CHAPTER – III

METHODOLOGY

This chapter presents the details of the research methodology employed for the investigation, which includes the details of the objectives of the study, hypotheses to be tested, design of the study, selection of sample, details of measuring instruments used, procedure for data collection and the statistical techniques employed for analysis of the data.

3.1 STATEMENT OF THE PROBLEM

The present study is aimed at assessing the level of women empowerment among women teachers at primary, secondary and tertiary level education, and also to study the relationship among the variables - Women Empowerment, Personality Factors and Self-Concept. Further it is attempted to prepare profiles of some empowered women teachers from the sample selected for the study.

The study is entitled as, “Empowerment of Women Teachers in Relation to their Personality Factors and Self-Concept”.

3.1.1 Objectives of the Study

1. To assess and compare the level of Women Empowerment among women teachers of primary, secondary and tertiary level education.

2. To assess and compare the Personality Factors among women teachers of primary, secondary and tertiary level education.

3. To assess and compare level of Self-Concept among women teachers of primary, secondary and tertiary level education.
4. To study the difference between rural and urban women teachers in total sample and of primary, secondary and tertiary level education in their level of Women Empowerment.

5. To study the difference between rural and urban women teachers in total sample and of primary, secondary and tertiary level education in their Personality Factors.

6. To study the difference between rural and urban women teachers in total sample and of primary, secondary and tertiary level education in their Self-Concept.

7. To study the difference among women teachers with different levels of Women Empowerment in total sample and of primary, secondary and tertiary level education in their Personality Factors.

8. To study the difference among women teachers with different levels of Women Empowerment in total sample and of primary, secondary and tertiary level education in their Self-Concept.

9. To prepare profile of empowered women teachers and analyse them.

3.1.2 Research Hypotheses

1. Women teachers of primary, secondary and tertiary level education do not differ in their level of Women Empowerment.

2. Women teachers of primary, secondary and tertiary level education do not differ in their Personality Factors.

3. Women teachers of primary, secondary and tertiary level education do not differ in their Self-Concept.

4. Rural and urban women teachers in total sample do not differ in their level of Women Empowerment.

5. Rural and urban women teachers of primary, secondary and tertiary level education do not differ in their level of Women Empowerment.
6. Rural and urban women teachers in total sample do not differ in their Personality Factors.

7. Rural and urban women teachers of primary, secondary and tertiary level education do not differ in their Personality Factors.

8. Rural and urban women teachers in total sample do not differ in their Self-Concept.

9. Rural and urban women teachers of primary, secondary and tertiary level education do not differ in their Self-Concept.

10. Women teachers with different levels of Women Empowerment in total sample do not differ in their Personality Factors.

11. Women teachers with different levels of Women Empowerment of primary, secondary and tertiary level education do not differ in their Personality Factors.

12. Women teachers with different levels of Women Empowerment in total sample do not differ in their Self-Concept.

13. Women teachers with different levels of Women Empowerment of primary, secondary and tertiary level education do not differ in their Self-Concept.

### 3.1.3 Null Hypotheses

1. There is no significant difference among women teachers of primary, secondary and tertiary level education in their level of Women Empowerment.

2. There is no significant difference among women teachers of primary, secondary and tertiary level education in their Personality Factors.

3. There is no significant difference among women teachers of primary, secondary and tertiary level education in their Self-Concept.

4. There is no significant difference between rural and urban women teachers in total sample in their level of Women Empowerment.
5. There is no significant difference between rural and urban women teachers of primary, secondary and tertiary level education in their level of women empowerment.

6. There is no significant difference between rural and urban women teachers in total sample in their Personality Factor.

7. There is no significant difference between rural and urban women teachers of primary, secondary and tertiary level education in their Personality Factors.

8. There is no significant difference between rural and urban women teachers of primary, secondary and tertiary level education in their Self-Concept.

9. There is no significant difference between rural and urban women teachers of primary, secondary and tertiary level education in their Self-Concept.

10. There is no significant difference among women teachers with different levels of Women Empowerment in total sample in their Personality Factors.

11. There is no significant difference among women teachers with different levels of Women Empowerment of primary, secondary and tertiary level education in their Personality Factors.

12. There is no significant difference among women teachers with different levels of Women Empowerment in total sample in their Self-Concept.

