CHAPTER-III

METHODOLOGY
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3.1 Methodology: A Precept
Research is an intellectual and creative endeavor to discover, to develop and verify knowledge. It entails objectives and systematic effort to offer solutions to the problems and to formulate Policies and Programmes. Research is a scientific inquiry that is designed to collect, analyze and use data to understand, describe, predict or control an educational or psychological phenomenon or to empower individuals in such context. (Mertens, 2010).
Methodology of research is the description and rationale of the diverse phases of conducting a research. It details the varied sequential stages that are generally adopted by the researcher to inquire into the research problem along with the logic behind them. Thus the researcher should formulate the methodology best suited to the nature of the problem under study, research hypothesis, theoretical constructs and feasibility to evolve the most valid and reliable findings. In the present study the locale of the study, design of the study, procedure of the study, statement of the problem, objectives of the study, major hypotheses of the study, operational definitions, types of schools, population and samples of the study, tools used and statistical techniques employed are dealt with in detail.

3.2 Locale of the Study
The present study has been conducted at Maddur Taluk. Residential schools and Non residential schools were chosen. Residential schools chosen were of state board syllabus namely Kittur Rani Chennamma School which consists of girls, Mooraji Desai School which includes both girls and boys. Non Residential schools chosen are government, aided and unaided schools which includes both boys and girls and of state board syllabus.
3.3 Statement of the Problem

In the present study, Attitude towards Co-curricular activities, self concept and academic achievement was analyzed and compared among the students of Standard IX of Residential and Non Residential Schools of Maddur taluk. It dealt with correlation between Attitude towards Co-curricular activities, self concept and academic achievement and it is a comparative study.

Therefore the study was entitled as “Attitude towards co-curricular activities, self concept and academic achievement among students of standard IX in residential and Non-residential schools-A comparative study”

3.4 Operational Definitions

a) Attitude towards co-curricular activities (ATCA)

A learned penchant to react consisting in a given manner (either positively or negatively) to certain persons, objects or concepts. Attitudes have cognitive, affective and behavioral components. Co-curricular activities are an integral part of curriculum which provides educational activities to the students and thereby help in broadening their experiences. Co-curricular activities can be defined as the activities that enhance and enrich the regular curriculum during the normal school hours and after school hours.

Therefore Attitude towards co-curricular activities is a learned predisposition towards co-curricular activities.

In the present study, Attitude towards the Co-curricular Activities is represented by the scores obtained by the students of IX of both Residential and Non-Residential Schools on the tool developed and validated by the researcher.
b) Self-concept (SC)

Self concept is defined as system of attitudes towards one self. Just as a result of experiences, forms, attitudes which he organizes into a self consistent system and depends against threats and attacks, so the person also forms attitudes himself. Self concept consists of all perceptions, feelings, attitudes, aspirations and values of oneself concerning oneself.

In the present study, self concept is represented by the scores obtained by the students on the test developed Dr. Prathiba Deo’s (1998).

c) Academic Achievement (AA): According to Carter V. Good (1973), achievement means “accomplishment or proficiency or performance in a given skill or body of knowledge, helps in declaring the examinee successful or unsuccessful, choosing the students for various professional and academic courses and selecting the candidates for different jobs”.

From the above definition Academic achievement is considered as educational performance with respect to knowledge, understanding, application and skills in all the subjects as measured by the tests/exams conducted by the respective schools.

In the present study, it is represented by the marks scored by the students of standard IX in the first term examinations conducted by the residential and non residential schools.
d) **Residential schools and Non Residential schools.**

Residential school is one where students stay in the hostels and pursue their studies. They line in with fellow students. Residential schools provide food, lodging for specific fees.

In the present study, Mooraji Desai Residential School and Kittur Rani Chennamma schools comes under the purview of Maddur taluk, so two schools of Mooraji desai Residential School were of co-education and one Kittur Rani Chennamma School is of girls was chosen for the study, the schools is of state board syllabus.

The schools which are not providing boarding and lodging facilities to their students are called Non-residential schools. In the present study, Government, aided and unaided co-education state board schools of Maddur taluk are chosen for the study.

