Chapter
Plan and procedure basically highlight the work carried out by the investigator. It is the character of the techniques of research on which the degrees of precision, objectivity, reliability and validity of result depends. The selection of the techniques and devices of the problem, time, function, availability of subjects and other resources at the dispose of the steps of the procedure adopted for the conduct of the study.

The most complicated and crucial operation in the research work is the collection of data. If the methodology and procedure adopted by the investigator is not good, he will certainly get lost in helplessness universe. The selection of adequate methods, tools and techniques is a very difficult problem and must be handled with care and profound consideration in respect of time, cost, ability, experience and the need of the investigator.

Planning broadly includes methods of research to be adopted, sample to be selected, tools to be considered for use, procedure and cautions to be followed for collection of data and statistical treatment to be given to data for its conversion into meaningful information. No research project can be undertaken successfully without proper thinking and planning because plan and procedure constitute an important part of research. It is the character of the techniques of the research on which the degree of prediction, objectivity and tools depend. Therefore, research is a purposive, scientific and planned deliberation, it must be handled with every caution, care and profound
consideration in respect of time, cost, ability and experience. The need of investigation procedure for any study is decided upon before starting the project because ‘methodology’ is the sheet anchor of any proposal.

The present chapter presents the description of the study regarding design, sample, the tools, the procedure of data collection and the statistical technique for analyzing the data.

**3.1 STATEMENT OF THE PROBLEM:**

“A STUDY OF WELL-BEING AMONG TEACHER EDUCATORS IN RELATION TO MENTAL HEALTH, EMOTIONAL INTELLIGENCE AND SOCIO- ECONOMIC STATUS.”

**3.2 OBJECTIVES:**

The present study was carried out with the following objectives:

**3.2.1 Well-Being and Mental Health**

1. To study the well-being of teacher educators having high and low mental health.
2. To study the well-being of male teacher educators having high and low mental health.
3. To study the well-being of female teacher educators having high and low mental health.
4. To study the well-being of male and female teacher educators having moderate mental health.
5. To study the well-being of married and unmarried male teacher educators having high mental health.

6. To study the well-being of married and unmarried male teacher educators having low mental health.

7. To study the well-being of married and unmarried female teacher educators having high mental health.

8. To study the well-being of married and unmarried female teacher educators having low mental health.

9. To study the well-being of married and unmarried male teacher educators having moderate mental health.

10. To study the well-being of married and unmarried female teacher educators having moderate mental health.

3.2.2 Well Being and Emotional Intelligence

11. To study the well-being of teacher educators having high and low emotional intelligence.

12. To study the well-being of male teacher educators having high and low emotional intelligence.

13. To study the well-being of female teacher educators having high and low emotional intelligence.

14. To study the well-being of male and female teacher educators having moderate emotional intelligence.

15. To study the well-being of married and unmarried male teacher educators having high emotional intelligence.
16. To study the well-being of married and unmarried male teacher educators having low emotional intelligence.

17. To study the well-being of married and unmarried female teacher educators having high emotional intelligence.

18. To study the well-being of married and unmarried female teacher educators having low emotional intelligence.

19. To study the well-being of married and unmarried male teacher educators having moderate emotional intelligence.

20. To study the well-being of married and unmarried female teacher educators having moderate emotional intelligence.

3.2.3 Well Being and Socio-Economic Status

21. To study the well-being of teacher educators having high and low socio-economic status.

22. To study the well-being of male teacher educators having high and low socio-economic status.

23. To study the well-being of female teacher educators having high and low socio-economic status.

24. To study the well-being of male and female teacher educators having moderate socio-economic status.

25. To study the well-being of married and unmarried male teacher educators having high socio-economic status.

26. To study the well-being of married and unmarried male teacher educators having low socio-economic status.
27. To study the well-being of married and unmarried female teacher educators having high socio-economic status.