13. There is no significant difference among women teachers with different levels of Women Empowerment of primary, secondary and tertiary level education in their Self-Concept.
3.1.4 Variables Considered for the Study

a. Criterion/Main Variables

(a) Women Empowerment

(b) Personality Factors

(c) Self-Concept

In case of objectives no. 7 and 8, and hypotheses no. 10 to 13 level of Women Empowerment is considered as a background variable.

b. Background Variables

- **Stages of education:** Primary, Secondary and Tertiary Levels
  
  o Primary school – Standard 1 to 7
  
  o Secondary school – Standard 8 to 10
  
  o Tertiary level – Degree level education

- **Locality:** Rural and Urban

- **Level of Women Empowerment:** Above Average, Average and Below Average

3.1.5 Operational Definition of Key Terms

a. Women Empowerment

In this study, women empowerment is considered as an active, multidimensional process which enables women to realize their full identity and power in all sphere of life, develop intelligence to support other women and work diligently towards strengthening women in their efforts to survive or gain equality. It includes the following indicators.

1) Self reliance, self respect and dignity of women

2) Decision making ability

3) Acceptance of small family norms

4) Better care of health for herself and children
5) Better conscious of their rights
6) Gender equity awareness
7) Women participation and involvement in job performance
8) Higher literacy and education

Level of Women Empowerment is determined based on the total score obtained on the Women Empowerment Scale development by the investigator.

b. Personality Factors

The personality is that which permits predictions of what a person will do in given situation.

According to Cattell, the personality consists of 16 primary or source traits or Factors – A, B, C, E, F, G, H, I, G, H, I, L, M, N, O, Q1, Q2, Q3 and Q4. Each personality trait is defined by bipolar qualities which constitute two extremes (low end and high end). Further, 8 second order characteristics again with bipolar description are derived from primary factors.

In the present study only first 4 out of 8 second stratum factors, whose components are very much appropriate and suitable to the main variable ie Women Empowerment have been considered. They are F-I, F-II, F-III, F-IV, the bipolar description of which is given in the following table.
**Table 1: Details of Bipolar descriptions of the second order dimensions of personality as measured by 16 PF**

<table>
<thead>
<tr>
<th>Low Score Direction</th>
<th>High Score Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Factor – I C-, H-, L+, O+, Q3-, Q4+</strong></td>
<td><strong>Adjustment (Low Anxiety) V/s High Anxiety</strong></td>
</tr>
<tr>
<td>The person who scores low on these factors tends to be one whose life is generally satisfying and one who is able to achieve those things that seem to him to be important. However, an extremely low score mean lack of motivation for difficult task.</td>
<td>The person who scores high on this factor is high on anxiety as it is commonly understood. He need not to be neurotic, since anxiety could be situational but it is probable that he has some maladjustment, i.e. he is dissatisfied with the degree to which no is able to meet the demands of life and to achieve what he desires. Very high anxiety is generally disruptive of performance and productive physical disturbance.</td>
</tr>
</tbody>
</table>

| **Factor – II Q1– A+, E+, F+, H+, Q2-** | **Introversion V/s Extraversion** |
| The person who scores low on factor life tends to be shy, self sufficient and inhibited in interpersonal contact. | The person who scores high on this factor is a socially outgoing uninhibited person good at making and maintaining interpersonal contacts. |

| **Factor – III A-, I-, M-, (E+, L+)^+** | **Pathemia (Tender minded) V/s Cortertia (Alert poise)** |
| The pathemic pole as the name indicates, operate at a mood level, namely of frustration and depression. Low scoring individuals show a tendency to feel rather than think | The ratings of which go with cortertia are those of cheerfulness, objective level. High scoring of individuals show tendency to high premsia and high autism |

| **Factor – IV E+, L+, M+, Q1+, Q2** | **Subduedness V/s Independence** |
| The person who scores low on factor IV is a group dependent, chastened, passive personality. He is likely to depend and need support from others. | The person who scores high on factor IV is a person who is independent, radical, autistic, projective, and a law to himself |
c. Self Concept

Self concept means individual’s evaluation about himself or herself. Self-concept is dominant element in the personality pattern and it governs the individual’s reaction to people and situation. It is multidimensional construct that refers to an individual’s portion of self relation to any number of characters.

In the present study, the level of Self Concept of women teachers is represented by the total scores obtained by women teachers on Self Concept inventory standardized by Dr. Beena Shah, according to whom Self Concept consists of the following ten dimensions.

