CHAPTER IV

METHOD AND PROCEDURE.
The present research was designed as, "A study of organizational commitment and job involvement in relation to role stress, Protestant work ethic, organizational climate and orientation." This research was an effort to investigate relationships envisaged among these variables.

Sample

The sample for the present study comprised a total of 205 middle level male managers who were employed in the various divisions of a large scale public sector company located near Chandigarh. The organization is a flagship company in the central public sector and is a forerunner in the manufacturing of tractors and machine tools. Those employees who were not available because they were away on an assignment were contacted later on. The details regarding the frequency distribution of the sample on the basis of age, level of educational qualifications, marital status, tenure, status of the spouse (earning/non-earning), number of dependents, total work experience, background (rural/urban), salary, number of suggestions given by the employees and accepted by the organization, and promotions received are given in the Appendix-I (Tables I-VIII).

Description of Tests

Keeping in mind the concepts to be measured, the aims of the study, and the nature of the sample, various tools were selected. Other considerations which influenced the
The selection of tools were the availability of time from the subjects, and the ability of the investigator to administer the tests and interpret the results. The following tests were selected for the study:

1) Organizational Commitment Questionnaire (Mowday et al., 1979).
2) Job Involvement Questionnaire (Lodahl and Kejner, 1965).
3) Role Stress Questionnaire (Rizzo et al., 1970).
5) Organizational Climate Questionnaire (Sinha, 1980).
6) The Orientation Inventory (Bass, 1962).

**Organizational Commitment Questionnaire (Mowday et al., 1979)**

This is the most widely used questionnaire to assess organizational commitment. The items for the construction of the scale were identified by Porter and Smith (1970). They identified those items which appeared to tap the three aspects of the definition of commitment mentioned by Mowday et al. (1979). The scale consists of fifteen items. The responses are recorded on a seven point Likert type scale. Six out of the fifteen items are negatively phrased to check the tendency of acquiescence. The scoring for the negatively phrased items is reversed. The value of each respondent's commitment is obtained by summing up the score for each item and then dividing this sum by the number of items (=15). This provides a summary indicator of commitment.

Mowday et al. (1982) report a coefficient alpha ranging
from 0.82 to 0.93 with a median of 0.90 (Cronbach, 1951). They also report that the range of average correlations for the item analyses was 0.36 to 0.72, while median correlation was 0.64. The items which were negatively phrased showed a less strong correlation.

Reported test-retest reliabilities were in the range of 0.53 to 0.75. These were obtained within periods ranging from two months to four months. Mathieu and Hamel (1989) reported reliability in terms of coefficient alpha as 0.89 and 0.92 for non-professionals and professionals respectively.

For validation purposes, Mowday et al. (1982) have provided varying lines of evidence. For example, Mowday et al. (1982) reported a correlation of 0.60 between organizational commitment and supervisor's rating of commitment. For discriminant validity, Mowday et al. (1982) reported a correlation of 0.30 to 0.56 across four samples between Organizational Commitment Questionnaire and the Job Involvement Questionnaire.

Jenner (1981) reports that the Organizational Commitment Questionnaire which was given to 2503 employees in a wide variety of settings showed that total scores on the scale were related to the number of hours put in voluntarily, as well as to single item measures of satisfaction, involvement, and plans for maintaining membership.

Morrow (1983) presented a facet design description of five forms of work commitment. Organizational Commitment
Questionnaire was one of them. This questionnaire demonstrated the maximum differentiation, i.e., the least amount of overlap with other forms. It also provided the strongest reliability data and yielded conclusive redundancy - independence data. Hence, this instrument may be stated to have a high construct validity. Morrow and McElroy (1987) confirmed Price and Mueller's (1981) findings which had stated that the Organizational Commitment Questionnaire was a measure possessing adequate discriminant validity.

Job Involvement Questionnaire (Lodahl and Kejner, 1965)

This scale may be referred to as the forerunner in the measurement and evaluation of job involvement. The original scale, which has since its inception undergone many changes, consisted of twenty items. Briefer versions have since appeared. The format of the scale is a four point Likert type. The responses range from strongly agree to strongly disagree. There is no point of neutrality in the scale's response pattern. Out of twenty items, seven are scored in the reverse manner. The score for any respondent is obtained by summing the scores over all twenty items.

