others, to analyse the motive of others etc.

The results show that the blue collar employees and white collar employees differ significantly from each other in need for intraception. The mean score of white collar

employees is 6.99 and blue collar is 6.10. The difference of 0.89 is in favour of white collar employees.

There is no significant difference in the interaction of union and employees on need for intraception.

Anova table - 22. Effects of need for succorance

Source	df	SSq	MSw	F
Union	2	192.50	57.25	4.38 **
Nature of job	1	60.16	60.16	5.15 *
U x W, B	2	65.77	32.88	2.81
Within	714	8346.99	11.99	
Total	719	8475.41		

* P < .01 ** P < .05

2.59 x .316 = .818

1.96 x .316 = .619

Table 1.22 Showing mean and mean differences

Mean	Mean difference
U1 = 6.00	U1-U2 = 2.00 *
U2 = 4.00	U2-U3 = 4.00 *
U3 = 8.00	U1-U3 = 2.00 *
B.T.= 5.74	B.T -W.T = 1.49
W.T = 4.25	

* P < .01

As can be seen from the Anova table 22 the F ratio of 4.38 is significant in case of unions at .05 level of confidence. It means that A.I.T.U.C., I.N.T.U.C and H.M.S. union differ each other in case of need for succourance. The positive effect of the need for succorance is to seek encouragement from others, to have others be sympathetic and understanding about personal problems, to receive a great deal of affection from others, to be helped by others when depressed, to have others feel sorry when one is sick, to have a fun made over one when hurt.

The mean score of I.N.T.U.C. union is 6.00, A.I.T.U.C. is 4.00 and H.M.S is 8.00. The total possible score in need for succourance is 15. Thus H.M.S. union mean score is higher than that of average position.

The mean difference between U1-U2 is 2.00 U2-U3 is 4.00 and U1-U3 is 2.00. All the mean differences are significant beyond .01 level of confidence. Thus it is clear that I.N.T.U.C. members need for succorance is higher than that of A.I.T.U.C. members, H.M.S. members need for succorance is more than the A.I.T.U.C. and I.N.T.U.C. members.

The F ratio of 5.15 in case of nature of job is also significant beyond .01 level of confidence, which means that white collar and blue collar employees differ from each other with respect to need for succorance. The mean score of white collar employees is 4.25 and blue collar employees is 5.74. Thus blue collar

employees score is higher than that of white collar employees. The difference is 1.49 in favour of blue collar employees.

The result shows no significant interaction effect.

The next analysis of results is related to the need pattern of Dominance measured by E.P.P.S. The need for dominance indicates as to be a leader in elected or appointed chairman of committee, to argue one's point of view, to be a leader in a group to which one belongs, to be regarded by others as a leader, to supervise and direct the actions of others.

Anova table - 23 Effects of need for dominance

Source	df	SSq	MSw	F
Union	2	116.57	58.28	7.52 *
Nature of job	1	40.11	40.11	5.18 *
U x W, T	2	15.90	7.95	1.03
Within	714	5527.77	7.74	
Total	719	5599.84		

2.59 x .253 = .655 * P < .01
1.96 x .253 = .501

Table 1.23 The mean difference on their significance on need for dominance

Mean	Mean difference
U1 = 5.15	U1-U2 = 2.01 *
U2 = 7.16	U2-U3 = 3.64 *
U3 = 3.52	U1-U3 = 1.63 *
W.T = 5.74 B.T = 4.19	W.T-B.T = 1.55

* P < .01

As can be seen from the Anova table 23 the F ratio of (7.52) is significant beyond .01 level of confidence for different unions. Thus results indicate that unionwise differences do exist in case of need for dominance.

The mean score of 5.15, 7.16, 3.52 represents respectively, I.N.T.U.C., A.I.T.U.C. and H.M.S unions. Thus A.I.T.U.C. union members' mean score is higher than that of other two unions.

The mean difference between U1-U2 is (2.01), U2-U3 is (3.64), U2-U3 is (1.63). These differences among all the three unions are significant beyond .01 level of confidence. It is obvious that the A.I.T.U.C. members' dominance need is higher than the I.N.T.U.C. members and H.M.S. members, similarly the I.N.T.U.C. members are more dominant than the H.M.S. members.

