CHAPTER III
RESEARCH DESIGN AND METHODOLOGY
Research Design & Methodology of the Study

Research Design and Methodology to be adopted were extensively discussed with experts and academicians in the field as the researcher found the necessity for blending the theoretical aspects of research with the practical methods adopted in the organisations for understanding the big picture. The three variables other than the socio-demographic variables selected for the study were Managerial Performance, Myers and Briggs Personality types and Level of Assertiveness of managers. This is a descriptive study that reveals associations between the variables and these associations are interpreted statistically.

The questions that the researcher came up with during the discussions with the experts and the study of literature helped in drawing out the objectives, hypotheses and the scheme for measuring the different variables of the study.

Objectives of the Study:

1) To assess the Performance level of Senior, Middle and Junior managers and to categorize them into high, medium and low performers.

2) To find out whether the performance of managers has any association with their personality types measured against the model of personality theorized by Myers and Briggs.

3) To assess the level of assertiveness possessed by the managers and to find out whether there is any relationship between managerial performance and level of assertiveness.
4) To find out the relationship, if any, between MBTI personality type of managers and their level of assertiveness.

5) To find out whether performance differences among managers have any association with the socio-demographic background of managers such as education, age and upbringing.

Hypotheses of the Study

The following hypotheses were formulated keeping in mind the objectives, literature review, observations made during pilot study and discussions with practicing managers and academicians.

1) Those managers who have Extrovert - Thinking in their preference show high performance in organizations.

2) Those managers who have Thinking - Judging in their preference show high performance in organizations.

3) Those managers who have Feeling - Judging in their preference show high performance in organizations.

4) High performing managers have significantly higher level of assertiveness than low performing managers.

5) Those managers who have Thinking - Judging in their personality preference show a high level of assertiveness.
Definition of Terms

'Personality'

Theoretical:
Personality is the unique way of behaviour of an individual which has a distinctive style of relating and responding to the outside world – Myers & Briggs

Operational:
The Myers and Briggs personality type indicator identifies four separate dichotomies: Extraversion versus Introversion, Sensing versus Intuition, Thinking versus Feeling, and Judging versus Perceiving. An individual is assumed to have a preference for one of each pair of opposites over the others. The four preferences direct the characteristic use of perception and judgment by an individual. The particular preferences that interact in a person affect not only what is attended to in any given situation but also how conclusions are drawn about what has been perceived. The MBTI classifies the first and the fourth dichotomies listed as attitudes or orientations and the middle two dichotomies as functions or processes.

The Four Dichotomies of the MBTI

1) Extraversion – Introversion Dichotomy (E – I)
2) Sensing – Intuition Dichotomy (S – N)
3) Thinking – Feeling Dichotomy (T – F)
4) Judging – Perceiving Dichotomy (J – P)
'Managerial Performance'

Theoretical:
Managerial Performance is the act of carrying out work in a successful manner - Fitzgerald (1997b).

Operational:
Managerial Performance for this study is the overall result achieved by the manager in the organisational context. The overall result is measured every year through the key result areas ascertained to each manager by their superiors at the beginning of the year.

"Assertiveness"

Theoretical:
Assertive behaviour is the expression of our needs, feelings and opinions clearly without violating the right of others - Zuker (1983)

Operational:
Assertiveness is the style of dealing with people and difficult situations realistically, attempting to recognise emotions, body language, understanding viewpoints and being flexible but firm.

Pilot Study
A Pilot study was conducted among the managers of the Cochin - Alwaye industrial belt. Fifteen practicing managers were taken as respondents for the pilot study. During the pilot study the respondents and the organizations adjudged the study as feasible and its variables relevant to managerial
performance but expressed the need to keep the confidentiality of the data collected as the topic of managerial performance was confidential in nature and was a delicate issue. The researcher assured them that the purpose of this study was purely academic in nature and will not be used for any other purpose.

Management experts and academicians were also consulted for ascertaining the relevance and feasibility of the research study.

**Scope of the study**

The scope of the study was limited to large scale manufacturing industries in the private sector in Alwaye - Kochi industrial belt. The performance appraisal system was carefully examined in eight manufacturing organization. Five of the organizations had a system of merit rating where the evaluation was not done on a scientific basis. The other three organisations had a similar appraisal system. In all the three organizations, organisational objectives to be attained every year were drawn up. From the organisational objectives departmental objectives were drawn up and then each category of managers drew up their personal objectives and key result areas in consultation with their superiors. At the end of each year, the managers were evaluated by their superiors and this was communicated to these managers. This data was used for promotions and the potential development of the person.
The error minimisation technique adopted by the organisations for the proper conduct of the appraisals was the 'Raters training'. All the raters underwent raters training programme and the rating was also vetted by the Department Heads / Divisional Heads / Organisation Head.

