CHAPTER IV

METHODOLOGY

The present research was guided by the proposition that executives performing the similar role perceive the different types of role stress differently. These perceptions towards different types of role stress are a function of personality, organisational climate and demographic factors. Therefore, to explore the effects of these variables on perception of different types of role stress, a group of marketing executives was selected. The specifications of these variables are:

(i) Personality variables
(ii) Organisational climate
(iii) Demographic factors
(iv) Organisational Role Stresses

The elements of independent and dependent variables have been presented in Figure 4.1.

Figure 4.1 identifies:

(i) The specific types of personality i.e. Extraversion and Neuroticism, which define the characteristics of an individual's personality. The dimensions of Managerial Talent namely, Supervisory Ability, Intelligence, Decisiveness, Self Assurance,
Organisational Role Stresses
- Inter Role Distance
- Role Stagnation
- Role Expectation Conflict
- Role Erosion
- Role Overload
- Role Isolation
- Personal Inadequacy
- Self Role Distance
- Role Ambiguity
- Resource Inadequacy
- Total Role Stress

Personality
- Extraversion
- Neuroticism
- Managerial Talent
  - Supervisory Ability
  - Intelligence
  - Decisiveness
  - Self Assurance
  - Achievement Motivation
  - Self Actualisation

Organisational Climate
- Achievement
- Expert power
- Extension
- Control
- Affiliation
- Dependency in the areas:
  - Orientation
  - Interpersonal relationships
  - Supervision
  - Managing problems
  - Managing Conflicts
  - Communication
  - Decision-making
  - Trust
  - Managing rewards
  - Risk taking
  - Innovation and change.

Demographic Factors
- Age
- Work experience

Figure 4.1 Dependent and Independent Variables.
Achievement Motivation and Self Actualization, Managerial Talent is the totality of abilities and traits required by all of the various managerial jobs. It is a quality which plays an important part in determining the degree of success people can attain in a managerial job.

(ii) The specific elements of the organisational climate namely, Achievement, Expert power, Extension control, Affiliation and Dependency in 12 areas (orientation, interpersonal relationship, supervision, managing problems, managing mistakes, managing conflicts, communication, decision-making, trust, managing rewards, risk taking and innovation and change) which reflect prevailing motivational climate of the organisation.

(iii) The specific elements of demographic variables i.e. Age and Work Experience, which reflect the personal characteristics of individuals in organisation. The Age refers to the age at the time the questionnaire was filled. Work Experience refers to the experience of executive in the organisation.

(iv) The different types of Role Stress i.e. Inter Role Distance, Role Stagnation, Role Expectation Conflict, Role Erosion, Role overload, Role Isolation, Personal Inadequacy, Self Role Distance, Role Ambiguity, Resource Inadequacy, and Total Role Stress which reflect the conflicting situations in one’s role set and role space.
4.1 Sample

The sample comprised 115 lower managerial level marketing executives belonging to four units of tractor industry in India i.e. Mahindra & Mahindra Ltd., Hindustan Machine Tools Ltd., Escorts Ltd. and Escorts Tractors Ltd. These business organisations were selected on the basis of the market share shared by them for the last five years (1980-1985). These were the four top organisations and were considered to be the representative of tractor industry in India. There were about 200 lower managerial level marketing executives in all these organisations. Only 115 out of 200 respondents returned the questionnaire after filling it.
4.2 Research Tools

(i) Eyesenck Personality Inventory (EPI, 1963):

Much of Eyesenck's work has been based on the application of the Moodsley Personality Inventory (MPI, 1959). This was developed from and superseded the Moodsley Medical Questionnaire. It has been replaced in its turn by the Eyesenck Personality Inventory (EPI, 1963). Eyesenck has developed this questionnaire to measure personality factors of an individual. He has given certain dimensions of personality i.e. Extraversion/Introversion and Neuroticism/Stability. Terms such as Extraversion and Neuroticism have been used in a sense strictly derived from empirical studies (e.g., Cattell & Scheies, 1961; Eyesenck, 1947; Kosselbaum, 1959; Mitchell & Jones, 1960; Nicholls & Schnell, 1963; and Vernon, 1953). Present study utilised this questionnaire to measure the personalities of marketing executives. EPI has been given in Appendix-I. Eyesenck Personality Inventory (EPI) consists of fifty seven items of Yes/No type.

The reliability of EPI is well established.

