

CHAPTER-III

PLAN AND PROCEDURE



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PLAN AND PROCEDURE

RESEARCH DESIGN

In the present study there are two types of data. First is based on two tests. i.e. before preliminary examination and Board examination. Second is based on the Academic performance.

The present research is descriptive research, which includes survey and stress of girls in before examination times. The major purpose of this descriptive research is description of stress, as it exists at present among X standard stress of girls

A descriptive research describes and interprets what is? It is concerned with relations that exist, opinions, and processes going on effects that are evident or trends and developing.

Descriptive researches are designed to obtain pertinent and precise information concerning the current status and whenever possible draw general conclusions from the facts discovered. They may result in solution of significant problems concerning local, state, national, international issues. They are more than just a collection of data; they involve measurement classification, analysis comparison and interpretation.

SURVEY METHOD

Descriptive researches are mainly concerned with the survey method, which gather data from a relatively large

number of cases at a particular time. It is concerned with the generalized statistics from a number of individual cases.

Basically, surveys deal with research question what is? With possibly some emphasis on attempting explanation. Survey method may also deals with the incidence and interrelationships of sociological and psychological variables usually, as they occur in some educational context.

Survey method can include a status quo study or a study in which the interrelationships of sociological or psychological variables are determined and summarized.

One criterion of surveys is the group measured – a sample or a population. Population surveys can be used effectively with small populations but they are rarely used with large ones. It may be physically or financially impossible to include an entire population. In the case of large population the time involved in measuring the entire population might actually reduce the accuracy of measurement. Thus a random sample could actually provide greater accuracy than measurement of the entire population, because it would not contain this effect of the longer time span.

A sample survey involves the selection of a subset of the population, called a sample, to be measured. The sample selected is usually some type of random sample when a sample is used the researcher attempts to generalize from the sample observations to the population from which the sample was selected.

SAMPLE DESIGN

Sampling is fundamental to all statistical methodology of behavioral and social research.

“In every branch of science we lack the resources to study more than a fragment of the phenomena that might advance our knowledge. In this definition a fragment is the sample and phenomena is the population. The sample observations are applied to the phenomena i.e. generalizations.”

(W. G. Cochran, 1968).

In the social sciences, it is not possible to collect data from every respondent, relevant to our study but only from some fractional part of respondent. The process of selecting the fractional part is called sampling.”

(David S. Fox, 1977)

“In the strict sense of the term, a representative sample which would be a miniature or replica population, at least with respect to the characteristic under investigation if not in all respect.”

(Mouley, 1970)

“The size of sample may or may not be significantly related to its adequacy. A large sample carelessly selected, may be relatively unbiased and accurate enough to make satisfactory possible.”

(J.W. Best, 1982).

Sampling Design and Sample

Purposive sampling design was used for the selection of schools. Two divisions of the two schools were selected. A total of 197 girl students of X standard were selected for the study and 190 girl students were responded.

Selection of Sample For The Study

In order to study the stress among the girl's students in the X standard two girl schools in Islampur city were selected. In 2002-2003 there were 15 secondary schools in Islampur city. These schools have been run by different managements however; the 13 schools of them are co-educational. So only two schools which are totally girl schools selected for the present research work. They are: --

1. Malati Vasantdada Patil Kanya Prashala, Islampur
2. Yashwant Girls High School, Islampur.

In 2002-2003 there were 162 and 35 girl students in the X standard in Malati Vasantdada Patil Kanya Prashala, and Yashwant girl High school respectively. However 7 girls of Malati Vasantdada Patil Kanya Prashala remained absent for the test taken for sample study.

The following chart shows the total number of girl students selected for the sample study.

