CHAPTER-IV

METHODOLOGY

The present study based on the descriptive survey method, aims at find of the personality pattern, value preferences, academic achievement and socio-culture of the Deori Secondary school students in the Lakhimpur and Dhemaji district of Assam. As per the objectives there is an assessment of personality patterns, value preferences, academic achievement and also socio culture through data collection.

The methodology of the social sciences has evolved slowly within this evaluation; the continuous interchange of ideas; information; and criticism made it possible to firmly establish; or institutionalized; commonly accepted rules and procedures and to develop corresponding methods and techniques.

It the methodology is correct and (we assume) the conditions under which the study was made or the events occurred have not changed; we would expect the finding to be similar. Indeed condition may change and new circumstances emerge. But the significant of inter-subjectivity lies in the ability of a scientist to understand and evaluate the methods of others and to conduct similar observations so as to validate empirical facts and conclusions. In the words of Abraham Caplan “the methodological question is always limited to whether what is reported as an observation can be used in subsequent inquiry even if the particular observer is no longer a part of the context”.

This research on Deori Secondary school students of Assam is a field study of an exploratory nature. It is based mainly in data collection through a sample survey conducted in the Lakhimpur and Dhemaji district of Assam. This study based on field
study as an explanatory nature on Deori secondary school students. Data collection made a sample survey by the investigator in Lakhimpur and Dhemaji district.

4.1 **Method of approach:**

Taking into consideration of the merits of the survey, survey method is used for this study. The descriptive research or normative survey method has undoubtedly been the most popular and the most widely used research method in education. Survey research in education involves the collection of information from members of a group of students- teachers or other person associated with the educational process and the analysis of this information to illuminate important of educational process.

The starting point for a survey is a clear statement of the questions, which the survey is designed to answer. The finishing point is a set of results, which address these questions? There is a logical set of procedures, which is usually adopted in order to proceed from the questions to the result.

4.1.1 **Purpose of Survey:**

The purposes of surveys fall in two main categories. First surveys may be used to obtain descriptive information about a target population. Occasionally the entire population may be including in the survey; as in a census of school enrolments. More commonly a sample is selected and results obtain from the sample are generalized to the population. Examples include surveys to provide norms for standardized test. Second; a survey may be designed to examine relationships between various factors; typically seeking to explain differences between students; no some criterion in terms of a range of explanatory factors. For example to explain differences in the mathematics achievements of students in terms of their age, sex, exposure to the mathematics curriculum; and amount of time spent in class on learning mathematics.
Rosier (1980) understanding surveys of the second type are conceptual models, which the researcher wishes to test with the aim of improving understanding of the network of factors influencing educational process.

4.1.2 Survey Research Cycle:

The methodology of survey research has now been well established under the influence of three main factors. First, the technology of sampling has research high level. The theoretical aspect of probability sampling have been extensively investigated; and the relationship between random samples and the target populations from which they have been taken may now be readily expressed quantitatively in terms of sampling errors (standard errors of sampling). Second, many technique develop for collecting valid and reliable information from survey respondents. Third, the availability of computers and sophisticate survey research on computer program (have facilitated the analysis of this information). To analyze the range of components of a typical project is in terms of a survey research circle. A detail description of one version is given in Runcal and M. C. Grath (1972). Each stage has implications for latter stage. Both in its planning and execution; a survey may be conducted more efficiently by reference to the logical demands of the circle, which are summarized.

Figure-2: Survey Research Cycle
4.1.3 Questions:

The starting point of a survey is the best on statement of the questions to be addressed by the investigation; set in the demography; social and administrative context in which the questions were identified.

4.1.4 Conceptual Framework:

The next stage of the circle; the factors or components include in the original questions should be defined more precisely in conceptual terms. Where an explanatory survey is being undertaken; the hypothesized relationships between concepts should be expressed in terms of a conceptual framework.

4.1.5 Instruments:

The general term in instruments refers to the range of questionnaires; tests; attitude scale and so no used for the collection of data in a survey. The instruments should be linked to the concept include in the conceptual framework. They should be selected or designed for the collection of data suitable for conservation in to variables for subsequent analysis.

4.1.6 Data Collection:

The data collection stage of the research circle involves identifying the survey respondents and collecting the design information from them. In a survey information
is collected from persons in their natural surroundings, for example from students in their normal classes.