The F ratio of 5.18 in case of nature of job is also significant at .01 level of confidence. This means that white collar employees and blue collar employees differ from each other. The mean score of white collar employees is 5.74 and that of blue collar employees is 4.19. The need for dominance is more among the white collar employees than blue collar employees. The mean difference of (1.55) is in favour of white collar employees.

The F ratio of 1.03 is not significant for interaction between unions and nature of job.

Anova table - 24 The effects of need for abasement

Source	df	SSq	MSw	F
Union	2	25.08	12.54	1.43
Nature of job	1	32.20	32.20	4.10 **
U1 B x W	2	36.92	23.46	2.69
Within	714	5206.63	7.84	
Total	719	6310.83		

** P $\angle$ .05

Mean W.T = 5.00 Difference

B.T = 6.55 1.55

The Anova table 24 indicates the results of need for abasement. The need for abasement is characterized by feeling guilty when doing something wrong, to accept blame when things do not go right, to feel need for punishment for wrong doing, to feel depressed by inability to handle situation, to feel the need for confession of errors etc.

The F ratio of 1.43 at the level of union is not significant. Hereby indicating that there is no significant difference between the members of different unions in terms of need for abasement.

The F ratio of 4.10 is significant at .05 level of confidence for white and blue collar employees. This indicates that blue collar and white collar employees differ from each other

in terms of need for abasement. The mean score of white collar employee is of 6.55 and that of white collar is 5.00. Thus the blue collar employees' score is more than that of white collar employee. The difference of 1.55 is in favour of blue collar employees.

The F ratio of 2.69 for interaction between unions and types of job is not significant.

Anova table -25 The effect of need for nurturance

Source	df	SSq	MSw	F
Union	2	65.45	32.77	2.59
Nature of job	1	60.88	60.88	4.81 **
U x W, B	2	28.86	14.43	1.15
Within	714	9034.09	12.65	
Total	719	9129.27		

** P $\angle$ .05

Mean score W.T - 4.99 Diff.

B.T - 7.39 (2.4)

Anova table 25 shows relation of union and nature of job with need for nurturance. The F ratio of 2.59 at the union level is not significant. But the F ratio of 4.81 in relation to nature of job is significant at .05 level of confidence. This shows that union is not an influencing factor, whereas nature of job is an influecning factor in the need for nurturance.

The positive side of the need for nurturance denotes help to friends when they are in trouble, to assist those who are less fortunate, to treat others with kindness and sympathy, to forgive others, to be generous others, to show great deal of affection towards others etc.

Since the F ratio is significant at the level of job the blue collar employees and white collar employees differ each other in need pattern of nurturance. The mean score of white collar employees is (4.99) and that of blue collar is (7.39). The mean score of blue collar employee is more than that of average position. The mean difference between blue collar and white collar employee is 2.4. Thus the blue collar employee show more nurturance need as compared to white collar employees.

The F ratio of 1.15 for interaction between union and nature of job is not significant.

Anova table -26 The effects of need for change

Source	df	SSq	MSw	F
Union	2	51.66	28.82	2.39
Nature of job	1	57.62	57.62	5.34 **
U x W, B	2	30.46	15.23	1.41
Within	714	7211.54	10.79	
Total	719	7811.33		

* P < .05

Mean score W.T. = 6.63 Diff.
B.T = 4.12 (2.51)

By referring to the Anova table 26, we find that the F ratio of 2.39 with respect to unions is not significant.

The F ratio of 5.34 is significant at .05 level of confidence in the case of the nature of job. This implies that the blue collar employees and the white collar employees differ from each other in terms of need for change.

The need for change attributes to do new and difficult things, to meet new people, to experience novelty and change in daily routine, to experiment and try new and difficult things, to try different things, to participate in new fads and fashions.

The blue collar and the white collar employees differ from each other in need for change. The mean score of the white collar employees is (6.63) and the blue collar is (4.12). The total score position of both the blue collar and the white collar employees is less than that of the average position. The mean difference is 2.51 in favour of the white collar employees. Thus the white collar employees show more towards a change pattern in work atmosphere as compared to the blue collar employees.

