CHAPTER THREE

METHODOLOGY
The objectives of a scientific endeavour are to ascertain facts and analyze them in an unbiased manner. In behavioral studies research design plays a significant role in collecting and analyzing data and drawing inferences. Lindquist (1956) pointed out that “the researches are designed to proceed in planned manner to control variance and to answer pertinent research questions”.

Mayers (1980) though there are different objectives of designing of an experiment, but the most important function of experimental design is to control variance.

Mohsin (1984) opines that “research design depicts the plan which states the relation observed facts and events on the basis of which conclusion could be drawn”. Main function of experimental design is to maximize the effect of systematic variance, control extraneous source of variance and minimize error variance (Baroota, 1989).

Several methodological approaches and designs have been developed and discussed (Fergusan, 1981) but the choice of appropriate design depends upon the special characteristics and avail of the sample, nature of measuring instruments and restraints regarding the manipulation of the variables being studied. Thus, the choice of method is governed by the aims of the study, the variables under investigation and the nature of the data.

The present study is designed to determine the level of mental health in relation to personality characteristics, life satisfaction and achievement expectancies. In this chapter the research procedure for this study area is presented. The design of proposed research, participants, instrumentation, procedure and method of data analysis are described.

The present research is correlational in nature. In correlational research design researcher observes and measures relationship between variables which occur naturally
without any assistance. It does not justify specifically calling one variable as independent and other as dependent variable. Thus, any statement about causal effects connects between the variables on a correlational study unwarranted, yet correlational study as its own worth. Present investigation is primarily focusing on the following variables:

**Predictor Variables:**

1. Personality characteristics.
2. Life satisfaction.
3. Achievement expectancies.

**Criterion Variable:**

1. Mental health.

**3-1-Sample**

In social science research the sample size and its selection technique plays significant role. Sometimes it becomes difficult to specify the sample size because it varies from problem to problem of a proposed research. The researcher has to plan his research works by limiting its domain in his investigation.

Sampling is a process of selecting a small part of a population assuming that it should be representing the characteristics of the population of which it is a part.

The adequate sample size and the method of selecting sample size from the population enable an investigator to draw meaningful conclusion and helpful in making generalization about the population from which the samples were drawn. In present research, samples of 300 students (professional and non-professional) were drawn randomly from different faculties of Aligarh Muslim University, Aligarh. The sample comprised of equal number of 150 (75 male and 75 female) professional students and
150 (75 male and 75 female) non-professional students. Both gender (male and female) were included in this research.

3-2-Tools Used

Psychological tests play major role for understanding human behaviour objectively. Due to complementary and dynamic of behaviour, it is required to carefully select appropriate measures which could serve the purpose. For the present study questionnaires were used in convenient and favorable manner. Following measures and scales were chosen for the present endeavor, details are given below:

3-2-1- Personal Data Sheet (PDS)

The PDS includes the information under the following major headings: Name of the participant, age, gender, course and residence.

3-2-2- Mental Health Inventory

It was developed by Jagdish and Shrivastava (1983), the higher score on the inventory indicate better mental health whereas minimum score of the inventory indicates poor mental health. This scale consists 56 items having six dimensions: (1) positive self-evaluation, (2) realistic perception, (3) integration of personality, (4) autonomy, (5) group-oriented attitudes, and (6) environmental mastery. The scale has four response categories viz., always, often, rarely, and never. The reliability and validity coefficient were found significant as the value of split-half reliability coefficient was $r = 0.73$ and validity coefficient i.e. construct validity was $r = 0.54$ which confirm the standardization of the scale.