28. To study the well-being of married and unmarried female teacher educators having low socio-economic status.

29. To study the well-being of married and unmarried male teacher educators having moderate socio-economic status.

30. To study the well-being of married and unmarried female teacher educators having moderate socio-economic status.

3.3 HYPOTHESES:

In the present study the following hypotheses had been tested:

3.3.1 Well-Being and Mental Health

1. There is no significant difference between the well-being of teacher educators having high and low mental health.

2. There is no significant difference between the well-being of male teacher educators having high and low mental health.

3. There is no significant difference between the well-being of female teacher educators having high and low mental health.

4. There is no significant difference between the well-being of male and female teacher educators having moderate mental health.

5. There is no significant difference between the well-being of married and unmarried male teacher educators having high mental health.
6. There is no significant difference between the well-being of married and unmarried male teacher educators having low mental health.

7. There is no significant difference between the well-being of married and unmarried female teacher educators having high mental health.

8. There is no significant difference between the well-being of married and unmarried female teacher educators having low mental health.

9. There is no significant difference between the well-being of married and unmarried male teacher educators having moderate mental health.

10. There is no significant difference between the well-being of married and unmarried female teacher educators having moderate mental health.

3.3.2 Well-Being and Emotional Intelligence

11. There is no significant difference between the well-being of teacher educators having high and low emotional intelligence.

12. There is no significant difference between the well-being of male teacher educators having high and low emotional intelligence.

13. There is no significant difference between the well-being of female teacher educators having high and low emotional intelligence.

14. There is no significant difference between the well-being of male and female teacher educators having moderate emotional intelligence.

15. There is no significant difference between the well-being of married and unmarried male teacher educators having high emotional intelligence.
16. There is no significant difference between the well-being of married and unmarried male teacher educators having low emotional intelligence.

17. There is no significant difference between the well-being of married and unmarried female teacher educators having high emotional intelligence.

18. There is no significant difference between the well-being of married and unmarried female teacher educators having low emotional intelligence.

19. There is no significant difference between the well-being of married and unmarried male teacher educators having moderate emotional intelligence.

20. There is no significant difference between the well-being of married and unmarried female teacher educators having moderate emotional intelligence.

3.3.3

Well-Being and Socio-economic status

21. There is no significant difference between the well-being of teacher educators having high and low socio-economic status.

22. There is no significant difference between the well-being of male teacher educators having high and low socio-economic status.

23. There is no significant difference between the well-being of female teacher educators having high and low socio-economic status.

24. There is no significant difference between the well-being of male and female teacher educators having moderate socio-economic status.

25. There is no significant difference between the well-being of married and unmarried male teacher educators having high socio-economic status.

26. There is no significant difference between the well-being of married and unmarried male teacher educators having low socio-economic status.
27. There is no significant difference between the well-being of married and unmarried female teacher educators having high socio-economic status.

28. There is no significant difference between the well-being of married and unmarried female teacher educators having low socio-economic status.

29. There is no significant difference between the well-being of married and unmarried male teacher educators having moderate socio-economic status.

30. There is no significant difference between the well-being of married and unmarried female teacher educators having moderate socio-economic status.
3.4 DESIGN OF THE STUDY:

The design of the study is as follows:

- Teacher Educators (500)
  - Male Teacher Educators (250)
  - Female Teacher Educators (250)
  - Married (125) and Unmarried (125)
  - Married (125) and Unmarried (125)

3.5 METHOD USED

The method used for this research work is generally known as **Descriptive Survey Method**. In this study, the information and data were collected through survey because it provides the relevant information and data on which decisions and improvements are based.
3.5.1 NORMATIVE OR DESCRIPTIVE SURVEY METHOD:

The word 'Survey' indicates the gathering of data regarding current conditions. The word 'Normative' is used because surveys are frequently made for the purpose of ascertaining which is the normal typical conditions or practice.

In the words of Best (1986) “Descriptive research describes what it involves; the description, recording, analysis and interpretation of conditions that exists. It involves some type of comparisons and contrast and attempts to discover relationship between existing known manipulated variables.”

