1. Details of Module and its structure

Module Detail		
Subject Name	Sociology	
Course Name	Sociology 01 (Class XI, Semester - 1)	
Module Name/Title	Doing Sociology : Research Methods – Part 2	
Module Id	kesy_10502	
Pre-requisites	Concept of Sociology	
Objectives	After going through this lesson, the learners will be able to	
	understand the following:	
	1. The process of conducting social science research	
	2. The criteria to arrive at a research question	
	3. The methods that can be used	
	4. Ethical issues involved in research	
Keywords	Research, Objectivity, August Comte, Aristotle, Plato, Socrates,	
	Reason, Inquiry, Scientific	

2. Development Team

Role	Name	Affiliation
National MOOC Coordinator (NMC)	Prof. Amarendra P. Behera	CIET, NCERT, New Delhi
Program Coordinator	Dr. Mohd. Mamur Ali	CIET, NCERT, New Delhi
Course Coordinator (CC) / PI	Dr. Sheetal Sharma	Jawaharlal Nehru University, New Delhi
Subject Matter Expert (SME)	Ms. Mamta Saha	Sanskriti School, Chanakyapuri, New Delhi
Review Team	Ms. Abha Seth	DAV Public School, Sec B-1, Vasant Kunj, New Delhi

Social Science is concerned with the understanding of human behavior and explanation of the same. To this pursuit, data plays a very important role. Social scientists do this **scientifically**, i.e. by **following a method or logic of investigation**.

Social scientists have developed methods for systematic collection of data. Hence, it is only natural to state that sociological research is completely scientific because it follows scientific canons of procedure.

Carrying out research scientifically should produce valid conclusions. This validity depends on a number of factors. i.e.-

- a) The methods that have been used
- b) How well these methods have been applied
- c) Whether the findings have enriched the existing body of knowledge regarding the subject

Before we move further on research methods, we must also understand how one should choose the subject of research subject. Following are some questions that can help the researcher decide the nature of subject that can be chosen and the method that should be used to study it.

- a) Does the subject area interest the researcher?
- b) Is it possible to carry out scientific study on the chosen topic?
- c) Does the researcher have enough resources to carry out the same?
- d) Is the researcher going to face any moral or ethical issues by posing questions or using a certain method?
- e) Is the subject of research theoretically significant and interesting?

To a novice taking his/her first steps into research, these are questions that will help select a research topic.

If on the basis of observation of empirically verified facts, if one is able to i) construct an abstraction(able to derive general rules), ii) prepare a conceptual frame that would help you organise, classify and interrelate the relevant facts and iii) sum up the facts in the form of empirical and systemic generalisations, we can say, you have gained a theoretical understanding of your chosen subject. Theoretical understanding helps us to sometimes predict logical outcomes of certain combinations of facts. At other times, such theoretical understanding may indicate the gaps that may exist in our knowledge of the subject.

There are three ways of generating data i.e.-**Historical**, **Comparative** and **Functional**.

Under the Historical method, historical changes in the social structure and types of society are investigated and are compared in certain respects with changes in other societies. In this manner, both causal explanations and historical interpretations find a place in the social explanation.

The analyses of social change in history are carried out with the help of several methods. One of the most favoured methods is the comparative method used in sociology. This entails the study of different groups and institutions in order to examine similarities and differences.

All sociological research involves the comparison of cases or variables, which are similar in some respects and dissimilar in others. A major methodological issue is whether or not the units of comparison and the indicators chosen to compare differences or similarities are genuinely comparable and can legitimately be used outside their cultural settings. Durkheim regarded the comparative method as the counterpart of the experimental method pursued in other sciences. Therefore, Durkheim favoured the comparative-historical method because sociologists could not carry out experiments and had to rely on the method of indirect experiment-the comparison of similar cases in a systematic way.

The functionalist method or functionalism is a doctrine which asserts that the principal task of sociology is to examine the contribution which social items make to the social and cultural life of human collectivities. It may additionally assert that to examine social phenomena in this way is to explain why these items occur at all; and /or why they have persisted. Functionalism provides a perspective from which to attempt an analysis of a society. Functions, as per Robert.K.Merton, can either be manifest or latent. Merton called an action intended to help a system's equilibrium, it is a manifest function. He also pointed out that people's actions can also have latent functions i.e. unintended consequences.

Thus, functionalism is a method which refers to factors and forces of integration, equilibrium, and disequilibrium. The inter-relation between these three can be studied under functionalism.