Lodahl and Kejner (1965) reported split-half reliabilities of 0.56, 0.67, and 0.80 for nurses, engineers, and students respectively. Correlated odd-even reliability coefficients have ranged from 0.72 to 0.89 (Goodman, Furcon, and Rose, 1969; Schwyhart and Smith, 1972).

For validity, Lodahl and Kejner (1965) reported that the scale effectively discriminated among groups (F = 4.84,
p < 0.01). They also showed that the scale had relevant correlations with other variables. Rabinowitz and Hall (1977) opine that this scale was constructed to assess the job involvement of the employee with his job, without reference to other activities.

Jones, James, and Bruni (1975) reported an internal consistency of 0.62 and Hollon and Chesser (1976) have reported an internal consistency of 0.93.

**Role Stress Questionnaire (Rizzo et al., 1970)**

In the last two decades, the importance of work roles seems to have been realized by organizational theorists. The thrust on roles could be a realization of the fact that role stress is "... dysfunctionally associated with a multiplicity of work related outcomes" (Bedeian, Armenakis, and Curran, 1981, p. 247). It is with this background, and a realization that there was no systematic measure to tap role stress, that Rizzo, House, and Lirtzman (1970) constructed the Role Stress Questionnaire.

Though, since its inception, many abridged versions of the scale have been used, yet the original scale consisted of twenty nine items. In the original scale, odd numbered items were scored for conflict and even numbered items were scored for ambiguity. The responses of the scale are anchored upon a seven point Likert type scale.

Role conflict is defined as a degree to which the expectations of a role are incompatible or incongruous with the reality of the role. Role ambiguity is defined as the
lack of clarity of role expectations as well as degree of uncertainty regarding the outcomes of one's role performance (Brief and Aldag, 1980).

For the present study, the original scale of twenty-nine items was subjected to factor analysis. The procedure for this was the same as was carried out by the authors at the time of construction and validation. The odd numbered items measured conflict and the even numbered items measured ambiguity till item number seventeen, after which the order was reversed.

The results of the factor analysis revealed that the variance (eigen value of the first factor was 5.402 and that of the second was 2.564). These two factors were then rotated using the varimax rotation. The first factor was identified as "ambiguity" and the second as "conflict." The items were chosen, keeping in view the criterion of a loading of 0.30 and above. There were some items belonging to the set of conflict, but loading heavily on ambiguity (e.g., item five had a loading of 0.41) and vice versa. These items were not included in the final list of items.

The final test consisted of fifteen items. The items incorporated for the measure of role ambiguity were 2, 4, 10, 12, 16, 19, 23, and 25 as against the scale by Rizzo et al. (1970) where ambiguity was measured by 2, 4, 10, 12, 19, and 25. Similarly, role conflict in the researcher's test was measured by 5, 9, 11, 18, 20, 22, and 24 against items 5, 11, 13, 18, 20, 22, 24, and 26 in the scale by Rizzo et al.
(1970). Hence, it can be clearly stated that the two tests differed in the selection of only five items.

When the scale was constructed, Rizzo et al. (1970) reported favourable reliabilities and construct validities. The same reports were also provided by House and Rizzo (1972). Schuler, Aldag, and Brief (1977) stated that the Rizzo et al.'s (1970) scales possessed enough reliability and construct validity to warrant their continued use.

Breaugh (1980) reported that Rizzo et al.'s (1970) scale to measure role ambiguity and two other indices of role ambiguity seemed to tap the same construct and the resulting correlations with a set of dependent variables were identical. Rizzo et al. (1970) reported reliability estimates ranging from 0.78 to 0.82. Schuler et al. (1977) carried out extensive validation of the role conflict and role ambiguity concepts of the Role Stress Scale of Rizzo et al. (1970). They stated after carrying out a detailed study of factor structure, coefficient of congruency, internal reliabilities, and test-retest reliabilities, that these scales warrant use. Commenting on the scale, Kelloway and Barling (1990, p.742) state that the scales "... exhibit construct validity and can be interpreted meaningfully." Netemeyer, Johnston, and Burton (1990, p.155) state, "The Role Conflict and Role Ambiguity scales exceeded some established thresholds of discriminant and convergent validity."

