CHAPTER V :

FACTOR ANALYSIS

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5.1   INTRODUCTION

The significant correlations that each item bore with the sub-test were taken to mean that the item really belonged to the cluster of items designated by the sub-test. The OCDQ (Baroda Form I) used in the study has 12 sub-tests or dimensions. Before the study is concluded, it would be worthwhile to identify the principal factors. This would necessitate factor analysis at the sub-test level. It is intended to do this by computing a 12x12 correlation matrix based on the 12 sub-test scores of 4814 respondents, examining the factor loadings to determine the degree to which each sub-test is saturated with each of the factors and applying to four varimax factor solution to find out which sub-test or sub-tests load high on each of the four factors. The results of factor analysis on above lines will be presented in subsequent sections of this chapter.

5.2   PRINCIPAL COMPONENT FACTORS (OCDQ)

As a preliminary step in factor analysing of the sub-tests a 12x12 inter-correlation matrix was computed. The inter-correlations of sub-tests give a picture of the internal structure of the test (the OCDQ). The inter-correlations are given in Table 5.1.

Table 5.1 : Inter-Correlation Matrix (12 x 12)

OCDQ(Baroda Form I) Sub-tests	1 Dis-engage-ment	2 Hind-ran-ce	3 Inti-macy	4 Esp-rit	5 Aloof-ness	6 Produ-ction Empha-sis	7 Consi-dera-tion	8 Thru-st	9 Non-graded order	10 Feed-back	11 Human-Rela-tions	12 Autonomy
1.Disengage-ment	1.00	.61	-.46	-.50	.54	-.33	-.39	-.37	-.40	-.34	-.67	-.32
2.Hindrance		1.00	-.46	-.60	.52	-.04	-.49	-.38	-.25	-.33	-.61	-.45
3.Intimacy			1.00	.42	-.27	-.01	.05	-.06	.18	.08	.37	.03
4.Esprit				1.00	-.41	-.11	.24	.07	.17	.12	.37	.29
5.Aloofness					1.00	-.16	-.56	-.46	-.29	-.32	-.60	-.47
6.Production Emphasis						1.00	-.11	.24	.10	-.07	.17	-.22
7.Considera-tion							1.00	.53	-.11	.02	.41	.40
8.Thrust								1.00	-.21	.10	.29	.04
9.Non-graded order									1.00	.24	.23	.11
10.Feedback										1.00	.13	.11
11.Human Relations											1.00	.33
12. Autonomy												1.00

The inter-correlations of the sub-tests of the OCDQ
(Baroda Form I) show that each sub-test measures a rela-
tively different "thing" or type of behaviour. The co-
efficients of correlation vary from -.01 to +.61.

The next step is to factor the above Correlation Matrix.
Here, the Principal-Axes Method, as reported by Fruchter
(1967:280) will be followed. This method of factoring the
Correlation Matrix has certain distinct advantages which
deserve to be noted. Firstly, each factor extracts the
minimum amount of variance and gives the smallest possible
residuals. Secondly, the Correlation Matrix is condensed
into the smallest number of orthogonal factors. Thirdly,
it has the advantage of giving a mathematical unique (least
squares) solution for a given table of correlations. Lastly,
the process of further extracting of principal components
could be stopped when the amount of variance goes on
decreasing.

In the discussion on the original principal component
matrix (12x4), the term "factor loading" will be used. It
would be worthwhile to clarify this term. Sharma (1973:215)
explains the term in the following words :

"The factor loading which a given sub-test
receives on a particular factor shows the
extent to which the sub-test measures the
same type of behaviour as is represented
in a more general term by the factor itself.
Whenever a sub-test yields a high factor
loading on a given factor, be it either
positive or negative, that sub-test can be
viewed as a 'good' measure of the factor.
Alternatively, if a sub-test secures only
a zero loading on a factor or a value near
zero, that sub-test obviously is not measur-
ing the same thing as the factor is measuring."

The details of extraction of the factors based on the
original Correlation Matrix (vide- Table 5.1) are presented
in the Original Principal Component Factor Matrix in Table
5.2 given on the next page.

The table constitutes the Original Principal Component
Matrix (12x4). It shows loadings on four factors that are
extracted. The 'Eigen Values' of each of these four factors
are 36.99, 13.70, 11.90 and 9.00 respectively.A factor is
considered to be of lesser importance if its 'Eigen Value'
is less than 1.00. Applying this criterion, all the four
factors were considered for Varimax Rotation Solution.
Kaiser's (1958) programme was applied for the rotation of
the factors.

