

Chapter 3

METHODOLOGY AND PROCEDURE

The collection of data is an important aspect of the research whole process of, the research depends upon the data. There are many techniques of data gathering.

This chapter gives us an idea about the sample which has been regarded as the basis of research. In addition to this it also provides a picture of instrument employed for the collection of data. In explaining the methods and procedures in the study, the investigator describes the techniques used in the collection of data and method adopted in drawing out the sample and procedure employed for tabulating and organizing the data for research.

The order of discussion of these is as under:

1. Population for the study
2. Selection of the Sample.
3. Tools and their description.
4. Administration of the Tools.
5. Scoring Procedure.
6. Statistical techniques used

3.1 POPULATION FOR THE STUDY

Population may be defined as the group of individuals belonging to same species. For the present study all the schools of the Jammu district were included in the population of the study and from this only the secondary school students were taken.

3.2 SELECTION OF THE SAMPLE

A sample is a small proportion of a population selected for analysis. Sampling is a foundation of research. It is essential for all statistical studies. The investigator demands a sample which would truly reflect the whole population. This is the basic characteristic of good sampling. A good sample will produce result very much approaching the population and generalization will be effective .There are many techniques for obtaining a sample, which will be representative of the whole population

It is physically impossible to work with total population in any scientific research. Moreover the time, money and efforts involved do not allow a researcher to study all possible members of populations. Research therefore, is invariably conducted by means of a sample drawn from the accessible populations on the basis of which generalizations are arrived at a made applicable to the target populations as a whole.

In the present study a sample of 245, IXth class school students was selected from secondary schools of district Jammu by simple random sampling. For the selection of the sample the investigator prepared a list of all the secondary schools of Jammu district and from these schools the investigator selected 9 schools randomly. From these schools the investigator selected class ninth and from the class the investigator selected 245 students randomly.

TABLE 3.1: Showing the Details of Sample Selected From Different Schools of Jammu City

S.NO.	NAME OF THE SCHOOL	BOYS	GIRLS	TOTAL
01	Government Girls HSS, Mubarak Mandi	--	26	26
02	Government High School, Bathendi	16	1	17
03	Government SRMLHSS, Parade (boys)	59	--	59
04	Government Girls HSS, Satwari	--	22	22
05	Government High School, Qasim Nagar	13	15	28
06	Government Girls HSS, Canal Road	--	41	41
07	Government Girls HSS, City Chowk	8	6	14
08	Government Central Basic HSS, Purani Mundi	13	--	13
09	Government HSS, Sunjwan	10	15	25
TOTAL		119	126	245

3.3 VARIABLES STUDIED

The variable which has been studied in the study is as under:

1. Learning style
2. Academic Achievement

3.4 SELECTION OF THE TOOL

In every type of research the investigator needs certain instruments to gather certain facts and explore new fields. The instrument thus employed are called tools. Different tools are suitable for collecting various kinds of information for various purposes..

In the present study instrument employed for the collection of data is:

3.4.1 Learning Style Tool By K. S. Misra Published By National Psychological Corporation Agra

The investigator employed learning style inventory developed by K.S. Misra. It consists of 42 items which are having five responses from 1st, 2nd, 3rd, 4th, 5th which were scored in reverse order as 5, 4, 3, 2, 1. The scores were added in an orderly manner as per the different learning styles of the students.

3.5 RELIABILITY

The three styles of learning having values of alpha reliability as for verbal style the value is .903 ,for figural style of learning the value is .742 and for enactive style of learning the value is .682. However the value of N is 150.

3.6 VALIDITY

The intrinsic validity was found by product moment method of correlation for the learning styles. The table Z depicts that enactive style of learning is positively correlated to the verbal and the figural styles of learning and positive correlation is found between the verbal and the figural styles of learning. It was found that positive correlation is found between all the styles of learning. The value of N is 100.

3.7 OTHER SOURCES OF DATA

The investigator collected the academic achievement scores of the secondary school students from the result register of the concerned schools. The investigator collected the total marks and the marks obtained by the students and from this academic achievement of the students were seen by the investigator.

3.8 DESCRIPTION OF TOOL FOR THE LEARNING STYLE

In the present study the investigator used the tool constructed by K.S. Misra for the learning styles. Through this tool six styles of learning can be measured which are discussed as under

- Enactive Reproducing style of learning
- Enactive constructive style of learning
- Figural Reproducing style of learning
- Figural Constructive style of learning
- Verbal Reproducing style of learning
- Verbal Constructive style of learning

The first and the second type can be grouped together to form the enactive style of learning; 3rd and 4th can be clubbed together to make the figural style of learning and 5th and 6th can be joined together to make the verbal style of learning while as the combination of 1st, 3rd and 5th forms the reproducing type of learning style and grouping together the 2nd, 4th and 6th makes the constructive style of learning.

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Table. No: 3.2 showing the values of correlation for different styles of learning measured through the tool of learning style by K . S. Misra (N=200)

	ER	EC	FR	FC	VR	VC	E	F	V	R
EC	.132									
FR	.371	.417								
FC	.227	.539	.486							
VR	.280	.431	.495	.372						
VC	.207	.310	.209	.271	.528					
E	.684	.813	.525	.530	.481	.350				
F	.345	.556	.855	.869	.444	.279	.612			
V	.281	.427	.351	.371	.889	.859	.479	.419		
R	.685	.451	.801	.492	.766	.427	.734	.745	.693	
C	.246	.816	.494	.812	.573	.660	.745	.762	.702	.598

3.9 ADMINISTRATION OF THE TOOL

The investigator visited the government secondary schools of jammu district selected through the simple random sampling. The researcher discussed the need of his study with the concerned principals for giving permission for the collection of data. Once the permission was given the investigator developed rapport by giving them directions for answering the questionnaire very carefully.

3.10 SCORING OF THE TOOL

The scoring of the questionnaire is done as per the instructions and procedure given in the manual.

3.10.1 SCORING OF THE LEARNING STYLE TOOL

The scoring of the questionnaire is done as per the instructions and procedure given in the manual. In each question of the questionnaire there are five response alternatives. These are very less, less, normal, much, and very much. The scoring of the responses is done by awarding the marks as 1, 2, 3, 4, and 5 respectively. Enactive style of learning is formed by the combination of scores of enactive reproducing and enactive constructive styles of learning. Figural style of learning is formed by the combination of scores of figural reproducing and figural constructive styles of learning. Verbal style of learning is formed by combination of score of verbal reproducing and verbal constructive styles of learning. Reproducing style of learning is formed by the addition of the score of ER, VR and FR styles of learning. Constructive style of learning is formed by the addition of the scores of EC, VC and FC styles of learning. The maximum score for this questionnaire is 210 and the minimum score for this questionnaire is 41.

3.11 STATISTICAL TECHNIQUES USED:

Regression