Since the area selected for the study was individual performance the organizations and the respondents wanted to keep the confidentiality of the data collected. Hence the researcher has named the organisations as A, B and C for the purpose of identification.

Managers with a minimum of three years experience were selected for the study. A manager who shows good performance in one year need not be so in the next year. His performance can either be good or poor in the next one or two years. To neutralize the effects of these fluctuations in performance, performance for a period of three continuous years preceding the period of data collection was taken. Individual responsibilities, situational variables and organizational contexts are different at each level in the management hierarchy and hence the managers were divided into senior, middle and junior managers to bring out the differences, if any, with respect to the objectives that were drawn up for the study. All managers in the junior, middle and senior levels were selected from the three organisations for the purpose of this study. The total number of questionnaires distributed was 600 out of which 594 samples were selected for the study.
There were 87 senior managers, 203 middle managers and 304 junior managers who came under the purview of the study.

Pretest of the questionnaires was done on an actual sub sample of the managers. No changes were made in the MBTI and Assertiveness measurement questionnaires. However, changes were made in the socio-demographic data sheet. The informal discussions that the researcher had with the managers helped in getting a high response rate from them during data collection.

**Nature and Sources of Data**

The data required for the study consisted of both primary and secondary data. Primary data pertained to Personality, Assertiveness and Socio-demographic variables, which were collected directly from the respondents. The secondary data covered the performance related details of managers. The procedure is explained in detail in Chapter 4.

**Tools of Data Collection**

For the purpose of the study the researcher administered the following questionnaires

1) **Myers Briggs Personality Type Indicator**

Questions are presented in forced choice format primarily because type theory postulates dichotomies. All questions offer choices between the poles of the same dichotomy E or I, S or N, T or F, J or P. There are no questions that cut across the dichotomies. According to Myers and Briggs, forced choice format
was required because both poles of a dichotomy are valuable and both are used at different times by everyone. The goal of the items is to force a series of choices that will determine which of the two valuable or useful behaviours or attitudes is preferred by the individual. The questionnaire was taken from an MBTI certified source in India wherein all data relating to reliability and validity pertain to the Indian scenario. The 124 items in the questionnaire had test-retest reliability of $+.791$. Test-retest reliabilities of the MBTI showed consistency overtime, with levels of agreement greater than by chance. When respondents reported a change in type, it is most likely to occur in only one preference and in scales where the original preference clarity index was low. Evidence for the validity of types and a number of factor analysis of the MBTI scales have demonstrated very close correspondence with the hypothesized four factor structure Thorne & Gough (1991). Correlations have also been established with a wide variety of scales from other instruments, Mitchell & Biglan (1971), Schutz (1978), Super (1970), Campbell & Hansen (1981)

For the tabulation of the questionnaire for arriving at the personality types and for analysis of the types, the researcher sought the help and guidance of a MBTI certified person. The researcher also underwent a training programme to learn the method of administering this questionnaire.

2) Assertiveness Inventory

The inventory designed by Shelton & Burton (1995) was used for this study with test-retest reliability of $+.831$. This is a widely used instrument by MBTI certified trainers in India. Validation of the instrument has been established
through many research studies conducted by Shelton & Burton (1995). There were 15 items which were rated on a three point scale – Always, Sometimes, Never. Three points were given for Always, two for Sometimes and 1 for Never. Scores between 0 – 19 depicted low level of assertiveness, 20 – 34 medium level and 35 – 45 high level of assertiveness.

3) Socio-Demographic description data
Socio-Demographic description data was also consolidated from the respondents to their age, educational qualification and upbringing.

Data analysis and Interpretation
The collected data was checked for accuracy and statistical analysis of data was done through computer applications using SPSS package. The investigator for the above activity sought the help of experts. The findings arrived at during the analysis were then discussed in the practical and theoretical framework. The chapters that follow, discusses these analyses and the last chapter summarises the major findings of the study.

Limitations of the Study
As research studies have not been conducted in the Indian organizational scenario linking Managerial Performance, MBTI Personality Types, Assertiveness and the selected socio-demographic variables, most of the reference studies mentioned are based on studies conducted in the western context.
The data used for measuring the performance of managers was taken from the records maintained by the organizations. Though no validity score was evolved for the measurement of performance the data used was valid, as this data was used by the selected organizations in determining promotion and other growth possibilities of the managers within the organization. It is also used for drawing up the developmental plan for managers.

As the scope of the study was confined to the manufacturing industries in the private sector, generalizations could only be made within the boundaries of the manufacturing sector in the industrial belt.