CHAPTER – IV
METHODOLOGY

STATEMENT OF THE PROBLEM:
To assess the impact of deprivation and stress on the adjustment and academic achievement of adolescents.

OBJECTIVES OF PRESENT STUDY:
1. To assess the effect of deprivation and stress on different areas of adjustment and on academic achievement of students’.
2. To examine the differences in different areas of adjustment and academic achievement between two groups of students on deprivation and stress.
3. To find out the differences in adjustment and academic achievement between different sample subgroups of demographic factors.
4. To know the relationship between independent and dependent variables.

HYPOTHESES:
The following are the hypotheses of the study:

1. There would be significant effect of deprivation and stress on different areas of adjustment and academic achievement of students.

2. There would be significant differences in adjustment and academic achievement between two groups of deprivation and stress.

3. There would be significant differences in adjustment and academic achievement between different sample subgroups of demographic factors.

4. There would be significant correlation between independent and dependent variables.
THE SAMPLE:

The total sample size of the present study includes 400 adolescents studying in first, second and third year degree belonging to Arts, Science and Commerce faculty of various colleges of Gulbarga. These adolescents were selected from a population of 1000 which was administered Prolonged Deprivation Scale. After scoring and classification was made on continuum of high and low deprivation; the subjects those fell on these two ends (of 75th and 25th quartile) were taken into account for further administration of the adjustment scale. This percentage of marks in the immediate past examination was taken as an index of academic achievement of sample.
Of the total sample of adolescents who fall on the medium deprivation category, were excluded from the main study considering only highly deprived and less deprived categories of subjects. Further after excluding the medium deprived category of subjects, they were further matched equally on all factors such as deprivation, stress and gender. After excluding and matching the final sample consisted of 400 students. The sample design is given as under:

**Sample design:**

<table>
<thead>
<tr>
<th>Deprivation</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High stress</td>
<td>Low stress</td>
<td>High stress</td>
</tr>
<tr>
<td>High</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Low</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Since deprivation is an independent variable, the equal number of students were selected. Similarly, stress is another important independent variable. Stress here includes academic stress as well as achievement stress. Care was taken to select the students in an equal number. Thus, there are 200 students who are highly deprived, with high academic stress and high achievement stress. Similarly an equal number of students who are low deprived, have low academic stress and low achievement stress. Further, there are equal numbers of male and female students. Adjustment inventory was administered on the sample selected thus.

**The method of Data collection:**

The investigator adopted survey method for the collection of information related to personal and socio-demographic status of the respondents. Before the collection of data the investigator briefed the respondents about the purpose of the
study and ensured them that their information would be used only for the research purpose. This process helped to establish rapport with the respondents. To meet the objectives of the present study the data is collected by administering personal bio – data sheet, prolonged deprivation scale, stress scales and adjustment inventory was administered to the respondents of different colleges of Gulbarga city.

**STATISTICAL TOOLS:**

1. **Personal Data Schedule:**

   A personal data sheet was designed to collect the information regarding demographic and educational details of the students sample.

2. **Prolonged Deprivation Scale (PDS):**

   To assess the socio-cultural deprivation of the subjects the prolonged deprivation scale developed by Misra and Tripathi (1980) was used. The scale consists of 96 statements with Likert type five alternative responses. The scale measures 15 areas of life situation and experimental domain where deprivation could occur. The areas of deprivation include:

The five alternative answers are assigned with score values of 1, 2, 3, 4 and 5 respectively except the items 70, 74, 75 and 77. For these items the score values are assigned inversely for the responses A, B, C, D and E. Total score is obtained by adding the scores of all 96 items. Higher score indicates higher level of deprivation and vice versa. On the basis of the obtained score by the subjects, individuals with a very high score namely above 75th percentile was considered as highly deprived, while low scores namely below 25th percentile was considered as individuals with low degree of deprivation.

Reliability of the scale has been established by the test author and it was found to be very high. Split half reliability coefficient was calculated by using odd and even sets of items. Spearman – Brown prophecy formula was used by the author to calculate reliability co-efficient. This was found to be 0.91 and found to be highly significant. Internal constituency of the scale was determined by Kuder-Richardson formula – 20, it was found to be 0.92, inter – rater reliability index obtained was 0.95, which is highly significant. The content, intrinsic, predictive and construct validity were also established by the test author.

3. Adjustment Inventory:

To assess adjustment of the subjects on different areas, the adjustment inventory developed by Bells (1968) was used. This inventory consists of
140 items which measure adjustment in the areas such as family, health, social and emotional. The descriptions of areas are given below.

a. **Family Adjustment:** According to Bells more scores obtained in this area are unsatisfactory or they become unhappy and those obtain less scores they would be satisfactory and happy.

b. **Health Adjustment:** In this area those who obtain more scores have poor health and who have less score have good health.

c. **Social Adjustment:** Those who obtain less score will want to be isolated and desire to live away from the society and who earn more scores will be in relation with society.

d. **Emotional Adjustment:** In this field those earn more scores will be less adjusted and who earn fewer scores will behave in a friendly manner and adjust well with society.

e. **Total Adjustment:** This provides information regarding overall adjustment of the individuals.

The scoring was done in accordance with scoring key given in the manual. It is a standardized test widely used in India by researchers and psychologists with sound validity and reliability (split – half: 0.64).

4. **Bist’s Battery of Stress (1981):**
The Bist battery of stress scales (BBSS) developed by Abha Rani Bisht was used in the present study. In this battery 13 types of stresses are there. In the present study, two types of stresses were considered. They are as follows:

1. Achievement stress
2. Academic stress

In achievement stress there are 52 items having positive and negative items. In academic stress scale, 65 items are there. The scoring is done as per scoring key (for +ve items: 4, 3, 2, 1 and 0; for –ve items: 0, 1, 2, 3, and 4). Accordingly one who scores higher on each of the stress areas is said to have higher stress in respective sub scale of stress battery. The reliability (split – half) of the scale is 0.87 which is significant. The validity of the scale is adequate.

5. Marks scored in immediate past examinations.

The marks/percentage obtained by student respondents in their immediate past examinations were collected. These are considered as index of academic achievement of the sample.

STATISTICAL TECHNIQUES:

The following statistical analysis was carried out:

1. t-test to examine the difference between the sample sub groups on dependent variable scores.
2. ANOVA was carried out to assess the impact of independent variables on dependent variables.
3. To determine the association between independent and dependent variables, the correlation test was carried out.