In other words it can be said that - Descriptive research is a method of collecting and analyzing data, obtained from a large no. of respondents representing a specific population, collected through highly structured and detailed questionnaires or interviews.

The activities of Descriptive Researches are not different from those of other researches. These are:

- Identify and define their problem.
- State their objective and hypotheses.
- List the assumption upon which their hypotheses and procedures are based.
- Choose appropriate subjects and source materials.
- Selection of consumed tools for collecting data.
• Specify categories of data that are relevant for the purpose of study and capable of bringing out significant similarities, differences, and relationships.

• Describe, analyze, and interpret their data in clear and precise terms.

• Draw significant and meaningful conclusions.

3.5.2 CHARACTERISTICS OF NORMATIVE SURVEY METHOD:

(i) It is essentially cross-sectional.

(ii) It gathers data from a relatively large number of cases.

(iii) It is concerned not with the characteristics of individuals but with generalized statistics as the whole population or a representative sample.

(iv) It deals with clearly defined problems and defined objectives.

(v) It doesn’t aspire to develop an organized body of scientific laws but provides information useful to the solutions of local problems.

(vi) Surveys may be quantitative or qualitative.

(vii) Description resulting from survey may be either, or expressed in mathematical symbols.

(viii) The vast range of phenomena forming the subject of Educational Surveys may be classified as:

- Physical conditions related to learning (Campus building, Furniture etc.)

- Behavioral conditions; related to learning (behavior of pupils, teachers, Headmasters etc.)

- Pupil’s ability to learn or the results of learning achievements, basic skills, information, attitude etc.
3.6 DELIMITATIONS OF THE STUDY:

The present study is delimited to:

a. 500 teacher educators serving in Colleges of Education in Haryana state which includes 250 males and 250 females.

b. Only 4 variables i.e. well-being, mental health, emotional intelligence and socio-economic status.

c. Well-being as the dependent variable and mental health, emotional intelligence and socio-economic are independent variables.

d. 175 colleges of Education in Haryana state.

3.7 POPULATION:

The entire group from which the sample is drawn is known as ‘Population’. The term ‘Universe’ is also used but is less popular. The term ‘Population’ in research may consists of persons, objects, attributes, qualities, behavior of people etc. Defining population means fixing the limits in terms of one or more of its various aspects e.g. geographical limits, age or grade, sex or socio-economic status, physical attributes and psychological behavior.

The population may be of two types ‘target population’ and ‘accessible population’.
In the present study, the target population was all the Teacher Educators serving in Colleges of Education in Haryana State and the accessible population was the teacher educators actually serving in colleges of education.

3.8 SAMPLE:

It is difficult rather impossible to include the population in the research project. Generally, investigator selects a part of the whole population to draw the conclusion and make generalizations about the whole population.

A sample is a part of the population. It is smaller representative of whole group.

According to Pandey

"A sample is a portion of a population, which is selected for the purpose of the study".

A good sample ensures three things:

• Freedom from bias.
• Representativeness of population characteristics.
• Adequacy in terms of population qualities.

There are several methods of sampling. For the present study, the investigator employed Random sampling technique for the selection of sample. In ‘Random sampling’ the criterion is met when every individual in the population has the same
chance of being chosen for the sample and when the selection of one individual in no way influences the choice of another.

At the first stage the 175 colleges of education were selected out of 460 colleges in Haryana State with the help of systematic random sampling technique. At the second stage 500 Teacher Educators (250 Male and 250 Female) were selected from 175 colleges of education. In the third stage the sample was sub divided on the basis of their marital status.

3.9 VARIABLES

The variables measured in the present study were well-being, mental health, emotional intelligence and socio-economic status.

3.10 TOOLS USED:

Tools are means for collection of data, for interpretation and to explore new fields. The selection of tools is of vital importance for the successful research. The effectiveness of the tool may be judged through the nature of purpose of the study.

The present study under the domain of descriptive survey method demands more reliable, valid and practicable tool. The investigator selected the following standardized tools, for the present study.

