

CHAPTER – III
METHODOLOGY

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The system of collecting data for research project is known as research methodology. The term research methodology also referred to as research methods, usually encompasses the procedures followed to analysis and interprets the data gathered. Research methodology involves the systematic procedure by which the research starts from the initial identification of the problem to its final conclusion. The role of the methodology is to carry on the research work in a scientific and valid manner. The method of research provides the tools and techniques by which the research problem is under taken. The prime necessity of the research is not only to follow all steps of research methods or techniques but also to consider its methodology carefully. Therefore, the research methodology includes research procedure and statistical design which leads a research to progress and helps an investigator to reach his/her goal.

3.1 RESEARCH METHOD USED IN THE STUDY

On the nature and characteristics of the present study, the investigator has applied the Descriptive Survey Method. The main objective of the study was to examine the relationship between socio-economic variables and academic achievement of Karbi students' in H.S.L.C. Examination. Therefore, this research study was brought under descriptive research.

Descriptive survey method is compels the researcher to obtain relevant and accurate information about the current status of the phenomena and draw out valid generalizations from the established facts without any interference or control over the situation. This method is considered appropriate for this research work, because no ready-made data are required for examining different objectives under study, such as socio-economic variables and academic achievement of Karbi students' in H.S.L.C. Examination. This method is used to collect authentic information relating to socio-economic variables and academic achievement of Karbi students' in Karbi-Anglong district of Assam and draw a valid general conclusion from the facts discovered.

3.2 POPULATION OF THE STUDY

A Population is any group of individuals or units that have one or more characteristics in common which are of interest to the researcher for particular research. A population may include all the individuals of a particular type or more restricted part of that group. The population may be classified as real, artificial or hypothetical. A real population is one which actual exists. An artificial population is created by the researcher in order to illustrate a principle. Hypothetical population is an artificial population devised purely on theoretical basis.

The population of the present study were 1205 Karbi students studying in class X at provincialised high and higher secondary schools of the district. It is already mentioned that the purpose of the present study is to find out the relationship between socio-economic variables and academic achievement of Karbi students appeared in H.S.L.C. Examination for the sessions 2012-2013, 2013-2014 and 2014-2015.

3.3 SAMPLE OF THE STUDY

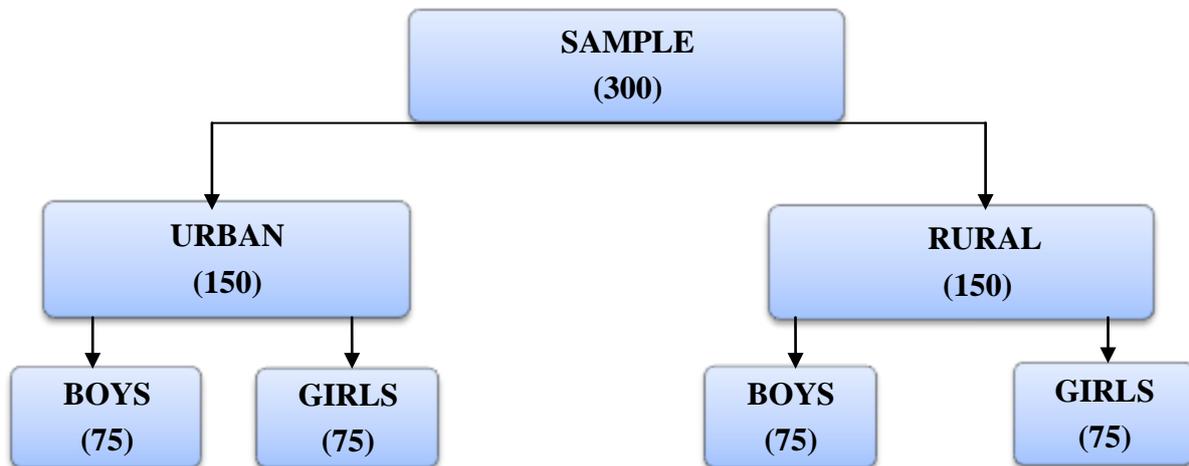
A sample is a small percentage of the larger group who are selected for research. A sample can be statistically explained as being a subset of a population. Research work is guided by inductive thinking. The investigator proceeds from specificity to generality. The sample observation is the specific situation, but when it is applied to the population it is general situation.

The students were selected purposively from the provincialised high and higher secondary schools as the study was restricted only the Karbi students. The investigator has selected 13 urban and 17 rural provincialised high and higher secondary schools of the Karbi-Anglong district.

For the present study, 300 Karbi students were selected as the sample from the universe 1205. Out of this, 150 Karbi students were drawn from urban and other 150 were drawn from rural. The numbers of the boys and girls Karbi students

were kept equal in both urban and rural. The data were collected with the help of the stratified random sampling technique.