Table 5.2 : Original Principal Component Factor Matrix (12x4)

Sr. No.	Variables	Factor Loadings				h^2
		Administrative orientation	Psycho-social needs	Task-fulfilment	Morale	
1.	Disengagement	.84	.17	-.27	00	.806
2.	Hindrance	.85	.04	.10	.08	.746
3.	Intimacy	-.48	-.47	-.91	-.53	.735
4.	Esprit	-.33	-.25	-.27	-.63	.641
5.	Aloofness	.81	-.16	-.04	-.20	.720
6.	Production Emphasis	-.13	.04	.89	-.04	.808
7.	Consideration	-.61	.59	-.22	-.03	.773
8.	Thrust	-.46	.68	.32	.03	.781
9.	Non-graded order	-.64	-.34	.15	.37	.683
10.	Feedback	-.36	-.24	00	.66	.622
11.	Human Relations	-.13	00	.14	-.78	.644
12.	Autonomy	-.32	.11	-.54	.23	.630
	Percentage Variation	36.99	13.70	11.90	9.00	
	Cumulative Percent Variation	36.99	50.69	62.59	71.59	

Note: Loading beyond ± .30 are considered significant.

From the above table, it is clear that four dimensions, viz.,'disengagement', 'hindrance', 'aloofness' and 'human relations' load high on Factor I, while 'thrust' and 'Non-graded order' load high on Factor II, 'production Emphasis' load high on Factor III and 'Feedback' and 'intimacy' load high on Factor IV. Sharma (1973 : 218) in his doctoral study reached the conclusion that a high score on 'production emphasis' indicated job-oriented behaviour. It will be noticed that the loading in this factor is smaller on dimensions of 'intimacy', 'considerations' and 'human relations' which bring about social need satisfaction. The loading on 'production emphasis' indicates a kind of job-satisfaction emanating from task-accomplishment. This factor may, therefore, be named as 'Task-fulfilment'.

'Feedback', 'esprit' and 'intimacy' load high on Factor IV. They are conducive to improvement of teacher morale, both intimacy and free flaw of communication are necessary to keep teachers satisfied socially and emotionally which contribute to their morale. So, the Factor IV may be named as 'morale' factor.

The Factor I indicates high loading in the case of

'disengagement', 'hindrance', aloofness' and 'non-graded
order' (or hierarchical behaviour). They are negative
behaviour resulting from closed administrative behaviour.
So, this Factor I may be named 'administrative behaviour'
or 'administrative closedness'.

The Factor II shows high loading on dimensions of
'consideration' and 'thrust'. Consideration denotes social
needs satisfacton, and 'thrust' is also a behaviour which
motivates teachers internally which also works towards psycho-
logical needs satisfaction. Therefore, the Factor II may be
named as 'psycho-social need satisfaction'.

In fine, keeping in mind the above factor rotation
solution, one might observe that institutional behaviour
that occurs in the sampled 128 secondary schools of Gujarat
is characterised by four general factors. Sharma's (1973)
general factor of 'job satisfaction' and Halpin's 'social
control' gets here the name of 'task fulfilment'. Another
general factor identified by Sharma was 'organizational
control' which was in Halpin's factor analysis was called
'social control' gets here the name of "administrative
orientation or closedness'. The third general factor was

called by both Sharma and Halpin as 'esprit' which, here, is called 'morale'. The fourth factor was designated as 'social control' both by Sharma and Halpin, but here it gets a different label - 'the psycho-social needs'.

Thus, the four principal factors extracted in the present study are: Administrative Orientation or Closedness, Psycho-social Need Satisfaction, Task-Fulfilment and Morale.

5.3 FOUR FACTOR ROTATION SOLUTION

In the previous section the principal four factors were extracted and named. A factor is considered to be of lesser importance if its 'Eigen Value' is less than 1.00. Applying this criterion, an attempt will now be made to consider all the previously extracted four factors for Varimax Solution. Kaiser's (1959) computer programme will be applied for the rotation of the solution. In Table 5.3, the rotated factor matrix with dimensions loadings of all the four factors are given.

Table 5.3 : Rotated Factor Matrix (12 x 4)

Dimensions	Factors			
	I	II	III	IV
1. Disengagement	-.44	.62	-.42	-.23
2. Hindrance	-.50	.63	-.27	.13
3. Intimacy	-.11	-.85	-.01	..05
4. Esprit	.16	-.74	.06	-.25
5. Aloofness	-.67	.34	-.39	.04
6. Production Emphasis	.17	-.04	.10	.88
7. Consideration	.82	=.15	-.10	-.26
8. Thrust	.83	.05	-.09	.27
9. Non-graded order	-.20	-.29	.74	.10
10. Feedback	.14	.04	.77	-.10
11. Human Relations	.50	-.58	.21	.11
12. Autonomy	.41	-.19	.26	-.59
Percent common variation	23.40	22.20	14.06	11.92
Percent Total variation	32.69	31.01	19.64	16.64

The discussion of the results is based on varimax rotated factor matrix. In interpreting a factor, the investigator considered only those variables which had loadings greater than .30 value.