### 3.5 Objectives of the study

1. To study the attitude of residential and non residential school students towards co-curricular activities.
2. To study the self concept of the students of residential and non residential schools.
3. To study the academic achievement of the students of residential and non residential schools.
4. To study the relationship between the following variables among the students of standard IX in residential and non residential schools in Maddur taluk
   
   a) Attitude towards co-curricular activities and self concept
   b) Attitude towards co-curricular activities and academic achievement
c) Self concept and academic achievement.

5. To find out whether the students of standard IX (residential and non residential schools) having favourable and unfavourable attitude towards co-curricular activities differ in their academic achievement.

6. To find out whether the students of standard IX (Residential and Non Residential Schools) having high and low self concept differ in their academic achievement.

7. To study the relationship between attitude towards co-curricular activities and academic achievement among the students of Standard IX in the following categories:
   a) Students of Residential and Non Residential schools
   b) Students of Non residential schools
   c) Boys of residential and Non Residential schools
   d) Girls of residential and Non Residential schools
   e) Boys and girls of residential and Non Residential schools

8. To study the relationship between the attitude towards co-curricular activities and self concept among the of students of standard in the following categories:
   a. Students of Residential and Non Residential schools
   b. Students of residential schools
   c. Students of Non residential schools
   d. Boys of residential and Non Residential schools
   e. Girls of residential and Non Residential schools
9. To study the relationship between academic achievement and self concept among the students of standard IX in the following categories
   
   a) Students of Residential and Non Residential schools  
   b. Students of residential schools  
   c. Students of Non residential schools  
   d. Boys of residential and Non Residential schools  
   e. Girls of residential and Non Residential schools

10. To study whether the students having favourable and unfavourable attitude towards co-curricular activities differ in academic achievement of students of standard IX in the following categories
   
   a. Students of Residential and Non Residential schools  
   b. Students of residential schools  
   c. Students of Non residential schools  
   d. Boys of residential and Non Residential schools  
   e. Girls of residential and Non Residential schools

11. To study the interaction effect of gender and type of institution on academic achievement of residential and non residential schools.

12. To study the interaction effect of gender and type of institution on self concept of residential and non residential schools.

13. To study the interaction effect of gender and type of institution on attitude towards the co-curricular activities of residential and non residential schools.
3.6. Hypotheses

1. There is no significant relationship between the following variables among the students of standard IX in residential and non residential schools in Maddur taluk
   a) Attitude towards co-curricular activities and self concept
   b) Attitude towards co-curricular activities and academic achievement
   c) Self concept and academic achievement.

2. There is no significant difference in the academic achievement of students of standard IX (Residential and Non Residential schools) having favourable and unfavourable attitude towards co-curricular activities.

3. There is no significant difference in the academic achievement of the students of standard IX (residential and Non Residential Schools) having high and low self concept.

4. There is no significant relationship between attitude towards co-curricular activities and academic achievement of students of Standard IX (Residential and Non Residential schools) in the following categories
   a) Students of Residential and Non Residential schools
   b) Students of residential schools
   c) Students of Non residential schools
   d) Boys of residential and Non Residential schools
   e) Girls of residential and Non Residential schools
5. There is no significant relationship between the attitude towards co-curricular activities and self concept among the following categories of students of standard IX

a) Students of Residential and Non Residential schools  
b) Students of residential schools  
c) Students of Non residential schools  
d) Boys of residential and Non Residential schools  
e) Girls of residential and Non Residential schools  

6. There is no significant relationship between academic achievement and self concept among the following categories of students of standard IX

a) Students of Residential and Non Residential schools  
b) Students of residential schools  
c) Students of Non residential schools  
d) Boys of residential and Non Residential schools  
e) Girls of residential and Non Residential schools  

7. There is no significant difference in the academic achievement of students of standard IX having favourable and unfavourable attitude towards co-curricular activities

a) Students of Residential and Non Residential schools  
b) Students of Non residential schools  
c) Boys of residential and Non Residential schools  
d) Girls of residential and Non Residential schools  
e) Boys and girls of residential and Non Residential schools
8. There is no significant interaction effect of gender and type of institution on academic achievement of residential and non residential schools.

9. There is no significant interaction effect of gender and type of institution on self concept of residential and non residential schools.

10. There is no significant interaction effect of gender and type of institution on attitude towards the co-curricular activities of residential and non residential schools.

