

Research Methodology



CHAPTER – III

Research Methodology

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- 3.2 Sample
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- 3.4 Research Tools
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3.1 Introduction :-

Research methodology involves the systematic procedure by which the researcher starts from initial identification of the problem to its final conclusion. The role of methodology is to carry on the research work in a scientific and valid manner.

Generally research design includes the following aspects :

- Objectives of the study
- Hypotheses to be tested.
- Variables used in the study.
- Data collection and sampling
- Construction of tools.
- Administration of tools.
- Statistics used.



Out of these aspects objectives, hypotheses, variables are discussed in detailed by researcher in chapter – 1

3.2 Sample:-

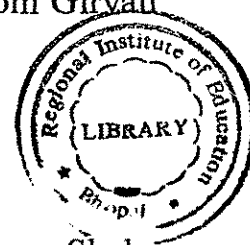
Data collection is essentially an important part of the research process so that the inferences, hypotheses or generalizations tentatively held, may be identified as valid, verified as correct or rejected as untenable. In order to collect the requisite data for any research problem, the researcher has to sample the population concerned, since it is not possible to encompass the entire population to devise appropriate tools for measuring the attribute concerned and to administer these tools.

The sample and techniques of sampling with its size is an important aspects of research and thus enhance the reliability and validity of research findings, W.G. Cochran has said – “In every branch of science we lack the resources to study more than a fragment of the phenomena that might advance our knowledge.”

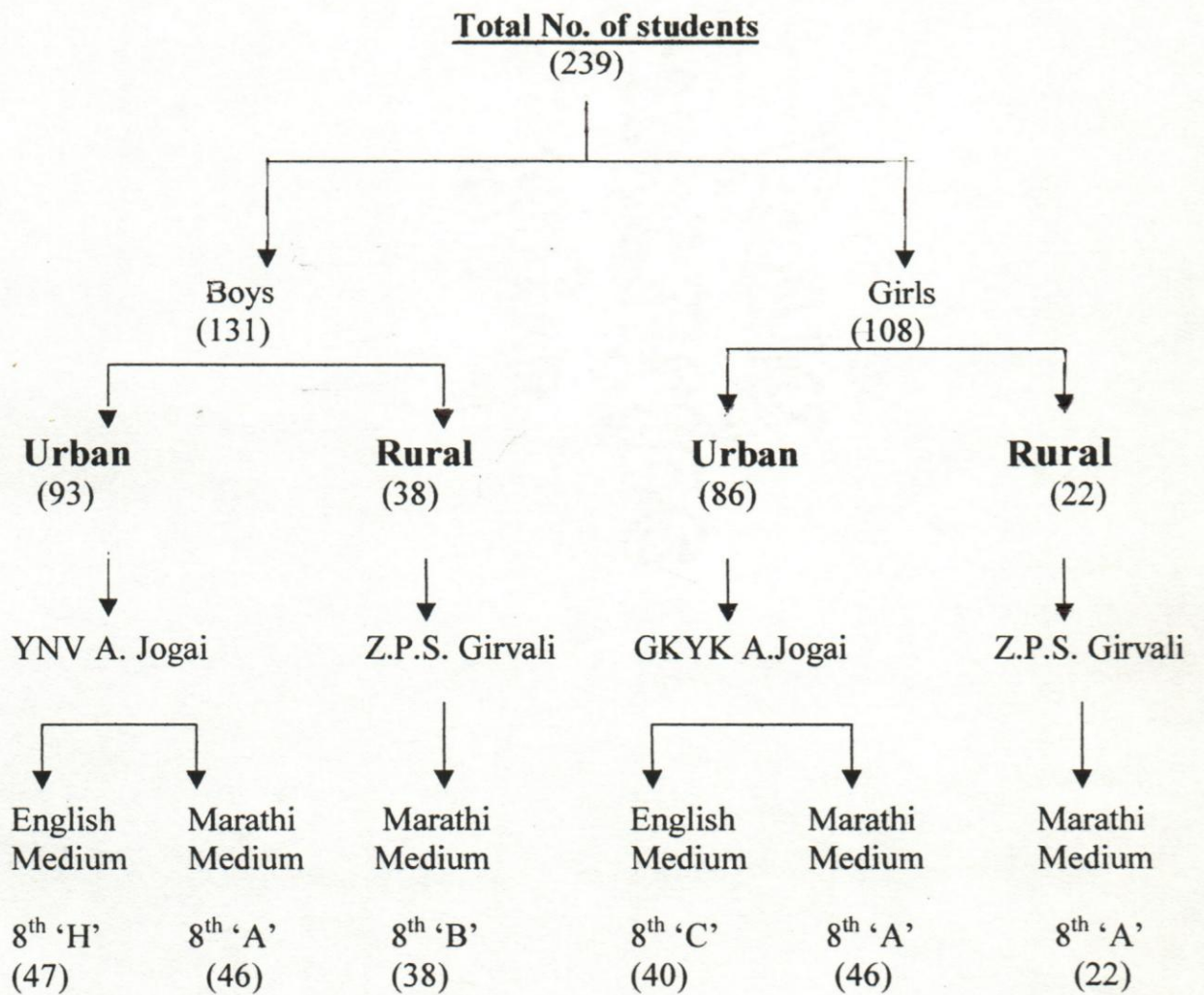
For this study the researches has used a purposive stratified sampling. In all there were 239 students (Boys and girls) of VIII grade from three different schools of Ambajogai, Tahsil, two of them from Ambajogai city (urban area) and one of them from Girvali village (rural area)