Anastasi (1958) has pointed out, "In interpreting a factor, we consider only those items whose loading with that factor exceeds some minimum. The interpretation of varimax factors has been centred around only those variables which had loadings greater than absolute value of .30."

The name and number of the components are given in the correlation matrix, the components and the rotated varimax factor loadings are given right in the beginning of the discussion of each factor.

VARIMAX FACTOR(I

The significant loadings of varimax factor I, are arranged in descending order in Table 5.4, for the sake of convenience.

Table 5.4 : Varimax Factor I

Variables	Loading
Thrust	.83
Consideration	.82
Human Relations	.50
Autonomy	.41
Disengagement	-.44
Hindrance	-.50
Aloofness	-.67

The Varimax Factor I is characterised by significant loadings for seven variables. Four variables of the factor loadings are found to be positive whereas three variables are negative. The percent common variance covered by this factor is 23.40. The significant loadings were shared by the variables Thrust .83, Consideration .82, Human Relations.50, Autonomy .41,᾽ ᾽᾽᾽ ᾽ ᾽᾽, Disengagement -.44, Hindrance -.50 and Aloofness -.67. Since this factor is mostly dominated by Thrust and Consideration, this factor can be named as 'Thrust and Consideration'.

VARIMAX FACTOR II

The varimax factor II is summarised in Table 5.5 :

Table 5.5 :

Variables	Loading
Hindrance	.63
Disengagement	.62
Aloofness	.34
Human Relations	-.58
Esprit	-.74
Intimacy	-.85

The Varimax Factor II is characterised by significant loadings of six variables. Though three variables have positive loadings, the remaining three are negatively loaded. The percent common variance covered by this factor is 22.20. The significant loadings were shared by variables, Hindrance .63, Disengagement.62, Aloofness .34, Human Relations -.58, Esprit -.74, and Intimacy -.85. Since this factor is mostly dominated by Intimacy, this factor can be named as 'Intimacy'. Halpin (1963) has also identified 'Intimacy' as one of the factors of Organizational Climate.

VARIMAX FACTOR III

The significant loadings of the third varimax factor are being summarised in Table 5.6.

Table 5.6 : Varimax Factor III.

Variables	Loading
Feedback	.77
Non-graded order	.74
Aloofness	-.39
Disengagement	-.42

This Varimax Factor is characterised by significant loadings for four variables. Though two variables have

positive loadings, the remaining two variables are negatively loaded. The percent common variance covered by this factor is 14.06. The significant loadings were shared by variables communication .77, Non-graded order .74, Aloofness -.39 and Disengagement -.42. Since this factor is mostly dominated by "Feedback" and "Non-graded order" the varimax factor III can be named as "Feedback" and "Non-graded order".

VARIMAX FACTOR IV

The significant loadings of the varimax Factor IV arranged in descending order are given in Table 5.7 below :

Table 5.7 : The Varimax Factor IV.

Variables	Loadings
Production Emphasis	.88
Autonomy	-.59

The Varimax Factor IV is characterised by significant loadings for only two variables. Though one variable has positive loadings, the other one is negatively loaded. The percent common variance covered by this factor is 11.92.

The significant loadings were shared by the variables
Production Emphasis .88 and ʸ⁻ .... Autonomy⁻...
-.59. Since this factor is mostly dominated by Production
Emphasis, this factor can be named as 'Production Emphasis'.
Halpin (1963) has also identified 'Production Emphasis' as
one of the factors of Organizational Climate.

5.4 PRINCIPAL COMPONENT FACTORS (OCDQ, PERSONALITY FACTORS, PCI AND DOGMATISM)

The previous two sections were devoted to factor
analysing the OCDQ (Baroda Form II) at sub-test level. The
organizational Climate of secondary schools, in the present
study, constitutes the dependent variable, whereas the 16
personality Factors, the Pupil Control Ideology and Dogma-
tism (belief systems) form its three independent variables.
A factor analysis of all the dimensions of the OCDQ, the
16 P.F., the PCI and Dogmatism will now be taken up. Here
also the same procedures of analysis will be used.

The preliminary step, as before, will be to compute
the comprehensive correlation matrix. This is done in
Table 5.8.

