METHODOLOGY

Research in social sciences are carried out as the sheer requirement of social science researches is to control, predict, describe and explain the phenomena with which they deal. There are a number of approaches developed, many designs created to carry on researches, but before we move, we should understand what exactly research is. Research is a systematic activity directed towards discovery and development of an organized body of knowledge. It’s a methodological investigation into a subject in order to discover facts. 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 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 research.

A research work should be called scientific if it is carried out in a planned and objective manner. Therefore it is necessary for the investigator to be careful in selecting the sample by utilizing the most appropriate sampling technique, selecting suitable and standardized tools and choosing most appropriate statistical techniques for data analysis.

As discussed earlier, the present research aims to study self Identity, value preferences, level of aspiration and personality characteristics among professionals and non-professionals students. It is a comparative study and in order to have a complete view of the problem and to make our result more reliable the students of professional and non-professional courses were divided into four different groups i.e. Professional males and females and non-professional males and females.
The details of method and procedure adopted in the present research have been divided into following parts:-

1. Sample
2. Psychological Tests
3. Procedure
4. Statistical Analysis
5. Hypothesis

**Sample**

Sampling is that part of statistical practice concerned with the selection of a subset of individuals from within a population to yield some knowledge about the whole population, especially for the purpose of making predictions based on the statistical inference. The main advantages of sampling are that the cost is lower, data collection is faster, and when the data set is smaller, it is possible to ensure homogeneity and to improve the accuracy and quality of the data. It is not possible for the researcher to survey the entire population, so an appropriate sample is drawn from the whole population to make our results reliable.

The sample of the present investigation comprises of four hundred (N=400) students studying in various professional and non-professional courses. According to the aim of the study, two hundred (N=200) students from professional courses and another two hundred (N=200) from non-professional courses were chosen. The data was collected through random sampling. The investigator prepared a list of the students from the register of the class teacher and prepared the slips of the names of the students. Then he
used lottery method to collect the data. The data was collected from different faculties of Aligarh Muslim University and H.R. institute of pharmacy of Ghaziabad.

The number of students of both the courses depended upon the availability of the students. The age of both professional and non-professional students ranges from 18 to 25 years.

**Tools**

To measure and understand human behavior psychological tests are developed and used. It is a matter of fact that there is not a single tool or psychological instrument which may tell about all aspects of behavior because of complex and varying psycho-emotional attributes of personality. Hence there is need for developing psychological
instrument for each specific purpose. Among various methods used in behavioral sciences, especially in psychology, Questionnaire method is considered as the best method to collect information. Hence we have used the same in the present study. Following tools were used to gather information about the subjects.

**Self-Identity Scale**

Self-Identity scale developed by Sengupta (2008) in a research project on choice of carrier, self-identity and success amongst college Teachers was used in the present investigation. There are 45 items in the scale. Each item has to be rated on a 4 point scale. The total score of the scale ranges from 45 to 180. All the items are positively true statement. Each item has 4 alternatives where 1 point is given when the subject responded never or rarely, 2 point for occasionally, 3 points for frequently and 4 point for always. The responses and their rating may be tabulated as:-

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Response(s)</th>
<th>Scores Assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Never or Rarely</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>Occasionally</td>
<td>2</td>
</tr>
<tr>
<td>3.</td>
<td>Frequently</td>
<td>3</td>
</tr>
<tr>
<td>4.</td>
<td>Always</td>
<td>4</td>
</tr>
</tbody>
</table>

The test was found to be highly reliable and valid, and was suitable to collect the information.

**Study of values**

Study of values scale developed by Ojha and Bhargava (1971) was used to measure the different values. Theoretical value, Economical value, Aesthetic value, Social value, Political and Religious value are the six dimensions that are measured through this scale. The study of values Test is self –administering. It consists a number of questions based upon a familiar situation. The test has two parts- first part consist of
30 items with two alternative answers and second part consist of 15 items with four alternative answers. In all there are 45 questions with 120 alternative answers. Roughly 20 alternative answers belong to each of the six values. The subject records his preferences numerically by the side of alternative answers.

Part one has 30 items and each item has to be rated on a 3 point scale. Each item has two alternatives i.e. agree or disagree. The scores for each item will be equal to 3. The total score of part one will be 90. Part one has two options for the subject. If he is agree with answer A and disagree with answers B, then he has to give 3 points to answer A and 0 to option B. But if he wants to give more preference to answer A and less preference to answer B, then he has to give 2 point to option A and 1 point to option B.