The schools chosen for sampling were :

1. Yogeshwari Nutan Vidyalaya, Ambajogai
 2. Smt. Godavaribai Kunkulol Yogeshwari Kanya Shala, Ambajogai.
 3. Zilla Parishad Prashala, Girvali
- Out of 239 students 131 boys and 108 girls were taken for the study.
 - Out of 131 , 93 boys were taken from urban area and 38 boys were taken from rural area.
 - Among 108 Girls 86 girls were taken from urban area and 22 girls were taken from rural area.
 - Sex, locality and medium of instruction are the three main strata that were taken into consideration in this purposive sampling.



The nature of satisfied purposive sampling is given is following fig.



SAMPLE TAKEN FOR STUDY

Table 3.1

	Name of the School	No. of the students		Total
		Boys	Girls	
1.	Yogeshwari Nutan Vidyalaya, Ambajogai	93	--	93
2.	Smt. Godavaribai Kunkulol Yogeshwari Kanya Shala, Ambajogai.	--	86	86
3.	Zilla Parishad Prashala, Girvali	38	22	60
	Grand Total	131	108	239

3.3 Variables:-

A variable, generally speaking, is a property that takes on different values, it is something that varies. The nature of the variables i.e. dependent or independent depends upon the statistical treatment given by the researches in a particularly study.

In this study the researches just aimed for the correlation of the Scholastic Achievement in Science (SAS), Environmental Attitude (En. At.) and Environmental practices (En. Pr.) . Therefore there are neither dependent nor independent variables. Researches for his convenience termed then as just variables .Besides this Sex, Locality and the Medium of instructions of the students are also the variables which were also taken into account during research.

List of variables:-

- Scholastic Achievement in Science (SAS)
- Environmental Attitude (En. At.)
- Environmental practices (En. Pr.)
- Sex
- Locality
- Medium of instruction.



3.4 Research tools

In order to know the environmental attitude and the environmental practices of the VIII. Grade students researcher has decided to use two different tools. The tools used by the researcher for this study were:

- 1) Environmental Attitude Scale (EAS).
- 2) Environmental Practices Questionnaire (EPQ).
 - i) **Environmental Attitude Scale**:- This was the self constructed 5 point lickert scale. There were total 30 items out of which 16 items were positive and 14 items were negative statements. The items were related to those environmental concepts which were studied by the students in last three years.
 - ii) **Environmental Practice Questionnaire**:- This open ended questionnaire consists of total 20 items. Each item is related to the day-to-day practices of the students which directly or indirectly affects environment.

3.5 Administration of Research Tool

As it is mentioned earlier that 239 students from three different students have been taken for study purpose.

In the beginning Yogeshwari Nutan Vidyalaya, Ambajogai was visited by the researcher. Students taken as a sample for study was of 8th 'H' and 8th 'A' division. Before circulating the environmental attitude scale and the environmental practices questionnaire to the students necessary instructions were given to the students and they were told that the results would kept confidential and will not have any affect or their academic achievement.



After that environmental attitude scale and environmental practice questionnaire were distributed among the students.

Subjects were asked to write correctly their names, grade, division, school name, age, date, sex on the top of the sheet. One-hour time limit was given to the respondent to fill the environmental attitude scale and environmental practice questionnaire. They were asked first to read the statements attentively and put a tick mark on any of the options given in case of environmental attitude scale while they were asked to mention their responses which would reflect their original environmental practices. After attempting all the items from both the tools the researcher collected the sheets.

The same process was implemented in the next two schools, namely

- Smt. Godavaribai Kunkulol Yogeshwari Kanya Shala, Ambajogai.
- Zilla Parishad Prashala, Girvali

In this way the researcher collected the desired data from 3 different schools by applying the processes, which are elaborately explained in the sub chapter – administration of research tools.

