Methodology
Chapter-2

METHODOLOGY

Research is a ceaseless effort in all disciplines and is conducted for many reasons. In social science research attempts are made to find out some solutions to the social problems of varied nature. The purpose behind any scientific research is to evaluate the after effects of certain variables in search of some alternative courses of actions, to improve the decision-making ability and to add something in the existing body of knowledge. The knowledge gained through scientific research opens new avenues for future researches and it is often useful to understand ourselves and the world we live in. When we talk of research design it means we refer to a plan, structure and strategy of investigation which includes various specifications to obtain possible answers to pre-conceived research questions in the form of hypothesis and to control variance. A research investigator has to go through various steps by employing most adequate procedure in gathering information pertaining to the variables under investigation. The data obtained is to be analyzed for the purpose of interpretation and drawing meaningful conclusions. A scientific research is objective and verifiable so it requires utmost care while planning, designing a research plan and it should be carried out in a well planned and objective manner by using scientific procedure that enables a researcher to arrive at a valid, objective, accurate and economic solution of the problems. It is pre-requisite for every researcher to be much careful while selecting the sample utilizing the most appropriate sampling technique, choosing standardized tools and applying suitable statistical tests for the analysis of data.
Lindquist (1956) stated that, "Research design is the plan, structure and strategy of investigation conceived, so as to obtain answer to research question and to control variance". According to Seltiz et al. (1962) "A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure". Edward (1968) stated that, "In research we do not haphazardly make observations of any or all kinds but rather our attention is directed towards those observations that we believe to be relevant to the question we previously formulated, the objective of research as recognized by all sciences, is to use observation as a basis of answering the question of one's interest". In the words of Kothari (1985) "Research design can be considered as a blueprint for the collection, analysis and interpretation of data".

In view of all these explanations concerning to the requirements of a scientific investigation in the field of organizational behaviour research, the present researcher took all possible measures in order to meet the requirements of a scientific research in psychology.

2.1 Sample

The use of sampling enables a researcher to describe the population from which the sample has been drawn and the use of appropriate sampling technique makes a research investigation more objective and scientific. It is also necessary for behavioural science researchers to clearly identify the population and also decide the size of the sample because it plays very important role in generalizing the obtained findings regarding the population of interest from which the sample was obtained. It is very difficult or rather an impossible task for social science researcher to include all the individuals
of the population for the purpose of a study hence, a representative sample from the population is often used. However, every researcher faces some difficulty in deciding the sample size and its selection technique so as to get appropriate representative sample. A sample is a small group of population representing almost the entire characteristics of the population.

According to Kerlinger (1983) “Sample is a portion of population or universe as representative of that population or universe”. Mohsin (1984) stated that, “Sample is a small part of the total existing events, objects or the information”. Thus, sampling is a process of selecting a small portion of a population representing the characteristics of the population of which the sample is a part. The present researcher took all possible precautions in selecting sample to make this small piece of work more scientific and objective.

The sample of the present study comprising 300 doctors (150 working in government hospitals and 150 working in private hospitals) was selected randomly from four districts of Uttar Pradesh viz., Lucknow, Bahraich, Gonda and Lakhimpur. Only those doctors have been included in the sample who possessed at least master’s degree. The sample breakup is as follows:
2.2 Tools Used

Job Involvement Scale

The job involvement scale developed by Singh (1984) was used. The preliminary schedule of the scale consisted of 72 items out of which 54 items were finally selected for the scale on the basis of item analysis. The 54 items retained in the scale relate to intrinsic motivation, attachment to work, fulfilment of organizational demand, commitment for work, internalization of organizational goals and organizational identification. It is a 4-point scale and each item is to be rated on a continuum of strongly agree to strongly disagree. Since the scale consists of both true keyed (35) and false-keyed (19) items, therefore the scoring will be reversed for false-keyed items. The job involvement scores will be determined on the basis of arithematic summation of the scores endorsed to all the 54 items. Thus, the minimum and maximum possible score on job involvement scale will range between 54 and 216. The lower score indicate lesser job involvement and the high score is the indicator of greater degree of job involvement. The reliability of the scale was computed by the Cronbach’s (1951) Alpha coefficient technique and was found to be 0.83. The scores on Job Involvement Scale of Lodahl and Kejner (1965) were used as one of the validation criteria for the present scale. The coefficient of correlation between the scores on the two tests was found to be 0.93 (N = 400).

Personal Efficacy Scale

The personal efficacy scale constructed by Singh and Kumari (1989) contains 28 items, out of which 10 items are negatively worded. Each item has to be rated on a 5-point scale on the continuum of strongly agree to
strongly disagree. In case of negatively worded items the scoring procedure is reversed. The item validity of the personal efficacy scale ranges from 0.21 to 0.54. The split half reliability of the scale was found to be 0.72. The scores of Social Reaction Inventory and Rosenberg Self-Esteem Questionnaire were used as the validation criteria for this scale. The coefficient of correlation between the scores of Social Reaction Inventory and Personal Efficacy Scale was found to be 0.72 and the coefficient of correlation between the scores of Rosenberg Self-Esteem and Personal Efficacy Scale was found to be 0.81. The personal efficacy of a subject is determined by arithematic summation of scores on all the 28 items. The range of personal efficacy score falls between 28 and 140. The low and high efficacy group is formed on the basis of Q1 and Q3 cutpoints, the high scores indicate high level of personal efficacy and the low score is indicative of low level of personal efficacy.