TABLE 3.1

79
List of Tools:

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Name of the Tool</th>
<th>Constructed By</th>
<th>Year of Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GENERAL WELL-BEING MEASURE</td>
<td>Dr. Santosh K. Verma, and. Ms. Amita Verma,</td>
<td>2009</td>
</tr>
<tr>
<td>2</td>
<td>MENTAL HEALTH BATTERY</td>
<td>Prof. Arun Kumar Singh, and Alpana Sen Gupta</td>
<td>2008</td>
</tr>
<tr>
<td>3</td>
<td>TEACHER'S EMOTIONAL INTELLIGENCE INVENTORY</td>
<td>Dr. (Mrs.) Shubhra Mangal,</td>
<td>2008</td>
</tr>
<tr>
<td>4</td>
<td>SOCIO-ECONOMIC STATUS SCALE</td>
<td>Prof. Ashok K. Kalia, and Dr. Sudhir Sahu,</td>
<td>2012</td>
</tr>
</tbody>
</table>
• DESCRIPTION OF THE TOOLS

The description of the tools used in the study are as follows:

3.10.1 GENERAL WELL-BEING MEASURE:

This tool was developed by Dr. Santosh K. Verma and Ms. Anita Verma in 2009 for measuring the general well-being as quality of life under a mental health status appraisal etc. Well-being may be defined as the subjective feeling of contentment, happiness, satisfaction with life’s experiences and of one’s role in the world of work, sense of achievement, utility, belongingness, and no distress, dissatisfaction or worry etc.

• INSTRUCTIONS

How do you feel these days (past or month)? Kindly tick (✓) the items applicable to you.

• SCORING

Numbers of ticks are counted and constitute the well-being score of the particular individual at that time.
• ADMINISTRATION

This can be self-administrated or, can be given orally also, after establishing rapport with the subject, and ensuring privacy (free from distractions of any kind) although the nature of items are such as are not likely to cause any embarrassment to the subject in the presence of others. Observations of any unusual nature, restlessness, physical discomfort due to any reason, being in a hurry, following a significant event in recent past like death in the family, accident, examination/interview, fatigue, disinterest, etc. need to be taken note of and considered while interpreting test results, on the usual lines of a clinical interview.

The administration and scoring takes hardly 5-6 minutes per subject.

• RELIABILITY

It was measured by K.R. 20-formula and was found to be .98 (p<.01) (S.K. Verma, Dube and Gupta 1983), while test-retest reliability was .91 (p<.01) (Moudgil et al. 1986) for the English version and .86 (p<.01) for the Hindi version (Moudgil et al. 1986).

• VALIDITY

The test was correlated with a number of the tests in different studies. The scale showed relative independence of other variables as expected but showed significant relations with another Well-being scale, with quality of life scale, and to some extent with learned helplessness, the last one is rather surprising and requires more work. Perhaps the learned helplessness scale, used here, is not well standardized on Indian population and this scale has recently raised some controversies regarding its scoring procedure (Amrita Verma, Mahajan and S.K. Verma 1988; Verma 1988).
3.10.2. MENTAL HEALTH BATTERY:

This battery was developed by Prof. Arun Kumar Singh and Alpna Sen Gupta in 2008 for measuring mental health towards the understanding and assessment of self, pressure, adjustment, thinking etc. Mental health as defined by Kornhauser (1965) connotates those behaviours, perceptions and feelings that determine a person’s overall level of personal effectiveness, success, happiness and excellence of functioning as a person. It depends on the development and retention of goals that are neither too high nor too low to permit realistic successful maintenance of belief in one’s self as a worthy, effective human-being (Lakshminarayanan & Prabhakaran, 1993). So a mentally healthy person is firm in his intentions and is least disturbed by strains and stresses on day-to-day life.