FLOW CHART OF SAMPLE

Secondary Schools in Islampur City

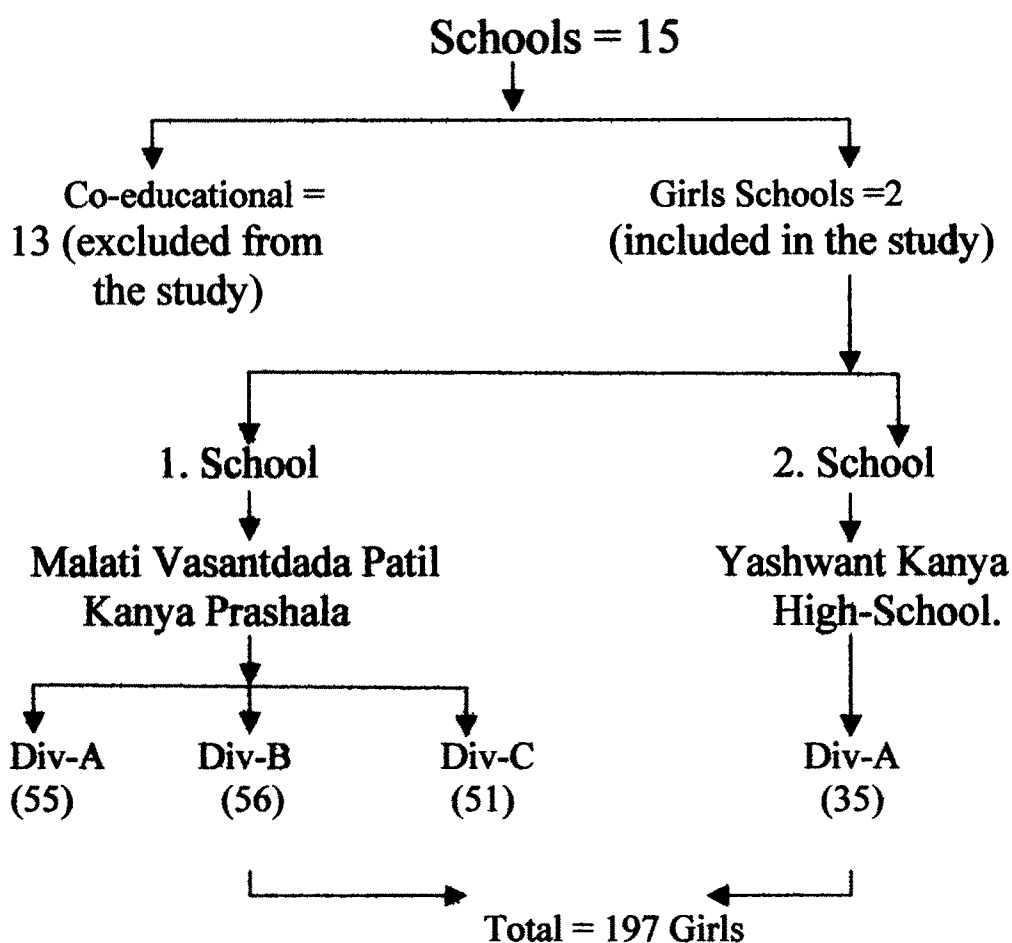


Fig.6 Sample for the Study

The following tables show the analysis of the stress among girls studying in X standard in Islampur city. The tables also include various factors responsible for stress among girl students. They are the financial situation, occupation of both father and mother and the area or the residence of these girls' students.



TABLE No. 1
RESPONSE TO THE QUESTIONNAIRE

Sr. No.	Category	No. of Students	Percentage
1	No of Girl Students Responded	190	96.44
2	No. of Girl Students Non Responded	07	03.56
	Total	197	100

The above Table No.1 shows that the researcher distributed questionnaires to 197 X standard girl students of Malati Vasantdada Patil Kanya Prashala, Islampur and Yashwant Kanya High Schools, Islampur. The total number of girl students who remained absent to respond the questionnaires is 7 and their percentage is 3.56.

However 190 girl students responded the questionnaires from these two secondary schools and their percentage is 96.44. It is clear from the table that the maximum girl students responded to the questionnaire.

TABLE No. 2
SCHOOL-WISE STUDENTS' RESPONSE TO QUESTIONNAIRE

Sr. No.	Name of School	No. of Students Responded	Percentage
1	Malati Vasantdada Patil Kanya Prashala, Islampur	155	81.58
2	Yashwant Kanya High-School, Islampur	035	18.42
	Total	190	100

The Table No. 2 shows School-wise response of girl students. The representation of girls from Malati Vasantdada Patil Kanya Prashala girl students is 155 and Yashwant Kanya High-School is 35 and their percentage is 81.58 and 18.42 respectively. The table shows that the total number of girl students responded for the present research work is 190.

TABLE No. 3

FINANCIAL SITUATION OF THE PARENTS

Sr. No.	Parents Annual Income In Rs.	No. of Students	Percentage
1	1000 to 25000	43	22.63
2	25001 to 50000	67	35.26
3	50001 to 75000	54	28.42
4	75001 to 100000	08	04.22
5	100001 to 125000	18	09.47
	Total	190	100

Table No.3 shows the financial situation of the girl students selected for the study. It is clear from the table that annual income of 110 student parents is below 50,000. Very few student parents annual income is above 1,00,000 and their percentage is 9.47.

