CHAPTER 3
METHODS AND PROCEDURE

A research design encompasses the methodology and procedures employed to conduct any sort of research. The preparation of a research proposal or design is an important step in the research process. This provides a basis for the elevation of the project and gives the adviser a basis for assistance during the period of his or her direction. It also provides a systematic plan of procedure for the research fellow. Research design is a road map for researchers. It is a step by step approach. Any piece of research is incomplete without a proper plan of action. A research is designed to enable the researcher to arrive at a valid, objective and accurate solution of the given problem as possible. Research design is thus, a detailed plan of how the goals of research are achieved. The research design constitutes the blue-print for collection, measurement and analysis of data. It aids the researcher in allocation of his limited resources by posing crucial choices: Is the blueprint to include experiments, interviews, observations, and the analysis of records, simulation, or some combination of these? Are the method of data collection and research situation to be highly structured? Is an intensive study of a small sample more effective than a less intensive study of a large sample? Should the analysis be primarily qualitative or quantitative? John W. Best (2007) Research is considered to be the more formal, systematic, intensive process of carrying on the scientific methods of analysis. It involves of more systematic structure of investigation, usually resulting in some sort of formal record of procedures and a report of result or conclusions. According to Kothari "Research Design stands for advance Planning of the method to be adopted for collecting the relevant data and the techniques to be used in their analysis, keeping in view the objectives of the research to availability of staff, time and money."

The present study is designed to study the impact of personality traits on social intelligence on   college students. As such, the descriptive method of research was employed to carry out this piece of research work. The details regarding sample, tools and statistical treatment are reported as follows:

3.1: POPULATION

A population is a summation of all the organisms of the same group or species, which live in the same geographical area, and have the capability of interbreeding A research population is also known as a well-defined collection of individuals or objects known to have similar characteristics. All individuals or objects within a certain population usually have a common, binding characteristic or trait. Usually, the description of the population and the common binding characteristic of its members are the same. "Government officials" is a well-defined group of individuals which can be considered as a population and all the members of this population are indeed officials of the government.In the present study the students of different Government degree colleges of Jammu district constitute the population of the study and a representative sample from this population has been selected by the investigator.

3.2: SAMPLE OF THE STUDY

The sample for the present study consisted the total population of all colleges of district Jammu. The study was conducted on a sample of 200 college students which was further divided into different groups of male-female and rural-urban arts- science dichotomy. The college students were in the age group of 19 - 21 years. The sample has been selected on the basis of random sampling technique. The breakup of the sample is given as follows:

Table No. 1: List of the Colleges taken for Data collection

S.NO	NAME OF THE COLLEGE	MALE		FEMALE		TOTAL
		SCIENCE	ARTS	SCIENCE	ARTS	
1.	GOVT WOMENS COLLEGE GANDHI NAGAR	NIL	NIL	18	12	30
2.	GOVT WOMENS COLLEGE PARADE	NIL	NIL	20	10	30
3.	GOVT DEGREE COLLEGE PALOURA	NIL	18	NIL	18	36

4.	GOVT DEGREE COLLEGE BISHNA	NIL	22	NIL	10	32
5.	GOVT M.A.M PG COLLEGE	28	10	05	NIL	43
6.	G.G.M SCIENCE COLLEGE	21	NIL	08	NIL	29

3.3: SELECTION OF THE TOOL

Selection of the tool is very important in any research study. If appropriate tools are not used, the investigator may be misled and the efforts of the investigator would go waste as he would not be able to achieve the objectives of the study. An investigator has to look for such procedural techniques and tools which will answer his pursuits or hypothesis objectively. A competent investigator, therefore, looks into the possible measures which can help him in arriving at the desired results. Accordingly, the present investigator adopted the following tool for the collection of data.

3.4:TOOL USED

The data for the present study was collected with the help of

3.4.1SOCIAL INTELLIGENCE SCLAE

Social intelligence scale developed by Prof. N. K Chadda and Usha Ganesan and published by National Psychological Corporation, Agra.

3.4.2ESYENCS PERSONALITY QUESTIONNAIRE

1. Social Intelligence Scale

- **Item construction and selection**

A set of 15 to 20 items were constructed for each dimension. An initial pool of 140 items was constructed for the whole scale. The six dimensions (Patience, Recognition of Social Environment, Confidence, Sensitivity, Sense of Humour and Co-cooperativeness) were constructed using the multiple choice technique. In the tactfulness dimension, responses were elicited in terms "yes" or "No" (Jackson, Neil & Beran, 1973). In the last dimension, that of Memory a set of 30 pictures

was presented for recognition. The entire set of 140 items was given to 5 experts and the necessary changes introduced, 91 items which met 100 percent approval amongst the judges were retained. These items were then tested for social desirability with the help of five experts. The items were on a 9 point rating scale ranging from extremely desirable, through neutral to extremely undesirable. (Edward, 1957). The items were all retained and subjected to item analysis.

