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## CHAPTER - III

### METHODOLOGY

#### 3.1. INTRODUCTION

In view of the objective of the study and the type of variables involved, a set of appropriate methodological strategies were contemplated. The objectives of the present study were predominantly exploratory-descriptive rather than predictive-prescriptive. Therefore, the aggregation of data and the analysis strategies were planned accordingly. In this chapter, attempt is made to describe the various aspects of methodology adopted for generating raw data and the statistical techniques used to test the host of hypotheses.

#### 3.2. TYPE OF DATA REQUIRED.

Three different types of data were required to meet the objectives of this study. These were data related to various organisational role-stress factors; data related to job satisfaction (dissatisfaction) variables; and information related to various types of organisational climates (Motivational). The host of hypotheses conjectured to understand the relationship between role-stress and job-satisfaction, and moderating effect of organisational climates on above relationship warranted a set of objectives and quantifiable data. Therefore,

standardized measures were required to gather primary, objective and reliable data from the respondents of sample organisations.

### 3.3. DESCRIPTION OF THE SAMPLE ORGANISATION:

There are four types of industries : Fertilizers, Chemicals, Electronics and Heavy Machineries namely : GSFC, GACL, GCEL and GTCL.

All above organisations are registered under Company Act. All four organisations are limited companies GSFC and GACL are having public share also but majority of the shares are with state govt. and different financial institutions, whereas GCEL and GTCL are owned by State Government.

Basic ideology of all the four organisations are same. Managing Directors who are appointed by the State Govt. are IAS officers.

#### 3.3.1. CONTROL VARIABLES AT ORGANISATIONAL LEVEL.

In experimental situation if a variable (A) is held constant during the manipulation of independent variables (B) such that there is no effect of the former (A) on the variance of the dependent variable (C) then the former (A) is considered as control variable.

In the organisational research models, the implicit variables are numerous and they are controlled by defining the population's salient contextual features and characteristics.

In the same line of thought the implicit variables of present research model need to be controlled in this study. By and large, following may be considered as controlled variables at organisational level in all four organisations.

1. All four organisations were engaged in production work.
2. Service rules and reward-punishment sanctions were more or less comparable, across all four organisations.
3. Equal number of data have been collected for both Job categories, Managers and Supervisors (Officers) from all four organisations situated in same geographical region.
4. The micro-systems of the external social sub-cultural factors were more or less similar in all four organisations.
5. By and large, vertical differentiation of these organisations was also comparable.

6. There were similarities in terms of organisational structure of the two types of organisations.

All the four organisations, which are situated in geographical periphery of Baroda were undertaken for present study.

### 3.3.2 DESCRIPTION OF SUBJECTS :

Researchers have indicated that groups formed post hoc for data analysis purpose from the members of one organisation on the basis of formal groups as well as on the basis of such factors as job level Gavin and Howe, (1975), job type clusters Gavin, (1975) and personal characteristics Newman, (1975) differ in their perception of O.C. Further, empirical studies suggest that such groups also vary in their experience of stress and job-satisfaction.

There are four types of job categories .

1. Manager - Technical
2. Manager - Non-Technical
3. Supervisor - Technical
4. Supervisor - Non-Technical

1. Managers - Technical -

This job category comprised of Managers, working on technical side. Most of them are working in actual

plant i.e. engaged in production process. By and large, such group requires the motivation, leadership, planning to guide and control people for better output and human relations. Their responsibilities include planning, organisation and controlling, managing personnel, maintaining performance standard, scheduling of work etc. This group is implementing policy and helping top management in deciding or making policy.

## 2. Managers - Non-Technical -

This job category comprised of Managers, working on non-technical side. Most of them are working in the area of personnel, administration, finance, marketing, public relations etc.

By and large, such group requires the managerial ability pertaining to motivation, leadership, planning to guide, control people for better out put and human relations. Their responsibilities include planning, organisations, and controlling, managing personnel, maintaining performance standard, scheduling of work etc. This group is implementing policy and helping top management in deciding policy or making policy.

## 3. Supervisors - Technical -

This job category comprised of Officers who are in the

capacity of supervision of subordinates in the plants. Some of them are directly recruited as Supervisors (Officers) and some of them come to this position putting many years of services in the same organisation. They are also in different shifts of duty as plants of all the organisations are working round the clock. They are directly attached to work. They are available in different plants in the organisations.

