CHAPTER - III

METHODOLOGY

1. INTRODUCTION:

A scientific method of finding the relationship between any two variables starts with a problem. Problem poses a question and tentative answer to the question is called a hypothesis which is advanced to give the research work a direction. Then research is planned and collected is the data with the help the standardized tool. The data is then tabulated and analyzed. The result indicates the probability of the hypothesis being accepted or rejected. After this, the researcher may be able to generalize the statement.

2. PROBLEM OF THE STUDY:

“A STUDY OF SELF-CONCEPT AND ADJUSTMENT OF ADOLESCENTS IN RELATION TO FAMILY SIZE”

3. OBJECTIVE OF THE STUDY:

The major objectives of the present research were as under:

1. To study and compare self-concept Home, Health, Social, Emotional and Total adjustment of urban and rural adolescents.
2. To study and compare self-concept Home, Health, Social, Emotional and Total adjustment of male and female adolescents.
3. To study and compare self-concept Home, Health, Social,
Emotional and Total adjustment of only child adolescents, small family adolescents and large family adolescents.

4. To study interaction effect between habitat and gender of adolescents in relation to self concept Home, Health, Social, Emotional and Total adjustment.

5. To study interaction effect between habitat and family of adolescents in relation to self concept, Home, Health, Social, Emotional and Total adjustment.

6. To study interaction effect between gender and family size of adolescents in relation to self concept Home, Health, Social, Emotional and Total adjustment.

7. To study interaction effect between habitat, gender and family size of adolescents in relation to self concept, Home, Health, Social, Emotional and Total adjustment.

4. HYPOTHESIS:

Main hypothesis of the present study are as under:

1. There will be no significant difference between urban and rural adolescents in relation to their Self Concept, Home, Health, Social, Emotional and Total adjustment.

2. There will be no significant difference between male and female adolescents in relation to their Self Concept, Home, Health, Social, Emotional and Total adjustment.

3. There will be no significant difference among only child, small family and large family adolescents in relation to their Self Concept, Home, Health, Social, Emotional and Total Adjustment.

4. There will be no significant interaction effect between habitat and gender of adolescents in relation to Self Concept, Home,
Health, Social, Emotional and Total Adjustment.

5. There will be no significant interaction effect between habitat and family of adolescents in relation to Self Concept, Home, Health, Social, Emotional and Total adjustment.

6. There will be no significant interaction effect between gender and family size of adolescents in relation to Self Concept, Home, Health, Social, Emotional and Total Adjustment.

7. There will be no significant interaction effect between habitat, gender and family size of adolescents in relation to Self Concept, Home, Health, Social, Emotional and Total Adjustment.

5. VARIABLES:

In present study two level of habitat (urban-rural), two level of gender (male-female) and three level of family size (only child, small family and large family) will be taken as independent variables. Score of self-concept and scores of home adjustment, health adjustment, social adjustment, emotional adjustment and total adjustment were taken as dependent variables.

6. SAMPLE:

In the present study 50 subject were selected in each cell. Thus total sample size was 600. The sample were selected randomly from urban and rural areas of Anand of Gujarat State respecting only child family, small family and large family male and female adolescents. The age range of respondents was 13 to 18 years.
<table>
<thead>
<tr>
<th>Area</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Small Family</td>
<td>Large Family</td>
<td>Small Family</td>
</tr>
<tr>
<td>Male</td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Female</td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>150</td>
<td>150</td>
</tr>
</tbody>
</table>

A: Area
A_1: Urban
A_2: Rural

B: Gender
B_1: Male
B_2: Female

C: Family Size
C_1: Small Family
C_2: Large Family

7. TOOLS:
For the present study following tools were used:
7.1 Self-concept questionnaire by V.K. Mittal
7.2 Bell adjustment inventory by R.K. Ojha

7.1 Self-concept questionnaire by V.K. Mittal

Self concept questionnaire (SCQ) by V.K. Mittal and S. Abroi. is a structured tool to measure an individual’s sense of self-competence. It contains 100 items. The adaptation in Gujarati version had been done of this tool.
There are three response categories. On each item the respondent is required to check the category which is most applicable to him. The questionnaire is non-times. In general, college student take 30 to 40 minutes in recording responses. The questionnaire provides a global measure of an individual's sense of self-competence. Scoring is simple. Scoring instruction and scoring keys given in the respective manual of the test.

**Reliability:**

The reliability of the questionnaire has been assessed through split half and test retest methods.

**(1) Split Half Reliability :**

For split half reliability the responses were given a split on odd and even basis. Pearson’s’ is computed between the two sets of scores and spearman brown correction is applied. The obtained corrected reliability co-efficient on a sample on 100 student’s \( r = .94 \).