4.1.7 Target Population:

Prior to preparing plans for selecting respondents; it is necessary to define the target population carefully; in order to set the administrative limits for the survey as well as to specifically the population to which the results of the survey may be generalized. Where the students are to be the unit of sampling; a typical population may be initially defined as “all 14 year old students”.

4.1.8 Sampling design:

The selection of respondents from the target population is based on a sampling plan or design; except where information is to be collected from all members of the population. Most sampling plans assume random sampling; so that each member of the sampling is selected with a known probability. It is than possible to use data derive from the sample itself to estimate statistical characteristics of the population.

4.2 Selection of final sample of the present study:

The present descriptive research investigation was carried out on the secondary school students of Deori community taken from selected district. The final sample was selected through the following four phrases –
4.2.1 First phase:

Out of 27 districts of Assam in North East region 2 (two) districts were selected on the basis of highly populated area by Deori community.

![Figure-3: Map of Assam](image)

**Figure-3: Map of Assam**

![Figure-4: Maps of Lakhimpur and Dhemaji Districts](image)

**Figure-4: Maps of Lakhimpur and Dhemaji Districts**

4.2.2 Second Phase:

In the consisted of 8 (eight) blocks from Lakhimpur district, the investigator purposively selected 4 (four) blocks. And in the Dhemaji district consisted of 5 (five) blocks the investigator purposively selected 4 (four) blocks for investigation.
Table No.-3
Four Blocks in Each District

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Lakhimpur District</th>
<th>Dhemaji District</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Narayanpur Block</td>
<td>Bordoloni Block</td>
</tr>
<tr>
<td>2</td>
<td>Bihpuria Block</td>
<td>Dhemaji Block</td>
</tr>
<tr>
<td>3</td>
<td>Naoboicha Block</td>
<td>Sisiborgaon Block</td>
</tr>
<tr>
<td>4</td>
<td>Karunabari Block</td>
<td>Machkhowa Block</td>
</tr>
</tbody>
</table>

4.2.3 Third Phase:

At the third phase investigator selected Narayanpur Block (block-1) with three schools (boys and girls). At Bihpuria block (Block-2) selected 3 schools (boys and girls). At Naoboicha block (Block-3) selected 2 schools (boys and girls). At Karunabari block (block-4) selected 2 schools (boys and girls) and in the Dhemaji district investigator selected Bordoloni block (Block-1) with 3 schools (boys and girls). At Dhemaji block (block-2) selected 3 schools (boys and girls). At Sisiborgaon block (block-3) selected 2 schools (boys and girls) and At Machkhowa block (block-4) selected 2 schools (boys and girls).

Table-4
Lists of the School

<table>
<thead>
<tr>
<th>Block</th>
<th>Lakhimpur District</th>
<th>Dhemaji District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Block-1</td>
<td>Mori Dikrong High School</td>
<td>Bordoloni Borbam Tiniali H. S. School</td>
</tr>
<tr>
<td></td>
<td>Madhabdev Collegiate H. S. School</td>
<td>Bordoloni Higher Secondary School</td>
</tr>
<tr>
<td></td>
<td>Narayanpur Higher Secondary School</td>
<td>Bhabali High School</td>
</tr>
<tr>
<td>Block-2</td>
<td>Lohit Dikrong Higher Secondary School</td>
<td>Dhemaji Nagar High School</td>
</tr>
<tr>
<td></td>
<td>Nehru Higher Secondary School</td>
<td>Dhemaji Higher Secondary School</td>
</tr>
<tr>
<td></td>
<td>Bongalmora Higher Secondary School</td>
<td>Pachim Dhemaji Higher Secondary School</td>
</tr>
<tr>
<td>Block-3</td>
<td>Phulbari High School</td>
<td>Machkhowa Higher Secondary School</td>
</tr>
<tr>
<td></td>
<td>Nowboicha Higher Secondary School</td>
<td>Botikar High School</td>
</tr>
<tr>
<td>Block-4</td>
<td>Laluk Higher Secondary School</td>
<td>Sisi Borgaon Higher Secondary School</td>
</tr>
<tr>
<td></td>
<td>Bahgora Higher Secondary School</td>
<td>Moridhal Higher Secondary School</td>
</tr>
</tbody>
</table>
4.2.4 Fourth phase:

At the fourth phrase investigator purposively selected 500 respondents in each district of Deori Secondary School students (Boys and Girls) from Class IXth and Xth. In the District of Lakhimpur, the total respondents were 250. Out of 250, boys respondents were 110 and girls respondents were 140. In the Dhemaji District the total respondents are 250 and out of 250, boy respondents are 110 and girl respondents were 140. Data was collected accordingly block-wise under Govt. aided schools.

