CHAPTER-III

PROCEDURE AND METHODOLOGY

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3.1 INTRODUCTION: -

The first chapter dealt with the problem rationale, purpose of study. The second chapter looked into the studies already done on the area to the problem. This chapter is concerned with the details of the techniques adopted in this study, it describes the methodological aspects of the study. It elaborates the sampling technique employed, the tool used, source of data and its collection and procedure of scoring used in and statistical techniques used. The chapter will also include the research design. The research design is the detailed plan of the investigation or the blue print of the obtained data.

3.2 THE SAMPLE: -

It is necessary that the representative sample may be drawn as, the study of each and every individual is not possible, and therefore the investigator selected a sample, which represented the whole population. With regard to the size of the sample. It is generally believed that the technique of selecting sample together with its size is an important aspect of research. This also enhances the reliability and validity. Commonly used sampling methods random sampling, purposive sampling and stratified sampling.

3.2.1. SAMPLE SIZE: -

A sample of about 100 elementary school teacher where taken from different elementary schools of Bhopal city.

3.2.2. DIMENSIONS OF SAMPLE: -

The sample had drawn from ten school of Bhopal City. Among ten schools five are Govt. school and rest are form private sector.

3.2.2.1 The following table shows the position of sample:

S.No.	No. School teachers	Sample size	Total
1	From Govt.	43	100
2	From Private	57	

Among these schools eight are of English medium and two are of Hindi medium.

3.2.2.2. The following tables show the position of sample from English and Hindi medium school.

S.No.	Medium of school	Sample size	Total
1	Hindi	2	10
2	English	8	

3.2.2.3. Details of the educational qualification of teacher of elementary school.

S.No.	Qualification	Sample size	Total
1	Arts.	51	100
2	Others	49	

3.2.2.4. Details of type of management of elementary school.

S.No.	Management	No. of teachers	Total
1	Govt.	43	100
Private	57		

3.3 DATA GATHERING DEVICE: –

To carry on any type of research investigation the data are gathered from which the hypothesis may be tested. For the purpose of this study investigator has used a self-developed questionnaire.

3.3.1 QUESTIONNAIRE: -

Questionnaire refers to a device for recurring answers to the questions by using a form which respondent fills in herself/himself. It is the most flexible tool which posses unique advantages over other kinds of tools in collecting both quantitative and qualitative information. A questionnaire is usually administered personally to enable researches to get first hand information.

The questionnaire deals with some preliminary data required from the teacher, namely the biodata of the teachers. This consisted of different aspects of teachers such as educational qualification and professional qualification teacher experience, age, management of school and the subject they are teaching in the school.

Information were collected by structured questionnaire which is prepared as tool for data collocation in which there are 20 item of multiple choice on awareness and 24 item of on the opinion with three optional answer as agree, disagree or undecided, then obtained remarks form the sample of elementary school teachers.

3.3.2 DATA GATHERING PROCEDURE: -

The researcher after structuring. The tool personally visited various schools in Bhopal only and indented the sample and distributed the structured tool to the respondents. After given their response to the question pertaining to these awareness and opinion regarding selected constitutional values, the researcher collected all the questionnaire back.

3.3.3. STATISTICAL PROCEDURES: –

For analyzing the data and arriving at results of a numbers of statistical techniques and formulae were employed.

They were as follows: -

(a) Mean (M) and standard deviation (S. D.) –

Mean and standard deviations were calculated in case of attitudes and Awareness about equality, freedom and secularism other in case of management and medium of instruction of the school and in case the teaching subject, in case of the qualifications of the teachers in case of experiences.

The formula used are as follows [Garrett 1966]

(1) Calculation of mean when data are ungrouped.

$$\text{Mean (M)} = \frac{\Sigma x}{N}$$

N = Total number of scores

x = scores

(2) Standard Deviation (SD)-

$$SD = \sqrt{\frac{\Sigma x^2}{N} - m^2}$$

x^2 = square of the scores

N = Total no. of scores

(b) Critical ratio –

In order to calculate the significant differences in the attitudes of Govterment and private school teachers-critical ratio is used.

The formula used are as follows: -

(i) $m_1 - m_2 - D$

(ii) $\sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}} = \sigma o$

(ii) $CR = D/\sigma D$

σD = the standard error of the Difference -between mean

m_1, m_2 – mean of the groups.

σ_1, $\sigma 2$ – S.D. of the 2 groups.

N_1, N_2 – Total number of scores in each group.

In order to be significant at .05 level and .01 level the value CR should be 1.96 and 2.58 respectively.

(c) Anova: -

In order to calculate the area wise significant difference Anova one-way test is used and when it is found that the difference are significant then the 't' were calculated.

(d) Product moment correlation (r)-

To find the relation between various variables. Product correlation technique is used.

The formula employed was as follows-

(1) $\sigma x = \sqrt{\frac{\Sigma x^2}{N} - \frac{(\Sigma x)^2}{N}}$

σx = S.D.

σy = S.D.

(2) $\sigma y = \sqrt{\frac{\Sigma y^2}{N} - \frac{(\Sigma y)^2}{N}}$ xy = common variance

r = product moment correlation

(3) $Vxy = \Sigma xy / N - \Sigma x/N - \Sigma y/N$

(4) $r = Vxy / \sigma x . \sigma y$

(e) Test of statistical significance.-

The 0.05 and 0.01 level of significance have been used for determining statistical significance in all cases.