CHAPTER- 3

METHODOLOGY

This present chapter gives a detail account of structure and strategy of research. It has comprised all methodological procedures used in the study. The topics are the sample, the data collection instruments, the data collection procedure, the data analysis techniques. The statement of problem, objectives, hypotheses, variables and their operational definitions, research design, the method used for the selection of the participants and the characteristics of the sample, the instruments used in the study, the data collection procedure is clarified and introduces the statistical techniques for the analysis of the data.

3.1 Statement of Problem:

According to the description of the study in previous chapters and basically previous reviews, this present study is planned with the following statement of problem.

“To study the stress and mood states among the parents of the physically handicapped children with reference to visually impaired.”

3.2 Objectives of study:

1) To study the parental approach of visually disable children.

2) To study the stress among the parents of visually disables children.
3) To study the various mood states, such as anxiety, depression, regression, fatigue, guilt, extraversion and arousal among the parents of visually disable children.

4) To study the emotional problems of the parents of visually disable children.

3.3 Hypotheses:

(i) There will be significant difference between the means of the male parents and female parents of visually impaired students in terms of their stress-HA.

$H_0$ - There will be no significant difference between the means of the male parents and female parents of visually impaired students in terms of their stress -$H_0$.

(ii) There will be significant difference between the means of the parents of male and parents of female children in terms of their stress-HA.

$H_0$ - There will be no significant difference between the means of the parents of male and parents of female children in terms of their stress -$H_0$.

(iii) There will be significant difference between the means of the male parents and female parents of visually impaired students in terms of their anxiety, a mood state-HA.

$H_0$ - There will be no significant difference between the means of the male parents and female parents of visually impaired students in terms of their anxiety, a mood state -$H_0$. 
(iv) There will be significant difference between the means of the parents of male and parents of female children in terms of their anxiety, a mood state-HA.

$H_0$: There will be no significant difference between the means of the parents of male and parents of female children in terms of their anxiety, a mood state $-H_0$.

(v) There will be significant difference between the means of the male parents and female parents of visually impaired students in terms of their depression, a mood state-HA.

$H_0$: There will be no significant difference between the means of the male parents and female parents of visually impaired students in terms of their depression, a mood state $-H_0$.

(vi) There will be significant difference between the means of the parents of male and parents of female children in terms of their depression, a mood state-HA.

$H_0$: There will be no significant difference between the means of the parents of male and parents of female children in terms of their depression, a mood state $-H_0$.

(vii) There will be significant difference between the means of the male parents and female parents of visually impaired students in terms of their regression, a mood state-HA.
(viii) There will be significant difference between the means of the parents of male and parents of female children in terms of their regression, a mood state-HA.

H₀- There will be no significant difference between the means of the parents of male and parents of female children in terms of their regression, a mood state -H₀.

(ix) There will be significant difference between the means of the male parents and female parents of visually impaired students in terms of their fatigue, a mood state-HA.

H₀- There will be no significant difference between the means of the male parents and female parents of visually impaired students in terms of their fatigue, a mood state -H₀.

(x) There will be significant difference between the means of the parents of male and parents of female children in terms of their fatigue, a mood state-HA.

H₀- There will be no significant difference between the means of the parents of male and parents of female children in terms of their fatigue, a mood state -H₀.
(xi) There will be significant difference between the means of the male parents and female parents of visually impaired students in terms of their guilt, a mood state-HA.

$H_0$: There will be no significant difference between the means of the male parents and female parents of visually impaired students in terms of their guilt, a mood state -$H_0$.

(xii) There will be significant difference between the means of the parents of male and parents of female children in terms of their guilt, a mood state-HA.

$H_0$: There will be no significant difference between the means of the parents of male and parents of female children in terms of their guilt, a mood state -$H_0$.

(xiii) There will be significant difference between the means of the male parents and female parents of visually impaired students in terms of their extraversion, a mood state-HA.

$H_0$: There will be no significant difference between the means of the male parents and female parents of visually impaired students in terms of their extraversion, a mood state -$H_0$.

(xiv) There will be significant difference between the means of the parents of male and parents of female children in terms of their extraversion, a mood state-HA.
H₀ - There will be no significant difference between the means of the parents of male and parents of female children in terms of their extraversion, a mood state -H₀.

(xv) There will be significant difference between the means of the male parents and female parents of visually impaired students in terms of their arousal, a mood state-HA.