(ii) Self Description Inventory (SDI, Ghiselli):

Ghiselli (1971) developed a scale known as Self Description Inventory to measure the managerial talent of managers and executives. Managerial talent is
a broad human quality, perhaps made up of a number of specific abilities and traits. It is the totality of abilities and traits required by all of the various managerial jobs which constitute managerial talent. Those men and women who have this talent to greater degrees do well as executives and administrators, and those who have it to a lesser degree do poorly in their occupational roles (Ghiselli, 1971). Self Description Inventory consists of sixty-four pairs of personality descriptive adjectives. The adjectives were chosen so that both members of each pair are similar in terms of the social desirability of the human qualities they symbolise. As a consequence, in taking the test the respondent tends to be prevented from just giving a favourable description of himself, and so must project something of his actual qualities in choosing between the two alternatives. In half of the pairs the individuals checks that adjective which he believes most characterises him, both adjectives referring to socially desirable traits. In the other half of the pairs he checks the adjective he believes least characterizes him, both adjectives in these pairs referring to socially undesirable traits. The test is given in Appendix-II.

Self Description Inventory provides the scores for thirteen traits, but in this study only following
six were selected:

(i) Supervisory Ability
(ii) Intelligence
(iii) Decisiveness
(iv) Self Assurance
(v) Achievement Motivation
(vi) Self Actualisation.

This test has been successfully used in a number of studies not only of managers, but also of personnel in a wide variety of other types of occupations. Its reliability and validity has also been calculated and reported by Ghiselli (1971).

(iii) Motivational Analysis of Organisations (Climate) Questionnaire - MAO(C) Pareek (1975):

The assessment of organisational climate was made by Motivational Analysis of Organisations (Climate) Questionnaire developed by Pareek (1975). It is also known as MAO(C) and is patterned after Litwin and Stringer's (1968) climate questionnaire. However, it differs from Litwin and Stringer's questionnaire in the sense that (i) it is comparatively more exhaustive, and (ii) it uses ranking method rather than the rating method used in Litwin and Stringer's questionnaire.
The purpose of this instrument is to arrive at the dominant motivational climate as perceived by different groups. The motivational profile on six motives, viz., Achievement, Expert Power, Extension, Control, Affiliation and Dependency could be made using this questionnaire. Twelve dimensions have been identified for the purpose of measuring climate, namely, orientation, interpersonal relationship, supervision, managing problems, managing mistakes, managing conflicts, communication, decision making, trust, managing reward, risk taking and innovation and change. There are 72 statements in total, six statements for each area. Out of six statements in each area, only one statement measures a particular type of motivational climate. Thus for each type of climate there are 12 items in the questionnaire.

The questionnaire's reliability and validity have also been calculated and reported by Sen (1981). The test-retest reliability for each climate dimension ranges from .17 to .44 and is fairly acceptable by its statistical norms.

(iv) Organisational Role Stress Scale - ORS (Pareek, 1983):

The ORS scale is a 5-point scale, indicating how true a particular statement is for the role. The following types of stress are assessed by this instrument:
Inter Role Distance (IRD), Role Stagnation (RS), Role Expectation Conflict (REC), Role Erosion (RE), Role Overload (RO), Role Isolation (RI), Personal Inadequacy (PIN), Self Role Distance (SRD), Role Ambiguity (RA), Resource Inadequacy (RIn). It has 50 items. The score of each role stress may range from zero to 20 and the total organisational role stress score may range from zero to 200.

Retest reliability was obtained for the ten stressors, and the total role stress score. The scale has acceptable reliability. Some evidence about validity is provided by a measure of self consistency of an instrument. Each item was correlated with the total score on the instrument for about 500 respondents. All but two correlations were significant at .001 level, one at the .002 and another at the .003 level of significance. The results showed high internal consistency of the scale (Pareek, 1983).
4.3 Scoring

(i) Eyesenck Personality Inventory (EPI):

Eysenck Personality Inventory consists of fifty seven items of Yes/No type* in all, out of which twenty four items refer to extraversion-introversion (E) and twenty four items refer to neuroticism-stability (N). The remaining nine items represent (lie) in this scale to check the individual's response bias. An individual telling more than three lies was discarded from the sample.

Items given on serial number of the questionnaire, reflecting extraversion-introversion (E) characteristic were:

1_a, 3_a, 5_b, 8_a, 10_a, 13_a, 15_b, 17_a, 20_b, 22_a, 25_a, 27_a, 29_b, 32_b, 34_b, 37_b, 39_a, 41_b, 44_a, 46_a, 49_a, 51_b, 53_a, 56_a.