**Religiosity Scale**

The religiosity scale developed by Tandon (1967) is a Likert type scale containing 50 statements each to be answered on a 5-point scale on a continuum of most favourable to most unfavourable. There are ten negative statements in the scale for which the scoring is to be reversed. The scores on the scale will fall between 50 and 250. The scores of the subject on all the statements are to be added to measure the overall attitude of the respondent towards religion. The reliability of the scale was established by test-retest and split half methods yielding the values of 0.89 and 0.90 respectively. Thus, the present scale was found quite suitable to yield highly consistent measure of religiosity.
Multivariable Personality Inventory

The Multivariable Personality Inventory developed by Muthayya (1973) was used to measure the personality traits of doctors. It contains 50 items with three negative items. The subject is required to give his/her response in terms of 'Yes' or 'No' categories where 'Yes' response indicates the presence of the trait whereas the incorrect response indicates the absence of the trait. A score of '1' is assigned in case of 'Yes' response and in case of negative items a score of '1' is assigned for a 'No' response. The reliability of the scale was found to be 0.52. The personality characteristics are measured dimensionwise by counting the responses of the subjects on item numbers concerning to a particular personality trait. The higher the score in each trait the greater the prevalence of the trait in the respondent concerned. The scale measures nine personality dimensions.

(i) Empathy: This variable, otherwise known as interpersonal sensitivity, has been considered important for people in leadership positions. This involves the realization and understanding of another person's feelings, needs and sufferings. It is a self-conscious effort to share and comprehend accurately the presumed consciousness of another person.

(ii) Ego-ideal: The ego-ideal is composed of all the fantasies, which portray the person as a hero, accomplishing great deeds or achieving recognition. Taken together, at any stage of a person's life they represent his highest hope, the dramatization of himself as a man of destiny. Failure to actualize his instituted fantasy depresses him. The ego-ideal usually consists of a composite of internalized exemplars.
(iii) Pessimism: It is a tendency to look upon the future with uncertainty, disbelief or disdain accompanied, sometimes, by expectation of negative happenings regardless of the actualities of the situation.

(iv) Introversion: The introvert tends to be self-oriented and introspective. His interests run toward the intellectual and artistic, and he shows more concern for abstract areas than for reality. His extreme concern for internal matters may result in insufficient attention to practical affairs, and his values are more apt to be idealistic or sentimental than realistic. He tends to behave in a serious, quiet, constrained, even inhibited manner and avoids social gatherings and personal involvements. The introvert tends to be highly ego-involved in achievement or in competitive situations and thus, vulnerable to the threat of failure. He is concerned with security than with adventure in high risk-situations. Resignation or withdrawal from the stress-situation is the natural response of the introvert.

(v) Neuroticism: This concept implies a heightened sensitivity to stressful environmental situations, a low degree of stress-tolerance. Neuroticism has been summarized in terms of four major categories: excessive and conflicting motivations, emotionality and instability, inadequate coping procedures and low self-esteem.

(vi) Need-achievement: This implies a desire or tendency to compete with a standard of excellence where, a) winning or doing well is the primary concern, b) affective concern over one's goal attainment, and c) there is no competition with others but involves meeting a self-imposed requirement of a good response. Any performance, its outcome or the capacity to produce it, is viewed, experienced and judged within a frame of reference based on various standards of excellence. Therefore, the need to achieve in definitive
terms means striving to increase, or keep as high as possible one's own capability in all activities in which a standard of excellence is thought to apply and where the execution of such activities can, therefore, either succeed or fail.

(vii) Self-confidence: To be a leader in any situation, an individual must appear to make positive contribution to the group. According to some, self-confidence has a positive relationship with leadership. Therefore, self-confidence is an important variable as it indicates the extent of assurance one possesses about one's capacities and abilities in not only confronting problem situations but also in finding solution to them.

(viii) Dogmatism: It is a closed way of thinking which could be associated with any ideology regardless of content: an authoritarian outlook on life, on intolerance towards those with opposing beliefs and a sufferance of those with similar beliefs. To say that a person is dogmatic or that his belief-system is closed to say something about the way he believes and the way he thinks not only about single issues but also about networks of issues.

(ix) Dominance: Individual whose personalites are characterized by dominance or ascendance will more frequently be found to occupy or emerge in leadership roles. The primary desires prevalent in such persons are for power prestige and material gain. Some of the behavioural components of this variable are to control one's human environment, to influence or direct the behaviour of others by suggestion, reduction, persuasion, or command.
Biographical Information Blank

The Biographical Information Blank (BIB) was prepared in order to record the background information of the respondents and it included respondent's age, gender, urban/rural, educational qualification, job experience, religion, marital status and number of dependants.

2.3 Statistical Analysis

The researcher is bound up to select most appropriate statistical method to analyze data but it is not a simple task to decide the appropriateness of statistical methods because selection of a suitable statistical test for data analysis depends upon the nature of data and design of the study. The present researcher took maximum precautions in selecting suitable statistical test and deciding to employ t-test and Stepwise Multiple Regression Analysis as per the requirements of the study. t-test is preferred as it is the most powerful parametric test and will serve the purpose of finding out the significance of mean differences if any, between the various comparison groups. Regression is considered to be most suitable and useful technique because it ascertains the influence of several independent variables on the dependent one (Tabachnick and Fidell, 1983). Through this technique the researcher intends to determine the significant predictors of the criterion or dependent variable.