Sampling classifications are made for the districts, blocks, schools, classes, boys and girls. The modality taken for the study will covered Personality patterns; value preferences, academic achievement and socio-culture of Deori secondary children.

| Table No-5 |
| Block-wise total Deori boys and girls respondents of Lakhimpur and Dhemaji district |

<table>
<thead>
<tr>
<th></th>
<th>Lakhimpur District</th>
<th>Dhemaji District</th>
</tr>
</thead>
<tbody>
<tr>
<td>NBLD</td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td></td>
<td>34</td>
<td>58</td>
</tr>
</tbody>
</table>

4.3 Description of the field:

The area of the present study was two district namely Lakhimpur and Dhemaji of Assam. Lakhimpur district is situated in the eastern parts of India, on the Northeast corner of Assam, located mightily Brahmaputra River. The district lies between $26^048'$ and $27^053'$ Northern attitude and $93.42$ and $94.20$ east longitude and $93^042'$ and $94^020'$ east latitude. The district covers an area of 2277 sq. km. of which 2261.26 sq.km. are urban (as per 2001 census). The total population of Lakhimpur district is 88910
persons out of which 455691 male and 433319 female. The literary rate of this district is 69.59% out of which male literacy rate is 78.26% and female 60.47%.

The Dhemaji district is comprises of erstwhile Dhemaji and Jonai sub-division and parts of Machkhowa mouza and Bordoloni. Forted by arch shaped Arunachal hills on the North and the East, the district emerges from the foothills and streches to the Brahmaputra River with Subansiri one side and the river Siang on the other. Geographically situated between the 94° 12' 18'' E and 95° 41' 32'' E longitudes and 27° 05' 27'' N and 27° 57' 16'' N latitudes, the district covers an area of 3237 Sq. Km and is a basically plain area lying at an altitude of 104 m above the Mean Sea Level. The following are the category wise population of Lakhimpur and Dhemaji district.

Table No-6

Category wise population of Lakhimpur and Dhemaji district

<table>
<thead>
<tr>
<th>Areas</th>
<th>Total</th>
<th>SC</th>
<th>ST</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td></td>
</tr>
<tr>
<td>Lakhimpur District</td>
<td>455691</td>
<td>433319</td>
<td>70060</td>
</tr>
<tr>
<td>Dhemaji District</td>
<td>294643</td>
<td>277301</td>
<td>30472</td>
</tr>
</tbody>
</table>

Source: Social welfare office, Lakhimpur and Dhemaji Districts as per 2001 census.

4.4 Tools used:

The following tools were used for the purpose of data collection:

1. Multidimensional Personality Patterns (MPI) standardized by Km. Manju Agarwala, Research Scholar, (Psychology), Agra College, Agra. (Appendix-A)

2. Value Survey (developed by the investigator) (Appendix-B)

3. Socio-Cultural Environment- (developed by the investigator) (Appendix-C)
4. Academic Achievement (School Performance Record Sheet)

(Appendix-D)

1. **Multi Dimensional Personality Inventory (M.P.I.) 1984** constructed and standardized by K. M. Manju Agarwal, Research Scholar (Psychology), Agra College, Agra. This was translated by investigator in Assamese language for the purpose of the study.

   The statement related to six-sub area of the present inventory has been written in English and translated into Assamese language and given to ten experts who know both the languages. All the statement follows five point scales. On the basis of language ambiguity and suitability, only high rated items have been retained for the test.

   The present Inventory has 120 items in all. Each 20 items (A, B, C, D, E and F) related to the following personality measures.

   (a) Extroversion-Introversion

   (b) Self-Concept

   (c) Independence-Dependence

   (d) Temperament

   (e) Adjustment

   (f) Anxiety

   Each item has three alternative answers- ‘yes’, ‘no’ and ‘sometimes’, which refers to the extent of agreement and disagreement of the content. The present test can be administrated individually as well as in group situation. There is no time limit for the completion of the inventory. Usually it requires 45 to 50 minutes. The standard instructions are printed on the front page of the Inventory. Separate Answer-Sheet is available for giving the answer.
The scoring procedure of the inventory is very simple:

1. Yes = 3
2. NO = 2
3. Sometimes = 1

The investigator for his research purpose accepted only highest score under the statement.