Thus the concept of mental health takes a ‘Gestalt’ view of the individual. It incorporates the concepts of personality characteristics and behavior all in one. It may also be understood as the behavioral characteristic of the person. A mental health shows a homogeneous organization of desirable attitudes, healthy values and righteous self-concept and a scientific perception of the world as a whole. Several psychologists like Erickson (1936), Rogers (1969), Hurlock (1972) have expressed their view in a similar tone. A mentally sound or healthy person should also be understood as a dynamic and conscientious person who is found to be reasonably rational in the choice of means for the realization of his or her pious ends (Anand, 1988). So mental health is an attitudinal concept toward ourselves and others (Lehner & Kubs, 1962). It also presents a humanistic approach towards the understanding and assessment of the self, positive feeling, attitudes towards self and others.
After reviewing the literature in this field (Jahoda, 1959; Maslow & Mittlernan 1951; Rogers, 1961; Whittaker, 1970), following six popular indices of mental health were finally selected for inclusion in the present battery:

- Emotional Stability
- Over-all Adjustment
- Autonomy
- Security-Insecurity
- Self-concept
- Intelligence

A brief description of each of these indices as under:

(i) EMOTIONAL STABILITY

It refers to experiencing subjective stable feelings which have positive or negative values for the individual.

(ii) OVERALL ADJUSTMENT

It refers to individual’s achieving an overall harmonious balance between the demands of various aspect of environment, such as home, health, social, emotional and school on the one hand and cognition on the other.

(iii) AUTONOMY

It refers to a stage of independence and self-determination in thinking.

(iv) SECURITY-INSECURITY
It refers to a high (or low) sense of safety, confidence, freedom from fear, apprehension or anxiety particularly with respect to fulfilling the person's present of future needs.

**(v) SELF-CONCEPT**

It refers to the sum total of the person's attitudes and knowledge towards himself and evaluation of his achievements.

**(vi) INTELLIGENCE**

It refers to general mental ability which helps the person in thinking rationally, and in behaving purposefully in his environment.

• INSTRUCTIONS

The following standard steps must be followed for smooth administration of MHB:

I. Instructions for each part are separate and printed just before the items for the concerned part starts. The examinees should read the instruction carefully and if there is any confusion, they should ask to clarify it by raising their hands. The examiner should attend to such examinee very carefully.

II. There is no fixed time limit for the first five parts. However, generally a normal examinee having average mental health takes about 25 minutes in giving complete answers.

III. Part VI is a speed test. The total allotted time for this part is 10 minutes. Therefore, all examinees must start answering the items and stop at the time instructed by the examiner. They are required to work as fast as possible.
- **SCORING**
  Scoring was done with the help of manual.

- **RELIABILITY**
  Both temporal stability reliability and internal consistency reliability of MHB were computed. The details are given in Table 3.2.

  **Table 3.2 Reliability Coefficient of MHB**

<table>
<thead>
<tr>
<th>Part</th>
<th>Area</th>
<th>Mean Age</th>
<th>N</th>
<th>Test-retest Reliability</th>
<th>Odd-even Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I.</td>
<td>Emotional Stability</td>
<td>15.6</td>
<td>102</td>
<td>Rtt = .876</td>
<td>Rtt = .725</td>
</tr>
<tr>
<td>II.</td>
<td>Over-all Adjustment</td>
<td>Yrs.</td>
<td></td>
<td>Rtt = .821</td>
<td>Rtt = .871</td>
</tr>
<tr>
<td>III.</td>
<td>Autonomy</td>
<td></td>
<td></td>
<td>Rtt = .767</td>
<td>Rtt = .812</td>
</tr>
<tr>
<td>IV.</td>
<td>Security-Insecurity</td>
<td></td>
<td></td>
<td>Rtt = .826</td>
<td>Rtt = .829</td>
</tr>
<tr>
<td>V.</td>
<td>Self-concept</td>
<td></td>
<td></td>
<td>Rtt = .786</td>
<td>Rtt = .861</td>
</tr>
<tr>
<td>VI.</td>
<td>Intelligence</td>
<td></td>
<td></td>
<td>Rtt = .823</td>
<td>Rtt = .792</td>
</tr>
</tbody>
</table>