#### 4. Supervisors - Non-Technical -

This job category comprised of Officers who are in the capacity of supervision of subordinates. Most of them are outside the plants i.e. sitting into Administrative building. They are in different fields like personnel, administration, HRD, Finance, Purchase, Marketing etc. Some of them are directly recruited as Supervisors and some of them came into this position by promotion (i.e. putting number of years' service in the organisation).

A total of 276 respondents from all the four organisations included in the study are as follows :

TABLE 3.3.2.1 - RESPONDENTS FOR FOUR ORGANIZATIONS.

	<u>MANAGERS</u>		<u>SUPERVISORS</u>		<u>TOTAL</u>
	Technical	Non-Tech.	Technical	Non-Tech.	
GSFC	15	15	25	25	80
GACL	15	15	25	25	80
GCEL	15	15	20	20	70
GTCL	8	8	15	15	46
TOTAL :	53	53	85	85	276

The above table shows number of respondents from all job categories from all the four organisations.

Table 3.3.2.1. shows summary of characteristics of samples selected from four organisations in different job categories pertaining to demographic variables such as age, total experience and experience in the present position, education and salary.

### 3.3.2.2. SUMMARY OF RESPONDENTS FOR AGE, EDUCATION, EXPERIENCE & SALARY, IS PRESENTED IN TABLE 3.3.2.2.

From table no. 3.3.2.2., following information about the sample job categories may be inferred

#### 1. Gujarat State Fertilizers Company :

1. Managers (Technical) of this organisation are in the age range of 40 years and 55 years. All are



Sr. No.	ORGANISA-TIONS	JOB CATEGORY		AGE		EDUCATION		EXPERIENCE TOTAL		EXPERIENCE PRESENT		SALARY	
				Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
1.	GSFC	Managers	Technical	40	55	6	7	16	35	2	8	6000	10000
			Non-Technical	38	59	6	7	11	33	2	30	5890	12000
		Supervisors (Officers)	Technical	26	54	6	8	2	30	1	17	4500	9000
			Non-Technical	31	59	6	8	8	32	1	30	4030	9000
2.	GACL	Managers	Technical	41	52	6	8	19	33	1	11	5095	12000
			Non-Technical	38	56	6	8	16	35	1	8	5045	15000
		Supervisors (Officers)	Technical	28	51	6	8	4	25	1	17	4000	9500
			Non-Technical	29	57	6	7	2	32	1	17	4016	11000
3.	GCEL	Managers	Technical	38	47	6	7	15	25	1	14	4450	11750
			Non-Technical	32	50	6	8	9	28	3	7	4725	9000
		Supervisors (Officers)	Technical	31	42	6	6	9	17	2	6	3750	8000
			Non-Technical	31	42	6	7	8	18	1	12	4450	8400
4	GTCL	Managers	Technical	34	62	2	7	21	40	6	20	5000	7000
			Non-Technical	27	66	6	7	3	41	1	14	3001	8700
		Supervisors (Officers)	Technical	27	53	4	8	3	32	1	16	2975	5600
			Non-Technical	32	58	4	7	8	38	1	28	2800	5500

graduates and some of them are post graduates in this job category.

Their experience is minimum 16 years to maximum 35 years . Their experience of present position ranges from 2 years to 8 years and salary range is Rs. 8000/- to Rs. 10,000/-

2. Managers (Non-technical) of this organisation are in the age range of 30 to 59 years. All are graduates and some of them are post-graduates in this job-category. Their total experience ranges from 11 years to 33 years . Their experience of present position ranges from 2 years to 30 years and salary range is Rs. 5890 to Rs. 12000.

- 3 Supervisors (Officers) (Technical) : The Supervisors are in the age range of 26 years to 54 years in this job category. Their total experience ranges from 2 years to 30 years . Their experience in present position ranges from 1 year to 17 years and salary range is Rs. 4500 to Rs. 9000. All are graduates and some of them are post graduates and professionally qualified in this job category.

4. Supervisors (Officers) (Non-Technical) : Supervisors in this category are in the age group of 31 years to 59 years. All are graduates and some of them are

post graduates and professionally qualified in this job category.

Their experience ranges from 8 to 32 years. Their experience in present position ranges from 1 year to 30 years and Salary ranges from Rs. 4030 to Rs. 9000.