2. Value Survey: In the absence of a suitable value survey for the specific purpose of investigation, the investigator followed secondary school level courses to identify certain values in relation to secondary school stage. The investigator considered all the subjects teaching in such stage like English, Assamese (MIL), General Mathematics, Social Studies, and General Science for development of their Academic Achievement. Out of all these subjects, the investigator specially observed social studies and Assamese (MIL) to identify certain number of values to observe value preferences on a personal basis of Deori secondary school students.

Investigator developed a value-survey along the following steps:

Step-1: Derivation of the list of values.
Step-2: Draft revision and modification.
Step-3: The final draft.

Step 1: Derivation of the list of values.

In order to develop the tools to measure preference for values, the investigator studied the contents of ixth and xth standard Secondary school level course under the SEBA (Secondary Education Board of Assam).

The major issues in value education (subjects and contents) centre on gearing up educational efforts towards i. Facilitating the growth of the inner capabilities of individuals, ii. Helping realism faith in the ability to preserve the humanistic tendencies, iii. Maturity in each person a positive view of self, of community, of
mankind and, iv. Helping keep with as well as define values in consonance with the norms of a pluralistic society. Then, there are concern related to visualize the affective elements of cognitive and others curricular, which have all too often been serving the hidden agenda.

Under socio cultural considerations it is state that “to bridge the gap between haves and have – notes”, the questions of equality assumes a profound importance and hence “the value of equality of opportunity has to be demonstrated first through the educational system and the design of the curriculum. Other aspects of consideration are national identity, scientific temper, art and creativity, interface between mark and education, value education, environment resource and population.” (The National curriculum for Primary and Secondary Education, A Framework, 1985)

Investigator observed following contents from the subjects of English, Assamese, Social Studies, General Science and other subjects –

- History of Indian Education
- Constitution in India
- Common cultural heritage
- Environmental Education
- Developments of scientific temper.

After doing content analysis, literature was consulted and discussed with the supervisor; the investigator developed the value survey based on personal values to identify the value preferences of Deori Secondary School Students.

Investigated developed list of value as follows:
- Broadminded
- Brotherhood
- Cleanliness
- Courageous and fearlessness
- Honesty and morality and ethics
- Love of nature and love or affection
- Self-help
- Sportsmanship

Some of the research study on values supports this ideal. Bowie and Morgan (1962), Sprinthall and Baton (1966), Tallives, Fanes Howard (1980), Nimechihda Pravit (1986). The above quoted studies lead to conclude that these ideas values are very much concern in Secondary School Level students.

**Step 2: Draft revision and modification:**

The preliminary draft of personal value survey was modified in two times. In the first round of modification the preliminary draft was given to ten experts in the field of Education with a request to give their comments about i. the comprehensiveness, ii. Suggestions.

For better communication most of the experts preferred values to the used in behavioral term. They also view that broadminded and brotherhood overlapping to same extent. And also they have suggested on the values of courageous and fearlessness as an overlapping views.

The changes incorporated in values-survey were as value ‘Brotherhood’ and ‘Fearlessness’ has dropped. Researchers prefer only Broadminded as personal value for value preferences.
**Second tryout:**

This time, the second draft was administrated over male (40) and female (40) students Higher Secondary School stage of Guwahati, Assam.

It was observed by the investigator that most of the Higher Secondary School Students asked to differentiate between ‘Honesty’, ‘Morality’ and ‘ethics’. Some students asked to differentiate between ‘Love of nature’ and ‘love and affection’, than Investigator used only one term as ‘Love of affection’.

Some students confused on the term as ‘Self-help’ and ‘Sportsmanship’. Investigator preferred to merge the value ‘Honesty’, ‘Morality’ and ‘ethics’ into form of ‘Honesty’.

- The distracting value ‘Love of Nature’ was merged into value as ‘Love or affection’.
- The distracting value ‘self-help’ and ‘sportsmanship’ were merged into ‘Self-Control’.

**Step 3: The final draft:**

On the basis changes made after second tryout in the second draft, the value-survey was finalized.


A copy the final draft has been enclosed vide the Appendix-B.