Table 3.1 Area wise distribution of sample



3.4 VARIABLES USED FOR THE STUDY

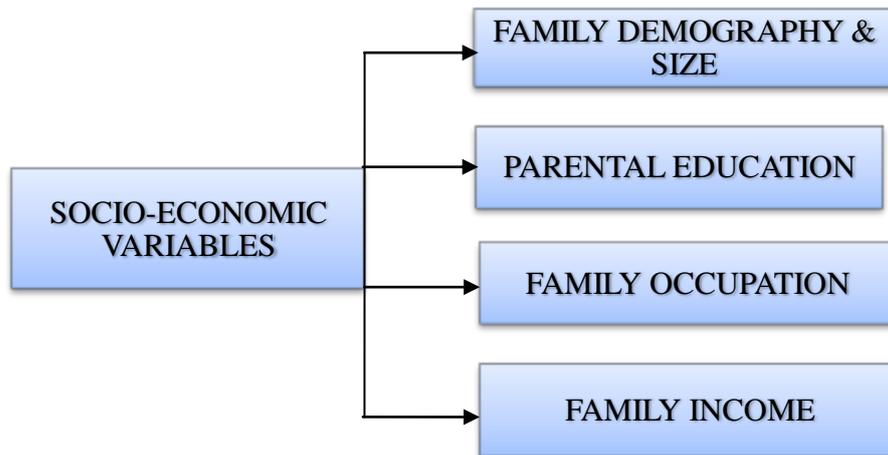
Any quantitative or qualitative research variables help to the investigator to draw the meaningful conclusion of the research study. The objective of the study was to find out the relationship in between socio-economic variables and academic achievement of Karbi students of Karbi-Anglong district. It is hypothesized that the socio-economic status has relation on academic achievement of Karbi students in H.S.L.C. Examination.

Dependent Variable:

In the study, dependent variable mentioned is Academic Achievement. It has been classified first division (60% and above), second division (45% - 59%) and third division (30% - 44%) as academic achievement of students in H.S.L.C. Examination.

Independent Variable:

Socio-economic is dependent variable. The independent variable has been used in present study to determine the socio-economic status of the students. The study takes into consideration of the following socio-economic variables.



3.5 TOOLS FOR DATA COLLECTION

To undertake the research, the investigator decided to collect data with which the hypotheses may be tested. Keeping in view all the aspects and operational definitions used for all the socio-economic variables and academic achievement, after consulting the relevant literature regarding tools used in educational research and considering the relevant advantages and disadvantages of different tools with reference to the objectives of the present study, the investigator used standardised test socio-economic status scale developed by R. P. Verma, P. C. Saxena and Usha Mishra from National Psychological Cooperation, Agra for measurement of socio-economic status of Karbi students families. In order to meet the needs of the student the socio-economic status scale had been also translated into Assamese language for Assamese medium students by the investigator.

To start with, formal permission from the heads of the high and higher secondary schools under the study was taken by the investigator to administer the tool to the Karbi students study in class X. Before the tool was administered, the

investigator met the subjects and established report. The Karbi students were requested at the very beginning to participate heartily and sincerely in responding to the tool. To make the investigation successful efforts were made to impress the students and they were told that their cooperation was most essential in this regard. The Karbi students were also assured that the data would be used only for research purpose and it would be kept confidential.

Before administering the socio-economic status scale tool to the Karbi students were given oral instruction about procedure to be giving their response on the tool. After making sure that every students understood the directions clearly, the students were asked to respond on the tool.

3.5.1 ACADEMIC ACHIEVEMENT SCORE

The index of academic achievement for the study was the H.S.L.C. Examination marks obtained by Karbi students were collected from the respective high and higher secondary schools selected for the study. Regarding the data in academic achievement of Karbi students the investigator had to wait till the results of H.S.L.C. Examinations were held in 2012, 2013, 2014 and the results were sent to the respective schools. The marks obtained by the Karbi students in the sample were collected from the schools records.

3.5.2 SOCIO-ECONOMIC STATUS SCALE

Being a composite socio-economic variable includes a total socio-economic status score based on parent's education, occupation, income levels and family demography and size of the Karbi students. The education level ranged from post graduate level to below primary education, level of occupation from higher professions to unskilled labour and income level from below Rs.2500 to Rs.8000 and above.

The socio-economic scale contains – family demography and size, education, occupation, income, amount of the land, household materials, residential location, opinion on social activities, membership of different organization, agriculture and social status etc.

The socio-economic status here indicates the position that a family occupies by means of education, occupation and income of the head of the family.

According to J. Lovinger (1940) “Socio-Economic Status contains such factors as size of the family, race, locality or residence, education of the parents, income and occupation. In our large democratic set up the society has diversified living groups.”

The investigator feels the socio-economic status does affect in academic achievement of Karbi students directly or indirectly in urban and rural of the district. The low socio-economic status of parents is the causes of poor academic performance of Karbi students in H.S.L.C. Examination.

SCORING PROCEDURE

Scoring procedure of all the four socio-economic variables and alternative a score of each items are as follow.

Table 3.2 Different socio-economic variables and scores of each item.

