CHAPTER III

PLAN AND PROCEDURE

The progress of mankind depends upon well conducted research programme, well conducted research programme postulates efficiency, reliable and valid facts. Such facts are obtained through a systematic procedure. Before undertaking the investigation, one has to think of a plan, structure and strategy which would help to elicit answers to information questions. The plan or the overall scheme of the research is prepared first. It includes an attitude of actions to be taken up from the hypothesis to the final analysis of data. Every researcher tries his/her best to establish genuineness, authenticity and trust worthiness of the data collected. To achieve this, factual information or data, unknown or untapped so far is essential in every study and has to be obtained from various sources direct or indirect. It is necessary to adopt a systematic procedure to collect the essential data. Best observes, “Like the tools in the carpenter’s box, each research tool is appropriate in given situation to accomplish a particular purpose”

The present study is based on the assumption that children living in personal atmosphere or children homes are special strata of children. Displacement from their parents, these children are in a state of tension and frustration. Therefore the present investigation has been conducted qualitatively and quantitatively. The present chapter deals with the following aspects.

1. Population
2. Selection of the sample
3. The tools of the research
4. Administration of the tools
5. Scoring of the tools
6. Statistical techniques employed

3.1 Population

A population is any group of individuals that have one or more characteristics in common which are of interest to the researcher, for a particular research. A population may include all the individuals of a particular type or more restricted part of that group for instance, a group of all the university teachers, a group of male/ female university teachers, a group of male/female university non teaching staff or our distance learners enrolled with IGNOU. Population is the aggregate or totality of objects or individuals regarding whom inferences are to be made in a sampling study. It means all those people or documents which are proposed to be covered under the scheme of study. In present study the population comprised of all the inmates of six Nari Niketans of Jammu province.

3.2. Selection of the Sample

Foundation of the research depends upon the sampling. Sampling generally refers to the process of selecting a small part or specimen of something in order to determine some quality or characteristic of the whole. The whole process of investigation demands a successful sample which would truly reflect the population. It is physically impossible to work out the total population in any scientific investigation. To work out on a sample saves time, labour and money. Sampling is the process by which a relatively small number of individuals, measures of individual objects or events are selected and analyzed in order to find out something about the entire population from which it is selected. The investigator mat not be able to collect the data about the whole population in any investigation. One has to take a selected group of individuals who would best represent the whole population and form the basis for making references for certain population facts. The sample has a great utility in research to estimate an accurate guess about the population. Sampling is the soul of the research. It is fundamental
to all statistical methodology of the research. The size of sample varies from study to study, method to method and nature of population. A good sample minimizes the error of estimate because it produces a result very much approaching the population and generalization would be effective. The sample of present study was selected by using simple random sampling technique. Out of 320 inmates only 160 were selected randomly from different Nari Niketans of Jammu province for the study. The list of inmates from each Nari Niketan selected for the present study is presented in the table 3.1.

TABLE 3.1 Detail of Selected inmates from Different Nari Niketans of Jammu Province

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Name of the Nari Niketan</th>
<th>No. of Selected Inmates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Nari Niketan, Doda</td>
<td>25</td>
</tr>
<tr>
<td>2.</td>
<td>Nari Niketan, Udhampur</td>
<td>22</td>
</tr>
<tr>
<td>3.</td>
<td>Nari Niketan, Jammu</td>
<td>30</td>
</tr>
<tr>
<td>4.</td>
<td>Nari Niketan, Rajouri</td>
<td>25</td>
</tr>
<tr>
<td>5.</td>
<td>Nari Niketan, Poonch</td>
<td>30</td>
</tr>
<tr>
<td>6.</td>
<td>Nari Niketan, Kathua</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>160</strong></td>
</tr>
</tbody>
</table>
FIGURE 3.1 Detail of Selected inmates from Different Nari Niketans of Jammu Province
3.3 Tools and their Description

The success of any research endeavor is largely dependent upon the tools which are used for data collection. In the present study the following tools were selected and used by the investigator. The detail of which is as under:

1. Self Prepared Data Sheet.
2. Adjustment Inventory by Dr. M.L. Saxena.
3. General Mental Abilities Test by Dr. S.S. Jalota.
4. Self Concept Scale By Pratiba Deo.
5. Problem Questionnaire prepared by the investigator herself.