The results indicate that there is no significant difference in interaction since the F ratio of 1.41 is less than the value of .05 level.

The Anova table 27 indicates that the F ratio of 2.91 is not significant for different unions. So also the F ratio of .05 is not significant for different categories of employees.

The F ratio of 5.05 is significant beyond .01 level of confidence for interaction effect. Thus the union and the nature of job jointly influence the need pattern of endurance. The need for endurance is to maintain a steady behaviour until the job undertaken is finished, to work hard at a task, to keep a puzzle or problem until it is solved, to avoid being interrupted while at work.

The mean score of U1 is (7.51) U2 is (6.50) U3 is (6.68). Thus the average position of U1 is better than that of U2-U3. The mean difference between U1-U2 is significant at .01 level. U1-U3 is beyond .05 level of confidence, there is no significance mean difference between U2-U3. The need for endurance is better expressed by the I.N.T.U.C. members than the A.I.T.U.C. whereas there is no difference between the A.I.T.U.C. and the H.M.S. members.

The mean score of U1W is (5.42), U2W (8.12) and U3W is (7.29). The mean difference between U1W-U2W is (2.2), U1-U3 is (1.37) which is significant at .01 level of confidence, whereas the difference between U1W-U3W is (.83) which is also significance at .05 level of confidence. Thus the results indicate that the A.I.T.U.C. white collar employees needs for endurance is better expressed than the I.N.T.U.C. and the H.M.S. white collar employees. Similarly the H.M.S. members mean score is higher than that of the A.I.T.U.C. white collar employees.

The mean score of U1B is (6.88). U2B is (6.91), U3B is (6.00). The mean score difference between U1B-U2B is not significant. The mean difference between U2B-U3B is (.91) and U1B-U3B is (.88). Both the differences are significant at .05 level of confidence. Thus results shows that, between A.I.T.U.C. blue collar employees and I.N.T.U.C. blue collar employees are not significantly differing each other. However A.I.T.U.C. blue collar employees and H.M.S blue collar employees differ from each other in need for endurance; so also I.N.T.U.C. blue collar employees need for endurance is better expressed than that of H.M.S. members.

The mean score of white collar employees is (4.62) and that of blue collar is (7.11). The mean difference is 2.49 in favour of blue collar employees.

Anova table 27. The effect of need for Endurance

Source	df	SSq	MSw	F
Union	2	207.40	103.7	2.91
Nature of job	1	1.86	1.86	.05
U x W, B	2	359.52	179.74	5.05 *
Within	714	25388.08	35.55	
Total	719	36937.07		

* P $<$ .01

2.59 x .444 = 1.149

1.96 x .444 = .870

Table 1.27 Mean difference and their significance on need for endurance

Mean			Mean difference		
U1	=	7.51	U1-U2	=	1.01 *
U2	=	6.50	U2-U3	=	.18
U3	=	6.68	U1-U3	=	.83 **
U1W	=	5.92	U1W-U2W	=	2.2 *
U2W	=	8.12	U2W-U3W	=	1.37*
U3W	=	7.29	U1W-U3W	=	1.83 *
U1B	=	6.88	U1T-U2T	=	.03
U2B	=	6.91	U2T-U3T	=	.91 **
U3B	=	6.00	U3T-U3T=	=	.88 **
W.T.	=	4.62	W.T-B.T.	=	2.49
B.T.	=	7.11			

* P $<$ .01 ** P $<$ .05

Anova table - 28 The effects of need for Hetrosexuality

Source	df	SSq	MSw	F
Union	2	82.73	41.36	1.78
Nature of job	1	13.09	13.09	.56
U x B x W	2	35.89	17.19	.77
Within	714	16570.70	23.20	
Total	719	16702.41		

Anova table 28 depict results on need for hetrosexuality. It is observed that none of the F ratios is significant for type of union, type of job and interaction betweem union and job. This implies that need for hetrosexuality is same for employees from different unions and of different categories. In this respect they do not differ from each other.