**(2) Test Retest Reliability :**

The questionnaire was read ministered second time after a gap of 7 days. On a sample of 100 students. Correlation coefficient (r) is calculated between the two set of source. The obtained test retest reliability is \( r = .86 \)

**Validity:**

The validity of the questionnaire has been assessed in the following manner.
(a) **Content validity:**

Only those items have been included which are judged as relevant by the judges with respect to eleven dimensions of self-competence as reported above. These dimensions were concretely described and only those items were included on which the judges perfectly agreed.

The discriminative value of each items of accessed through the contrasted group technique. Only highly discriminative items are retained.

(b) **Validity through pooled teacher’s ratings:**

Teacher’s ratings were obtaining on the sense of self-competence for 50 B.Ed. students. For this purpose a preformed was prepared on which the concept of self-competence was explained in a gestalt like manner. A 5 point rating scale is used, value of 5 is given to the point indicative of least competence and the value of 25 for maximum competence. The rating was obtained towards the close of the session only from those teachers who were highly interested in the study and felt confident in rating. Subsequently these rating were averaged and coefficient of correlation was computed among the numerical values of ratings and students scores of SCQ. The obtained validity coefficient is $r = .68$ with at value $= 9.45$. The obtained validity coefficient highly significant at .01 level of significance.

(c) **Validity through crises check list:**

For further validation of self-competence questionnaire (SCQ), a crises check list was administered on 400 college students. The check list contains a few pairs of adjectives
indicative of personality characteristics relating self-concept, e.g., suspicious vs. self-reliant, Guilt conscious Vs those with initiative, alienated Vs involved etc. the check list is a five point rating scale. The obtained scores on check list by 400 colleges students have been correlated with the score obtained by these students on SCQ. The coefficient of correlation is \( r = .49 \)

7.2 Bell adjustment inventory by R.K. Ojha

Bell adjustment inventory (student form) by Dr. R.K.Ojha was prepared in 1968. The adaptation in Gujarati version had been done of this tool. When one of the Ph.D. students was conducting his research work under the guidance of the author. This inventory includes four parts Home, Health, Social and Emotional. Each part has 35 questions, which are answered on a three point scale.

The adjustment inventory has four parts. Each part has 35 questions. In the left side of each question “Yes”, “No” “?” have been given. If you agree with the statement or to the facts mentioned in the question, encircle “yes”. If you answer is negative i.e., you are not agreeing to the facts mentioned in the question, encircle “No”. If you can neither answer the question in “Yes” and “No” then encircle question mark “?”. There is no time limit, but should answer all the items quickly.

Reliability:

The adjustment inventory possesses high reliability. The reliability coefficient were determined by spilt-half and test-retest method. For split-half, the correlation between odd and even items was calculated and corrected by the Spearman-Brown formula.
Similarly, in case of test-retest method, the inventory was again administered on a sample of 200 students after a period of two months. The reliability coefficients are show in Table.

<table>
<thead>
<tr>
<th>Method</th>
<th>Home</th>
<th>Health</th>
<th>Social</th>
<th>Emotional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Split-Half</td>
<td>0.84</td>
<td>0.81</td>
<td>0.87</td>
<td>0.89</td>
</tr>
<tr>
<td>Test – Retest</td>
<td>0.91</td>
<td>0.90</td>
<td>0.89</td>
<td>0.92</td>
</tr>
</tbody>
</table>

**Validity:**

The adjustment inventory was validated against K.Kumar’s Adjustment inventory. The two inventory scores yielded a positive correlations. This study was conducted on a sample of 400 cases of four educational groups. Person’s rare given in Table.2

**Scores:**

Scoring of the inventory is most easy. You have to count the number of responses where the individual has encircled “Yes” only. For each encircled “Yes” response 1 score is to be given. The total numbers of “Yes” scores thus make total score of the individual in the part. You are not concerned to the “No” and “?” response.

The inventory is totally negative inventory. When an individual answers in “Yes”, it indicates his difficulties. If he answers in “No”, it indicates that the individual has no such difficulty. If one answers in question mark “?”, his answer is neither affirmative nor negative towards difficulties. Therefore, only “Yes” responses are scored to measure adjustment difficulty.
8. PROCEDURE:

After identification of the only child family, small family and large family both gender and habitat, randomly 360 respondents were selected. The self-concept questionnaire and Bell adjustment inventory were given to the selected sample individually. The instructions were given to each subject according to test manuals, scoring were done as per scoring keys of both the tests.

9. STATISTICAL ANALYSIS:

The analysis of variance is not just a statistical method. It is an approach and a way of thinking. From one point of view at least, modern statistical methods culminate in analysis of variance, multiple regression analysis, and factor analysis. These methods are general. They have aims of scientific data analysis hardly conceived fifty years ago. They attain their results in fundamentally the same way, although the methods and outcomes are different: the total variance of any statistical situation is broken down into components of variance.

Following statistical technique were used:

Analysis of variance were used to study the contribution of main and interaction effects of three independent variable like – Habitat, Gender and Family size.