3.3.1 Self Prepared Data Sheet:

It was prepared by the investigator herself with the help of experts to know the family background of children residing in the Nari Niketans. The data sheet was consulted with the eminent professors of Department of Education, University of Jammu and officials of Social Welfare Department to seek their observation and viewpoints regarding the questions in the data sheet. On the basis of their responses, the data sheet was edited and their ideas were incorporated in the data sheet. Moreover the data sheet was employed on the inmates of Nari Niketans to check whether it is exercisable or not. With the gap of one month it was again employed on the same students to judge whether it was reliable or not. It included information regarding the educational qualification of parents, their occupation, income and socio-economic conditions. It includes:

a) Parental education (paternal and maternal): Illiterate/middle standard/secondary level/graduate level or any professional degree.

c) Parental Income (paternal and maternal): Below Rs. 3000, Rs.3000-6000, Rs.6000-9000, Rs. 9000-12000, Rs.12000-15000, Rs. 15000-18000 above Rs.18000.

d) Parental Socio Economic status which includes, type of house, area of land, number of cattle, and the material items possessed by the families of the inmates.

3.3.2 Adjustment Inventory By Saxena:

This inventory is constructed by Dr. M.L. Saxena. It is used to collect data about the personality of the learners completely. It aimed at measuring problems of individual related to their home, health, social, emotional and school adjustment. The Inventory is intended for use of the school, college and university student ranging in the age from 11 year to adulthood. It is suitable for use with both sexes. It seeks to discriminate between well adjusted and properly adjusted students and is expected to be helpful in the hands of teachers, social workers and those engaged in guidance and counseling.

The inventory provides five separate measures of adjustment viz:–

1. Element (a) Home Adjustment
2. Element (b) Health Adjustment
3. Element (C) Social Adjustment
4. Element (d) Emotional Adjustment
5. Element (e) School or College Adjustment
A high score on this Inventory indicated a superior adjustment, while a low score shows a poor adjustment. The Inventory contains 90 items seeking responses in yes, doubtful or No. responses are obtained on an answers sheet and the booklet can be used over and over again. The Inventory is non-time, Generally 45 minutes have been found sufficient to deliver necessary instructions and obtain responses. The students were required to read each question and tick mark (/) appropriate type of response. The Reliability of the test is calculated as .87 and the validity coefficient of .80.

3.3.3 General Mental Ability Test By Jalota

It is a group Test of General Mental Ability. This test of General Mental Ability was prepared in 1950 at Banaras by a band of students. To measure intelligence of the subjects in the sample, the investigator used Hindi version of General Mental Ability Test constructed and standardized by Dr. S.Jalota (Revised Test 72) in 1976. It is a verbal test meant for adolescents studying in schools.

By this test we can measure the intelligence of a group and classify intelligent, average and dull categories. The test consists of 100 questions spread over five pages and is a group test. Each question is a multiple choice type with five alternatives. The test has five separate categories of 20 tasks- vocabulary, classification, number series, analogies and reasoning. The items are mixed. The responses are to be given by the subjects on the separate answer sheets. The test is to be completed by the student within twenty minutes.

The number of different types of items are given as under:

1. Synonyms 10 items
2. Antonyms 10 items
3. Number Series 20 items
4. Classification 20 items
5. Appropriate Answers 10 items
6. Reasoning 10 items
7. Analogies 20 items

TOTAL 100 items

The Reliability of the test is 0.936 and the Validity ranges from 0.30 to 0.78. A copy of the specimen of the test and its answer sheet is appended in Appendices respectively. It is a fact that this test is not standardized for the population of Jammu, but it was assumed that it will not generate differences as all the students tested in the sample will be under the same advantages or disadvantages.

3.3.4 Pratiba Deo’s Self Concept List (SCL):

The SCL (Self Concept List), the revised personality word list (PWL) is based on the self-reporting technique and is available in forms, the check list as well as the rating scale. Initially the PWL was adapted from Sarbin’s PWL which consists of practically all the representative adjectives which describe the various aspects of personality. However, it was observed that the list was not suitable to the Indian conditions. Efforts, therefore, were made to develop the PWL from the self-descriptions of individuals as well as from the reports obtained from the Sarbin’s list. On these bases the PWL was revised.