2 Gujarat Aalkalies Chemicals Limited :

1. Managers (Technical) - Of this organisation are in the age range of 41 years to 52 years. All are graduates and some of them are post graduates, professionally qualified and even doctorate in this job category.

Their experience ranges from 19 to 33 years. Their experience in the present position ranges from 1 year to 11 years and Salary ranges from Rs. 5085 to Rs. 12000.

2. Manager (Non-Technical) - Of these organisation are in the age range of 38 to 56 years. All are graduates and some of them are post graduates and professionally qualified in this job category.

Their experience ranges from 16 to 35 years. Their experience of present position ranges from 1 to 8 years and Salary ranges from Rs. 5045 to Rs. 15000.

3. Supervisors (Officers)-(Technical) : Of this organisation are in the age range of 28 to 51 years. All are graduates and some of them are post graduates and doctorate in this job category.

Their experience ranges from 4 to 25 years. Their experience in present position ranges from 1 year to 17 years and Salary range is Rs. 4000 to Rs. 9000.

4. Supervisors (Officers)-(Non-Technical) : Of this organisation are in the age range of 29 years to 57 years. All are graduates and some of them are post graduates in this job category.

Their experience ranges from minimum of 8 to maximum of 18 years. Their experience in present position ranges from 1 year to 12 years. Salary range is Rs. 2725 to Rs. 9000.

3. Gujarat Communications And Electronics Limited

1. Managers - (Technical) : Of this organisation who are in the age range of 38 years to 47 years. All are graduates and some of them are post graduates in this job category.

Their experience varies from 15 to 25 years. Their experience in present position ranges from 1 year to

14 years and Salary range is Rs. 4450 to 11750.

2. Managers (Non-Technical) : Of this organisation are in the age range of 32 years to 50 years. All are graduates and some of them are post graduates and professionally qualified in this job category.

Their experience is of 9 to 28 years. Their experience in present position ranges from 3 years to 7 years and Salary range is Rs. 2725 to Rs. 9000.

3. Supervisors (Officers)-(Technical) : Of this organisation are in the age range of 31 year to 42 years. All are graduates.

Their experience ranges from minimum of 9 to maximum 17 years. Their experience in present position ranges from 2 years to 6 years and Salary range is Rs. 3750 to Rs. 8000.

4. Supervisors (Officers)-(Non-Technical) : Of this organisation are in the age range of 31 years to 42 years. All are graduates and some of them are post graduates in this job category.

Their experience ranges from 8 to 18 years. Their experience in present position ranges from 1 year to 12 years and Salary range is Rs. 4450 to Rs. 8400.

Gujarat Tractor Corporation Limited

1. Managers (Technical) : Of this organisation are in the age range of 34 to 62 years . Some of them are not much qualified in this job category and some of them are having post gradate qualifications.

Their experience ranges from 21 to 40 years. Their experience in present position ranges from 6 years to 20 years and Salary range is Rs. 5000 to Rs. 7000.

2. Managers (Non-Technical) : Of this organisation are in the age range of 27 years to 66 years. All are graduates and some of them are post graduates in this job category.

Their experience ranges from 3 to 41 years. Their experience in present position ranges from 1 year to 14 years and Salary ranges from Rs. 300 to Rs. 8700.

3. Supervisor (Officers)-(Technical) : Of this organisation are in the age range of 17 years to 53 years. Some of them are S.S.C. in this job category and few of them are graduates and post graduates.

Their experience is in the range of 3 to 32 years. Their experience in present position ranges from 1 year to 16 years and Salary ranges from Rs. 1975 to

Rs. 5600.

4. Supervisors (Officers)-(Non-Technical) : Of this organisation range in age from 32 years to 58 years. Some of them are S.S.C. in this job category and some of them are graduates and few are post graduates.

Their experience ranges from 3 to 32 years. Their experience in present position ranges from 1 year to 16 years and Salary ranges from Rs. 2800 to Rs. 5500.