1. Social Self-Concept
2. Emotional Self-Concept
3. Physical Self-Concept
4. Cognitive Self-Concept
5. Aesthetic Self-Concept
6. Political Self-Concept
7. Job related Self-Concept
8. Self-Confidence Self-Concept
9. Self-Concept related to Belief and Tradition
10. Self-Concept related to Personality Traits

d. Locality of Schools – Area in which a school exists

Rural schools: The area consisting of a population of 10,000 or less is considered as rural area and the schools in these areas from are considered as rural schools. Teachers from these rural schools are considered as rural teachers.

Urban schools: The area consisting of a population of 50,000 and more is considered as urban area and the schools in these areas are considered as urban schools. Teachers from these urban schools are considered as urban teachers.
e. Stages of Education – represents three levels of education

Primary level of education: Education from standard 1st to 7th
Secondary level of education: Education from standard 8th to 10th
Tertiary level of education: Degree level education

f. Levels of Women Empowerment:

Levels of Women Empowerment consisted of 3 levels – Above Average, Average, Below Average. These 3 levels have been defined using a common criteria below.

Above Average – If the score obtained is above M +σ of the distribution

Average – If the score obtained between M-σ and M+σ of the distribution.

Below Average – If the score obtained below M -σ of the distribution of the scores on Women Empowerment Scale.

3.2 METHODOLOGY

3.2.1 Design of the Study

The present study is descriptive-cum-analytical study involving survey method. In the present study, the data is collected using different tools to assess the Level of Women Empowerment, Personality Factors and Self Concept of women teachers at different levels of education – primary, secondary and tertiary, and also to find out the relationship among these variables.

3.2.2 Sampling Details

Selection of the samples for study was done at three stages.

a. Selection of Taluks

b. Selection of Schools and Colleges

c. Selection of women teachers
a. Selection of Taluks

(i) Population: All the eight taluks in Hassan district i.e. Arasikere, Sakaleshpura, Arakalagudu, Channarayapatna, Hassan, Belur, Holenarasipura, and Alur constituted the population of the study.

(ii) Sample: out of these eight taluks only five taluks, i.e. Arasikere, Sakaleshpur, Arakalagudu, Channarayapatna and Hassan were selected as sample for the study. These taluks were selected considering the direction as the base. Keeping Hassan taluk as the centre place, four other taluks – Arasikere from north, Alur from south, Arakalagudu from east and Channarayapatna from west were selected randomly.

b. Selection of Schools and Colleges

(i) Population: All the primary schools (1228), secondary schools (415) and degree colleges - tertiary institutions (272) in the selected five taluks constituted the population for the study.

(ii) Sample: About 5% of total schools and colleges were selected using random sampling technique and giving representation to urban and rural schools. This sample consisted of 97 institutions of which 62 are primary schools, 21 are secondary schools and 14 are colleges.

c. Selection of Women Teachers

(i) Population: All the women teachers working in the selected primary and secondary schools and degree colleges constituted the population for the study.

(ii) Sample: From the above said population, 250 primary teachers, 200 secondary teachers and 100 college teachers were selected randomly. Thus the total sample consisted of 550 women teachers selected from both urban and rural schools.

The investigator could not get back filled in tools from 40 women teachers and found 10 incomplete tools. All 50 are from primary schools. Thus the total sample
consisted of 500 women teachers from 5 taluks with 100 teachers in each taluks and from different levels of education – primary (200), secondary (200) and tertiary (100), the details of which are given in the following table.