TABLE No. 4

FATHERS OCCUPATION

Sr. No.	Type of Fathers Occupation	No of Students	Percentage
1	Employed	63	33.16
2	Self Employed / Business	39	20.53
3	Labour / farmer	88	46.71
	Total	190	100

The above Table No.4 shows that the father's occupation of the girl students. It is clear from the table that 63 girls fathers are employed and their percentage is only 33.16. The number of self-employed and labours are 39 and 88 and their percentage is 20.53 and 46.71 respectively. It is clear from the table that the occupation of maximum number of girl student's fathers is labour and farming.

TABLE No. 5
MOTHER'S OCCUPATION

Sr. No.	Type of Mothers Occupation	No. of Students	Percentage
1	Employed	07	03.60
2	Self Employed / Business	06	03.30
3	Labour / Farmer / House-wife	177	93.10
	Total	190	100

The above Table No.5 shows the mother's occupation of the girl students. It is clear from the table only 07 girls mothers are employed and 6 girls mothers are self-employed and their percentage is 3.60 and 3.30 respectively. The 177 girls mothers are House-wives and labours and their percentage is 3.30 and 93.10 respectively. It is clear from the table that maximum number of mother's occupation is labours and housewife, because of rural and semi urban area.

TABLE No. 6
AREA OF THE STUDENTS

Sr. No.	Resident Place	No. of Students	Percentage
1	Rural	41	21.58
2	Semi-Urban	149	78.42
	Total	190	100

The above Table No.6 shows that 149 students are from semi-urban area and their percentage is 78.42. Very few students i.e. 41 are from rural area. It is clear from the table that the maximum students are from semi-urban area.

PROCEDURE

The investigator prepared the stress test for girl students. The stress test and state anxiety test administered to of the girls students in X standard of both the schools selected for the study. Three weeks before preliminary examination, the stress score data and state anxiety score data collected and correlated with academic performance of the student in the preliminary examination. The stress test and state anxiety test re-administered three weeks before S.S.C. Board examination and data collected and correlated with the academic performance of the girl students in S.S.C. Board examination compared.

DATA GATHERING TOOLS

For the purpose of the study appropriate data gathering tools were prepared and used in consultation with experts keeping the objectives of the study in mind.

Questionnaire

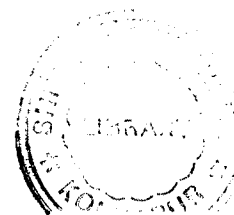
Before framing the questionnaire, the researcher had to go through a number of studies. Regarding the importance of the questionnaire, Topp and Mcgrath have said as cited by Mouley (1970)

“... the questionnaire is an economical way of accumulating information of significance to educators that is economical both for senders and for the respondent in time, effort and cost that if it were eliminated progress in many areas of education would be greatly handicapped and much useful information lost ”(P.262).

A questionnaire is a systematic compilation of questions that are submitted to a sampling of population from which information is desired. (Barr Davis and Johnson, 1975).

For the present study, one questionnaire was prepared. The content of questionnaires was finalized keeping in view the fact that questions incorporated were as simple, unambiguous and straight forwarded as possible.

Experts examined the drafts of all questionnaires. Their suggestions in respect of the questionnaire were accepted and accordingly modified and then administered to the subjects.



Dr.S.W.Deshpande and Dr.V.B.Aljapurkar prepared standardized state anxiety questionnaire and it used for the purpose of the present study.

Preliminary Examination Mark list

To assess the girls academic performance in the classroom, examination marks are considered as most important measures which judges the overall competence or performance of the girls. Suppose one girl has 59 percent in prelim examination. We took 59 score of academic performance. It shows exact academic performance of girls in stress. Hence preliminary examination marks formed the data to study the educational performance of the sample. Teacher made test for preliminary examination X standard prepared by Headmaster Association Kolhapur question papers are provided to two schools selected for this study for the preliminary examinations. Assessment is done by school teachers in their respective schools.

DESCRIPTION OF DATA GATHERING TOOLS

Questionnaire

- i. Questionnaire No. 1- Stress Test.
- ii. Questionnaire No. 2 - Standardized State Anxiety Test.

The first questionnaire was used to collect information of stress before 3 weeks of preliminary examination and S.S.C. Board examination.

The Second questionnaire was used to collect information of state anxiety test. State Anxiety Test was taken before 3

weeks of preliminary examination and before 3 weeks of S.S.C. Board examination.

Mark Sheet of S.S.C. Board Examination

S.S.C. board examination conducted in March 2003. This examination was conducted for school subjects Viz. Marathi, Mathematics, General Science, and Social Science (History, Civics, Geography) English, Hindi. Marathi, Hindi, English subjects carried 100 Marks. Mathematics, Geometry, Social Science, General science subjects carried 150 marks each total 750 marks were distributed 6 subjects. Aggregate percentage obtained in all school subjects in the preliminary examination were used as data, for educational performance. Our stress test and state anxiety test score were also taken. One girl has 91 percent in board examination we took 91 score in educational performance.