**Protestant Ethic Scale (Blood, 1969)**

The concept of Protestant Work Ethic was primarily
propounded by Weber (1905) in his treatise. Ever since the first presentation of the concept, social scientists have borrowed heavily from it to explain various economic and sociological phenomenon.

The inclusion of Protestant Work Ethic in the domain of organizational behavior is very valuable. Protestant Work Ethic can be best explained as "...orientation towards work which emphasizes dedication to hard work, deferment of immediate rewards, conservation of resources, the saving of surplus wealth, and the avoidance of idleness and waste in any form" (Beit-Hallahami 1979, p. 263).

There are primarily two scales used to operationalize the concept of Protestant Work Ethic. They were developed by Blood (1969), and Mirels and Garrett (1971). Both scales, in operationalizing Protestant Work Ethic have moved a great distance away from Weber's original thesis.

Blood (1969) postulated that the manner in which a person would evaluate work in general, would be related to his attitudes towards the job he would hold. He went ahead to state that there were people who enjoyed sacrificing for their work. At the time of the construction of the scale, he predicted that people high on Protestant Work Ethic will be more satisfied with their jobs.

The Protestant Work Ethic Scale constructed by Blood (1969) has eight items. The scale uses a six point anchoring system for scoring. The responses can range from complete disagreement to complete agreement. The scale is constructed
in a way as to yield two scores. Each respondent is judged for his endorsement of pro-work ethic and for non work ethic.

Blood (1969) reported that Protestant Work Ethic dimensions made a contribution to the predictions of job satisfaction. Among the predictors of job satisfaction, the validity coefficients for Protestant Work Ethic dimensions ranked first and second.

Brief and Aldag (1975) carried out a principal component analysis of the scale with varimax rotation of two components yielding factors similar to those reported by Blood (1969). Cook, Hepworth, Wall, and Warr (1981) reported four studies which had used this measure to assess the endorsement of work ethics across various samples. Greenberg (1978) found evidence for the construct validity of the scale.

Wanous (1974) showed that the scale had a reasonable reliability coefficient. Waters, Bathis, and Waters (1975) administered three scales of Protestant Work Ethic to 165 students. Here the scale constructed by Blood (1969) yielded a correlation of 0.70 with the scale by Mirels and Garrett (1971) which can be said to be encouraging. Their findings were substantiated by Blau (1987).

Hence, for the present study, where Protestant Work Ethic has been conceived of as a job attitude, it was decided to use the measure constructed by Blood (1969).
The Organizational Climate Questionnaire (Sinha, 1980)

This scale was constructed as a part of a large scale survey conducted by Sinha (1980). A large number of items pertaining to organizational climate were written down and were subjected to factor analysis in order to achieve orthogonal dimensions of organizational climate. Before factor analysis was carried out, the items were rated for construct validity by a panel of five judges. Five hundred and twenty two executives drawn from eight different organizations rated their respective organizations on a five point scale. The responses were factor analysed by the Principal Axis Method and rotated to the varimax solution. The items which showed a loading of 0.20 or more were selected to constitute a factor. If a particular item loaded significantly on more than one factor, it was selected for that factor on which the loading was highest except in a few cases where it was allowed to stay on both factors. The varimax rotation was carried out to make the factors orthogonal, but despite statistical maneuvering, some overlap still existed.

The scale has ninety one items and the response format is a five point Likert type. The responses range from 'Quite true' to 'Quite false' through 'doubtful'. Nine factors are assessed across the scale. They are:

1) Authoritarian climate
2) Task Oriented Climate
3) Status acceptance
4) Favourable work conditions
5) Efficiency
6) Involvement
7) Work relationships
8) Interpersonal relationships, and
9) Bureaucratic climate

Some of the items have to be reverse scored since they are negatively keyed. The two dimensions of authoritarian and bureaucratic climate were negatively keyed.

Sinha (1980) reported that seven organizations, across which the scale was used, differed significantly on each of the nine dimensions of climate (p<0.01). It is a scale which is 'coming of age' in the Indian set up.

The Orientation Inventory (Bass, 1962)

Orientation is a personality variable. Orientation may be thought of as a way of organizing the environmental realities. Bass (1962) identified three variables which effectively discriminate an individual's orientation in three areas:
1) Self
2) Interaction with others, and
3) Task

Self orientation reflects the extent to which a person describes himself as expecting direct rewards to himself regardless of the job he is doing, or the effects of what he does upon others working with him. A person with a high score on self orientation is more likely to be rejected by
others, to be unresponsive to the needs of others around him, and is concerned mainly with himself, not co-worker needs, or the job to be done.

