Chapter III

Research Methodology

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Introduction

Research methodology is a systematic procedure that involves sampling, construction, administration of tools for collecting and statistical analysis of the data. This study consists of attitude towards environmental education of elementary level students (VIII standard) and observation to determine their environmental practices. On the basis of these research results, certain generalization can be made which provided a rationale to the present study.

This chapter deals with following points

Selection of the sample
Variables under study
Design of the study
Tools/techniques used for collecting evidences
Administration of tools
Collection of data
Scoring and tabulation of data
Statistical techniques used

III.1 Selection of the sample

Borg and Gall (1983) said that "The large group we wish to learn is called population, where as the smaller groups were actually study is called sample". Thus sample is a portion of the population which represents the population. A good sample must be as nearly the representatives of the entire population as possible and ideally it must provide the whole of the information about the population as from which the sample has been drawn. For the present study sample is selected using purposive sampling technique. In this study for sampling, students of class VIII of Kerelian Public English School (KPES), Bhavnagar has been school has each section of class VIII of strength 40 students. Thus the researcher has taken 40 students of one section. So, 40 students have been selected for regarding practices and attitude towards Environmental Education.

III.2 Variables

Variables are the conditions or characteristics that the experimenter manipulates, controls or observes. Following two types of variables were used in this study.

III.2.1 Independent Variable

These are the condition or characteristics that the experimenter manipulates or control in his or her attempt to ascertain their relationship to observed phenomena. In present study elementary level students were independent variables.

III.2.2 Dependent Variable

These are the conditions or characteristics that appear, disappear or change as the experimenter introduces, removes and changes independent variables. In present study attitude towards environmental education and environmental practices were dependent variable.

III.3 Design of the study

"A research design is a specification of operations for the testing of hypothesis under a given set of condition." The present study is a status study which was done with the help of environmental attitude scales given to students and their obtained scores showing attitude towards environmental education. Observation was also done to find out the environmental practices among students.

III.4 Tools/techniques used for collecting evidences

A researcher requires data gathering tools or techniques. Each tool is suitable for the collection of certain type of information. One has to select from the available tools which will provide data for testing the hypothesis. For the study of attitude towards environmental education and environmental practices among elementary level of students, data reported in present study involve the following two techniques

Environmental attitude scale

This was the standard 3 point scale. The test consisted of 40 items on a 3 point scale, agree, disagree and undecided. The environmental attitude inventory was record as follows Positive statement 2 marks, negative statement 0 marks and undecided statement 1 marks. The final value for attitude measure was obtained by summing the response value obtained by a student on each statement of 40 items.

Observation Schedule

To observe the practice of the respondents, researcher administered structured observation schedule which consist of 18 items regarding activities like cleanness, hygiene, pollution etc. during morning, lunch and school ending timing. Out of 18 items, 5 items was negative statement and 13 items was positive statement.

III.5 Administration of tools

Environmental attitude scale

1. The test was consisting of 40 number of question.
2. Tester gives instruction about the test to students.
3. All students were seated comfortably in the class.
4. The duration of the test was 30 minute.

Observation schedule

1. During observation students were not aware about that they were being observed by the tester.
2. The size of the field observation was 25 X 25 meter in dimension where students were observed.

III.6 Collection of data

The investigator after structuring the tool personally visited selected school for Bhavnagar. With the help of headmaster researcher has met all the available members of schools. The data collected through environmental attitude scale for attitude towards environmental education of elementary level students. After this, researcher observed the students regarding environmental practice for 3 days in morning (School starting hrs), lunch and school ending hrs.

III.7 Scoring and tabulation of data

The instructions were given in environmental attitude scale. It is a three point scale. If agree with statement then 2 marks, disagree with statement then 0 mark and going with undecided then 1 mark. Three point scale for Environmental Attitude

Agrre-2 marks
Disagree-0 marks
Undecided- 1 marks

In this scale there was total 40questions, so that maximum possible score was 80 and minimum score was 0. The observation schedule, there are 18 statement related to certain activity. It the activity take place by students then tick 'Yes' with positive statement got '1' mark. If activity does not take place tick 'No' got '0' marks with positive statement. If negative statement then activity take place by students tick 'Yes' got '0' marks and activity does not take place tick 'No' got '1' marks.

III.8 Statistical technique used

The collected data were subjected to statistical analysis for the present study. Following statistical techniques mean, median, standard deviation, t- test and coefficient of correlation were used.

In this study, the researcher attempt to study attitude towards environmental education and environmental practices of elementary level of students using environmental attitude scale and observation.