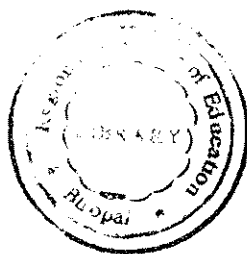


Chapter - III

Methodology



CHAPTER –III

METHODOLOGY

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CHAPTER III
METHODOLOGY

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This chapter, deals with experimental design, variable, sampling, tools used and their descriptions, administration of tools, data collection, Statistical treatment to analyses the data ,

3.1 Sample

Sampling is the process of selecting a number of individuals or items for a study in a way that the individuals of items represent the large group (Population) from which they were selected. The individuals or items selected comprise 'Sample' and the large group is referred to as ' Population'. The purpose of sampling is to gain information about a population of interest as subject.

A good sample must be as nearly representative of the entire population as possible and ideally it must possess the entire characteristic of the population from where the sample has been drawn.

Random sampling techniques was employed to draw the representative sample for the study. 70 students studying in class 7th of Deep Shikha Govt. Primary school, Bhopal was randomly selected out of a total no of 110 students of the class. The selection was made using the table of random number. Sample consisting of 43 girls and 27 boys.

Table 3.1.1 - Distribution of boys and girls in groups

| Group Name | Girls | Boys | Total |
|--------------------|-------|------|-------|
| Experimental Group | 22 | 13 | 35 |
| Controlled Group | 21 | 14 | 35 |
| Total | 43 | 27 | 70 |

3.2 Variables

The essential feature of experimental research is that the researcher deliberately manipulates, controls or observe the condition or characteristics which determine the events in which he is interested. These conditions or characteristics are called variables.

In educational research, generally the variables are categorized into two main types.

Types : 1. Independent variables
2. Dependent variables

The Independent variables are the condition or characteristics that the investigator deliberately manipulates or controls to determine the events in which a researcher is interested.

The dependent variables are the condition or Characteristics that appear, disappear or change as the experimenter introduces, removes or changes independent variables. The dependent variables are the measured changes in pupil performance attributed to the influence of the independent variables.

Here, the study was based on the following variables:

Independent variables - Selected Asanas, Pranayama and Sukshma vyayam.

Dependent variables - 1. Level of Anxiety
2. Mental Health .

Demographic variables - Gender

3.3 Design of the study

A research design is a blueprint of the procedure which provides the structure and strategy that controls investigator or experimenter. It enables researcher to test the hypotheses more systematically by

reaching valid conclusions about the relationship between dependent and independent variables.

The present study was an experimental research. The study was following two group randomized subjects, post-test-only experimental design. In this design, the investigator measured dependent variables (level of Anxiety and Mental Health) , before the independent variables (selected asanas, sukshma Vyayam and Pranayama), and then takes its measures again afterwards. The focus is on variable relationship.

Table 3.3.1 The design of the study

| Randomly assigned group | Independent Variables | Post Test |
|-------------------------|--------------------------|------------------|
| Experimental | 6 weeks of yoga practice | T ₂ * |
| Control | No yoga practice | T ₂ * |

(* - Post test only)

3.4.1 Tools

A researcher requires many data gathering tools or techniques. Each tool is suitable for the collection of certain types of information. Out of the available tools, the researcher should identified and select a tool which may be most suitable in that situation.

For this study the researcher used a Psychological tests as a tool for gathering a data. The Psychological tests have been devised to evaluate or measure behavior in a standardized way for the purpose of selection, classification, prediction and guidance as well as for the evaluation of educational programme. A standardized test is one that has specific directions for administration and scoring, a fixed set of test items and has been administered to representative samples taken from the population.