Anova table -29 The effect of need for aggression

Source	df	SSq	MSw	F
Union	2	573.33	286.66	28.58*
Nature of job	1	13.33	13.33	1.32
U x W,B	2	36.34	18.17	1.81
Within	714	7168.54	10.03	
Total	719	7905.46		

* P < .01

2.59 x .289 = .748

1.96 x .289 = .566

Table 1.29 Mean difference and significance

Mean	Mean difference
U1 = 3.15	U1-U2 = 2.65 *
U2 = 5.80	U2-U3 = 1.8 *
U3 = 4.00	U1-U3 = .85 *

* P < .01

The anova table 29 indicates that the F ratio of 28.50 is significant beyond .01 level of confidence with respect to different unions. Thus unions differ on need for aggression.

The need for aggression indicates the quality to attack contrary points of view, to criticise others publicly, to make fun of others and to become angry etc.

The mean score of U1 is (3.15) U2 is (5.80) and U3 is (4.00). The position of the mean score in all the three union is less than average. The mean difference between U1-U2 is (2.65) U1-U3 is (1.8) and U1-U3 is .85. The difference is significant beyond .01 level of confidence. Thus A.I.T.U.C. members are more aggressive than I.N.T.U.C. and H.M.S. members.

The F ratios for the type of job and interaction are not significant.

CONCLUSION

Combining together the entire results of analysis of variance related to E.P.P.S. fifteen needs indicate that union is not of a much influencing factor in the analysis of personal needs. The need for achievement, affiliation, succorance, dominance, and aggression are the influencing needs - at the union level; other needs like, order, difference, exhibition, autonomy, intraception, abasement, nurturance, change, endurance and hetrosexuality are not influencing factor at the union level.

Much of the personal needs are influenced by the nature of job; it indicates that personal needs variation do exist among blue collar and white collar employees. The need for autonomy, affiliation, intraception, succorance, dominance, abasement, nurturance, change, and endurance varies among blue collar and white collar employees. However the need for achievement, order, difference, exhibition, endurance, hetrosexuality, and aggression is not an influenning need among the white collar and blue collar employees.

The interaction effect of union and nature of job together is not influencing the personal needs of the members only the need for order and endurance is significant at the interaction level. The remaining needs are not significant at the interaction level, similarly the needs for exhibition, difference, and hetrosexuality are not significant at any level.

The hypothesis tested was that " The personal needs of union members will vary according to the type of union". The results indicate that all fifteen personal needs do not vary with respect to unions. The personal needs like achievement, affiliation, succorance, dominance, and aggression vary according to the type of union. The A.I.T.U.C. members' need for achievement, order, dominance, and aggression, is more prominent then that of the H.M.S. union members; however the

H.M.S. members need for succorance is more than that of A.I.T.U.C. and I.N.T.U.C. members so also the need for aggression is better expressed among H.M.S. members are as compared to I.N.T.U.C. members. The affiliation tendency is more among A.I.T.U.C. members as compared to I.N.T.U.C. and H.M.S. members.

There is no difference between the members of A.I.T.U.C. and I.N.T.U.C. on need for achievement and order; so also the I.N.T.U.C. members do not differ on need for affiliation when compared to H.M.S. members.

The I.N.T.U.C. union members need for achievement, difference and dominance are more expressed than of H.M.S union. However, the need for succorance is higher in the I.N.T.U.C. members than A.I.T.U.C. members.

The next hypothesis to be tested was, that the personal needs of the employees would vary according to the type of job.

The results indicate that most of the personal needs vary according to the type of job. The need for autonomy, affiliation, intraception, succorance, dominance, abasement, nurturance and change varies between blue collar and white collar employees. The blue collar employees are more autonomous than white collar employees and the need for succorance, abasement, and nurturance too, are better pronounced in the blue collar employees than the white collar employees.

The white collar employees are more affiliated than that of blue collar employees; the need for intraception, and dominance is highly pronounced among the white collar employees. White collar employees prefer more change than that of blue collar employees.

Next hypothesis is "The personal needs of employees will be influenced by the combined effect of type of union and nature of job".