- **Item analysis**

The scale was administered to an unselected sample of 300 (150 males and 150 females) for the purpose of item analysis. This sample was drawn from population of university students pursuing a variety of courses. In the case of 6 dimensions (Patience, Confidence, Cooperativeness, Sense of Humor and recognition of Social Environment) the student was given a choice of three alternatives for each item and was asked to choose one. In the case of the first four dimensions (Patience, Cooperativeness, Confidence and sensitivity) scores of 1, 2 and 3 were given three response alternatives e.g.in the confidence dimension a score of 3 would indicate a high degree of confidence, a score of 1 a lack of confidence and a score of 2 would reveal moderate confidence. In other words dimensions (Sense of Humour and Recognition of Social Environment) one of the three alternatives given is the appropriate response. This response when given was allotted scores of 1. In the case of Tactfulness dimension the responses were in the form of "Yes" or "No". The appropriate response was awarded a score of 1. The last dimension that of Memory was scored 1 or 0 on whether or not the subject"s response was right or wrong. In the case of four dimensions (Tactfulness, Sense of Humour, Recognition of Social Environment and Memory) the Phi Coefficient was calculated on the basis of the high and low group on one hand and the scores of 1 or 0 on the other. These values were then converted into Chi-Square. For the remaining dimensions (Patience, Confidence, Cooperativeness and sensitivity) the square values were calculated based on the expected and observed outcome for each item, using the entire sample of 300. The items having Non-significant Chi- Square values were dropped from the scale at this point. Two levels of significance that is 5% and 1% were taken as the criterion for dropping the items. A total of 66 items were retained in the Final scale.

The final distributions of items per dimensions are as follows:-
Number of Items retained under each dimension in the scale.

Table No. 2: Dimensions of Social Intelligence as per manual

Dimension	Number of items Retained.
a) Patience	8
b) Co-cooperativeness	11
c) Confidence	8
d) Sensitivity	9
e) Recognition of Social Environment	3
f) Tactfulness	7
g) Sense of Humour	8
h) Memory	12
Total	**66**

Table No. 3: Scoring for the Dimensions (A) Patience as per manual.

Item Nos.	Response Alternatives		
	A	**B**	**C**
4	1	3	2
8	2	3	1
15	1	2	3
16	1	3	2
20	1	2	3
27	3	1	2
33	3	2	1
36	2	3	1
	Score Awarded		

Table No. 4: Scoring for the Dimensions b) Cooperativeness as per manual.

Item Nos.	Response Alternative		
	A	**B**	**C**
1	3	2	1
5	3	1	2
9	5	1	2
14	2	1	3
17	1	3	2
21	3	1	2
25	3	2	1
26	2	3	1
28	1	3	2
31	1	3	2
32	2	1	3
	Score Awarded		

Table No 5: Scoring key for the dimension C) Confidence as per manual

Item Nos.	Response Alternative		
	A	**B**	**C**
3	1	3	2
7	3	2	1
11	2	3	1
12	2	3	1
19	1	3	2
23	2	1	3
30	1	2	3
35	1	2	3
	Score Awarded		

Table No 6: Scoring Key for the dimension D)Sensitivity as per manual.

Item Nos.	Response Alternative		
	A	B	C
2	2	1	3
6	1	3	2
10	1	2	3
13	2	1	3
18	2	3	1
22	2	3	1
24	1	2	3
29	3	1	2
34	2	1	3
	Score Awarded		

Table No 7: Scoring Key for dimension E) Recognition of Social Environment as per manual.

Item Nos.	Response Alternative		
	A	B	C
37	1	0	0
38	1	0	0
39	0	1	0
	Score Awarded		

Table No 8: Scoring key for the dimension of (F) Tactfulness as per manual

Item Nos.	Response Alternative	
	Yes	No

40	0	1
41	0	1
42	0	1
43	1	0
44	0	1
45	1	0
46	1	0
	Score Awarded	

Table No 9: Scoring Key for dimension of (G) Sense of Humor as per manual.

Item Nos.	Response Alternative		
	A	**B**	**C**
47	0	1	0
48	1	0	0
49	0	1	0
50	0	1	0
51	0	0	1
52	0	0	1
53	1	0	0
54	1	0	0
	Score Awarded		

Table No 10: Scoring Key for dimension of (H) Memory as per manual

Score of one (1) for following correct responses	
55. Indira Gandhi	61. Sarojini Naidu
56. Sachin Tendulkar	62. Rabindarnath Tagore
57. Ram dev	63. A.P.J Abdul Kalam
58. C V Raman	64. Atal Bihari Vajapayee
59. Lata Mangeshkar	65. Aishwariya Rai

60. Prem Chand	66. Dr. Rajendra Prasad

Reliability

In the present scale test, retest and split half techniques were employed to find the reliability co-efficients. For finding the split half reliability a sample of 150 (75 males and 75 females) was taken. The following coefficients were obtained.