3.7. Variables of the study

While comparing the students of residential and non residential schools, attitude towards co-curricular activities, self concept and academic achievement are treated as criterion variables. However while studying the influence of attitude towards co-curricular activities and self concept on academic achievement and self concept on academic achievement. The dependent variable is academic achievement and independent variable is attitude towards co-curricular activities and self concept.

Gender (male and female) is the moderator variable.

3.8. Procedure of the Study

The present study is an analytical, descriptive and a comparative study. The researcher selected the required number of secondary schools as per the sample to collect the data. The researcher visited and administered the questionnaires on attitude towards the co-curricular activities and self concept to all the students of standard IX of both residential and non-residential schools in Maddur Taluk. The students were met individually in group for explaining the purpose of the study
and were instructed how to respond to the tools-attitude towards the co-curricular activities and self concept rating scale. Further clarifications were given for the questions/doubts raised by them. The first term examination scores of students of standard IX were collected from both residential and non residential schools of Maddur Taluk. The responses of the students on all the two tools are scored as specified in the tools and their scores in the academic achievement were all tabulated and subjected to statistical analysis using SPSS package. Thus data collected were analyzed, compared and interpreted using t-test, co-efficient of correlation and ANOVA.

3. 9.Population and sample:

The population consists of all the students of standard IX of residential and Non residential schools of Maddur Taluk. According to the random sampling technique, the 25% of the population is taken as the sample.

**Maddur Taluk secondary Schools Standard IX Students statistics**

<table>
<thead>
<tr>
<th>Types of schools</th>
<th>Number of Schools</th>
<th>Total number of students</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Govt</td>
<td>R 3</td>
<td>NR 39</td>
<td>Total 42</td>
</tr>
<tr>
<td>Aided</td>
<td>- 19</td>
<td>19</td>
<td>05</td>
</tr>
<tr>
<td></td>
<td>- 15</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Unaided</td>
<td>3</td>
<td>73</td>
<td>76</td>
</tr>
<tr>
<td>----------</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
</tbody>
</table>

Note: sample size according to Morgan table

The samples were selected from both residential and non residential schools in Maddur Taluk.

Population (all the students of Standard IX of Maddur Taluk (3923 students))

856 students

Residential School (149 students)

Non Residential Schools (707 Students)

Mooraji Desai Schools (2) - (100 Students)

Kittur Rani Chennamma school (1) - 49 students

Government-3 schools - (172 students)

Aided-5 Schools (234 students)

Unaided-4 Schools - 301 students

Note: The numbers in the bracket indicate the population size.
3.10. Tools used for Data Collection

The following tools were used for the collection of data on different variables of this study:

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>Variables considered</th>
<th>Tools used</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Self concept</td>
<td>Dr. Prathiba Deo’s (1998) self concept rating scale.</td>
</tr>
<tr>
<td>2</td>
<td>Attitude towards co-curricular activities</td>
<td>Developed, validated by the researcher</td>
</tr>
<tr>
<td>3</td>
<td>Academic achievement</td>
<td>First term examination marks are taken from residential and non residential schools of Maddur Taluk</td>
</tr>
<tr>
<td>4</td>
<td>Demographic factors (Gender, type of school)</td>
<td>Personal data sheet developed by the researcher</td>
</tr>
</tbody>
</table>

3.10.1 Self concept rating scale

Description of the tool: Self concept rating scale developed by Dr. Prathibha deo (1998) was used. The rating scale consists of 212 adjectives which cover all the important aspects of personality. Most of these are divided into positive and negative words. The classification being based on 80% agreement amongst 25 judges specially appointed for this purpose. The judges were people with long experience in the field of psychology. Words which were not showing 80% of the agreement or characterized as neither positive nor negative are classified as neutral words. The positive or the negative aspect was considered from the personal as well as social point of the view by the judges. The words are also
divided into different dimensions according to the attribute and these dimensions are intellectual, emotional, Character, social and aesthetic characteristics. The check list can measure all the aspects, perceived ideal, real and social self of the individual and under each the scores are obtained for each dimension in positive and negative classes. The tool after thorough expertise given, the check list was shortened to 90 items by eliminating the opposite words. The rating scale is on 5-point scale: the five points being very much like this, much like this, uncertain, not much like this and not at like this. The 90 words in the check list also divided in the positive and negative and neutral classes as well as dimensions of intellectual, emotions, and character, social and aesthetic characteristics.