  **Note**: All correlation values were significant (P< .01).
• VALIDITY

MHB was validated against the different tests developed earlier. Part I of MHB was validated against Emotional Stability Test earlier by Sen Gupta & Singh (1985). Part II was validated against High School Adjustment Inventory (HSAI) developed earlier by Singh and Sen Gupta (1987) and Hindi adaptation of Bell’s Adjustment Inventory by Mohsin, Shamshad and Jehan (1967). For part III and Part V constructed validity was computed. Part IV was validated against Neuroticism Scale of MPI as adapted by Jalota & Kapoor (1957). Likewise, part VI was validated against Jalota Group General Mental Ability Test (1976). Only relevant parts of MHB with suitable criteria were given to the random sample of 102. The standard instructions of the test and the criteria were followed. The details are given in Table 3.3.

Table 3.3

Validity Coefficients of MHB

<table>
<thead>
<tr>
<th>Parts of MHB</th>
<th>N</th>
<th>Concurrent Validity</th>
<th>Parts of MHB</th>
<th>N</th>
<th>Construct Validity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part I : ES</td>
<td>.673*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
3.10.3. TEACHER'S EMOTIONAL INTELLIGENCE INVENTORY

The inventory was developed by Dr. (Mrs.) Subhra Mangal in 2008 for measuring the Emotional Intelligence of teachers. The concept of Emotional Intelligence is an extension of the concept of social intelligence as proposed by Howard Gardner in his theory of multiple intelligence. Emotional Intelligence is a way of characterizing skills and abilities that help us to recognize emotions in ourselves and others, understand them and use language to communicate them; harness the power of emotion as a tool in cognitive activities like problem-solving, reasoning and creativity; and manage emotions both in ourselves and in other people. In short, the four major domains governed by EI can be summarized as-

- Understanding emotions of self;
- Managing emotions of self;
- Understanding emotions of others;
- Managing emotions of others.

A teacher is a mechanism to bring about a positive social and behavioural change in the student by presenting before him a model behavior and emotional intelligence in his day to day teaching and dealing with the students. The teacher can be the most
powerful force in modelling and emotionally intelligent behavior and teaching how to control anger, resolve conflicts and motivate students. In an era of tremendous work load and severe competition, a teacher needs to profess and act in an emotionally intelligent manner so that the students in turn can imbibe these positive characteristics and can turn out to be productive and dutiful citizens of the nation.

Along with the design and execution of an intelligent curriculum, its effective implementation requires an emotionally intelligent teacher who can sense the slightest changes in the class-room and can manoeuvre the teaching strategies accordingly. An emotionally intelligent teacher is the heart and soul of a successful educational programme. Thus, in order to identify and develop such characteristics in our teachers, we need to assess the emotional intelligence of teacher.

A psychological test is an objective, organized and statistically refined instrument or method to measure some specific skill, behavior or set of characteristics under standardized conditions. The construction and standardization of such a test is largely a creative undertaking which is constructed in accordance with definite principles. The various factors underlying the EQ of teachers were identified and related literature in the field of measurement devices for the assessment of emotional intelligence was studied. In fact, to date no special effort has been made to devise a tool for the assessment of emotional intelligence of teachers. It was felt that the teacher’s emotional intelligence is not the same thing as the emotional intelligence of any general adult or any other professional. The job front of teachers involves multiple interactions and all together different ideals and motives. Teaching profession requires interacting with people, working in terms or having informal relationships. It is a known fact that jobs that put us in contact with other people, and involve working in informal teams, or require us to empathize with the understand
others require a high level of emotional competence. Teaching is a similar kind of job where the interactions are informal and multi-dimensional, as mentioned below.

- Interaction with pupils,
- Interaction with parents,
- Interaction with peer group,
- Interaction with authorities,
- Interaction with community.

Such professions may be satisfying only when one has a prerequisite level of emotional intelligence. In contrast, jobs which can be done individually in structured or fixed ways may not require a great deal of emotional intelligence. This implies that more the interactions on the job front, greater is the requirement for EQ and the underlying emotional competencies.