The interaction influence of union and nature of job is seen only in need for order and endurance. The remaining needs are not influenced by interaction of union and nature of job.

Another objective of the present study is to find out the predictive value of trade union affiliation for each of the three unions with the help of six dimensions of motivation and fifteen personal needs. As reported in the Chapter III the stepwise regression analysis was used. Stepwise regression helps to predict the order of importance of independent variables X_1 .... X_{23} in predicting dependent variable. Computer programme involving stepwise multiple regression analysis was used for the purpose.

In the stepwise regression the independent variables X_1, X_2 .....X_{23} are entered one by one into the equation according to some pre-established criterian. The provision is also there to swap or remove variable. Variables are entered, swaped or removed using a test statistics F, and is called either F to entered or F - to remove. The variable X_{ij} having the largest F - to entered or the largest squared correlation with 'Y' is selected as the best predictor of Y. The least square equation, the multiple correlation coefficient, standard error, the sum of squares reduced are also calculated. At the time step the next variable having largest squared partial correlation with Y given X_i is selected as the best predictor of Y given that X_{ij} as already been selected. The same procedure continued until the last variable X_{23}. In all the cases the least squares equation or the multiple regression equation, the

Multiple Correlation Coefficient, Standard error etc. was also calculated.

In the present study three regression analysis were carried out to predict the trade union affiliation of three different unions viz.

1. All India Trade Union Congress (A.I.T.U.C.)
2. Indian National Trade Union Congress (I.N.T.U.C)
3. Hind Mazdoor Sabha (H.M.S)

DISCUSSION (A.I.T.U.C.)

As stated earlier various statistical parameters like Multiple Correlation Coefficient, standard error, reduced sum of square etc., were worked out. Further using a stepwise procedure involving one additional variable at each time step different regression equations involving combination of different variables were also worked out. For each of the cases statistical parameters like, regression coefficient, multiple R, F values, alpha and standard error estimates adjusted worked out.

Table 2:A (see appendix B) indicating coefficient of the multiple regression equation fitted to predict A.I.T.U.C. union affiliation from the variables studies. The computer has picked up the first variable which is having the largest squared correlation with Y. For the first variable viz. 'opportunity for promotion', the multiple correlation of coefficient (R) worked out can be seen to be .181. Then the

additional variable or the second variable entered i.e. variable 'adequate earning' there was an increase in multiple R. In the second variable the Multiple R is 0.244 an increase of 34.8 %. Multiple R for the third variable, abasement was 0.266, an increase of 9.2 %. When the fourth variable 'nurturance' was entered there was an increase of 7.8 %. Till the seventh variable i,e. up to the variable 'affiliation' the improvement in predicting union affiliation from the variables considered is seen to be more than 3 %. Later on an improvement in increase of multiple R was reduced considerably and reached a stage where there was no improvement at all. Variables like dominance, opportunity to learn a job, autonomy, aggression, exhibition, achievement have little contribution in predicting A.I.T.U.C. union affiliation.

Finally, the variablkes like, competition, hetrosexuality, endurance, intraception, succorance, are not at all influencing in predicting A.I.T.U.C. union affiliation. It is because when the variable 'achievement' was entered into the regression equation, the Multiple R was .374. When the variable competition was entered the multiple R was .375 and remained constant till the last variable 'succorance' entered into the regression equation. Thus the results indicatedg that the increase in multiple R is 0 % and the

above said variables have no influence in predicting A.I.T.U.C. union affiliation.

Table 2.1 indicating F values obtained from the stepwise Multiple Regression Equation to predict union affiliation. The standard stepping rule is used for determining the number of predictor to select the best regression equation.

The variable 'opportunity' for promotion and 'adequate earning' is significant at .01 level. As such the best equation for predicting Y is seen to be the one obtained with the variables X_4, X_2, X_{19}, X_8, X_{12}, X_3, X_{15}. The contributions of variables of abasement, job security, order, work achievement, affiliation is significant at .05 level. Thereby it is evident that all the first seven variables are best predictor for A.I.T.U.C. trade union affiliation.