### 3.3.3. PROCEDURE OF SAMPLING

From all the four organisations data were obtained by executing following steps :

1. In all the four organisations an exhaustive list of Managers and Supervisors (Officers) both Technical and Non-Technical was prepared.
2. The final list was prepared on the basis of job categories with so many specifications like Managers Technical from all the plants, Managers non-technical from all the departments, Supervisors (technical) from all the plants and Supervisors (officers) non-technical from all the departments.
3. The selected number of people were given a set of

questionnaires which were personally handed over to each respondent. The purpose of the study was explained to the respondents. It was emphasised that:

- (a) They should give a frank response.
- (b) The confidentiality will be maintained.
- (c) They should read the instructions carefully and should remember the 'frame of reference' before responding to each questionnaire and
- (d) They should not hesitate to ask the researcher about any clarification such as, any 'term', 'item' or 'set of instructions'.

At the beginning of each questionnaire, the 'frame of reference' relevant to the questionnaire was explained to the respondents. It was done in the light of the fact that the respondents were supposed to change their frame of reference in accordance with the type of data required through particular instrument. For example, while answering the OC (motivational) related items, they were supposed to remember the whole organisational perspective whereas in responding to job satisfaction related items, they were supposed to provide a self description.

The total administration time ranged from 1 to 2 hours depending upon respondent's capacity to understand. At the time of submission, of the filled in questionnaire,



each item was checked and any item found untouched, was filled in immediately by the concerned person.

#### 3.4. TECHNIQUE FOR DATA GENERATION :

As indicated earlier, to meet the objective of present study, standard tools were required to gather objective and reliable data. For this purpose, questionnaire was prepared and administered by the investigator. In the process of selecting a set of instruments to generate data precautions were taken to use standard instruments. In the present context standardization refers to the theoretical considerations of reliability and validity and pragmatic consideration of the feasibility of using the instruments.

##### 3.4.1. INSTRUMENT USED :

At the time of selecting the measures it was decided to use such instruments which could measure all the relevant factors/dimensions of variables under study. However, emphasis was made on selecting most widely used instrument so that other researches can easily be compared with the findings of the present study.

#### 3.4.1.1. ORS SCALE

In the same line of thought it was decided to use 'ORGANISATIONAL ROLE STRESS SCALE' (ORS SCALE) which was developed by Pareek. It was widely used, many researchers felt that some of the items in original scale lack face validity, some of the items were judged to be improperly reflecting the underlying role stress dimensions. For all these reasons it was thought that all the role stress dimensions be adequately defined or expressed in terms of items and that the new items together with original items be treated by considering the opinions of experts. And hence it was duly modified by the investigator. The reliability of the modified scale was established through the retest procedure.

The original set of 50 items plus the new set of 50 items i.e. in all 100 items were shuffled properly and were given to a group of 25 experts of various industries located in Baroda who were required to sort out items in the category to which they belong in terms of their opinions. The experts were given the names of role stress dimensions along with their definitions. Incidentally it so happened that the original set of items and new set of items were found to be falling in the same respective categories to which they were assigned before sorting procedure was carried out. The same 100 items pertaining to each of the 10 areas were given to a group of 29 respondents for rating, using 5

point scale for each person. Total score for each of the areas based on 10 items was computed and then each item was related with the total score on all items in that respective area to which the item belonged. This was done for each of the 100 items. Item total correlation formed the basis for judging internal consistency which in turn formed the basis for final selection of the items for pertinent categories. Through this process 5 items for each of 10 role stress dimensions were finally selected.

Then to compute reliability the whole test consisting of 50 items was administered to test the same group with the interval of 30 days between two administrations. Correlations were computed between the sets of scores, thus obtained separately for each of the 10 areas. The correlations are as shown below.

<u>AREA</u>	<u>Correlations</u>
1	0.89
2	0.81
3	0.88
4	0.81
5	0.89
6	0.88
7	0.70
8	0.71
9	0.82
10	0.71

All these correlations are positive and sufficiently high and hence the test is considered to be reliable.

The test with suitable modifications and calculation of reliability was finally prepared. This scale measures ten factors of role stress which may be briefly defined as follows.

(1) Inter Role Distance (IRD):

A person usually performs more than one role in different capacities at times, there can be conflict between various role switches as indicated in this score on IRD. For example one manager can face conflict between his organisational role and the family roles.

(2) Role Stagnation (RS) :

When a person feels that he has reached the dead end in his career and he cannot grow further in his role, he experiences role stagnation.

(3) Role Expectation Conflict (REC):

When a person perceives that other person's expectations from him are mutually incompatible, he experiences role expectations conflict.