Variables	Item	Scores
Family demography and size.	Single family	1
	Joint family	2
	Mother -Yes	2
	Mother -No	1
	Father –Yes	2
	Father -No	1
	Unmarried brother/Sister	2
	Married brother/Sister	1
	Brother living together	2
	Brother not living together	1

Parental education level	Mother- Yes	2
	Mother-No	0
	Father-Yes	2
	Father-No	0
	High school	1
	Intermediate	2
	Graduate	3
	Post graduate	4
	B.Ed./Diploma/LLB/Engineer/Medicine	6
	Ph.D./PG in Medicine or Engineering	7
	Brother/sister up to first degree level	1
Bother/sister up to post-graduate level	2	
Brother/sister up to professional course	3	
Family occupation level	Labour	1
	Skill labour	2
	Small business/small farmer/shop keeper	3
	Secondary school teacher/class iii service	4
	I.A.S/P.C.S/Doctor/Engineers/C.A.	6
Family income level	Rs.2500-5000	2
	Rs.5001-10000	4
	Rs.10001-20000	5
	Rs.20001-35000	6
	Rs.35001-55000	8
	Rs.55001-100000	10
	Above Rs.100000	12

For scoring the questionnaire, a manual scoring key has been done conveniently. The responses were given scores from 0-12 of each item. The total scores were the summation of each item was checked. According to socio-economic status scale, the respondents were group into five categories. The scores ranging above 92 indicates Very High Socio-Economic Status (VHSES), scoring ranging in between 68-91 indicates High Socio-Economic Status (HSES), scoring in between 44-67 indicates Average Socio-Economic Status (ASES), scoring in between 32-43 indicates Low Socio-Economic Status (LSES) and scoring in between 20-31 indicates Very Low Socio-Economic Status (VLSES).

Table 3.2 Different categories and range of socio-economic status.

Range of Scores	Categories of SES
92 and above	Very high SES
68-91	High SES
44-67	Average SES
32-43	Low SES
20-31	Very low SES

3.6 DATA COLLECTION

In the purpose of investigation, the investigator had used both primary and secondary sources of data. Primary data were collected from the Karbi students of high and higher secondary schools through use of the above mentioned socio-economic status scale.

The investigation has given important care in proper application of the tool and it has been conducted without biasness. The investigator visited different schools in the district which were taken as a sample. The investigator first of all went to the Inspector of Schools office to get information regarding the total numbers of provincialised high and higher secondary schools and enrolled of schools to which Karbi students belong. The investigator met the heads of the sample secondary schools to know the status of Karbi students enrolment and the investigator also gave assurance them that all the data and information collected from them would be kept confidential.

Regarding collection of data for academic achievement of Karbi students in H.S.L.C. Examination conducted by SEBA, the investigator collected the marks obtained by the sampled students from their respective schools records for analysis.

In investigation, the secondary data were collected from various reports and information of office of Inspector of Schools, Journals, libraries, websites and other offices of the district.

3.7 STATISTICAL SUPPORT

For quantities analysis of the present study, various statistical techniques were used. These techniques were found to be reliable in analysing the data. After administering and scoring research tool scripts, the collected data were sorted and arranged according to their characteristics. The collected data are known as “raw data”, the raw data are meaningless unless certain statistical treatment is given to them. The statistical techniques used in this study were classified into two sectors such as the descriptive statistics and the inferential statistics.

The descriptive statistics was used for quantitative description of data collected through socio-economic status scale tool in simple scores. The percentage, Mean and S.D. were also calculated in this section.

In inferential statistics various test of significant were done for testing hypotheses and determine the validity of data and draw conclusion. The t-test, coefficient of correlation was calculated to find out significant effect and significant means difference between urban and rural Karbi students socio-economic status and academic achievement in H.S.L.C. Examination. The t-test and Coefficient of Correlation were tested for significance by comparing the value with the tables for significance by Garrett (1997).

3.8 LIBRARY WORK

The present research study is mainly based on primary sources of data. The investigator also collected the information for verifying and enriches the knowledge acquired from primary sources of data. The investigator was visited different institutions and libraries to collect information on the topic for the related study, various books, journals, periodicals, dissertations and thesis were consulted. For this purpose, the investigator visited the following libraries.

1. Krishna Kanta Handique Library, Gauhati University, Assam.
2. Assam Institute of Research for Tribal and Scheduled Caste, Government of Assam, Guwahati, Assam.

3. Central Library, North East Hills University, Shillong, Meghalaya.
4. Omeo Kumar Das Institute of Social Change and development, Guwahati, Assam.
5. Board of Secondary Education Assam, Guwahati, Assam.
6. District Museum, Diphu, Karbi-Anglong district, Assam.
7. Diphu Government College Library, Karbi-Anglong, Assam.
8. Karbi Autonomous Council, Karbi-Anglong, Assam.
9. SCERT Library, Guwahati, Assam.
10. Director of Census Operation, Government of Assam, Guwahati, Assam.
11. Guru Charan Medhi Library, Morigaon College, Morigaon, Assam.
12. District Library, Morigaon Assam.
13. State Central Library, Guwahati, Assam.
14. Central Library, Dibrugarh University, Dibrugarh, Assam.