**Table 2: Details of the sample of teachers for the study**

<table>
<thead>
<tr>
<th>Taluks</th>
<th>Primary Rural</th>
<th>Primary Urban</th>
<th>Primary Total</th>
<th>Secondary Rural</th>
<th>Secondary Urban</th>
<th>Secondary Total</th>
<th>Tertiary Rural</th>
<th>Tertiary Urban</th>
<th>Tertiary Total</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alur</td>
<td>36</td>
<td>08</td>
<td>44</td>
<td>24</td>
<td>12</td>
<td>36</td>
<td>12</td>
<td>08</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Arakalagudu</td>
<td>40</td>
<td>10</td>
<td>50</td>
<td>10</td>
<td>20</td>
<td>30</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Arasikere</td>
<td>40</td>
<td>10</td>
<td>50</td>
<td>20</td>
<td>10</td>
<td>30</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>Channarayapatna</td>
<td>40</td>
<td>10</td>
<td>50</td>
<td>20</td>
<td>6</td>
<td>26</td>
<td>14</td>
<td>10</td>
<td>24</td>
<td>100</td>
</tr>
<tr>
<td>Hassan</td>
<td>40</td>
<td>10</td>
<td>50</td>
<td>15</td>
<td>15</td>
<td>30</td>
<td>10</td>
<td>10</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>196</td>
<td>48</td>
<td>244</td>
<td>89</td>
<td>63</td>
<td>152</td>
<td>56</td>
<td>48</td>
<td>104</td>
<td>500</td>
</tr>
</tbody>
</table>

**3.2.3 Measuring Tools Used for Data Collection**

The following tools were used for data collection in the present study.

**Table 3: Measuring tools used for data collection in the present study**

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Variables to be measured</th>
<th>Tools used</th>
<th>Remarks</th>
</tr>
</thead>
</table>
3.2.3.1 Women Empowerment Scale

The Women Empowerment Scale was prepared by the investigator and the details are given under the following headings.

(i) Deciding the indicators of Women Empowerment

(ii) Construction and Validation of Items

(iii) Validity and reliability of the Scale

(i) Deciding the indicators of Women Empowerment

After going through the literature on Women Empowerment it is found that many researchers have defined it differently and identified different indicators of it. After Beijing Conference 1995, many experts Jejebhoy (2000), Malhotra, Anju, Schuler and Boender C. (2002), Sowmya (2012) have considered many indicators based on that Beijing conference for these studies on women empowerment.

After analyzing all these factors, which are overlapping each other the indicators considered in Sowmya’s study were found relevant to teachers and tangible, and hence all the eight of them were selected for the present study also. They are as follows.

1. Self reliance, self respect and dignity of women
2. Decision making ability
3. Acceptance of small family norms
4. Better care of health for herself and children
5. Better conscious of their rights
6. Gender equity awareness
7. Women participation and involvement in job performance
8. Higher literacy and education
Then the list of indicators selected by investigator was given to five subject experts to get their opinion regarding appropriateness and tangibility of indicators. All of them reported that they are relevant and tangible and as such above said eight indicators were finally considered, the explanation for which is given under the operational definition of key terms (3.1.5 supra).

(ii) Construction and Validation of Items for the Scale

About 10-12 items under each indicators (totally 90) in the form of statement (both positive and negative) were constructed by the investigator. The response for each item is to be given at 3-levels – Agree, Undecided and Disagree. The statements were prepared by considering review of related literature on Women Empowerment and a few questionnaires/scales on Women Empowerment by different people in addition to the discussion with a few subject experts in the field. Then the items were scrutinized by the investigator in consultation with two more experts and were revised or deleted after a thorough discussion with the guide to see that the statement are clear, relevant and representative of the respective indicator of women empowerment and appropriate to the level of members to whom it was meant for. Totally 60 items were considered and the draft of Women Empowerment Scale was prepared.

The draft scale with 60 items was administered to a sample of 50 women teachers randomly selected from five different institutions from two taluks, i.e. Hassan and Belur. Time taken to complete the scale by majority of teachers was also noted down. Based on the performance of teachers on the draft scale and discussion with them after the session, certain items were revised restructured; then ‘t’ value for all the 56 items was calculated and then the items were selected considering the ‘t’ values of each item and the final form of the scale with 50 items was prepared in consultation with the guide (Appendix I).
The final form of Women Empowerment Scale prepared by the investigator consisted of 50 statements (positive and negative) spread over eight indicators. The details are given in the following table.

**Table 4: Details of the items on Women Empowerment Scale**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Positive</th>
<th>Negative</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-reliance, self-respect and dignity of women</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>2. Decision making ability</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>3. Acceptance of a small family norm</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>4. Better care of health for herself and her children</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>5. Better conscious of their rights</td>
<td>4</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>6. Gender equity awareness</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>7. Women participation and involvement in job performance</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>8. Higher literacy and education</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>20</td>
<td>50</td>
</tr>
</tbody>
</table>

Each item has three alternative responses – Agree, Undecided and Disagree. The subjects are expected to read each statement and indicate their responses by putting ‘✓’ mark in the appropriate column. There is no ‘right’ or ‘wrong’ response.