The next step is to repeat the procedures followed in Section 5.2 and prepare Original Principal Component Factor Matrix (30 x 11) which would help in condensing the original 30 variables into eleven factors. This is done in Table 5.9.

Table 5.8 : The Comprehensive Correlation Matrix (30x30)

Variables	Dis-engage-ment	Hind-ran-ce	Into-macy	Esp-rit	Aloof-ness	Prod. Emph-asis	Consi-dera-tion	Thru-st	Non-graded order	Feed back	Human Rela-tions	Auto-nomy	Pers. A	Pers. B	Pers. C
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.Disengagement		.61	-.46	-.50	-.54	-.33	-.39	-.34	-.40	-.34	-.67	-.32	00	-.08	-.14
2.Hindrance			-.46	-.60	-.52	-.04	-.49	-.38	-.25	-.33	-.61	-.45	-.86	-.18	-.11
3.Intimacy				.42	-.27	-.01	.05	-.06	.18	.08	.37	.03	-.02	.06	.07
4.Esprit					.61	-.11	.24	.07	.17	.12	.37	.29	.06	.06	.08
5.Aloofness						-.16	-.56	-.46	-.29	-.32	-.60	-.47	00	-.06	-.06
6.Production Emphasis							-.11	.24	.10	-.07	.17	-.22	.01	-.07	-.08
7.Consideration								.53	-.11	.02	.41	.40	.09	.07	.06
8.Thrust									-.21	.10	.29	.04	.01	.50	.07
9.Non-graded order										.24	.23	.11	-.07	.23	.07
10.Feedback											.13	.11	-.02	.50	.07
11.Human Relations												.33	00	.07	.12
12.Autonomy													.03	.26	.08
13.Pers.A														.07	.06
14.Pers.B															.11
15.Pers.C															

349

Table 5.8 (contd.)

Varia-bles	Pers. E	Pers. F	Pers. G	Pers. H	Pers. I	Pers. L	Pers. M	Pers. N	Pers. O	Pers. Q1	Pers. Q2	Pers. Q3	Pers. Q4	PGI	Dogmatism
	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1.	.06	-.02	-.06	-.06	.07	.07	.04	-.02	.10	-.03	.09	-.09	.04	.07	.02
2.	.07	-.02	-.07	-.06	.07	.07	.05	-.03	.07	00	.11	-.07	.05	.06	.14
3.	-.02	.01	.08	.07	.07	-.07	-.03	.04	-.08	.04	-.01	.03	.01	-.11	-.07
4.	00	.03	.09	.06	-.07	-.04	-.02	.03	-.10	.05	00	.02	00	-.12	-.06
5.	.06	.06	-.07	-.06	.03	.06	.06	-.02	.06	-.05	.07	-.06	.05	.07	.11
6.	-.04	00	-.06	-.06	-.01	.06	-.03	-.01	.13	.03	.08	-.02	-.09	00	.01
7.	-.09	-.08	.10	.06	-.06	-.03	-.04	-.04	-.06	-.03	-.08	.07	-.06	-.08	-.03
8.	-.28	-.04	.09	.31	-.31	.01	.01	-.03	-.34	00	-.07	.11	-.05	-.07	-.72
9.	-.22	.04	.17	.06	-.06	-.07	-.05	.06	-.07	.03	-.13	.06	00	-.10	-.12
10.	-.10	.03	.08	.34	-.34	-.04	-.03	.11	-.33	-.01	-.54	.12	.02	-.09	-.78
11.	-.21	.01	.18	.06	-.04	-.06	-.03	-.03	-.06	-.05	-.07	.09	-.03	-.08	-.14
12.	-.07	-.04	.09	.06	-.06	-.02	-.10	-.02	-.09	00	-.29	.06	-.03	-.11	-.48
13.	.02	.11	.12	.13	.08	.11	.07	.05	.13	.06	.03	.06	.05	-.07	.04
14.	.08	.08	.08	.09	.05	.01	.03	.06	.08	.11	.11	.08	-.05	-.05	.01
15.	.02	.14	.13	.14	-.07	-.02	.08	-.02	.01	.04	.21	.23	-.15	-.16	-.03

Table 5.8 (continued)