To confirm the above findings, it can be seen from the table 2.1 the standard error estimate adjusted value was minimum when the seventh variable 'affiliation' was entered. Standard error estimate adjusted was 14.16 when the X_4 variable was entered; it was minimum when the variable X_{15} was entered i.e. 13.92. Later on in subsequent steps it increases and reaches a peak level of 14.70 when X_{17} variable was entered. The standard error of the dependent variable i.e. union affiliation decreases thereby indicating that the additional variables are helping in more accurate

Table 2:1 Results indicating the 'F' value obtained from the stepwise Multiple Regression Equation to predict union affiliation (A.I.T.U.C. union)

Order of variable	Variable	Standard Error Estimate Adjusted	R	F value
4	Opp. for promotion	14.16	0.181	8.095 *
2	Adequate earning	14.03	0.244	7.843 *
19	Abasement	14.00	0.266	5.974 **
20	Nurturance	13.97	0.287	5.264 **
12	Order	13.94	0.307	4.882 **
3	Achievement	13.93	0.321	4.458 **
15	Affiliation	13.92	0.331	4.074 **
11	Difference	13.94	0.341	3.807
5	Suitable type of job	13.95	0.350	3.574
6	Comf.working condi.	13.96	0.355	3.298
21	Change	13.94	0.359	3.071
8	Job Security	14.03	0.365	2.902
18	Dominance	14.62	0.367	2.703
7	Opp. to learn a job	14.11	0.369	2.529
14	Autonomy	14.16	0.370	2.367
24	Aggression	14.21	0.371	2.228
13	Exhibition	14.27	0.372	2.102
10	Achievement	14.33	0.374	1.991
9	Competition	14.38	0.375	1.890
23	Hetrosexuality	14.57	0.375	1.702
22	Endurance	14.57	0.375	1.641
16	Intraception	14.64	0.375	1.541
17	Succorance	14.70	0.375	1.451

* $P < .01$ ** $P < .05$

prediction of union affiliation i.e. dependent variable.

The objective of the present study is that the combination of motivational factors and personal needs can predict trade union affiliation. The best predictor variable of A.I.T.U.C. trade union affiliation are opportunity for promotion, adequate earning, abasement, nurturance, order, achievement and work achievement and affiliation. The motivation for promotion, adequate earning is closely associated with financial incentives. The need for affiliation and work achievement is related to the higher needs of the employees.

INDIAN NATIONAL TRADE UNION CONGRESS

The second regression equation is developed to study the affiliation of Indian National Trade Union Congress workers. The procedure which was carried out in the earlier regression was continued here to predict the union affiliation from the independent variables $X_1 \ldots\ldots X_{23}$.

Table 2.B (see appendix C) indicating coefficients of the multiple regression equation developed to predict INTUC union affiliation. According to the pre-established criteria the computer picked up the variable which was having largest squared correlation with independent variable.

The first variable entered into the regression equation is 'job security', its multiple correlation of coefficient (R)

is seen to be 0.204. There is a sharp increase of multiple 'R' for the second variable 'change' and the increase is 9.37 %. For the third variable multiple R is 0.233 an increase of 4.51 from the previous variable. The computer has picked up need for 'order' as a next best predictor of trade union affiliation. Need for exhibition, dominance, autonomy, is also influencing union affiliation in a better way and increase of multiple R is more than 1 %.

Variables like opportunity to learn a job, affiliation, nurturance, abasement, endurance, suitable type of job, comfortable working condition, work achievement, opportunity for promotion, and intraception have less influence on INTUC trade union affiliation, because the increase in multiple R is less than 1 %.

In predicting the trade union affiliation the need for hetrosexuality, difference, aggression and succorance have absolutely no influence, because the multiple R remained constant at .335.

Table 2.2 is indicating the F values for the stepwise multiple regression to predict INTUC workers' affiliation. As it was used in the earlier regression equation, in this case also standard stepping rule is used for determining the number of predictor to select the best regression equation.