Another revision took place in sixties with a view to have for each characteristic two synonyms and two antonyms for establishing split-half reliability. In a study conducted specially for this purpose, the co-efficient of reliability came out to be .92 which was very high but the list became rather lengthy. So again modifications were made in the PWL by avoiding duplication
and by eliminating difficult and rare words. This SCL, in the final form yielded a list of 212 words in the check-list form. This was standardized for use. The main purpose of SCL 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. The results can be used to assist the individual for better adjustment, better success in life.

### 3.3.5 Problem Questionnaire

This questionnaire was prepared by the investigator herself with the guidance and suggestions of experts regarding various physical, social and educational problems faced by inmates of Nari Niketans. The questionnaire was prepared after consultation with academicians, educationists, social workers and especially with officials of social welfare department regarding the status of questions framed so far. After consultation, their valuable suggestions and advices were incorporated in the questionnaire and modifications were made. The Reliability of the questionnaire was calculated by using the Test-Retest method and was found 0.74. The questionnaire depicted three types of problems viz. Physical, Social and Educational. There were 11 questions on physical area, 13 questions on social and 11 questions on educational area. The detail of these problems is as under..

1. **Physical area**: It includes the questions regarding location of Nari Niketan building, rooms, furniture, toilets, bedding, lodging, food, medical checkup etc.

2. **Social area**: It includes the questions such as atmosphere of the Nari Niketan, relation with other inmates, behavior of warden and other staff members, relation with students living outside the Nari Niketans, organization of cultural and awareness programmes, provision for tour and picnic etc.
3. **Educational area:** It includes questions regarding remedial teaching, availability of books, uniform, scholarship, library facility, playground, television, computers, reading rooms etc.

3.4 **Administration of Tools and Collection of Data**

In order to collect the data for the present study, the investigator personally visited various Nari Niketans located in different districts of Jammu province. A letter of authority from Director Social Welfare enabled the investigator to secure the cooperation of District Social Welfare Officer and Superintendents of Nari Niketans of Jammu province. Dates convenient for the administration of tests were fixed with the consultation of various incharges of Nari Niketans. The selected inmates assembled in a room and different tests namely Adjustment inventory, General Mental Abilities Test and Self Concept List were employed. Data sheet and Problem Questionnaire were administered separately on next day in a conducive and congenial atmosphere. Before the start of the test, the inmates were instructed how to respond to each tool. The students were asked that they have to respond to all items and procedure for answering was also conveyed to them and strictly followed. After completing the task, the tools were collected and inmates were thanked for their cooperation. The same procedure was adopted for all other tools. The inmates were assured that their responses will be kept as a secret.

3.5. **Scoring of Tools**

3.5.1 **Self Prepared Data Sheet:**

Self Prepared Data Sheet was administered to collect the information about parental education, parental employment, parental income and parental socio economic status. The scoring procedure for all these components is discussed as under:
a. Parental Education: All the subjects were scored on seven point continuum for parental education. The score given to each category is in increasing order i.e., illiterate (0), middle standard (1), secondary level (2), graduate level (3), post graduate level (4), professional degree (5), any research degree (6), both in case of father and mother. The high scores indicate highly educated parents and low scores indicate low educated parents.

b. Parental employment: Parental employment was scored on 7 point continuum starting from unemployed to highly paid jobs and scores given to each category ranges from 0 to 6 i.e. unemployed (0), agriculture(1), private employee (2), government service (3), professional (4), business (5), any other higher paid job (6). The range of scores being 0-6. The high score indicates lucrative jobs where as low score indicates low paid employment for both the parents separately.

c. Parental income: Parental income of female students were also scored on seven point continuum i.e. the income range was restricted from income less than Rs3000/- to income more than Rs18000/- per month and the scores were awarded from 0 to 6 for various ranges i.e. below 3000 (0), 3001-6000 (1), 6001-9000 (2), 9001-12000 (3), 12001-15000 (4), 15001-18000 (5), above 18000 (6). The higher score indicates high income group and low score indicates low income group.

d. Parental social status: Parental social status was developed on the components of family background, material position and certain psychological indicators of the students. Scoring was done as per the scoring key developed by the investigator.