Variables	Pers. E 16	Pers. F 17	Pers. G 18	Pers. H 19	Pers. I 20	Pers. L 21	Pers. M 22	Pers. N 23	Pers. O 24	Pers. Q_1 25	Pers. Q_2 26	Pers. Q_3 27	Pers. Q_4 28	PCI 29	Dogma-tism 30
16.Pers.E		.06	-.09	.07	-.07	.04	.06	.24	-.01	.13	.02	.02	.13	.07	.02
17.Pers.F			.17	.30	-.10	.03	.03	.08	.07	.04	.07	.23	-.08	-.09	.08
18.Pers.G				.06	.13	.03	.10	-.07	.18	.04	.08	.07	-.04	-.13	.10
19.Pers.H					-.07	.04	.02	.04	.06	.10	.09	.13	-.01	-.08	.01
20.Pers.I						.11	.04	.02	.17	-.02	.06	-.04	.16	.07	00
21.Pers.L							.10	.05	.12	.10	.05	.01	.11	-.04	.07
22.Pers.M								.05	.13	.03	.10	.01	.11	.06	.06
23.Pers.N									.09	.05	.03	-.03	.16	.06	.06
24.Pers.O										-.01	00	.01	.08	-.01	.01
25.Pers.Q_1											.06	.04	.01	-.06	-.02
26.Pers.Q_2												.19	-.03	-.07	-.02
27.Pers.Q_3													-.10	-.08	00
28.Pers.Q_4														.09	.05
29.PCI															-.01
30.Dogma-tism															

Table 5.9 :   Original Principal Component Factor Matrix (30 x 11)

Sr. No. Variables	I	II	III	IV	V	VI	VII	VII	IX	X	XI	h^2
					Factor Loadings							
1. Disengagement	.84	.01	.10	.02	.28	.07	.05	.01	.01	.05	.02	.810
2. Hindrance	.85	.02	.04	-.04	.10	.04	.09	.02	.09	-.02	.04	.758
3. Intimacy	-.48	.01	-.41	.05	.06	-.25	-.21	-.33	-.16	.13	-.20	.710
4. Esprit	-.63	.07	-.21	.10	-.22	-.18	-.14	-.21	-.09	.14	-.08	.640
5. Aloofness	.79	.14	-.12	-.09	00	-.16	-.12	-.07	-.03	.01	-.02	.721
6. Prod.Emp.	-.13	-.02	.11	-.14	.83	.13	.10	-.11	.02	.04	.03	.783
7. Consideration	-.60	-.10	.51	00	-.30	.17	-.08	-.02	-.04	-.02	.07	.766
8. Thrust	-.45	-.13	.58	-.04	.19	.42	-.11	-.02	-.13	-.09	-.02	.802
9. Non-graded order	-.34	-.02	-.52	.05	.23	-.24	.34	.24	.11	-.02	00	.690
10. Feedback	-.35	-.01	-.28	.17	.02	.21	.21	.50	-.07	-.22	-.05	.631
11. Human Relations	-.77	-.07	.03	.05	.015	-.09	-.08	-.12	.04	-.01	.09	.666
12. Autonomy	-.52	-.03	.09	.02	-.53	-.10	.16	.14	.21	-.03	.17	.696
13. Pers.A	-.05	.36	.23	.20	-.03	-.08	-.20	.07	.16	.15	-.25	.390
14. Pers.B	-.10	.35	.03	.06	00	.12	.27	-.11	.09	.47	.32	.577
15. Pers.C	-.17	.48	-.03	-.30	-.16	.02	.21	-.05	-.21	-.18	-.03	.499
16. Pers.E	.10	.17	-.24	.40	-.07	.46	-.03	-.15	.06	.01	.24	.560
17. Pers.F	-.03	.57	-.14	-.12	.08	.08	-.33	.30	-.03	.08	00	.587
18. Pers.G	-.11	.39	.35	-.07	.14	-.36	-.05	.08	.01	.11	.19	.501
19. Pers.H	-.16	.49	-.11	00	00	.21	-.26	.15	00	.13	-.33	.541
20. Pers.I	.10	.02	.38	.32	.01	-.35	.33	-.02	.02	.23	-.08	.552
21. Pers.L	.10	.24	.19	.30	-.01	-.06	00	-.10	.31	-.47	-.25	.597
22. Pers.M	.08	.25	.14	.28	.16	-.07	.04	-.23	-.50	-.27	00	.577
23. Pers.N	00	.15	-.20	.53	.03	.27	.02	.13	-.10	.04	.22	.498
24. Pers.O	.02	.26	.35	.30	.15	-.16	.10	.34	-.06	.17	-.09	.498
25. Pers.Q_1	-.05	.26	-.08	.14	.06	.22	.09	-.43	.51	.04	-.07	.609
26. Pers.Q_2	00	.43	.01	-.10	-.12	00	.45	-.23	-.21	-.18	.07	.544
27. Pers.Q_3	-.02	.48	-.05	-.30	-.14	.07	.05	-.05	-.13	-.04	.02	.373
28. Pers.Q_4	.09	-.06	-.01	.64	-.03	-.12	-.01	-.06	-.06	-.12	-.15	.485
29. PCI	.28	-.25	-.04	.25	-.12	.10	.03	-.06	-.40	.30	00	.491
30. Dogmatism	.04	.14	-.03	.16	.08	-.31	-.43	.01	.06	-.26	.61	.784
Percent Variation	15.29	6.95	6.19	5.54	4.95	4.32	3.94	3.73	3.55	3.37	3.31	
Cumulative Percent Variation	15.29	22.24	28.42	33.96	38.92	43.24	47.18	50.91	54.46	57.83	61.14	