**Scoring:** In case of positive statements, responses of Agree, Undecided and Disagree are given a weightage of 3, 2 and 1 respectively. In case of negative statements, the same responses are given a weightage in the reverse order, i.e. 1, 2 and 3 respectively.
This being a summated scale the total maximum score on the scale one would get will be 150 (50 x 3) and minimum score will be 50 (50x1).

(iii) Validity and Reliability of the Scale

The content validity of the scale is ensured as the items were validated at different stages of construction of statements. The items were scrutinised and revised through the discussion of item with subject experts, guide and experienced teacher educators, and a pilot study on a sample of 50 teachers. Chronbach alpha reliability coefficient was calculated and it was found to be 0.8986 and indicates higher level of reliability.

(iv) Kannada Version of the Scale

As the sample of the study consisted of some teachers from Kannada medium, the scale was translated into Kannada version by the investigator with the help of the guide.

The translation was reviewed by two more persons well versed both in English and Kannada languages. As such the validity for Kannada version is also ensured. Chronbach reliability was calculated and found to be 0.8254 which ensured reliability for Kannada version of the scale (Appendix II).

3.2.3.2 Sixteen Personality Factor Questionnaire

The 16PF questionnaire form A developed originally in English by R.B. Cattell was translated by Sudhakar James and K. Yeshodhara into the regional language, i.e. Kannada and both the versions English and Kannada have been used in this study (Appendices III and IV).

This questionnaire consisted of 187 items measuring sixteen distinct dimensions or traits of personality. These 16 dimensions of personality are designated as primary factors – A, B, C, E, F, G, H, I, L, M, N, O, Q1, Q2, Q3 and Q4. Each
dimension of personality is defined by bipolar qualities which constitute two extremes, of which one pole has a score at the low end of the steps (1, 2 and 3) and other pole at the high end of the steps (8, 9 and 10).

Further, the steps of 5 and 6 are considered average whereas 4 and 7 are considered as slightly deviant (respectively in a low and high directions). However, it cannot be assumed here that high scores are necessarily ‘good’ and low scores ‘bad’ because in personality each type of temperament usually has both its good and bad points. The description of bipolar qualities on each primary factor is given vide operational definition 3.1.5.

In addition to the 16 primary factors, the questionnaire can be used as a measure of four secondary dimensions (second order factors) which are broader traits, scorable from the component of primary factors. The four second order factors considered for this a study consisted of the following well known dimensions: (i)Introversion v/s Extraversion, (ii) Adjustment v/s Anxiety, (iii) Tender minded v/s Alterpoise or Pathemia v/s Cortertia, (iv) Subduedness v/s Independence.

Second order scores are not derived directly from raw scores but from the steps on the primaries. The primary scores are combined with weights to get the steps for the second order factors.
Table 5: The details of weights to get second-order sten scores from 16 PF primary stens