H₀ - There will be no significant difference between the means of the male parents and female parents of visually impaired students in terms of their arousal, a mood state -H₀.

(xvi) There will be significant difference between the means of the parents of male and parents of female children in terms of their arousal, a mood state-HA.

H₀ - There will be no significant difference between the means of the parents of male and parents of female children in terms of their arousal, a mood state -H₀.
3.4 Variables:

There are following main variable in the present study. They are as under-

A) Independent variable:

1) Male and female parents of visually impaired children.

2) Male and female visually impaired children

B) Dependent variable:

1) Stress

2) Mood states

3.5 Operation Definition:

1) Physically Handicapped (visually impaired):

In the present investigation physically handicapped children are those who are visually impaired, they are called as blind.

2) Parents of Visually Impaired Children:

Mother and father parents of male and female visually impaired children.

3) Stress:

Stress and strain stressors, external event beyond our own control that create extreme demands and us stimuli at these types are known as stressors,
formally defined as any demands either physical or psychological in nature encountered during the course of living.

4) Mood States:

The child must learn to control his loves and hates, fears and rages. Mood of excitement and depression despite the fact that civilization requires emotional control and emotional inhabitation most of us who are honest with over selves realize that, were it not for the promise of certain emotional satisfaction. Life would be scarcely worth living at all.

3.6 Research Design:

A - Parents

A₁ - Mother parents

A₂ - Father parents

B - Visually impaired children

B₁ - Male children

B₂ - Female children.

Research design of the sample
2x2 factorial design was used for the present study.

<table>
<thead>
<tr>
<th>Visually Impaired Children</th>
<th>A Parents</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A&lt;sub&gt;1&lt;/sub&gt; Mother</td>
<td>A&lt;sub&gt;2&lt;/sub&gt; Father</td>
</tr>
<tr>
<td>B&lt;sub&gt;1&lt;/sub&gt;- Male children</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>B&lt;sub&gt;2&lt;/sub&gt;- Female children</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

3.7 Research Sample:

1) Sample description:

For the present study sample were selected total 200 parents of physically handicapped (visually impaired) children. Out of them 100 were mother of handicapped children (50 mothers of male children and 50 mothers of female children) and 100 were father of handicapped children (50 mother of male children and 50 mothers of female children). The age range of parents was 30 to 50 years. All samples were selected from North Maharashtra region of India.

2) Procedure for sample selection:

For the present study purposive sampling procedure was used.
3.8 Research Tools:

In the present study following tools were used to serve the purpose. Personal data sheet to collect the general information of respondent related with age, sex, experience and marital status with the help of data sheet.

Keeping in views the problems under study it was through desirable to employ following two psychological test.

1) PERCEIVED STRESS SCALE (PSS) BY SHELDON COHEN(1994)

The perceived stress scale (PSS) is the most widely used psychological instrument for measuring the perception of stress. It is a measure of the degree to which situations in one’s life are appraised as stressful. Items were designed to tap how unpredictable, uncontrollable, and overloaded respondents find their lives. The scale also includes a number of direct queries about current levels of experiences stress. The PSS was designed for use in community samples with at least a junior high school education. The items are easy to understand and the response alternatives are simple to grasp. Moreover, the questions are of a general nature and hence are relatively free of content specific to any subpopulation group. The questions in the PSS ask about feeling and thoughts during the test month. In each case respondents are asked how often they felt a certain way.

Evidence for Validity: Higher PSS scores were associated with (for example):

* Failure to quit smoking
* Failure among diabetics to control blood sugar levels

* Greater vulnerability to stressful life-event-elicited depressive symptoms

* More colds

**Health status relationship to PSS**: Cohen et al. (1988) show correlations with PSS and Stress Measures, Self-Reported Health and Health Services Measures, Health Behavior Measures, Smoking Status, Help Seeking Behavior.

**Temporal Nature**: Because levels of appraised stress should be influenced by daily hassles, major events and changes in coping resources, predictive validity of the PSS is expected to fall off rapidly after four to eight weeks.

**Scoring**: PSS scores are obtained by reversing responses (e.g., 0 = 4, 1 = 3, 2 = 2, 3 = 1 & 4 = 0) to the four positively stated items (items 4, 5, 7, & 8) and then summing across all scale items. A short 4 item scale can be made from questions 2, 4, 5, and 10 PSS 10 item scale.