5.5 THE ELEVEN ROTATED FACTOR SOLUTION

The Original Principal Component Matrix (30x11) with factor loadings of eleven dominant factors is given in Table 5.10 on the next page. The 'Eigen Values' of each of these eleven factors are 15.29, 6.95, 6.19, 5.54, 4.95, 4.32, 3.94, 3.73, 3.55, 3.37 and 3.31 respectively. For varimax rotation Kaiser's (1959) computer programme was applied. The rotated factors matrix with factor loadings of eleven factors is given in succeeding tables.

THE VARIMAX FACTOR I

The significant loadings of the first out of the total varimax factors are being summarised in Table 4.11 below :

Table 5.11 : The Varimax Factor I

Variables	Loadings
Hindrance	.62
Disengagement	.57
Aloofness	.33
Non-graded order	-.32
Human Relations	-.54
Esprit	-.73
Intimacy	-.83

Table 5.10 : Rotated Factor Matrix (30 x 11)

Sr. No.	Variables	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	h^2
					Factor Loading								
1.	Disengagement	.57	-.03	-.48	.06	-.22	.01	.01	-.43	-.07	-.04	-.09	
2.	Hindrance	.62	-.03	-.55	.03	.12	-.03	.08	-.22	.02	-.04	-.01	
3.	Intimacy	-.83	-.01	-.05	-.02	.06	.11	-.07	.02	00	-.02	-.03	
4.	Esprit	-.73	.06	.21	.03	-.22	.01	-.08	.04	.03	.04	00	
5.	Aloofness	.33	.03	-.69	-.03	.03	.02	-.05	-.32	-.06	-.07	.08	
6.	Production Emphasis	00	-.06	.15	-.09	.83	-.05	.04	.13	.14	.12	.03	
7.	Consideration	-.12	.03	.81	-.06	-.24	-.0?	.02	-.13	-.02	.02	00	
8.	Thrust	.07	-.03	.82	-.01	.29	.01	-.05	-.14	-.05	-.05	-.08	
9.	Nongraded order Struc.	-.32	00	-.18	-.02	.06	-.03	.09	.73	.06	.09	00	
10.	Feedback...	-.01	.02	.21	.22	-.07	.09	-.12	.68	-.17	-.09	-.12	
11.	Human Relations	-.54	-.05	.52	-.07	.10	-.01	.04	.20	.11	.05	.17	
12.	Autonomy & Democracy	-.16	.08	.42	-.07	-.61	-.07	.11	.24	.12	.12	.09	
13.	Pers.A	-.05	-.06	.05	-.01	-.09	-.35	-.43	-.13	.17	-.13	00	
14.	Pers.B	-.01	.22	.03	.28	.01	-.29	-.04	-.03	.27	.53	.03	
15.	Pers.C	-.06	.66	.07	-.10	-.06	.05	-.17	.73	-.01	.02	-.01	
16.	Pers.E	.06	.02	-.04	.68	-.03	.17	-.06	-.04	.22	.02	.02	
17.	Pers.F	.01	.16	-.08	.05	.05	.03	-.69	.07	-.04	.11	.21	
18.	Pers.G	-.02	.18	.09	-.22	.08	-.44	-.18	-.07	.01	.12	.110	
19.	Pers.H	-.13	.10	.03	.08	.01	.01	-.69	.02	.07	-.03	-.14	
20.	Pers.I	.03	-.03	-.04	-.03	-.04	-.69	.22	-.07	.04	-.05	-.09	
21.	Pers.L	.15	.07	00	-.01	-.06	-.14	-.07	00	.38	-.62	.09	
22.	Pers.M	-.08	.38	-.01	.25	.27	-.19	.07	-.18	-.23	-.39	.11	
23.	Pers.N	.01	-.04	00	.67	00	-.08	-.09	.17	-.28	-.02	.07	
24.	Pers.O	.15	-.02	.07	.06	.07	-.62	-.23	.10	-.12	-.06	.03	
25.	Pers.Q_1	-.08	.05	-.02	.17	.07	.03	-.05	-.08	.74	-.02	-.08	
26.	Pers.Q_2	.02	.71	-.05	.07	-.01	-.10	00	.02	.10	-.02	-.04	
27.	Pers.Q_3	.01	.52	-.04	-.06	-.05	.09	-.26	-.05	.03	.11	.03	
28.	Pers.Q_4	-.12	-.18	-.11	.36	-.08	-.27	.11	00	-.02	-.45	-.02	
29.	PCI	-.01	-.16	-.17	.34	-.03	-.07	.15	-.29	-.38	-.08	-.24	
30.	Dogmatism	-.03	-107	-.07	.13	-.03	.04	.01	-.05	-.04	-.08	.86	
	Percent Common variation	10.08	8.60	5.65	5.25	5.05	5.02	5.00	4.86	3.92	3.89	3.80	
	Percent total variation	16.49	14.07	9.25	8.59	8.27	8.21	8.18	7.96	6.41	6.36	6.22	