Multiple Methods and Choice of Methods

The need to select a method arises from two problems that we encounter in Sociology. These are-

- a) The social world involves many competing versions or interpretations of reality
- b) Presence of multiple points of view in the social sciences

As a result of these two problems, we need to make a choice of the method to be used.

In social sciences there are multiple methods of data collection. Data collection acts as a bridge between the observer and social reality. Data collection gives us some correct and dependable inferences about the nature and structure of society and social phenomena.

Why we need to make a choice of the method to be used?

- a) There are multiple truths and multiple perspectives in sociology
- b) There is no single road to sociological truth
- c) Different kinds of methods are suited to tackle different types of research questions
- d) Each method has its own strengths and weaknesses

There are different ways of classifying or categorizing various methods commonly used by sociologists. It is distinguished between **qualitative and quantitative methods**; **observable and non-observable behavior**; data collection using **secondary data or primary data**; and data collection for micro **methods or macro methods**.

The recent trend in social science is to advocate the use of multiple methods to bear on the same research problem from different vantage points. This is sometimes referred to as Triangulation i.e. the process of reiterating something from different directions. In this way different methods can be used to complement each other to produce a much better result than what might have been possible with each method by itself.

Following are some of the methods that social scientists can choose from-

a) Observation

Observation is a method that employs vision as its main means of data collection. It implies the use of eyes rather than ears and the voice. It is accurate watching and noting of phenomena as they occur with regard to the cause and effect or mutual relations. It is watching other persons' behavior as it actually happens without controlling it.

Lindzey Gardner defined it as 'selection, provocation, recording and encoding of that set of behaviours and settings concerning organisms (naturalistic settings of familiar surroundings) which are consistent with empirical aims'.

Characteristics of observation as given by Black and Champion-

- I. Behavior is observed.
- II. It enables understanding significant events affecting social relations of the participants.
- III. It determines reality from the perspective of observed person him/herself.
- IV. It defines regularities and recurrences in social life by comparing data in one study with those in other studies.

- V. Observation involves some controls pertaining to the observer and to the means s/he uses to record data. However, such controls do not extend to the setting or subject population.
- VI. It is focused on hypothesis-free inquiry.
- VII. It avoids manipulations in the independent variable i.e. one that is supposed to cause other variable and is not caused by them.
- VIII. Recording is not selective.

b) Case-Study

Case study research excels in bringing to us an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research. Case studies emphasize detailed contextual analysis of a limited number of events or conditions and their relationships. Case study method is ideal when a holistic, in-depth investigation is needed. Its aim is to determine the factors that account for the complex behavior patterns of the unit and the relationships of the unit to its surroundings. Case-data can be gathered, exhaustively, on the entire life-cycle or on a definite section of the cycle of a unit but with a view to ascertain the natural history of the social unit and its relationship with social factors and forces involved in its environment.

c) Survey

A survey is a form of planned collection of data for the purpose of description or prediction as a guide to action or analyzing the relationship between certain variables. Surveys are conducted on a very large scale. It is an attempt to provide an overview. It is a comprehensive or wide-ranging perspective on some subject based on information obtained from a carefully chosen representative set of people. Such people are usually referred to as 'respondents'. Survey research is done by large teams consisting of those who plan and design the study and their associates and assistants.

d) Participant Observation

Participant observation refers to a particular method by which sociologists learns about society, culture, and people that s/he is studying. It involves a long period of interaction with the subjects of research. As a non-native, the sociologist or anthropologist has to immerse him/herself in the culture of the natives-by learning their language and participating intimately in their everyday life-in an effort to acquire all the explicit and

implicit knowledge and skills of the insider. The goal of the researcher is to understand the 'whole way of life' of a community. It is often called 'field work'.

e) **Interview**

An interview is basically a guided conversation between the researcher and the respondent. Interview occupies the ground between a structured questionnaire of the type used in surveys, and the completely open-ended interactions typical of participant observation methods. Its chief advantage is the flexibility of format. Questions can be re-phrased or even stated differently; the order of subjects or questions can be changed according to the progress in the conversation; subjects that are producing good material can be extended and built upon others that provoke unfavourable reactions that can be cut short or postponed to a later occasion, and all this can be done in the course of interview.