Items on serial number of questionnaire having neuroticism-stability (N) characteristics were:

2_a, 4_a, 7_a, 9_a, 11_a, 14_a, 16_a, 19_a, 21_a, 23_a, 26_a, 28_a, 31_a, 33_a, 35_a, 38_a, 40_a, 43_a, 45_a, 47_a, 50_a, 55_a, 57_a.

Items considered as lies were:

6_a, 12_b, 18_b, 24_a, 30_b, 36_a, 42_b, 48_b, 54_a.

*Yes/No has been referred as a/b respectively for all the questions in the questionnaire for our scoring purpose.
Each item was given a score of "one". If the score was less than ten in extraversion-introversion (E), the individual was considered under introversion factor. If the score was more than or equal to ten, he was labelled under extraversion factor. Similarly, if the score was less than ten on neuroticism factor, the individual was placed under stability factor and if the score was more than or equal to ten, he was considered to be neurotic.

(ii) **Self Description Inventory:**

Scoring was done on the basis of standard scoring keys. Six scores were obtained, one each for the earlier listed traits. All items in the test were not scored for any given trait, and the items that were scored for a particular trait carried different weights. The score for a scale was simply the sum of weights of the items checked. Managerial Talent index was the sum of all the scores obtained on six dimensions listed earlier. The weights are given with the scoring keys in Appendix IIa. Higher score indicated higher Managerial Talent and low score indicated comparatively low Managerial Talent.

(iii) **Motivational Analysis of Organisations (Climate) Questionnaire:**

There were 72 statements in total, six statements for each of the 12 areas listed earlier. Out of six
statements in each area, only one statement measured a particular type of climate. Thus for each type of climate there were 12 items in the questionnaire. The sum of the ranks of these 12 items on a particular motivational dimension gave the score for that motivational dimension. Scoring was done with the help of a standardized answer sheet (Appendix IIIa), on which the response of respondents were indicated by writing 1, 2, 3, 4, 5, 6 against the letters of the alphabet (a, b, c, d, e, f) as they were given in the questionnaire. By adding the scores for each motivational dimension (column-wise) gave the scores for different types of motivational climate. Total Motivational Climate score consisting of sum of the scores on all motivational dimensions was 252 for every respondent. Lower score on a particular dimension of Motivational Climate indicated the dominance of that climate and higher score indicated the lack of that dimension.

(iv) Organisational Role Stress Scale:

There were 50 items in 'Organisational Role Stress' Scale. Scores were obtained on a 5-point scale with the help of an answer-sheet (Appendix IVa) on which the responses of the respondents were indicated by writing 0, 1, 2, 3, or 4 against the serial number of each item as it appeared in the questionnaire.

By adding the scores for each Role Stress (row-wise) gave the score for that type of Role Stress.
The summation of the scores on every type of role stress gave the total role stress score. Each individual had eleven scores (10 scores on 10 role stress and one overall score). The higher score on a particular type of Role Stress indicated the higher degree of that type of stress and lower score indicated the lower degree of that Role Stress.

The personal demographic factors of age and work experience were tapped by single items in the questionnaire.
4.4 Data Collection and Analysis

All these measures were mailed to all the respondents through their area office. An appeal was made to them that information given by them would be kept confidential and would be used only for research purposes. The questionnaires were administered including standard instructions and arranged in the following order:

The Self Description Inventory, Eysenck Personality Inventory, CRS scale, and MAO(C). The covering page of the set of questionnaire included an appeal to the respondents followed by the simple questions concerning the demographic variables on the next page. Also the respondents were asked not to write their names in any questionnaire.

Statistical Techniques Used:

(i) The whole of the data were normalised by converting the raw scores into standard T-scores.

(ii) For the purpose of comparing the perception of different types of role stress of executives differing on various independent variables, two groups (high vs low) were created. The mean scores obtained by each group on various types of role stress were compared and tested for their significance of difference by two-tail 't' test.
(iii) Bivariate relationships with the help of First order correlations between various independent and dependent variables were analysed through correlation metrices for total sample of 115 executives.

(iv) Factor analysis was carried out to find out the best combinations of different independent variables for the purpose of regression analysis, and to explore the factorial independence of various measures used in the study.

(v) Multiple regression analysis was performed to confirm the cause and effect relationship and to find out the relative contribution of each of the independent variables in explaining the variance in the perception of various types of Role Stress as well as the Total Role Stress.