**Reliability:** The final copy of value-survey was administrated over 20 High/Higher secondary students of Guwahati, measure for each of the six values of personal category over a gap of one week. The test-retest reliability for each value was obtained separately through rank order. (Correlation method, Garrettetal, 1985)
The reliability co-efficient corresponding of these values have been given as follows-

**Table No-7**

Test-retest reliability co-efficient N=20

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Personal Values</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Broadminded</td>
<td>0.96</td>
</tr>
<tr>
<td>2</td>
<td>Courageous</td>
<td>0.95</td>
</tr>
<tr>
<td>3</td>
<td>Cleanliness</td>
<td>0.98</td>
</tr>
<tr>
<td>4</td>
<td>Honesty</td>
<td>0.96</td>
</tr>
<tr>
<td>5</td>
<td>Love and affection</td>
<td>0.95</td>
</tr>
<tr>
<td>6</td>
<td>Self-control</td>
<td>0.97</td>
</tr>
</tbody>
</table>

**Scoring:**

Each value of personal is required to be ranked in order of its importance as a guiding principle in once life. Following conventional scoring procedure, the lower number which the subjects ascribe to given value, the more important is presumed to be attributed to it. The possible rank thus, ranges from 1 through for the total 6 values.

3. **Socio Cultural environment:** The questionnaire scheduled developed on the basis of Deori peoples social life related. Deori are traditionally belief on their own culture, even in modern age they are used to live in joint family. So investigator after many discussions with old age Deori people in locally and tour many other sources and developed 36 questions for the investigation purpose. Question follows to deferent items like their nature of house; nature of family pattern, family income; religious rituals and other cultural environment etc. Investigator identified their socio-cultural environment only on the basis of respondent’s response with Yes or No. Closed type questions nature used for this descriptive study. Each answer follows same score as 1.
The ‘Yes’ followed by the concept of respondents believe on highly traditional socio cultural environment and ‘No’ denotes as less believe on traditional socio cultural environment. (Appendix C)

4. Academic Achievement: However, no tool was used for measuring the Academic Achievement for investigation purpose. It was decided to collect their total marks secured by them in the Annual High School/Higher Secondary Examination, which is conducted by the District School Board in both two districts. The marks were collected through personal visits to those Schools by the investigator.

The categories of students were classified on the basis of their marks secured in the above-mentioned examination as given below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Marks Secured</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st High</td>
<td>60% and above</td>
</tr>
<tr>
<td>2nd Average</td>
<td>45% and above</td>
</tr>
<tr>
<td>3rd Low</td>
<td>Below 45%</td>
</tr>
</tbody>
</table>

(Appendix D)

(v) Data collection:

Data collected through the process of personal visit with the use of tools vis. Multidimensional Personality Inventory by Km. Manju Agarwal (1984) (Assamese version), Value Survey, Socio Cultural Environmental questionnaire to the respondents of Deori Secondary School students of Class ixth and xth standard. All the scheduled tools were given to the selected samples at a time. Time was given to the respondents 2 to 2.30 hrs. Tools also used in group wise but separate sheet for each student. Total duration of data collection was 3 to 4 months for each district. Lastly investigator collected student’s performance as Academic Achievement from the school official for each student from the school record sheet.

The materials collected from the field have been enriched through the consultation of various libraries like Guahati University Library, North Eastern Hills
University Library, Shillong, Dibrugarh University Library, Assam University Library Silchar, Assam, Central University Library, Tezpur, Assam, and different college libraries of Assam and other state also.

The investigator has collected statistical data, documents and other relevant literature from various governmental departments like Deori Autonomous Council (D.A.C.), Assam, Director of Census, Director of Public Information, Tribal Study Centre, Guwahati, Assam, etc. and taken from some personal experience of aged person of Deori people.

4.5 Design:

The present study has been designed with its conceptual structure, its objectives consisting of the grouping for the collection, measurement and analysis of data. It has been developed with plan, structure and strategy of investigation to obtain answers for the research questions. The present study has eight objectives and it has also developed research tools for the collection of data.

4.6 Techniques of Data Analysis:

The present study based on Data tabulation on open-ended questionnaire survey. The collected data was classified and tabulated according to the objectives of the study. The collected data was analyzed with the help of numerical and simple percentage of statistical method and also descriptive statistics method, like mean, median, standard deviation etc. To see the relationships between the variables, coefficient of correlation, t-test were used. A simple method was used for assess the data of all variables both the qualitatively and quantitatively. Computer programme was used as latest version of Statistical Package For Social Science (SPSS_Ver.19)