Interaction orientation reflects the extent of concern with maintaining a happy harmonious relationship in a superficial sort of way, often making it difficult to contribute to the task at hand or to be a real help to others. Interaction orientation reflects a person's high concern for group activities but it is not conducive to the progress or completion of the group's tasks.

Task orientation reflects the extent to which a person is concerned about completing a job, solving problems, working at them persistently and doing the best possible. In any group, despite his concern with the task, the task oriented individual tends to work hard within the group to make it as productive as possible. If he is interested in the activities of the group, he will fight for what he regards as right.

The inventory has twenty seven items. Each item has a set of three responses, i.e., (A), (B), and (C). The respondent has to mark one out of three as the one with which he agrees the least and one with which he agrees the most. The three statements represent the presence of one of the three types of orientation. Hence, each item indicates whether it represents a maximum of self, task, or interaction orientation. It also reveals whether it depicts the least of self, task, or interaction orientation.

This is an ipsatively scored test. A total score of 81

155
is distributed among the three orientations, this being a limitation of the test.

The test-retest reliability for the three scales is: i) Self: 0.73 ii) Interaction: 0.76 and iii) Task: 0.75.

The time gap between the two administrations was one week for 84 college students. Bass (1962) states that there have been a number of studies which show the usefulness and validity of the test. Barrett (1965) stated that the inventory was a research instrument which had a potential for tapping the persons orientation in any setting. However, he also stated that the inventory accurately assessed two and not three dimensions, i.e., self and bipolar task orientation. Jerath (1979) subjected the inventory to item analysis. He found that a few items had a low item-total correlation especially with self scores. Even after getting these results no items were dropped owing to their discriminative value for other two scores. Sagen (1965) stated that additional studies were needed to strengthen knowledge regarding the Orientation Inventory.

Stritch (1964) reported far lower test-retest reliabilities for hundred students who were retested in 1-5 days. Reported correlations for self, interaction, and task orientation were: 0.63, 0.35, and 0.40.

Bass (1967), while concluding a detailed review of The Orientation Inventory, suggested that the reliability and validity of The Orientation Inventory scores leave much to be desired. He considered it to be inadequate for individu-
al diagnosis and mentioned that it lacked the precision demanded when smaller samples were used. However, it was deemed satisfactory for gross classification of large samples in research.

Procedure

The data for this study was collected from a large central public sector unit, located about 25-30 kms away from Chandigarh. The Organization Development Officer was contacted and was explained the design of the work being done. An official circular was then sent to all the heads of departments. Owing to the official circular, the investigator received all cooperation from the numerous heads. The heads furnished a list of all the people who fell in the middle management cadre in their department. The managers, as per their number in each department were introduced to the investigator and then the senior left the room. The investigator then introduced to them the purpose of the study which was simply stated as a study of job attitudes of managers of various companies so that they would be able to give the most spontaneous and frank rather than a desirable response.

The instructions which were printed on all the forms were read aloud to the subjects. The technique of answering was also verbally explained to the subjects. They were told that there were no correct' responses and every response was individually significant. They were requested to answer each item on all the scales.
To ensure that the subjects gave honest and spontaneous responses and to build their confidence, they were specifically directed not to make any identification mark on their set of questionnaires. Their anonymity was thus assured. On completion of the test, the subjects were asked to glance over again and answer any question they may have left unanswered. While the respondents filled the questionnaires, the investigator sat in a corner, but was always available for any clarification any one sought.

**Scoring**

Scoring was done in accordance with the set of instructions available in the respective manuals. For the Job Involvement Questionnaire, the original pattern of scoring was maintained. According to this, a high score indicates low job involvement. Hence, all negative correlations with Job Involvement Questionnaire are treated as positive and vice versa.

**Statistical Analysis**

Analysis of variance was computed to test the effect of demographic variables on organizational commitment and job involvement. Intercorrelations among all variables except the demographic variables were calculated. Step wise regression analysis was utilized to determine the predictors of organizational commitment and job involvement. Factor analysis was carried out to determine the underlying factors. The details of the analysis performed are given before presenting the respective results.