3-2-3- NEO- Five Factor Inventory (Neo-FFI)

The Neo-FFI (Costa & McCare, 1992) is a self report measure of personality features that make up an influential model of personality known as Five Factor Model (FFM). It is used in this study to assess the personalities of students because of its
validity and wide range of application (Furnham, et al, 2003). Many scholars believe that these five factors present the forming facets of character traits of human beings (Goldberg, 1992; Saucier, 1994). Mowen and Spears (1999) have demonstrated the trustworthiness and effectiveness using the structural equation model. As operationalised by the Neo-PU-R, the five factors or domains are: neuroticism, extraversion, openness to experience, agreeableness and conscientiousness. The NEO-FFI is a 60 items (12 items per domain) version of the forms-S of the Neo-PI-R that provides a brief, comprehensive measure of the five domains of personality with 5-point ratings (1 = strongly disagree to 5 = strongly agree). The NEO-FFI scales show correlations of 0.75 to 0.89 and internal consistency values range from 0.74 to 0.89. The internal consistencies reported in the manual were: N= 0.79, E= 0.79, O= 0.80, A= 0.75, C= 0.83.

3-2-4- Life Satisfaction Scale (LSS)

A 10 items scale designed by Warr et al. (1979) was used to measure the satisfaction with salient features of daily life and activities of the respondents, psychometric properties of the scale (test, retest reliability, split-half reliability, internal consistency, reliability and validity), were reported by author and others. Responses were rated on seven points scale from 1, referring to “I am extremely dissatisfied”, to 7, referring to “I am extremely satisfied”. The possible range of scores could vary from 10-70. A high score indicated high satisfaction and vice-versa. Test-retest is also very high i.e. r= 0.87.

3-2-5- Generalized Expectancy for Success Scale (GESS)

The Generalized Expectancy for Success Scale (GESS) is a 30-items measure to assess general expectancy of being successful and the belief, one is able to achieve desired goals (Fibel & Hale, 1978). The scale measures three aspects of generalized
expectancy—(1) general efficacy, (2) long range career-oriented expectancy, and (3) personal problem solving skills. The scale has an internal consistency of 0.90 for females and 0.91 for males, with test-retest reliability for a six-week period of 0.83 for both genders, sum of scores range from 30 to 150 with higher scores reflecting greater expectancy for being successful and internality (an internal control of success).

It is based on a Likert scale (5= highly probable, 1= highly improbable). Items 1, 2, 4, 6, 7, 8, 14, 15, 17, 18, 24, 27, and 28 are scored in reverse. All items have the same opening phrase: “In the future I expect that I will ....” subjects were required to indicate to a different ending on each item, each of which represents a belief of success or failure within the future. Higher scores on this scale indicate subjects’ greater motivation to face difficult challenges. Previous research showed that GESS had high test–retest reliability as well as high internal consistency; its Cronbach’s alpha was 0.90. The validity of the GESS has been tested primarily with concurrent validity procedures.

3-3-Procedures

Permission to conduct the research was received from the relevant Faculty authority and participating students. The data were collected by the researchers in class groups. Four questionnaires namely mental health inventory, neo-five factor inventory, life satisfaction scale and generalized expectancy for success scale and personal data sheet (PDS) were administered on students. Each respondent took almost 40-45 minutes in answering all the questionnaires. They were assured that their responses would be kept strictly confidential and would be used exclusively for research purpose. After the data collection scoring was done by the investigator.
3-4-Method of Data Analysis

For determining the impact of personality characteristics, life satisfaction and achievement expectancies on mental health, descriptive statistics, correlation analysis, multiple regression analysis (step-wise) and independent samples t-test were used to compare the differences of demographic variables. All of the analysis has been done by Statistical Package for Social Sciences (SPSS).

3.5 Ethical considerations

The following ethical issues were fulfilled for the present research study:

3.5.1 Confidentiality and anonymity

In this research confidentiality and anonymity were respected. The information given was kept safe and was not used unfairly to compromise the research work. The subjects were convinced that the results will have no personal consequences against them. Every individual who wishes access to the information is obliged to maintain confidentiality.

3.5.2 Voluntary participation

Participation was voluntary no one was forced to participate. There was no payment for completing the survey.

3.5.3 Withdrawal

Students were free to withdraw anytime they feel like without any penalty.