Table No 11: Split half Reliability Coefficientsas per manual

Areas	Rel. coeff
A. Patience	.93
B. Cooperativeness	.91
C. Confidence	.89
D. Sensitivity	.90
E. Recognition of Social Environment	.95
F. Tactfulness	.91
G. Sense of Humour	.90
H. Memory	.96

In order to determine the retest reliability, the previous sample used for split half was administered the scale after a period of fifteen days. The following coefficients were obtained.

Table No 12: Test - retest Reliability Coefficients as per manual.

Areas	Reliability Coefficients

A. Patience	.94
B. Cooperativeness	.91
C. Confidence	.90
D. Sensitivity	.93
E. Recognition of Social Environment	.95
F. Tactfulness	.84
G. Sense of Humour	.92
H. Memory	.97

3.5 Validity

The techniques of validity used to validate this scale were (1) Empirical Validity and (2) Cross validation.

To test the empirical validity a sample of 50 individuals was taken external criterion used was the „Social Intelligence Test" by F. A. Moss, T. Hunt, K. M. Omwaka and L. G. Woodward (1949), George Washington University Series. The present Scale and the Social Intelligence Test by Moss and Hunt were administered and scored accordingly. The data obtained was subjected to Pearson Product Moment Correlation for testing the validity. The dimensions of recognition of social environment, memory and sense of humour were common to the present scale and the Social Intelligence Test by Moss and Hunt. The sense of Humour dimensions was similar in both cases. The other two dimensions mentioned were slightly different in format and manner of administration. Inspite of this correlation obtained for all these three dimensions were positive and significant. Further the remaining dimensions that of patience, confidence, sensitivity, cooperativeness and tactfulness indicate significant correlation with the total score of the Social Intelligence Test by Moss and Hunt. The total score of the present scale is highly and significantly correlated with the Social Intelligence Test by Moss and Hunt. (r=70<01). Henceforth the present scale has a validity coefficient of 70.

For the purpose of cross validation, a sample of 15 individuals was taken. The data obtained on the first sample and the second sample was correlated to test the validity of the scale. The Pearson"s Product Moment Correlation was obtained. The coefficients obtained are as follows:

Table No 13: Cross validation-correlation between two groups as per manual.

Areas	Correlation between two Groups
A. Patience	.82
B. Cooperativeness	.91
C. Confidence	.86
D. Sensitivity	.75
E. Recognition of Social Environment	.91
F. Tactfulness	.75
G. Sense of Humour	.95
H. Memory	.94

Overall cross validation r = 80

2**.** **Esyenck personality questionnaire-R (EPQ-R)**

The Eysenck personality questionnaire is the result of many years of developmental works.it was designed to give rough and ready measure of three important personality dimensions: Psychoticism, Extraversion and Neuroticism. Each of these three traits are measured by means of 100 questions, carefully selected after lengthy item analysis. The earlier history of the development of inventories for the purpose of measuring these traits has been reviewed in the structure of human personality.

Psychoticism which describes the personality as solitary, troublesome, cruel, lacking in feeling and empathy, hostile to others, sensation seeking, and liking odd and unusual things. Neuroticism refers to the general emotional liability of a person, his emotional over-responsiveness and his liability to neurotic breakdown under stress. Extraversion as opposed to introversion refers to the out-going, uninhibited, sociable proclivities of person. these three dimensions are conceived of as being quite independent. It also seems clear that under certain circumstances many people will dissimulate, and even under ordinary experimental test conditions it seems likely that some people will dissimulate. Given that it is possible and indeed easy to dissimulate, it clearly becomes

important to attempt the construction of scales for the measurement of dissimulation, in order to establish who has dissimulated when, and if possible to correct the measurement scales for this dissimulation. Several different methods have been tried in this connection, but the most important has undoubtedly been the construction so-called lie score.

Scoring procedure

To see that each question has only one answer then place the key on the booklet so that (*) marks on the booklet are visible through the circles on the key. There are 4 scores (Psychoticism, Extraversion, Neuroticism and Lie score) to be obtained. Each answer scores 1 point. For example, to obtain the score for Psychoticism add 1 score for each answer visible through the squares and record the sum in the table on page 1. Do the same for page 2, 3 and 4. Transfer these scores on the table at back page. Repeat this procedure to obtain Extraversion, Neuroticism and Life score.