<table>
<thead>
<tr>
<th>FACTOR I: LOW VS. HIGH ANXIETY</th>
<th>FACTOR III: TENDER MINDED EMOTIONALITY VS. ALERT POISE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start out with constant</td>
<td>Start out with constant</td>
</tr>
<tr>
<td>Add 2 times sten on Factor L</td>
<td>Add 2 times sten on Factor C</td>
</tr>
<tr>
<td>Add 3 times sten on Factor O</td>
<td>Add 2 times sten on Factor E</td>
</tr>
<tr>
<td>Add 4 times sten on Factor Q4</td>
<td>Add 2 times sten on Factor F</td>
</tr>
<tr>
<td>Subtotal</td>
<td>Add 2 times sten on Factor N</td>
</tr>
<tr>
<td>Subtract 2 times sten on Factor C</td>
<td>Subtract 4 times sten on Factor A</td>
</tr>
<tr>
<td>Subtract 3 times sten on Factor H</td>
<td>Subtract 6 times sten on Factor I</td>
</tr>
<tr>
<td>Subtract 4 times sten on Factor Q3</td>
<td>Subtract 2 times sten on Factor M</td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>Divide total by 10 to give</td>
<td>Divide total by 10 to give</td>
</tr>
<tr>
<td>approximate sten score which</td>
<td>approximate sten score which</td>
</tr>
<tr>
<td>is higher as more Anxiety</td>
<td>is higher as more Alertly Poised</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FACTOR II: INTROVERSION VS. EXTRAVERSION</th>
<th>FACTOR IV: SUBDUEDNESS VS. INDEPENDENCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take 2 times sten on Factor A</td>
<td>Take 4 times sten on Factor E</td>
</tr>
<tr>
<td>Add 3 times sten on Factor E</td>
<td>Add 3 times sten on Factor M</td>
</tr>
<tr>
<td>Add 4 times sten on Factor F</td>
<td>Add 4 times sten on Factor Q1</td>
</tr>
<tr>
<td>Add 5 times sten on Factor H</td>
<td>Add 4 times sten on Factor Q2</td>
</tr>
<tr>
<td>Subtotal</td>
<td>Subtotal</td>
</tr>
<tr>
<td>Subtract 2 times sten on Factor Q2</td>
<td>Subtract 2 times sten on Factor A</td>
</tr>
<tr>
<td>Subtract constant, always 11</td>
<td>Subtract 2 times sten on Factor G</td>
</tr>
<tr>
<td>Total</td>
<td>Total</td>
</tr>
<tr>
<td>Divide total by 10 to give</td>
<td>Divide total by 10 to give</td>
</tr>
<tr>
<td>approximate sten score which</td>
<td>approximate sten score which</td>
</tr>
<tr>
<td>is higher as more Extraversion</td>
<td>is higher as more Independent</td>
</tr>
</tbody>
</table>

The bipolar description of these four second order personality factors is given in table 4 vide 3.1.5 supra.

In secondary source trait analysis and scoring which deserves comment is that of separation of “state” from “trait” which has been foreshadowed in discussing anxiety (F-II) above. Practically all personality source traits are subjected to some degree of fluctuation over time. It has further been shown that the primaries fluctuate together exactly in patterns that would be expected from their influence by secondary.
In this study we have used form ‘A’ developed originally in English by R.B. Cattell was translated by Sudhakar James and Dr. K. Yeshodhara to the regional language i.e. Kannada has been used in this study. (Appendix III)

Validity for Kannada version was ensured by the translators by getting the expert opinion that the meaning of the original version has been retained. Chronbach alpha reliability was established and it was found to be 0.85.

### 3.2.3.3 Self-Concept Inventory

The Self-Concept Inventory (adult form) developed by Dr. Beena Shah (1986) was used in the present study (Appendix IV) for collection of data on self concept.

This inventory is a self reporting one with 64 items and it was designed for adults (age group 21 to 50 years) of both the sexes (male and female) belonging to urban and rural areas.

The items in the inventory are spread over the following ten dimensions of self-concept.

1. Social Self-Concept
2. Emotional Self-Concept
3. Physical Self-Concept
4. Cognitive Self-Concept
5. Aesthetic Self-Concept
6. Political Self-Concept
7. Job related Self-Concept
8. Self-Confidence Self-Concept
9. Self-Concept related to Belief and Tradition
10. Self-Concept related to Personality Traits
Each item in the inventory represents adjectives related positively or negatively to the good self-concept indicating the feelings of an adult about a particular trait and demands response on a five-point scale – always, often, 50% occasion, seldom and never. Test takers are required to indicate their level of feeling by putting (✓) against appropriate levels of responses.

The distribution of items on 10-dimensions of self-concept are given in the following table.

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Dimensions of SCI</th>
<th>Item Sl.No.</th>
<th>Total Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SSC</td>
<td>P-4, 8, 18, 30, 38, 48 N-39</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>ESC</td>
<td>P-2, 12, 45 N-6, 15, 17, 21, 36, 41, 46, 52, 57, 59</td>
<td>13</td>
</tr>
<tr>
<td>3</td>
<td>PSC</td>
<td>P-42, 55, 63 N-29</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>CSC</td>
<td>P-3, 13, 32, 33 N-24, 27</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>ASC</td>
<td>P-7, 49, 64 N-51</td>
<td>4</td>
</tr>
<tr>
<td>6</td>
<td>PSC</td>
<td>P-10, 18, 19, 37, 43, 60 N-Nil</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>JRSC</td>
<td>P-1, 9, 22, 31, 44, 56, 61 N-40, 62</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>SC</td>
<td>P-14, 34, 35 N-5</td>
<td>4</td>
</tr>
<tr>
<td>9</td>
<td>SCRBT</td>
<td>P-28, 47 N-20, 36, 50, 53</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>SCRPT</td>
<td>P-11, 16, 23 N-25, 26</td>
<td>5</td>
</tr>
<tr>
<td>11</td>
<td>Composite Self-Concept</td>
<td>All P and N items</td>
<td>64</td>
</tr>
</tbody>
</table>

**Instructions for the test users**

1. There is no time limit for answering its items. Usually about 20 minutes are sufficient for responding to all the items.