Table 2:2 Results indicating the 'F' value obtained from the stepwise multiple regression equation to predict the union affiliation (I.N.T.U.C. union)

Order of variables	Variables	standard error estimate adjusted	R	F value
8	Job security	13.122	0.204	10.357 *
21	Change	13.114	0.223	6.178 **
10	Achievement	13.101	0.233	5.530 **
2	Adequate earning	13.100	0.252	4.136 **
12	Order	13.073	0.278	4.092 **
13	Exhibition	13.00	0.293	3.992 **
18	Dominance	13.001	0.301	3.643
14	Autonomy	13.12	0.306	3.301
7	Opp. to learn a job	13.16	0.309	2.975
15	Affiliation	13.21	0.302	2.698
20	Nurturance	13.25	0.315	2.287
19	Abasement	13.30	0.318	2.130
22	Endurance	13.34	0.321	1.994
05	Suitable type of job	13.39	0.323	1.878
6	Conf. working condition	13.44	0.325	1.765
3	Work achievement	13.49	0.328	1.677
4	Opp. for promotion	13.54	0.330	1.593
16	Intraception	13.54	0.332	1.517
9	Competition	13.64	0.333	1.444
23	Hetrosexuality	13.70	0.334	1.376
11	Difference	13.76	0.335	1.314
24	Aggression	13.82	0.335	1.251
17	Surrorance	13.88	0.336	1.191

* $P < .01$ ** $P < .05$

The first variable entered into the regression equation is 'job security' and it is significant at .01 level. Variable X_8, X_{21}, X_{10}, X_2, X_{12}, X_{13} are seen to be the best predictor of INTUC trade union affiliation. The variable like change achievement, adequate earning, order and exhibition is significant at .05 level, indicating that the first six variables are the best predictors of INTUC workers union affiliation.

From the table 2.2 the standard error estimate adjusted for the 1st variable is 13.12 which subsequently decreased to 13.00 at the 6th variable. We can conclude that multiple regression equation involving least standard error conforms the importance of better predictor variable. From the 6th variable onwards there is an upward trend in the standard error estimate adjusted value, indicating the remaining variables are not so important in predicting INTUC union affiliation.

Considering the combined strength of motivational and personal needs in predicting INTUC union affiliation, the best predictor variables are job security, adequate earning, change, achievement order, exhibition. Out of these 'job security' and 'adequate earning' is of motivational factors, and the remaining variables are of personal needs. For an employee 'job security' is very important motivator in an organisational setup. Trade union can help the workers, by way of collective approach to protect

the job. Obviously, once the job security is assured, the members of the union will affiliate more towards their respective union. Another important predictor variable is adequate earning which is related to financial incentives.

The need for change, achievement, order, exhibition are higher needs which play significant part in predicting INTUC trade union affiliation. It is very important to explain how these needs are influencing union affiliation.

HIND MAZDOOR SABHA

The third regression equation is to predict the trade union affiliation of the 'Hind Mazdoor Sabha'.

Table 2.3 (see appendix D) indicates the coefficient of the multiple regression equation evolved to predict HMS union affiliation. The table indicates variable X_5 which has largest squared correlation with independent variable. This variable is 'suitable type of job' followed by 'affiliation'. The multiple correlation of coefficient (R) of the X_5 variaole is .216. For the next variable multiple R is of .248 an increase of 14.8 % from the previous variable. For need for autonomy the multiple R is .264 an increase of 6.4 % from the previous variables. The computer has picked up variable 'competition' as next best predictor and the multiple R is of .272 an increase of 3 % from the previous variable. There is an increase of 2.1% in multiple R for the variable 'exhibition&, All these variables viz. suitable type of job, affiliation,

autonomy, competition and exhibition have more influence on HMS trade union affiliation as compared to other variables.

Later on there is a marginal decline in increase of multiple R from the variable No. X_8 that is 'job security' till the variable endurance. The variables like job security, abasement, change, adequate earning, intraception, aggression and endurance have influence on HMS trade union affiliation but lesser than the variables entered into the beginning of regression equation.