**Purposes and uses of self concept scale:** It can be used for the assessment of the individual for self-reporting approach or for the approach of observation by others. It can be used in a ‘Yes’ or ‘No’ form or in a rating scale on a 3-points or 5-points. The main purposes of Self concept scale is to help persons in finding out and assessing what the individual thinks of himself and through the assessment, study many of the underlying problems of perception, motivation, learning and adjustment. Better adjustment, better achievement and better successes in life.

The self concept scale has been extensively used for research purposes and also for guiding students in educational problems. Guidance for personal problems too, has been provided through the use of this tool.

**Administration of the Self concept scale:** The Self Concept scale can be given individually or in groups. Before the Self concept scale is given, good emotional rapport should be established, which is very necessary to get accurate and correct results. The subjects should be seated comfortably and at some distance from one
another. The physical conditions of the room in which the test is to be administered should be comfortable and congenial. The investigator should adopt a sympathetic and understanding attitude towards the subjects to win their confidence.

Instructions printed on the list should be read out or explained verbally by the tester so that the subjects do not hesitate to give their honest and frank response in the correct manner. After the directions are fully explained, the subjects should be given a chance to ask the questions for the clarifications of their doubts and queries. It should be made sure that the subjects understand clearly what they are expected to do to give correct responses. Copies of self concept scale should be distributed to all of them. If the data are required for group comparisons, the subjects need not write the names which will bring out more frank and honest responses from the individuals. Otherwise, the subjects may be asked first to write down all the participants. Then the tester should read the instructions which are printed on the SCL. After reading out the instructions, the tester should make sure that everyone has followed the instructions clearly and knows exactly how he is asked to give responses and it takes about 15-20 minutes for filling up the list for one aspect.

**Scoring:** Scoring of Self concept scale is quick through the use of stencil hand scoring keys. There are separate transparent keys for positive and negative scores as well as for neutral words. Keys are also available for the different dimensions.
For the check list, a positive word marked carries a weightage of +1 and a negative word marked carries a weightage of -1. Each aspect is scored separately. Total positive score and negative core gives the composite score for that aspect for that individual. Other aspects can be scored in a similar way.

**Reliability:** Reliability was estimated 0.89 by test and retest method.

**3.10.2 Attitude towards Co-curricular activities**

The researcher prepared the tool which consists of 145 items, based on the attitude towards co-curricular activities, which is based on the literary activities, cultural activities and sports activities and given to the experts for examining the suitability of each item for inclusion in the test and also discussed in detail i.e each statement with the experts of Mysore University and other university and collected their opinion, and then it was further modified. The modified tool was used for the pilot study and refinement done accordingly. The final version of the tool consists 75 items were present. The rating scale is on 5-point scale: the five point points being Strongly agree, agree, undecided or neutral, disagree strongly disagree.

**Item analysis:** The preliminary format of the tool was tried out. For item analysis biserial co-efficient of correlation was computed and then final 75 questions were chosen. This final version was used on a group of 110 students.

**Reliability:** This final version was used on a group of 95 students and reliability value is calculated using split half method and using spearmen-Brown Prophecy formula. The reliability value is found to be 0.89 and the final tool consists 75 items.
Scoring procedure for Attitude towards co-curricular activities: The marks allotted are 4, 3, 0, 2, and 1 mark respectively.

Academic Achievement: In the present study, it is represented by the marks scored by the students of standard IX in the first term examinations conducted by the Residential and Non Residential schools.

3.11. Statistical techniques used for Analysis of Data

The following statistical techniques were employed in the present investigation:

t-test: In the present study, t-test was applied to find out the difference between independent means of residential and Non residential schools, gender and areas of specialization with respect to different and independent variables considered in the study.

Correlation co-efficient: measure how variable or rank orders are related. Correlation devise for finding out the extent to which the scored of one series of measurement correlate with the scores of other series of measurements. In this study, correlation coefficient used to find relationship between gender and residential and non residential schools.

ANOVA: ANOVA is used to test the main and interaction effects of other independent variables on the means of various groupings of a single dependent variable. In the present study ANOVA is employed to find out the interaction effect between the variables.
3.12. Summary

Chapter-3 gives overall picture of the title of the study, objectives, Hypotheses, variables, procedure of the study, operational definitions, tools used, description of the tools, population and samples and the statistical techniques used.