This factor is characterised by significant loadings for seven variables. Three variables of the factor loadings are found to be positive whereas four variables are negative. The percent common variance covered by this factor is 10.08. The significant loadings were shared by variables Hindrance .62, Disengagement .57, Aloofness .33, Non-graded Order -.32, Human Relations -.54, Esprit -.73 and Intimacy -.83. Since this factor is negatively dominated by high significant loading on the dimensions of Intimacy and Esprit, this factor can be named as 'Intimacy' and 'Esprit'.

THE VARIMAX FACTOR II

The significant loadings of varimax factor II are summarised in Table 5.12.

Table 5.12 : Varimax Factor II

Variables	Loading
Pers. Q_2	.71
Pers. PCI	.66
Pers. Q_3	.52
Pers. M	.38

This factor is characterised by significant loadings only on four variables. All the factor loadings are found to be positive. The percent common variance covered by this factor is 8.60. Since significant loadings were dominated by self sufficient, it can be called 'Self Sufficient'.

THE VARIMAX FACTOR III

The significant loadings on varimax factor III are summarised in Table 5.13.

Table 5.13 : Varimax Factor III.

Variables	Loadings
Thrust	.82
Consideration	.81
Human Relations	.52
Autonomy	.42
Disengagement	-.48
Hindrance	-.55
Aloofness	-.69

This factor is characterised by significant loadings on seven variables. Four variables are found to be positive whereas three variables are negatively loaded. The per cent common variance covered by this factor is 5.65. The signi-

ficant variables were shown by variables Thrust .82,

Consideration .81, Human Relations .52, Autonomy

Γ . . . . . . .42, Disengagement -.48, Hindrance -.55 and

Aloofness -.69. The significant loadings were shared by

Thrust and Consideration. This factor can be named as

"Thrust"and"Consideration"

THE VARIMAX FACTOR IV

The significant loadings of varimax factor IV are

summarized in Table 5.74.

Table 5.14 : Varimax Factor IV.

Variables	Loadings
Pers. E	.68
Pers. N	.67
Pers. Q_4	.36
PCI	.34

This factor is characterised by significant loadings

only on four variables. All the factor loadings are found

to be positive. The percent common variance covered by this

factor is 5.25. The significant loadings were shared by

variables PE .68, PN .67, Q_4 .36 and PCI .34. The significant loadings were shared by Dominant and sophisticated. This factor is named as "Dominant and Sophisticated".

THE VARIMAX FACTOR V

The significant loadings of the fifth varimax factor are being summarised in Table 5.15.

Table 5.15 : The Varimax Factor V

Variables	Loadings
Production Emphasis	.83
Autonomy	-.61

This factor is characterised by significant loadings only on two variables. One variable is found to be positive and the other variable is negatively loaded. The per cent common variance covered by this factor is 5.05. The significant loadings were shared by variables Production Emphasis .83 and Autonomy -.61. The significant loadings were shared by Production Emphasis. This factor can be named as 'Production Emphasis'.

THE VARIMAX FACTOR VI

The significant loadings of the sixth varimax factor are being summarised in Table 5.16.

Table 5.16 : The Varimax Factor VI.

Variables	Loadings
Pers. A	-.35
Pers. G	-.44
Pers. O	-.62
Pers. I	-.69

This factor is characterised by significant loadings only on four variables. All the factor loadings are found to be negative. The percent common variance covered by this factor is 5.02. The significant loadings were shown by variables Pers.A -35, Pers.G -.44, Pers.O -.62 and Pers.I -.69. The significant loadings were shared by Tough and Confident. This factor can be named as "Tough and Confident".