(4) Role Erosion (RE):

When a role occupant feels that some functions which he performed in the past are now being performed by others, he experiences role-erosion.

(5) Role Overload (RO) :

When a person feels that there are too many expectations from significant others with which he is unable to cope, he experiences role overload.

(6) Role Isolation (RI) :

When a person feels that rather than being integrated with other organisational roles, his role is isolated from the mainstream of the organization life, he experiences role isolation

(7) Personal Inadequacy (PI) :

When a person feels that he lacks adequate skills and knowledge to handle the job, he experiences personal inadequacy.

(8) Self Role Distance (SRD) :

If a person occupies a role which he may find

conflicting with his self-concept or personal values, he experiences stress in terms of self - role distance.

(9) Role Ambiguity (RA) :

When a person is not clear about various expectations that others have from his role, he experiences role ambiguity.

(10) Resource Inadequacy (RIN):

When a role occupant feels that he lacks adequate resources to perform his role effectively, he experiences resources inadequacy.

There are five statements for each role - stress factors and total fifty statements comprise this instrument. All the statements related to role- stress factors are placed randomly throughout the scale. The respondent is asked to respond to each statement on a five point scale ranging from one to five. Respondents were clearly instructed to tick mark on the opinion out of 5 opinions ranging from 'never' or 'rarely feels this way', 'occasionally feels this way', and 'very frequently feels this way'.

Respondents were asked to tick mark one of the opinions, using five points scale, 1 score being assigned if he

'never or rarely feels ' the way described in the statement , 2 if he occasionally or few times feels the way as described in the statement and so on. In the process, a score of 5 is given if he frequently feels this way as described in the statement.

The total score for each role-stress factor is obtained simply by adding the scores of each item of a particular factor. Thus the score for each factor varies between five to twenty . The overall role stress score can be obtained by adding the scores on all the ten role-stress factors, ranging from fifty to two hundred fifty.

#### 3.4.1.2 JOB SATISFACTION MEASURE :

##### JOB - SATISFACTION:

Job satisfaction as used in the present study, is defined as 'overall' affective orientation of job occupant towards his job.

Since it is difficult to measure adequately all the conditions which might be leading to satisfaction or dissatisfaction with job and more difficult to determine relative contribution of each condition, and since interest was only in obtaining an estimate of total job satisfaction, 'overall affective orientation towards job' appeared to be the most suitable definition.

For practical purpose of measurement, an operational

definition proposed here is 'job satisfaction is the degree of expressed positive, neutral or negative feeling of job incumbent towards his job as a whole.

Since the purpose was to obtain measure of overall job satisfaction, Brayfield-Rothe job satisfaction index was found to be most appropriate scale for the purpose, considering its careful construction, validity, reliability and its applicability to most of the job situations. Bravity of the scale is an added advantage for its use in research where only overall job satisfaction index is needed.

Brayfield - Rothe scale consists of 18 items providing 5 category responses for each item. The scale is based partly on Thurstone method and partly on Likert method.

246 statements were sorted out from a pool of 1075 statements. These 246 statements were mimeographed, sorted into sets and given to judges to sort them into pools to assign scale values ( according to Thurstone method) values for the statements were determined graphically. 18 items were selected on the basis of following four criteria.

1. Items covering the entire range of attitude continuum at approximately 5 setup intervals were selected.



2. No item was included which has Q value of 2.00 or above.

3. Acceptability to employees and management as judged by investigators and management representatives.

4. Elimination of items referring to specific aspects of jobs.

The scale consisting of 18 items was administered to a group of employees to determine reliability. The reliability index based on 'odd-even' items was lower than desirable level. Therefore, the authors of the scale modified the scale-replaced two neutral items and substituted nine new items. Since Likert method generally gives higher reliability than Thurstone's Likert type, five category response system was adopted, (strongly agree / agree / undecided / disagree / strongly disagree). The modified scale thus consisted of 18 items with Thurstone scale-values ranging from 1.2 to 10.00 with approximately .5 step intervals. These items were rated on five category responses. There are nine positive and nine negative statements. On positive statements strongly agree means maximum score of 5 and strongly disagree with minimum score of 1. On negative statements strongly agree means minimum score of 1 and strongly disagree means maximum score of 5.

