CHAPTER- 4
DESIGN AND METHODOLOGY

The present investigation was intended to explore the independent existence of emotional and social intelligence and investigate their potentiality to predict happiness in adolescents. For this purpose following design and methodology were used in the present study.

Design:
A correlation research design was used to find out the correlation between emotional and social intelligence and to explore whether four areas of emotional intelligence (intra personal awareness, inter personal awareness, intra personal management and inter personal management) and eight areas of social intelligence (patience, co-cooperativeness, confidence, sensitivity, recognition of social environment, tactfulness, sense of humor and memory) are capable of predicting happiness in adolescents.

Sample:
For the present study, a sample of 200 (100 males and 100 females) adolescents was selected on the incidental sample technique from the schools and colleges of Rohtak city, Haryana within the age of range of 17-22 years.

Instrumentation:
In this study the following tools were used for the investigation.

1. Mangal Emotional Intelligence Inventory.
2. Social Intelligence Scale.
3. Happiness Scale

MANGAL EMOTIONAL INTELLIGENCE INVENTORY

Emotional intelligence of the subjects was assessed by Dr. S.K. Mangal and Mrs. Shubhra Mangal’s Mangal Emotional intelligence inventory (MEII). Emotional
intelligence inventory has been designed for use with Hindi and English knowing 16+ years ago of school, college & university students for the measurement of their emotional intelligence (total as well as separately) in respect of four areas or aspects of emotional intelligence namely, intra personal awareness (knowing about one’s own emotions), inter personal awareness (knowing about other’s emotions), intra personal management (managing one’s emotions) and inter personal management (managing others emotions) respectively.

It has 100 items 25 each from the four areas to be answered in 'yes' or 'no'. The validity for the inventory has been established by adopting two different approaches namely factorial and criterion related approach.

For adopting factorial approach inter-correlations among the four areas of the inventory vary from .437 to .716 (after testing these correlations at the 0.01 level - 2tailed, it was found that all were significant).

As far as criterion related validity is concerned, with adjustment inventory for college students and emotional maturity scale the validity coefficients were found to be -.662 and -.613 respectively.

The split half, K-R formula (20) and test-retest reliabilities were found to be .89, .90 and .92 respectively.

Scoring can be done by hand or with the help of stencil. The mode of response to each of the item of the inventory is in the form of a forced choice i.e. either ‘yes’ or ‘no’, indicating complete agreement or disagreement with the proposed statement respectively. In the present emotional intelligence inventory, there are items where the response ‘yes’ is indicative of the presence of emotional intelligence and ‘no’ for the lack of emotional intelligence where ‘no’ response provides clue for the presence of emotional intelligence and ‘yes’ for its absence. For scoring one mark is to be
given for the response indicating presence of emotional intelligence and zero for the absence of emotional intelligence.

SOCIAL INTELLIGENCE SCALE

Social intelligence of the subjects was assessed through Chadha and Ganesan's (1986) social intelligence scale (SIS). SIS is a group test designed to measure the social intelligence. The test consists of eight independent dimensions. The description of 8 dimensions is given below:

1. **Patience** – Calms endurance under stressful situation.
2. **Co-operativeness** – Ability to interact with others in a pleasant way; to be able to view matters from all angles.
3. **Confidence** – Firm trust in oneself.
4. **Sensitivity** – To be accurately aware of and responsive to human behavior.
5. **Recognition of social environment** – Ability to perceive the nature and atmosphere of the existing situation.
6. **Tactfulness** - Delicate perception of the right thing to say or do.
7. **Sense of humor** - Capacity to feel and cause amusement; to be able to see the lighter side of life.
8. **Memory** – Ability to remember all relevant issues: names and face of people.

The split-half reliability co-efficient of different dimensions of the scale range between .89 and .96. The test-retest reliability co-efficient ranges from .84 to .97 in the sample of 150 subjects.

The validity of the test has been computed in terms of empirical validity and cross validity. For empirical validity, author's used “social intelligence test” by Moss and Hunt (N=50). The total scores of SIS have been found highly correlated with SIT i.e. .70. The cross validity of the test range between .75 and .95. Thus the scale may be taken as a fair measure of social intelligence.
The six dimensions (patience, co-operativeness, confidence and sensitivity, sense of humor and recognition of social environment) scores of 1, 2 and 3 indicate a degree of confidence, hence a score of 1 a indicates lack of confidence. In the other two dimensions (sense of humor and recognition of social environment). Subject has to choose one of the three alternatives; thus one score is awarded. In case of the tactfulness dimension the response was in the form of ‘yes’ or ‘no’. The appropriate response was awarded a score of 1. The last dimension that memory was scored ‘1’ or ‘0’ depending on whether or not the subject’s response was right or wrong. A high score indicates high social intelligence.

**HAPPINESS SCALE**

The Happiness Scale was developed by Patlove Ed.D, Kathleen, Lutz McFadden in 2003, it consists of 30 items, each item has to be responded in 0-5 rank such as (0) Does not Apply, (1) rarely, (2) occasionally, (3) some time, (4) frequently, (5) always. Each item has to be scored on the basis of rank assigned range of scores is 0-150. The higher scores, higher the happiness and vice versa.

**Procedure:**

The present study was conducted to explore emotional and social intelligence as predictors of happiness in adolescents. To fulfill this purpose, Mangal emotional intelligence inventory, social intelligence scale and happiness scale were administered.

All the subjects of the study were approached personally. The tests were administered either individually or in small groups of 2-3 individuals. The subjects were prior informed about the possible time involved in the study and only volunteer subjects were taken into account. While establishing the rapport with the subjects, it was especially ascertained that the particular subject has not undergone any major and significant life change during the study.
The selected subjects were requested to answer frankly and honestly as the information providing by him/her to be kept confidential and would only to be used for study purpose.

When the subjects were comfortable the instructions related to each test were given. All the three tests were administrated in accordance with the instructions as mentioned in each test. Although there was no time limit to administer the tests, the subjects were asked to complete the tests as early as possible.

After completion of administration, the subjects were duly thanked for his/her cooperation. After the data collection was over all tests or questionnaires were scored as per the scoring procedure prescribed by their authors. The obtained data were subjected to statistical analyses using SPSS software. Pearson product moment correlation and stepwise multiple regression analyses were applied to the data.

We may now pass on the next chapter dealing with results and discussion.