2. It is a self reporting inventory. It can be administered individually or in groups.

The respondents should read and follow instruction printed on the cover page of test before giving their responses. Only one answer should be given for one item.
Scoring: The inventory can be scored by hand. For any adjective, positively associated with good self concept, a score of 4 for always, 3 for often, 2 for 50% occasion, 1 for some times and 0 for never is to be given. On the contrary, for those adjectives which are negatively associated with good self concept scoring is done in reverse order, i.e. 0, 1, 2, 3 and 4 respectively. On the same five points always, often, 50% occasions, sometimes and never. Thus, the total score one would get on this inventory ranges from 0 to 256 (64x4).

Reliability and Validity

Coefficients for all the 10 dimensions varied between 0.50 and 0.82 which are highly significant (far beyond 0.001 level of significance). This indicated that the inventory is highly reliable.

The coverage of the adjectives of SCI deals with almost each and every important domain of the self. The unanimous opinion of the experts regarding the selection of the dimensions as well as the relevance of the adjectives to these dimensions of the SCI has also been taken into consideration, which has ultimately ensured the content validity of this inventory.

Intrinsic validity

It is here taken in terms of the index of reliability. The high values of split-half reliability coefficients have itself verified the existence of a considerable degree of validity in this inventory of self concept.

Construct validity

To determine its construct validity, the inter correlations between the ten areas of Self-Concept Inventory were calculated. Correlation matrix is given in the manual.

The value of correlation of coefficients between the two areas of self as well as between composite self and individual dimensions were very high (far beyond
0.001 level of significance). This concludes that the validity of this self concept inventory is satisfactorily high.

**Kannada version of the scale**

As the sample of the study consisted of some teachers from Kannada medium. Scale was translated into Kannada version by the investigator with the help of guide.

The translation was reviewed by two more persons well versed both in English and Kannada languages. As such the validity for Kannada version is also ensured. Chronbach reliability was calculated and found to be 0.816 which ensured reliability for Kannada version of the scale (Appendix V).

**3.4 PROCEDURE FOLLOWED IN DATA COLLECTION**

The data required for the study was collected by administering the tools selected/prepared for the study. Women Empowerment Scale, Self-Concept Inventory and R.B. Cattell 16PF Questionnaire to the women teachers constituting the sample for the study. The tools were given to the teachers in each school with necessary instructions to answer them and clarifications were given to teachers wherever required. There was no time limit for answering this tool. However, they were requested to complete the task as early as possible and also to answer all the items in the tools. The answered tools were collected back from them after a gap of 2 to 3 days.

Responses were scored manually following the procedure given in the manual for respective tools i.e. in case of 16PF Questionnaire and Self-Concept inventory (SCI) and as per the details given Vide 3.3.1 in case of Women Empowerment Scale.

The data obtained on different variables of the study was tabulated and subjected to statistical analysis using appropriate techniques/tests.
3.5 STATISTICAL TECHNIQUES USED FOR DATA ANALYSES

To analyse the data collected, both descriptive and inferential statistical techniques were used, the details of which are given below.

1. Descriptive statistics i.e. Mean, SD and percentage analysis to report and compare the levels of Women Empowerment, Personality Factors and Self-Concept among women teachers of primary, secondary and tertiary level education.

2. One-way ANOVA and Dunken’s ‘t’ test to the hypothesis on the difference among women teachers of primary, secondary and tertiary level education with respect to Women Empowerment, Personality Factors and Self-Concept.

3. ‘t’ test of significance for difference between means to test the hypotheses on the difference between rural and urban teachers, regarding Women Empowerment, Personality Factors and Self Concept.

4. One-way ANOVA to test the hypothesis on the difference among women teachers with different levels of Women Empowerment with respect to Personality Factors and Self-Concept.

For this purpose SPSS package version 11.00 was used and the details are presented in next Chapter IV.