2) **MOOD STATE QUESTIONNAIRE BY CURRAN AND CATTLE IN HINDI VERSION DR. M. BHARGVA AND DR. KAPOOR. (1990)**

**Description of the test:**

Researcher has used eight state questionnaire for measuring eight important emotional states and moods. This test is designed and prepared by Cattell and Curran published by National Psychological Corporation at Agra. The theoretical importance of measuring emotional states lies in the fact that
any prediction of how a person will act or how he will perform depends as much on his present state as on his usual trait. An alert individual of average intelligence may perform better on an intellectual task than a tired generous. The practical importance of good state measures is evident in such areas as drug research, studies of moral, evaluation of classroom conditions, directive a course of therapy etc. Both forms of the A and B forms of 8 SQ contain 96 items, 12 of which measure each states (Anxiety, Stress, Depression, Regression, Fatigue, Guilt, Extraversion and Arousal). The test may be administered individually or in the group. The test was constructed to be used with adults and adolescent of approximately 16 years of age or above.

One component of the 8 mood state is stress. Our main variable is also stress, therefore avoiding the repetition, researcher use here only 7 states.

**Direction for Administration:**

The 8 SQ can be administered to an individual or to a group. The simple and clear instruction printed on the cover page of the text booklet make the 8 SQ virtually. Self administering after the examinee has read the instruction. The administrator should answer any question that may arise. The administrators should also reinforce the state quality at the test by comment “remember you are being asked to make the answer that tells best how you feel now, at this moment.”

Answers should be marked on separate answer sheet and not in reusable test booklet, except when an examinee is confused by answer sheet. The
examiner should make certain that the examinee fills in necessary identification information and understands how to use the answer sheet. If the examiner occasionally considers it desirable to read the instructions allowed with the examinee and discuss certain points in order to be sure the examinee understands what is required, this practice is permissible. In each situation the examiner must be the judge of the best way to get the instructions across to the examinee.

Although there is no limit, it is convenient to have certain expectations. The average time for completion is 20-25 minutes for one form.

**Design of the test:**

An individual’s score on each of eight scales is based on twelve items per form.

A) To use four alternative responses, thereby preventing the subject from making the “Lazy” choice of a middle category if only three options were presented,

B) To keep the frequency of choices of the four alternatives approximately in a Normal distribution for most items with a few showing a predominance of more extreme response;

C) To avoid more “face validity” than is inescapable by finding items which load sufficiently on the state factors but are not too obvious and there four faxable.
D) To select items of predominantly state quality rather than trait quality.

**Reliability of the questionnaire:**

In the test consistency is the generic term covering reliability, homogeneity and transferability. All three concern the agreement (consistency) of a test with itself but reliability asks how far a testing with a relating, homogeneity how far one part of test agrees with the meaning on another and transferability how far the meaning of the test on one population agrees with the meaning of the test on one population agrees with the meaning on another population. In the case of state measures it too early to ask about the last and the first needs more careful thought than usually alter within an hour, but may alter in half a day and change completely on a month, the we may test reliability on a state by battery by an immediate retest table show the reliabilities calculated in an immediate retest for a group of undergraduates A method of extrapolation from retest after 1,2,3,4,5 hours might improve these estimated “Reliability coefficients :- Immediate test retest from B only
The reliability in terms of stability coefficient that is after elapse of a considerable time period on the other hand, should not be as high as for a trait measure. Indeed, if the test measure pure state and if research should show that people do not differ in their mean state levels, these “reliability “should be zero following table shows the results from retesting a group of undergraduate after a week. It is evident that there is some probability that everyone does not start from the some mean position in there swings of moods, at least on such states extraversion, guilt, depression, regression that is to say, there slight constant and stable differences among people on three mean state level.