3.5.2 Adjustment Inventory:
The inventory has 90 questions; each question carries responses in form of “Yes or No”. Neutral responses were ignored. The students were required to read questions and tick mark (/). The higher the score an individual obtained in any of the adjustment area, the more the person was adjusted in that particular area. The correct answers of each element were as follow and were given one mark. Neutral responses were ignored. (Appendix-1)

**ELEMENT (A)  Home Adjustment**

*Mark to be given for YES response*

1, 2, 6, 7, 10, 12, 17, 27, 29, 32, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

*Mark to be given for No response*

9, 11, 14, 19, 24, 31, 38, 41, 45, 50, 53, 57, 61, 65, 69, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

**ELEMENT (B)  Health Adjustment**

*Mark to be given for YES response*

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90

*Mark to be given for No response*


**ELEMENT (C)  Social Adjustment**

*Mark to be given for YES response*

23, 33, 40, 50, 63, 68, 79, 86

*Mark to be given for No response*

6, 15, 20, 21, 27, 30, 40, 52, 55, 61, 67, 72, 86
ELEMENT (D)  Emotional Adjustment

Mark to be given for YES response

NIL

Mark to be given for No response

4, 7, 8, 12, 17, 18, 22, 25, 35, 36, 44, 46, 48, 49, 53, 56, 57, 60, 64, 65, 73, 84, 85, 87, 89,

ELEMENT (E)  School Adjustment

Mark given for YES response

29, 43, 47, 54, 58, 69, 83,

Mark to be given for NO response

13, 16, 81, 82, 90

3.5.3 General Mental Ability Test:

In the process of scoring, the answer sheets obtained after the test were scored according to the prescribed scoring key. Each correct response was awarded mark. The correct responses were added. The addition of correct responses gave the Intelligence score of the students. The maximum marks that a student could obtain were 100 and minimum was zero. Higher the score obtained, more the person was intelligent. (Appendix-6)

3.5.4 Self Concept List:

First of all the booklets were distributed to the students. After that the instructions pertaining to the test scale were made clear to them by the investigator. Every attempt was made to remove doubts and difficulties of the students. Time, limitation was needed according to the test scale and the scale had to be fully
completed by the student within 15 minutes and then booklets were collected. Scoring of SCL (PWL) is quick through the use of stencil hand scoring keys. There are separate transparent keys for negative and positive 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 weight of +1, and a negative word marked a weight of -1. Each aspect is scored separately. For one aspect, the total positive score will be the sum of all the positive weights given to the positive words, similarly the negative words when totaled will yield the total negative score. The total positive score plus the total negative score gives the composite score for that aspect for that individual. Other aspects can be scored in a similar way. The neutral words are not given any weight age and are to be ignored in the scoring. For the rating scale, the weight ages for positive words for the first five points of, very much like, much like, uncertain, not like that, nor at all like that are 4, 3, 2, 1 and 0 respectively and for negative word also the weight age is the same way. The composite score is obtained by subtracting the total negative score from the total positive score. The neutral words are to be ignored in the scoring. (Appendix-4)

3.5.5 Problem Questionnaire:

For scoring purpose the question referring to a problem carries one mark and the question depicts no problem carries zero mark. More the score, more the problem of the individual. The Reliability of the Questionnaire was calculated by using the Test-Retest method and was found 0.74. (Appendix)

3.6 Statistical Techniques Employed

3.6.1 ANOVA:
It was used to study the effect of psychological variables viz. Intelligence, Self Concept and Adjustment on Academic Achievement of inmates of Nari Niketans. Intelligence, Self Concept and Adjustment were Independent variables and Academic Achievement was taken as dependent variable. ANOVA 2x2x2 factorial designs was used for analysis of data.

3.6.2 Mean and Critical Ratio (CR)

These were used to compare the mean scores on Intelligence, Self Concept (Emotional, Social, Aesthetic, Cultural and Total scores), Adjustment (Home, Emotional, Health, Social, School and Total scores), Academic Achievement and Problems (Social, Physical, Educational and Total scores) between the inmates of Nari Niketans belonging to different social categories viz. General, SC and ST.