THE VARIMAX FACTOR VII

The significant loadings of varimax factor VII are given in Table 5.17.

Table 5.17 : The Varimax Factor VII.

Variables	Loadings
Pers. A	-.43
Pers. F	-.69
Pers. M	-.69

This factor is characterised by significant loadings only on three variables. All the factor loadings are found to be negative. The percent common variance covered by this factor is 5.00. The significant loadings were shared by variables Pers.A -.43, Pers.F -.69 and Pers.M -.69. Since this factor is dominated by high significant loadings on Silent and Conventional, it can be called "Silent and Conventional".

VARIMAX FACTOR VIII

The significant loadings of the eighth varimax factor are being summarized in Table 5.18.

Table 5.18 : The Varimax Factor VIII.

Variables	Loadings
Non-graded order	.73
Pers.C	.73
Feedback	.68
Aloofness	-.32
Disengagement	-.43

The factor is characterised by significant loadings only on five variables. Three variables are found to be positive and the other variables are negatively loaded. The percent common variance covered by this factor is 4.86. The significant loadings were shared by variables Non-graded order .73, Pers. C. .73, Feedback .68, Aloofness -.32 and Disengagement -.43. Since this factor is highly dominated by high significant loadings on Non-graded order and Mature, it can be called "Non-graded order" and "Matured".

THE VARIMAX FACTOR IX

The significant loadings of varimax factor IX are given in Table 5.19.

Table 5.19 : The Varimax Factor IX.

Variables	Loadings
Pers. Q_1	.74
Pers. L	.38
PCI	-.38

This varimax factor is characterised by significant loadings for only three variables. Though two variables have positive loadings the remaining one is negatively loaded. The percent common variance covered by this factor was 3.92. This factor is characterised by significant loadings on variables Q_1 .74, Pers.L .38 and PCI -.38. Experimenting, which is found to have high positive loadings. The varimax factor IX can be named "Experimentation".

THE VARIMAX FACTOR X

The significant loadings of varimax factor X are given in Table 5.20.

Table 5.20 : The Varimax Factor X

Variables	Loadings
Pers. B	.53
Pers. M	-.39
Pers. Q_4	-.45
Pers. L	-.62

This varimax factor is characterised by significant loadings for only four variables. Though one variable has positive loadings, the remaining three variables are negatively loaded. The percent common variance covered by this factor is 3.89. This factor is characterised by significant loadings on variables Pers. B .53, Pers.M -.39, Pers. Q_4 -.45 and Pers. L -.62. The significant loading was dominated by Trustful, it can be called 'Trustful'.

THE VARIMAX FACTOR XI

The significant loadings of varimax factor XI are
given in Table 5.21.

Table 5.21 : The Varimax Factor XI.

Variables	Loadings
Dogmatism	.86
Pers. G	.40

This varimax factor is characterised by significant
loadings for only two variables. All the factor loadings
are found to be positive. The percent common variance
covered by this factor is 3.80. This factor is characte-
rised by significant loadings on variables Dogmatism .86
and Pers .G .40. The significant loading was dominated by
Dogmatism, it can be called "Dogmatism".

5.6 CONCLUSION

The factor matrix (vide Table 5.2) comprising four
and eleven principal axis components, explains the correla-
tion matrix (12x12) and (30x30) (Vide- Tables 5.1 and 5.8)
The naming and interpretation of the rotated varimax factors
have shown the composition of the important factors. The
factors were named for the Organizational Climate. (1) Thrust
and Consideration, (2) Intimacy, (3) Feedback and Non-graded
order, and (4) Production Emphasis. One of these four factors,
'Thrust and Consideration' has covered 23.40 per cent of
common variance and it has been the most dominating factor.
The per cent common variance covered by the factor 'Produc-
tion Emphasis' was only 11.92 and it was the least dominaat-
ing factor.

The factors were named for the ten factors extracted
out (1) Intimacy and Esprit, (2) Self-Suificient (3) Thrust
and Consideration (4) Dominant and Sophisticated (5) Produc-
tion Emphasis (6) Tough and Confident (7) Silent and Conven-
tional (8) Non-graded order and Mature (9) Experi-
menting and (10) Trustful, Out of this ten factors 'Intimacy
and Esprit' has covered 10.08 per cent of common variance

and it has been the most dominating factor. The per cent common variance covered by the 'Trustful' was only 3.80 and it was the least dominating factor.

According to the rotated varimax factor matrix and according to the per cent common variance the factors were named as indicated above.