<table>
<thead>
<tr>
<th>State</th>
<th>Reliability coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>0.90</td>
</tr>
<tr>
<td>Stress</td>
<td>0.92</td>
</tr>
<tr>
<td>Depression</td>
<td>0.96</td>
</tr>
<tr>
<td>Regression</td>
<td>0.94</td>
</tr>
<tr>
<td>Fatigue</td>
<td>0.92</td>
</tr>
<tr>
<td>Guilt</td>
<td>0.90</td>
</tr>
<tr>
<td>Extraversion</td>
<td>0.96</td>
</tr>
<tr>
<td>Arousal</td>
<td>0.88</td>
</tr>
</tbody>
</table>
“Stability coefficients for the 8 SQ : form B”

Re-test after one week

<table>
<thead>
<tr>
<th>State</th>
<th>Reliability coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>0.29</td>
</tr>
<tr>
<td>Stress</td>
<td>0.29</td>
</tr>
<tr>
<td>Depression</td>
<td>0.22</td>
</tr>
<tr>
<td>Regression</td>
<td>0.34</td>
</tr>
<tr>
<td>Fatigue</td>
<td>0.18</td>
</tr>
<tr>
<td>Guilt</td>
<td>0.32</td>
</tr>
<tr>
<td>Extraversion</td>
<td>0.38</td>
</tr>
<tr>
<td>Arousal</td>
<td>0.19</td>
</tr>
</tbody>
</table>

Validity of the 8 SQ:

Validity in the case of state scale has its most precise meaning as concept validity. These means the correlation of the scale score with the pure factor constituting the concept. The scale was intended to measure. Concept validity which come from the basic factor - analytic research and constitutes the real proof that the scale are measuring underlying fictional dimensions are show in following table. These values are taken from the factor structure matrix whish gives the direct correction between the scale and the factor.
Concepts validities of the 8 SQ scale:

\textbf{(Hindi version from B )}

<table>
<thead>
<tr>
<th>State</th>
<th>Reliability coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety</td>
<td>0.58</td>
</tr>
<tr>
<td>Stress</td>
<td>0.47</td>
</tr>
<tr>
<td>Depression</td>
<td>0.90</td>
</tr>
<tr>
<td>Regression</td>
<td>0.96</td>
</tr>
<tr>
<td>Fatigue</td>
<td>0.94</td>
</tr>
<tr>
<td>Guilt</td>
<td>0.40</td>
</tr>
<tr>
<td>Extraversion</td>
<td>0.67</td>
</tr>
<tr>
<td>Arousal</td>
<td>0.72</td>
</tr>
</tbody>
</table>

An inspection of the values in above table shows that, for the most part, these are gratuities upper limits and the scale has generally excellent predictive potential.

\textbf{Description of the standardization sample:}

The norms sample for 8 SQ consist of 1701 adults (1966 men & 735 women) Sample across a broad range of adults and included people 15 to 75 years old. All score were age correlated before the final norms shown were calculated and using the age change reported in the whole test booklet. With the exception of the male convicts, all tables were constricted on a central age of 20 years.
**Scoring pattern for the 8SQ:**

Each question on the 8 sq has four options and is scored 0, 1, 2, or 3. The score of each item contributes to only one factor total. Since there are 1w items per state on each form; the highest possible raw score “B” form is 36. Answer sheets can be either hand scored with a stencil key or machine scored.

Each item is scored 3,2,1 or 0. The high scoring direction is indicated by the letter “a” or “d” if the letter is a, the response is scored ‘3’, the “b” response is scored ‘2’, and the “c” response is scored ‘1’. If the letter is a “d”, the “d” response is scored ‘3’ the “c” response is scored ‘2’, and the “b” response is scored ‘1’.

Hand scoring is accomplished easily and rapidly with a key. The answers appear as pencil marks in the boxes on the given answer sheet. Simply fit the key over the answer sheet and count the marks visible through the holes for each factor allowing either a 3,2,2 or 1 as indicated by the number printed above the add there scores and enter the total in the space indicated at the bottom of the sheet. Computerized machine scoring of the 8 SQ answer sheets as available through IPAT’s test services division which will provide the test user with raq scores and standard scores on B form of the 8 SQ.

**3.9 Method of data collection:**

As mentioned earlier the parents of physically handicapped children with reference to visually impaired were selected from the north Maharashtra
region of Maharashtra state of India. The age range of parents was 30 to 50 years. The socio-economic factor was considered while selecting the sample. The selected tools were administered to the selected sample. Necessary care was taken whether the instructions would understand to be selected sample regarding tools. All necessary ethics of data collection were strictly followed.

3.10 Statistical Treatment:

The research data has analyzed statistically by using descriptive statistics i.e. mean, SD, as well as inferential statistics such as ‘t’ test; ANONA and correlation was used for interpretation of data.

Summary:

According to above description it is strongly stated that this is a well structured study. All the methodological concepts are neatly defined and explain in the structure of true study.