For this study, the two Psychological test were used namely :

1. Sarason's Test Anxiety Scale for children (TASC)
(Indian Adaptation)
- by Dr. A. Kumar
(For age ranges upto 16 or 17 yrs)
2. Mental Health Scale (MHS)
- by Dr. (smt) Kamlesh Sharma
(For age ranges from 11 to 20 years)

3.4.2 Reliability

1. *TASC* - The coefficient of reliability for this scale was determined by two methods viz split – half method and kuder- Richardson formula – 20 and was found 0.81 and 0.83 respectively.
2. *MHS* - The Test – retest (interval of 2 Month) and split- half reliability coefficient was found 0.86 and 0.88 respectively.

3.4.3. Validity –

1. *TASC* - The Scale was validated on a small sample against the outside criterion of Teacher's rating using teacher's five point scale of 17 items for rating School going Children developed by Sarason and others. The validity coefficient was found to be 0.61, though low but significant.
2. *MHS* - The Validity coefficient was calculated by comparing the scale with mental health check list of Pramod Kumar and was found 0.79.

3.4.4 Scoring –

1. *TASC*- There are 30 statement in this scale. Every statement has two alternative responses: Yes and No. The subject has to choose only one response. The 'Yes' answer to an statement means admitting

anxiety and get a single score. The 'No.' answer is an statement means not admitting anxiety and get a no (zero) score. The total number of 'Yes' answers therefore, denotes the raw score of anxiety.

2. MHS - There are 60 statements in the scale. Every statement has three alternative responses – Yes, Indefinite and No. The Subject has to choose only one alternative response. The Scheme of scoring is as:

- For positive statement –
2 Score for Yes, 1 score for Indefinite and 0 score for No.
- For Negative Statement-
2 Score for No, 1 score for Indefinite and 0 score for Yes.

3.5 Administration of the schedule of the Yogic practices

The researcher visited the Deep Shika Govt. Primary School, Bhopal and met the principal. Purpose of the entire research project was discussed and a request to grant permission for taking class VII students for the research work. After discussing the detailed schedule, the principal was convinced and he allow to take up such project in his school.

Prior to administered the schedule of yogic practices, students were explained about the entire procedure to be followed during the session that they were supposed to attend. A day to day schedule of 6 weeks of yogic practices was made. The yogic practices consist of selected yogasanas ViZ. Vajrasana, matsyasana, Bhujangasana, Dhanurasana, Tarasana, Trikonasana, the anuloma- viloma pranayama. and sukhshma Vyayam. It was demonstrated by the researcher with the help of his colleagues. From the Second week the repetitions of the yogasanas, pranayama and sukshma vyayama was increased. The

exercise of yogic practices was taken for 50 minutes everyday. The entire schedule of yogic practices was recorded on a audio tape. This fixed schedule of yogic practices was administered everyday from 3.55 pm to 4.45 pm. A continuous supervision was carried out during the exercise. No specific controlled on diet and playing activity was monitored during the session of yogic practices.

3.6 Data Collection (Post test)

After treating with 6 weeks of yoga practices, the researcher was administered the MHS and TASC on sample as a post test.

Prior to administration of the test the students were made clear that this test is designed to help them and is not for grade and the whole process had nothing to do with their school achievement. After this, researcher administered the test on the students. The study was conducted on both male and female students. They were distributed question papers and adequate time was given to complete the test. The students were observed during the test. The researcher was conducted a test in a healthy environment and was strict to the instructions given below

1. Read the questions carefully.
2. This test will not influence your final result in any manner.
3. Try to finish the test as early as possible.
4. You may find some of the questions difficult. In such a case do not waste time, go on to the next question.
5. Put a tick mark on any of the options as you think right.
6. Don't talk while answering the question paper.
7. Before Submitting the test, be sure that you answered the entire question.

After completion of the test, the test paper were collected. An introspection report of few students was taken. The researcher expressed gratitude to the principal, teachers and the students for their co-operation.

3.7 Statistical Techniques used

For the analysis and interpretation of data, raw scores of post test were classified and tabulated in different categories. The analysis was done with a view to find out effect of Yogic practices on level of anxiety and mental health of students. For this the descriptive statistics like mean, Standard deviation (SD) and 't' test were used.