Part two has 15 items and each item has to be checked on a 10 point scale. This part has 4 alternatives A, B, C, D. The subject has to give 4 point to the alternative by which he is impressed most. Then he has to give 3 points to the alternative by which he is impressed less in comparison to the first answer. In the same way he gave 2 points to the alternative by which he is impressed a little and 1 point when he is not impressed at all. The score of each item will be equal to 10. So the total score of part two will be 150. The subject has to answer each item and cannot repeat the sequence of the number.

It is a revised edition of value scale. The split–Half Reliability for different values was different. The split –Half reliability of revised form for Theoretical value was found to be .78, for Economical value .81, for Aesthetic value .76, for social value .82, for political value .83, and for religious value it was .84.

The scale was found to be highly reliable and valid and was suitable to gather information from the respondents for this small piece of research work.
Level of Aspiration Scale

In order to measure the level of aspiration among students, a test conducted by Singh & Tiwari (1976) was used. Although there are many tests of level of aspiration but this scale was found suitable because this is very simple but highly effective scale.

The test consisted of ten level of aspiration forms. There are five rows of forty eight half inches squares in each test sheet. In first, third and fifth row, there are ten squares and in second and fourth row, there are nine squares. In total there are forty eight squares. On the left hand corner of the test, there is a space for expected scores and on the bottom right hand side there is space for actual scores. For administration of the test only stop watch is needed with test sheets. It may be administered to a group as well as to an individual. Only two signals, “Start” and “Stop” are given to the subject. The task is to draw “satis” ( ) in the squares of the test sheet within a given time of 60 seconds. Only ten trials are given to a subject.

Neo five Factors Inventory

The NEO-FFI was used by present investigator. It was designed by Costa and McCrae (1992) which contains 60 items to provide self and other reported measures of the five factor model of personality. Neuroticism (N), Extraversion (E), Openness (O), Agreeableness (A), and Conscientiousness (C) are the personality dimensions measured by the test. The NEO-FFI was developed from factor-analytic work on data from a 1986 administration of NEO-PI to 986 men and women. (Costa and McCrae 1988).

In a study with 983 adults, Costa and McCrae (1988) found that the NEO-FFI scales showed correlation ranging from .75 for conscientiousness to .89 for N. When
correlated with the NEO-PI, internal consistency for the NEO-FFI was calculated using alpha coefficient, values were .89, .79, .74, and .84 for N, E, O, A, and C, respectively.

The validity of the NEO-FFI scales was tested by correlating the scales of the NEO-FFI to other measures of the five-factor model based on self-report, rating by spouses, and by peer rating of the NEO-PI factors. On the self reports, the convergent correlations ranged from .56 to .62, divergent correlation ranged from p<.20. The spouse reports of the NEO-PI factors showed convergent correlation ranging from .39 to .53. The divergent correlation were p<.30. On the peer rating of the NEO-PI factors, the convergent correlations ranged from .34 to .59 and all divergent correlations were p<.19 Costa and McCrae (1985).

**Procedure**

A good rapport was established with the students before we asked them to fill the questionnaires and care was taken to remove any misconceptions regarding the proposed study. Subjects were assured that the information gathered from them would be kept secret and were requested to extend their co-operation.

First the investigator administered the Tests of self-Identity, value preferences and personality characteristics. The questionnaires were distributed to the subjects. The questionnaires were explained to the subjects by the investigator and the subjects were instructed to read the questionnaires carefully and if there is something vague in the written material, they were asked to make it clear by asking the investigator.

The subjects were then asked to complete the questionnaires. The subjects took one to one and half hours to complete the questionnaires. They were asked to fill the background information given in the scale of values. After completing the questionnaires
the subjects were asked to return their questionnaire to the investigator. After returning the questionnaires, the test of level of aspiration was administered to the subjects individually.

The investigator instructed the subjects that they had to draw “satia” (§) in the columns of the given form of level of aspiration. They had to draw as many “satia” as they could within 1 minute. Only signals “start” and “stop” were given to the subjects. Before starting the work, subjects were asked to write down the expected scores in the given column. When they had done it, they were given a “start” signal and work was started and after one minute “stop signal” was given to the subject to stop the task. After completing the forms investigator asked the subjects to count their performance scores and write down their actual scores in the column which is there on the bottom of the form.