Therefore, an attempt has been made to construct a measure that would refer to all aspects of a teacher as a person and the various teaching situations encountered by him/her.

**ADMINISTRATION OF THE INVENTORY**

While administering the inventory, the following things should be kept under consideration:

(i) It is a self-administrating inventory, this the cooperation of the respondents on whom it is to be administered is quite essential.

(ii) Therefore, the administrator should try to win over their confidence.
(ii) The items of the inventory are available both in Hindi and English. Therefore it can be used for both the population of Hindi and English speaking teachers.

(iv) The administrator as well as the respondent should read the instructions given on the front page of the inventory booklet, carefully.

(v) The administrator as well as the respondent should get themselves acquainted with the uses and purposes of this inventory.

(vi) As this is not a cognitive test, no response is right or wrong. The respondent should be advised to give the true response to the item pertaining to the situation described in the item which shows 'what he/she really is' and not 'what he/she wants to be'. This would give a true picture of the EQ competency being measured.

(vii) Although no time limit is prescribed for the test, it should be clearly instructed that not much time should be spent on each item and the first spontaneous response that comes to the mind of the respondent is the true response.

(viii) This inventory is a self-report scale of emotional intelligence and is based on teachers' endorsement of descriptive statements about themselves and their handling of different situations. Thus, if a person's self-concept is accurate, and the person is honest and true, then self-report data serves as an accurate measure.

(ix) However, if the respondent does not report truly and accurately, then it will not give a true picture of his/her own strengths and weaknesses. This fact should be clearly explained to the respondents.

(x) The instructions and mode of response mentioned in the inventory should be clearly explained to the respondents.

- Scoring of the inventory
The terms in the inventory are either in nature of positive statements or the negative statements. The system of scoring the positive and negative natured items in the inventory was done according to the manual.

- **Reliability**

Reliability of the inventory was established through two methods:

(a) Test- Retest Method

(b) Split-Half Method

The results arrived by these tests are summarized as under:

**TABLE 3.4**

Reliability Coefficients of the Teachers’ El Inventory

<table>
<thead>
<tr>
<th>Method Used</th>
<th>Test-Retest Method (N=150)</th>
<th>Split-Half Method (N=200)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability Coefficients</td>
<td>0.96</td>
<td>0.95</td>
</tr>
</tbody>
</table>

- **Validity:**

To assess the accuracy of the tool, three types of validity measures were obtained:

(a) Content Validity

(b) Construct Validity

(c) Criterion Related Validity
For content validity, which is a non-statistical type of validity, the opinion of the eight judges was taken on the suitability of the contents of the inventory.

For the construct validity, the factor loadings of the four factors for each of the 28 variables were taken into account as these were nothing but the values of the correction coefficient of the variables with each of the four factors.

For criterion related validity, correlation of the tEQi scores with an external criterion was to be obtained. Here we made use to the two different external criteria namely:

1. Mangal’s Teacher Adjustment Inventory (MTAI)
2. Ratings of Teachers by their Headmasters. The results obtained are summarized as under:

**TABLE 3.5**

Validity Coefficients of the Teachers’ El Inventory

<table>
<thead>
<tr>
<th>Measures Used</th>
<th>Mangal’s Teacher Adjustment Inventory MTAI (Short Form) (N =200)</th>
<th>Ratings of Teachers by their Headmasters (N=500)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validity Coefficients</td>
<td>0.55</td>
<td>0.65</td>
</tr>
</tbody>
</table>
3.10.4 SOCIO-ECONOMIC STATUS SCALE (SES)

SES Scale is designed to measure social position of a person in Urban and Rural areas according to the lifestyle prevailing in both the regions by Prof. Ashok K. Kalia and Dr. Sudhir Sahu in 2012. Socio-economic status of a person in this scale refers to the “status of his/her family in relation to their level of socio-cultural participation, ability to influence mass, level of education, kind of occupation, financial position, health-well-being, lifestyle, level of aspiration, kind of gadgets, services and leisure facilities that the family enjoys.”

