Methodology
METHODOLOGY

The aim of scientific research is to probe the influence of independent variables on dependent variable, therefore it becomes much important for research investigators to take into consideration the various steps that are essentially required in carrying out the research and to draw conclusions. The investigator must take utmost care in working out a neat experimental research design and the study to be conducted in a planned and objective manner, because every piece of research requires systematic activity to discover the facts and interpret the findings obtained in the light of the findings of earlier researchers.

A research work should be called scientific if it is carried out in a planned and objective manner therefore the investigator is required to be much careful in selecting the samples by utilizing the most appropriate sampling technique, selecting suitable and standardized tools and choosing most appropriate statistical technique for data analysis. All these vital steps are to be followed to make any research investigation more objective and scientific and it will be helpful in making predictions and drawing meaningful conclusions.

According to Lindquist (1956), "Research design is the plan, structure, and strategy of investigation conceived, so as to obtain answer to research question and to control variance". 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 recognised by all sciences, is to use observation as a basis of answering the question of interest.

Referring to the above explanations regarding pursuing scientific investigation in the field of organizational behaviour research. The investigator has took all possible precautions to complete this small piece of research-work by taking into consideration the requirements of scientific research.
2.1 Sample

In every field of inquiry including psychology and social sciences, the researcher has to take utmost care in research design and selection of samples. It is not out of place to mention that every researcher faces some sort of difficulty in deciding the size of the sample and its selection technique because of its significance in scientific investigation. It is not possible to include all the individuals of the population of interest because it is not in the purview of the investigators, particularly in social science researches hence, the sample from a population is used.

According to Kerlinger (1983) "Sample is a portion of population or universe as to be the 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 drawing a small portion of a population representing the characteristics of the entire population of which sample is a part". Inspiring from the mentioned above explanations the present researcher took all possible precautions to make this research work more scientific and objective. The purposive random sampling technique was used for the selection of individuals in the samples for this research-work.

The appropriate sample size and the method of selecting samples from the population of interest enable an investigator to draw reliable inferences/conclusions and to make generalization about the population from which the samples were drawn. The sample of the present study comprising 190 doctors and 170 paramedical staff were selected by means of purposive random sampling technique from J.N.M.C.H. Aligarh Muslim University, Aligarh. The sample break-up is as given below:
The various comparison groups have been formed to test the hypotheses keeping in mind the objectives of the proposed research work.

2.2 Tools Used

**Personal Efficacy Scale**

The personal efficacy scale developed by Singh and Kumari (1982) was used. There are 28 items, out of it, item numbers 14, 17, 19 are false keyed, each item has to be rated on a 5 point scale on the continuum of strongly agree to strongly disagree. The possible scores for each of the items arranged from 5-1. In case of false keyed items the scoring procedure will be reversed, from strongly disagree to strongly agree with a range of score 5-1 respectively.

The split half reliability co-efficient of this scale was found to be 0.72. The score Social Reaction Inventory Rosenberg Self-Esteem Questionnaire were used as the validation criteria for this scale. The co-efficient of co-relation between the scores of Social Reaction Inventory and Personal Efficacy Scale was found 0.72 and co-efficient of co-relation between the Scores of Rosenberg and Self-Esteem and Personal Efficacy Scale was found to be 0.81.

The personal efficacy of a subject to be determined by arithmatic summations of scores of the subject on all the 28 items. The minimum scores of a subject on this scale to be 28 and the maximum possible scores will be 140, the high
scores indicate high level of personal efficacy and the low score is indicative of low level of personal efficacy. The classification of high, moderate and low level of efficacy of subjects can be determined on the basis of Q₁ and Q₃. The subjects having the scores below Q₁ may be put in the category of low personal efficacy group whereas individuals having above Q₃ scores may be placed in high efficacy groups. Subject’s scores falling between Q₁, Q₂ and Q₃ can be placed in moderate efficacy group.

The scale was found suitable because the statements of this scale were well worded and may be used to measure the personal efficacy of subject irrespective of their nature of work and type of organization.

2.3 **Hospital Climate Questionnaire**


There are 33 items in this scale and each item to be checked on 5 point scale, all the items are positively true statements, each statement has 5 alternatives viz. strongly agree, undecided, disagree and strongly disagree. For strongly agree 5 points, Agree 4 points, undecided 3, disagree 2 and strongly disagree 1 point. The total scores on all the items of a subject will be ranging between 33 – 165.

The reliability and validity, Cronback’s alpha = 0.63 was established, the scale was found suitable to gather information from the respondents for this small piece of research work.

2.4 **Job Satisfaction Questionnaire**

This Scale was developed by present researchers and (Khan and Sheeba), there are 22 items in this scale and each item to be rated on 9 – 5 point scale, ranging on the continuum of strongly agree to strongly disagree and the weighted scores should be marked 5, 4, 3, 2 and 1 respectively, (out of 55
items, 22 items were finally selected) and these items were related to working conditions, opportunities, social relationship, co-operation and benefits related to the job.

Item analysis was done and only those items were retained which showed significant discriminative value. The score on job satisfaction questionnaire of a subject should be ranging between 22 – 110, a subject lowest score will be 22, and the highest score 110 on this scale. The coefficient correlation between the scores of this scale with Singh's Job Satisfaction Scale was established. The coefficient correlation between the scores of these two scales was found to be 0.79, the split half reliability of this test was found to be 0.77, further the reliability of the scale to be established by test-retest method too. The test developed measures to investigate over all degree of job satisfaction of individuals working in Medical College Hospital. The arithmetic summation of the score on all 22 items will be indicative of the level of job satisfaction, i.e. higher the score the level of job satisfaction and lower the score is the indicative of the degree of dissatisfaction.

On the basis of Q₁, Q₂ and Q₃ cut points, the degree of job satisfaction of the subjects to be ascertained.

2.5 Biographical Information Blank (BIB)

In order to record the background information of the respondents the Biographical Information Blank (BIB) was prepared that include the respondent’s age, religion, designation, income, qualification, marital status, and experience.

2.6 Statistical Analysis

Selection of appropriate statistical technique for the purpose of data analysis depends upon the nature of the data and design of the proposed research work. In this study the effect of independent variables such as selfefficacy, hospital
climate and certain biographical variables on dependent variable i.e. job satisfaction to be analyzed. The data obtained from various groups and sub-groups of doctors and paramedical staff could be analyzed by means of other statistical method but the ‘t’ test is undoubtedly the most powerful parametric test was preferred over other statistical method because this test is found more suitable to analyze data because this technique will serve the purpose of finding out the significance of mean differences if any, between various comparison groups, in terms of their level of job satisfaction and to arrive at conclusion and interpret the findings.