In this manner, all the ten forms one by one were given to the subject and they have to complete it within a period of one minute. After completing the task, subjects returned the form to the investigator. The investigator scored them and calculated the D-Score through the following formula:-

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\text{D-Score} = \text{Actual Score} - \text{Expected score of the next trial}.
\]

Similarly the mean of all the D-Scores of each trial were computed to draw the level of aspiration of the subjects.

**Statistical Analysis**

The selection of appropriate statistical technique for the purpose of data analysis depends upon the nature of data and design of the proposed work. In the proposed study self- identity, value preferences, level of aspiration and personality characteristics are
used to compare different professional and non-professional students. The data obtained from various groups of students could be analysed by means of other statistical method but ‘t’ test was found more suitable to serve the purpose. This test serves the purpose of finding out the significance of mean differences among the students studying in professional and non-professional courses.

**Hypothesis of the present study**

The formulation of hypothesis plays a significant role in drawing inferences about the population from which the sample is drawn. Hypothesis is the assumption regarding the population parameter. It is the prime objective of the investigator to formulate hypothesis before conducting the study. To determine the objectives of the present research certain null hypothesis were formulated for the purpose of drawing conclusions regarding the population—

Ho$_1$-It is expected that there will be no difference between professional and non-professional students as a whole on self-identity.

Ho$_2$- It is expected that there will be no difference between professional males and females on self-identity.

Ho$_3$- It is expected that there will be no difference between non-professional males and females on self-identity.

Ho$_4$- It is expected that there will be no difference between professional and non-professional males on self-identity.

Ho$_5$- It is expected that there will be no difference between professional and non-professional females on self-identity.
Ho_6- It is expected that there will be no difference between non-professional females and professional males on self-identity.

Ho_7- It is expected that there will be no difference between professional females and non-professional males on self-identity.

Ho_8- It is expected that there will be no difference between professional and non-professional students as a whole on the preferences of six values (Theoretical, Economic, Aesthetic, Social, Political and Religious).

Ho_9- It is expected that there will be no difference between professional males and females on the preferences of six values (Theoretical, Economic, Aesthetic, Social, Political and Religious).

Ho_{10}- It is expected that there will be no difference between non-professional males and females on the preferences of six values (Theoretical, Economic, Aesthetic, Social, Political and Religious).

Ho_{11}- It is expected that there will be no difference between professional and non-professional males on the preferences of six values (Theoretical, Economic, Aesthetic, Social, Political and Religious).

Ho_{12}- It is expected that there will be no difference between professional and non-professional females on the preferences of six values (Theoretical, Economic, Aesthetic, Social, Political and Religious).

Ho_{13}- It is expected that there will be no difference between non-professional females and professional males on the preferences of six values. (Theoretical, Economic, Aesthetic, Social, Political and Religious).
Ho14- It is expected that there will be no difference between professional females and non-professional males on the six values (Theoretical, Economic, Aesthetic, Social, Political and Religious).

Ho15- It is expected that there will be no difference between professional and non-professional students as a whole on level of aspiration.

Ho16- It is expected that there will be no difference between professional males and females on level of aspiration.

Ho17- It is expected that there will be no difference between non-professional males and females on level of aspiration.

Ho18- It is expected that there will be no difference between professional and non-professional males on level of aspiration.

Ho19- It is expected that there will be no difference between professional and non-professional females on level of aspiration.

Ho20- It is expected that there will be no difference between non-professional females and professional males on level of aspiration.

Ho21- It is expected that there will be no difference between professional females and non-professional males on level of aspiration.

Ho22- It is expected that there will be no difference between professional and non-professional students as a whole on the five personality traits (Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness).

Ho23- It is expected that there will be no difference between professional males and females on the five personality traits (Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness).
Ho24- It is expected that there will be no difference between non-professional males and females on the five personality traits (Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness).

Ho25- It is expected that there will be no difference between professional and non-professional males on the five personality traits (Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness).

Ho26- It is expected that there will be no difference between professional and non-professional females on the five personality traits (Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness).

Ho27- It is expected that there will be no difference between non-professional females and professional males on the five personality traits (Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness).

Ho28- It is expected that there will be no difference between professional females and non-professional males on the five personality traits (Neuroticism, Extraversion, Openness, Agreeableness and Conscientiousness).