- ITEMS AND COMPONENTS OF SOCIO-ECONOMIC STATUS SCALE

The scale comprised of 40 statements in all based on five different dimensions of socio-economic parameters. Distribution of items and components of SES Scale is given below:

**TABLE 3.6**

<table>
<thead>
<tr>
<th>Part</th>
<th>Dimensions of SES Scale</th>
<th>Items</th>
<th>Total Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part-I</td>
<td>Socio-Cultural Component</td>
<td>1 to 15 (+ information on Caste)</td>
<td>15+1</td>
</tr>
<tr>
<td>Part-II</td>
<td>Economic Component</td>
<td>16 to 20</td>
<td>05</td>
</tr>
<tr>
<td>Part-III</td>
<td>Possession of Goods and Services</td>
<td>21 to 30</td>
<td>10</td>
</tr>
<tr>
<td>Part-IV</td>
<td>Health Component</td>
<td>31 to 35</td>
<td>05</td>
</tr>
<tr>
<td>Part-V</td>
<td>Educational Component</td>
<td>36 to 40 (+information on Stream)</td>
<td>05+1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>40+2=42</td>
</tr>
</tbody>
</table>
• RELIABILITY OF SOCIO-ECONOMIC STATUS SCALE

Reliability of the scale has been measured by Split-half and test-retest method.

Results given below indicate that the scale is highly reliable.

TABLE 3.7

<table>
<thead>
<tr>
<th>ENGLISH VERSION</th>
<th>HINDI VERSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Split-half Method</td>
<td>Test-retest Method</td>
</tr>
<tr>
<td>.68</td>
<td>.86</td>
</tr>
</tbody>
</table>

• VALIDITY OF SOCIO-ECONOMIC STATUS SCALE

All the 40 items of socio-economic-status has been evaluated by the various experts. The investigator has established content validity while preparing the preliminary draft of SES. Expert opinion of teacher educators and language specialists with regard to relevance of each item was sought. For this, a copy of the final draft of SES was given to nine experts who have been directly or indirectly involved in research. The expert opinion came out to be favourable in terms of the relevance of each item in the scale. This scale has already been used in various research work at Post-Graduate, M.Phil and Ph.D. level in MaharshiDayanand University, Rohtak and its affiliated institutions and proved as most appropriate and useful for determining SES. The criterion validity was measured by correlating it with Socio-Economic-Status Scale by Prof. Rajbir Singh, Dr. RadheyShyam and Dr. S. Kumar (2006) and it came out to be 0.85 which is highly significant.
• LIMITATIONS OF THE SCALE
This scale is not suitable for small children (below 8 years) who do not possess adequate knowledge of their family and family members. It is a verbal test and only literate persons are able to respond. In case of illiterate respondent, it may disturb privacy as another person is required to fill information on behalf of illiterate respondent in the answer sheet.

3.11 PROCEDURE OF DATA COLLECTION:
Data was collected personally by the investigator. A sample of 500 Teacher Educators (250 male, 250 Female) was drawn from 175 colleges of education of Haryana state. The above sample was sub divided on the basis of their marital status. The sample is drawn from the 175 colleges of Education of Haryana State.

After selecting the sample and grouping them, it was planned to administer the tools described in Table 3.1 to all of them. To ensure the best possible conditions for administering the scales, the principals of the institutions from where the sample was drawn, were approached for seeking permission to collect the desired data with the help of teacher educators. After that the investigator met personally to the teacher educators and acquainted them about the objectives of the study and urged them to answer the question truthfully and without any hesitation and pressure. They were assured that this data will be used only for research purpose and the record will be kept confidential. Then the investigator administered the tests.

3.12 STATISTICAL TECHNIQUES USED:
In the present study for the analysis and interpretation of collected data Mean and Standard Deviation were applied. The ‘t’ test was computed to find the difference
between means of well-being scores of teacher educators in relation to mental health, emotional intelligence and socio-economic status.