This arrangement of statements minimizes the role of acquiescence. Maximum possible score on the scale for an individual is 90 and minimum 18.

#### Reliability of the scale

The correlation as reported between odd and even item scores obtained from a group of employed female office workers is reported to be .77.

#### Validity of the scale

##### (a) Content validity :

The statements included in the scale had very small Q values, indicating consistency among judges which is an indication of validity of the contents measuring job satisfaction.

##### (b) Concurrent validity :

The blank was administered to 91 adult night school students in Personnel Psychology class. The students were employed in clerical, management or supervisory positions or were engaged in professional or semi-professional occupations. The enrollment to Personnel Psychology class was taken as 'overt' expression of their interest in personnel work. Continued regular attendance after full day's work throughout the course (blank was administered at the end of the Semester) was another indicator of 'interest' in personnel work. It

was, therefore, assumed that those employed in 'personnel work' would be more satisfied than those employed in non-personnel work. Following results (give in Table 3.4.1.2.1) supported the assumptions.

TABLE 3.4.1.2.1. : JOB SATISFACTION OF PERSONNEL AND NON-PERSONNEL WORK EMPLOYEES.

	N	Mean	S.D.
Personnel	40	76.90	8.60
Non-personnel	51	65.40	14.02
Total :	91	70.40	13.20

(From Brayfield - Rothe, 1951, Op. Cit.)

The difference between the mean job satisfaction scores is significant at .01 level and so is the difference between S.Ds. of the two. This is an indicator of the validity of the scale.

(c) Correlation with other job satisfaction measures :

(i) Product moment correlation between the scores obtained with Hoppock's job satisfaction blank (form II) and Brayfield Rothe job satisfaction Index, as reported by the authors of the scale, was found to be .92.

(11) Even (1967) reported high correlation between Brayfield-Rothe job satisfaction Index and Cornell J D A (probably most laboriously constructed and widely used measure of satisfaction with major aspects of job). For three groups correlation reported are .73, .50 and .66. These are some of the indicators of the validity of the scale.

#### Use of B.R. Job Satisfaction Index for Present study

Since the scale does not include any item which has bearing on any specific aspect of job and has no item which could have any cultural bias, it was assumed that the Index is a valid measure for any job situation even in India. The Index measures only over-all feeling of an individual towards his job - whatever be the nature of the job.

#### Reliability of the Index as Determined on an Indian Sample.

The test was administered to a moderately large sample consisting of 200 secondary school teachers - 100 male and 100 female. Satisfaction scores on odd and even items were correlated ( $r = .72$ ) and from the correlation coefficient between the two halves, self-correlation of the whole scale was obtained by Spearman-Brown prophecy

formula which was found to be .83. Thus, split-half reliability index was sufficiently high

The scale was used in the present study without any modification of the test of Pandey

#### 3.4.1.3. ORGANIZATIONAL CLIMATE MEASURE :

MAO(C) i.e. Motivational Analysis of Organisation (Climate) developed by Pareek (1979) was used to gather data pertaining to six dimensions of motivational climate of organisation. These organisational-climate dimensions, namely, achievement, expert power, extension, control, affiliation and dependency are briefly described as follows :

(i) An Achievement dominant climate indicates that concern for work excellence, and healthy competition with other companies prevails in the organisation. In such OC, excellence is rewarded; information is available for all those who need it for decision making; people who achieve targets are trusted; people prefer to solve problems by themselves and learn from experience. They take moderate risks and are concerned about creative work.

(ii) An Expert power dominant climate indicates that experts, i.e. people with skill and expertise are encouraged. They are influential in decision-making,

resolving conflicts and problems, and are regarded high in the organisation.

(iii) An Extension dominant climate indicates that there is a high concern in the organisation to develop people and groups or to work for their longer good. In such climates, people are treated with genuine concern for their welfare rather than being treated as roles. In such OC, people help each other, supervisors try to help their subordinates to grow and develop, and people try to handle problems and resolve conflicts supportively.

(iv) A Control dominant climate indicates that people enjoy status, power and authority for its own sake. Managers like to control their subordinates. Communication is selective only with some people and, is used as mechanism of control; decisions are made by a few; and only these powerful few dominate most of the decisions.