When the variable 'difference' was entered into the regression equation the multiple R is .306; for the next variable it remained constant thereby indicating no improvement in the prediction of union affiliation. The variables like work achievement, opportunity to learn a job, opportunity for promotion, comfortable working condition, order, succorance, achievement, and hetrosexuality, have absolutely no influence in HMS Trade Union affiliation, because the multiple R (.307) remained constant at all levels.

Table 2.3 is indicating the F values obtained from the stepwise Multiple Regression equation to predict HMS union affiliation. As it was used in the earlier two regression equations, in this case also standard stepping rule is applied for determining the number of predictor to select the best regression equation.

Table 2:3 Results indicating the F value obtained from the stepwise Multiple Regression Equation to predict the union affiliation (H.M.S. Union)

Order of variable	Variables	Standard Error Estimate adjusted	R	F value
5	Suitable type of job	13.57	0.216	11.67 *
15	Affiliation	13.52	0.248	7.76 *
14	Autonomy	13.52	0.264	5.89 **
9	Competition	13.51	0.272	4.70 **
13	Exhibition	13.57	0.279	3.96 **
8	Job security	13.61	0.285	3.90 **
19	Abasement	13.64	0.290	3.05
21	Change	13.64	0.293	2.72
2	Adequate Earning	13.74	0.296	2.44
16	Intraception	13.79	0.298	2.22
24	Aggression	13.84	0.299	2.04
22	Endurance	13.88	0.304	1.92
18	Dominance t	13.94	0.305	1.77
11	Difference	13.94	0.306	1.65
20	Nurturance	14.05	0.306	1.54
3	Work achievement	14.11	0.307	1.45
7	Opp. to learn a job	14.18	0.307	1.36
4	Opp. for promotion	14.24	0.307	1.20
6	Comfortable working Co.	14.30	0.307	1.20
12	Order	14.37	0.307	1.14
17	Succorance	14.38	0.307	1.08
10	Achievement	14.50	0.307	1.02
23	Hetrosexuality	14.57	0.307	0.98

* P $<$ .01 ** P $<$ .05

From the table we can see that the variable 'suitable type of job' entered into the regression equation is followed by the variable, need for 'affiliation'. Both the variables are significant at .01 level. The variables like X_{14}, X_9, X_8 entered into the equation one by one indicating as good predictors of HMS union affiliation. The variable autonomy, competition, exhibition, job security is significant at .05 level, indicating that all the first 6 variables are the best predictors of HMS trade union affiliation.

Looking at the table 2.3 the standard error estimates adjusted value for the first variable is 13.57 and subsequently decreased till the 4th variable entered into regression equation.

According to the F value table, the next two variables are also significant at .05 level. But the standard error estimate adjusted value increased slightly. The remaining variables from X_{14}.....X_{23} are not so important in predicting HMS union affiliation.

Based on the objectives of the study we can conclude that the best predictor variables of the HMS trade union affiliation are suitable type of job, job security, competition, affiliation, autonomy, and exhibition.

CONCLUSION

The problem of present investigation is to study trade union affiliation in relation to motivational and personal needs. Trade Union affiliation tendency is treated as dependent variable, and motivational and personal needs as independent variables. The assumption is that trade union affiliation will be influenced by the combined force of motivational factors and personal needs of the employees.

The hypothesis is that trade union affiliation can be predicted with combined influence of general motivation and personal needs. The hypothesis is proved to be correct. Looking into the first stepwise multiple regression equation, related to AITUC union, the best predictor variables are opportunity for promotion, adequate earning, abasement, nurturance, order, work achievement and affiliation.

For the prediction of affiliation of INTUC worker the best predictor variables are job security, change, achievement, adequate earning, order, and exhibition.

Suitable type of job, affiliation, autonomy, competition, exhibition and job security are best predictor variables for the prediction of affiliation of HMS union.

By synthesising three stepwise multiple regression equation, related to three unions, the following conclusions can be drawn.

(a) Motivation for adequate earning, is a common predictor variable of the INTUC and AITUC unions respectively.

(b) Need for 'affiliation' is a common predictor variable of the HMS and AITUC unions.

(c) Among the variables studied the motivation for 'job security' is a common predictor variable in INTUC and HMS union.

(d) There is no common predictor variable in all the trade union.