Assessment of Educational Performance

Two parts of educational performance of the subjects assessed.

Preliminary-Examination

The percentage of marks obtained in the preliminary examination was considered.

Board- Examination

The percentage of marks obtained in the board examination was considered.

Stress test were prepared as follows:

a. Preparation of the test *collection of statements.*

The following steps were taken

- i. Selection of Schools.
- ii. Selection of Class.
- iii. Distribution of Questionnaire before preliminary examination.
- iv. Distribution of Questionnaire before Board examination.
- v. Analysis and Interpretation of data.
- vi. Conclusion.

b. Weightage To Different Points

The weightage to different points are taken in stress test such as unexpected incidents, unhappy, own problems, insecure, control of anger, fear of examination, recall answers, forgetters, spend of time in studying was taken in stress test.

c. Forms of Questions

In stress tests only objective type of questions were framed.

d. Preparation of marking scheme and scoring key

All questions in the tests were objective types. In answers rating scale was used. In rating scale the options such as never, rarely and always were used in answers.

The range of possible scores for the stress test varies from a minimum score of 20 to a maximum score of 60 on stress test. The range of possible scores for the state anxiety test varies from a minimum score of 20 to a maximum score of 80 marks

item by rating themselves on a four-point scale. On both test subjects respond to each stress and state anxiety test. The Three categories for the A- Stress test scale are 1. Never 2. Rarely 3. Always (Likert Type Scale used, Best and Khan 2000) The four categories for the A state anxiety scales are 1. Not at all 2. Somewhat 3. Moderately and 4. Very much so.

The scoring weights of or items on which ratings indicate high anxiety are the same as the numbers ticked out or check marked for those items on the test form for items on which a high rating indicates low anxiety, the scoring weightage are reversed anxiety, the scoring weightage are reversed. The weighted scores of responses in stress test marked 1, 2 and 3 and for the reversed items are 3, 2 and 1 respectively.

The reversed items on the stress test subscales are
A-Stress Scale: 1, 2, 7, 15, 18, 19

The weighted scores of responses in state anxiety test marked 1, 2, 3 and 4 and for the reversed items are 4, 3, 2 and 1 respectively.

The reversed items on the state anxiety test subscales are
A-State Anxiety Scale: 1, 2, 5, 8, 10, 11, 15, 16, 19 and 20

To score each scale, give the appropriate score to tick marked response form the scoring key and add the response values for each item. For items on which a high rating indicates low anxiety, the scoring weights are reversed. This is most conveniently done with a simple hand counter or does the adding in his head. Make certain that the correct scoring key is

used to score the A- state anxiety and stress scales. The scores for each scale may be recorded at any convenient place on the test form.

e. Administration

The Marathi stress test prepared and given individually. Complete instructions is printed on the test form for both the stress and state anxiety test. There is no time limit for solving the questionnaire.

Scoring of each socio-economic factor

Scoring of each socio- economic factor affecting Stress test and State anxiety test.

i. Occupation of Parents.

Occupation of parents divided into following categories:

- a. Employed:- If parents of the girl students were getting regular payment.
- b. Self-employed: - If parents of the girl students were doing their own business.
- c. Labour- If parents of the girl students were doing manual work.

ii. Family income from all Sources-

Data on yearly income of the families of the girls was collected.

- a. Low income – (Below Rs. 25,000 /-)
- b. Middle income – (Rs 25,001/- to 50,000/-)
- c. High income – (Above Rs. 51,000/-)

iii. **Sex-**

To get girls in our study.

iv. **Residential Address**

By using address check girls were lived in rural or Semi-urban area.

v. **Age.**

15-18 Years girls were taken.

SCORING KEY

Scoring Key In Stress Test

We take scoring key in stress test is as follows:

0 - 12	Low Stress Level
13- 24	Moderate Low Stress Level
25-36	Moderate Stress Level
37-48	Moderate High Stress Level
49-60	High Stress Level

Scoring Key In State Anxiety Test

We take scoring key in state anxiety test is as follows:

0-16	Low State Anxiety Level
17-32	Moderate Low State Anxiety Level
33-48	Moderate State Anxiety Level
49-64	Moderate High State Anxiety Level
65-80	High State Anxiety Level

STATISTICAL TOOLS

For objective interpretation of the data collected using different tools, following statistical measures were used. And data analyzed and interpreted

1. Mean
2. Standard Deviation
3. Co-relation
4. 't' test