(v) An Affiliation dominant climate is characterised by people striving for friendly, warm and affectionate relationships; where tasks and methods of achieving tasks are based on such relationship with high concern for social relations, being good and close to each other, and where maintaining good relationships is given more importance than other things.

(vi) A Dependency dominant climate indicates that in such an organisation, people do not do things on their own, but look for orders and suggestions from their superiors and refer matters to them rather than attempting solutions themselves. Such an organisation is characterised by observing rules and regulations, strictly following orders, excessive dependence on authority, clear line of communication etc.

Pareek (1979) used the general framework of Litwin and Stringer (1968) and developing MAO(C). However, it differs from Litwin and Stringer's scale in two ways : First, MAO(C) is more comprehensive - It covers 12 different task-dimensions of organisation, namely, orientation; interpersonal relationship; supervision; communication; decision-making and trust which allows respondent to provide perceptual description of almost all aspects/happenings of the organisation. In other words, MAO(C) picks up overall information about different motivational climates of 'TOTAL ORGANISATION'. Secondly, it used a ranking method rather than rating method as used in Litwin and Stringer's Questionnaire.

There are six statements for each task dimensions and in so far total 72 statements comprise this instrument. Each statement of one task dimension represents one motivational dimension of organisational climate. There are therefore, total 12 statements for each type of

climate in the questionnaire.

For our purpose, the respondents were asked to respond to each statement on 7 point scale ranging from one to seven.

Respondents were asked to tick-mark on one of the opinions out of seven opinions ranging from just a little, a little, fairly moderate, fairly high-degree, fairly great deal and maximum. So the respondents have to tick-mark as per their feeling.

Sen (1981) reported the reliability and validity MAO(C). The test-retest reliability for each climate dimension, namely, achievement, expert power extension, control, affiliation and dependency was found to be .38, .33, .40, .39, .45 and .17 respectively - which were statistically significant at levels from .001 to .008. However, the only exception was found in case of dependency type of climate which was statistically significant. Overall, MAO(C) is reported to have acceptable standard of reliability and has been used in many studies; Sen, (1981); Surti, (1982); Khanna, (1984); Sharma, (1987); Pestonjee, (1982), G.P.Singh, (1987).



### 3.5 PROCEDURE FOR TESTING THE HYPOTHESES :

#### 3.5.1. DIFFERENTIAL HYPOTHESIS :

The first hypothesis, differential hypothesis, states that there will be no difference in level of different types of role stresses, experienced/perceived by Managers (Technical), Managers (Non-Technical), Supervisors (Technical) and Supervisors (Non-Technical) of each of the four organizations.

In order to test this hypothesis the scores on various measures expressed in terms of means and standard deviations for various categories of personnel will be taken into account. It is assumed that different groups and sub-groups of people will be comparable in respect of their standing on various measures of factors involved in this investigation.

#### 3.5.2. CORRELATIONAL HYPOTHESIS :

3.5.2.1 This hypothesis states that factors of role-stress will not be significantly associated with job satisfaction variables in case of all four job categories in each of the four organisations.

It states that the role-stress dimensions taken singly or jointly will not be correlated significantly with job

satisfaction. This hypothesis will be tested using simple correlation between the two variables.

- 3.5.2.2 This hypothesis simply states that there will not be significant correlation between job satisfaction and dimensions of organisational climate (motivational) in case of all the four job categories and in each of the four organisations.

This hypothesis will be tested using simple correlations

3.5.3. MODERATOR HYPOTHESIS

So far as the hypothesis pertaining to moderation effect of climate dimensions on role stress, job satisfaction correlations are concerned the high scoring and low scoring groups based on performance on each climate dimension will be formed. The role stress, job satisfaction correlation then will be examined separately for the higher and lower groups based on climate dimensions.

The moderation effect on role stress, job satisfaction correlation will be examined separately for each of the six climate dimensions. In order to study the main effect and interaction effect of the types of organisation and levels of personnel, the F test was

used for the analysis of scores on Job-satisfaction, organisational climates and role stress factor.

3.6. PRESENTATION OF THE STUDY :

The whole report is presented in the following Chapters:

1. The first Chapter deals with the background and specification of each organisation and explanation of concepts.
2. The second Chapter deals with rationale of the study.
3. The third Chapter deals with methodology.
4. The fourth Chapter deals with results and discussions.
5. The fifth Chapter deals with summary and Conclusions.