ETHICAL ISSUES

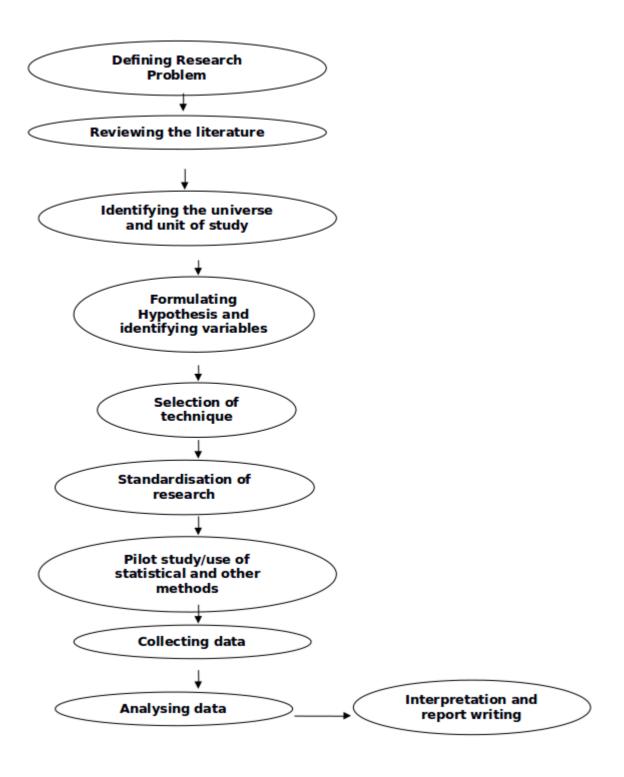
This is extremely important and necessarily has to be kept in mind while choosing a research method. There are many ethical issues that need consideration such as-

- 1. **Informed Consent-**This implies that the subject population that is being observed must be observed with their prior consent. The subject population should be informed and consent taken in advance of the study. They should be told about the study in complete detail. They also must reserve the right to turn down the request of the researcher to observe them. If the nature of study is intensive involving large amount of time, periodic consent must be sought from the subject population.
- 2. **Confidentiality and Privacy**-Identities of the respondents must be kept complete confidential. At no point in time should researches reveal the identity or contribution of the participants to the study.
- 3. **Negative Effects**-The researcher must anticipate that the study might have negative effects for the participants. Example of negative effects-harm to employment prospects, social exclusion and so on. Researcher must anticipate and prevent such things from happening.
- 4. **Vulnerable Groups**-Researcher must include people who are vulnerable because of their age, disability, mental/physical issues. The research should be inclusive.
- 5. **Covert Research**-This implies that the researcher has hidden his/her identity from the respondents. As a result the respondent could not have gained informed consent. This might have created serious ethical issues.

RESEARCH DESIGN

Research design is the framework that consists of all the detail about the research that would be undertaken by a researcher. It is a systematically planned out blueprint stating the manner in which the study would be carried out.

Following are the components or steps of a research design-



Funtions And Purpose Of Research Design

Manheim (1977: 142) identified the following five purposes of preparing a research design.

- a) To gather sufficient evidence to support one's hypothesis and to disprove alternative hypotheses.
- b) To carry out a research that can be repeated in terms of its subject matter and research procedure. In other words, it does not pertain only to unique situation that has no relevance to society at large.
- c) To be able to work out correlations among variables in a manner that produces interrelated propositions.
- d) To make out the need for a pilot study in order to carry out the future plans of a full-fledged research-project.
- e) To be able to economise on time and resources by selecting appropriate techniques of data collection.

Black and Champion (1976: 76-77) have pointed out the following three functions of research design.

- a) A research design provides a blueprint for operationalising the research activity.
- b) It defines the limit and scope of the research.
- c) It provides an opportunity to the researcher to foresee possible areas of problems in the process of carrying out the research.

There are many issues that are worth studying such as gender and education, role of technology in the life of students, Usage of Public Transport and so on.

Thus, we see that we have a multitude of issues that we want to understand and plenty of questions to which we want answers. All this can be done appropriately only when we are able to understand the nature of the problem and accordingly choose a research method or a combination of them.

What becomes crucial is that we must choose an appropriate research question that is both relevant and feasible. The researcher needs to understand the meaning of the issue at hand and put into meaningful terms from an analytical point of view.

The researcher must conduct a thorough study of the literature already available for the chosen topic. This will give the researcher a good idea about the work that has already been done with regard to the topic.

Before starting with data collection you have to identify the universe and the unit of study. The identification of universe implies demarcation of the physical area and social unit of study. The universe consists of the population within a well-defined area where' the study is to be conducted. However, such a group is usually too large and not possible to be covered by a single investigator. Therefore, a smaller and more manageable group may be selected by sampling. The outlines of the universe and its attributes may be delineated more clearly by a taking a census and then making the choice of the group(s) to work on. Within the broad universe further specification of the possible units that could be studied makes up the actual or effective universe. The group(s) selected as focus of study is called the unit of study.

A pilot study is an exploratory study done before the actual work starts in the field. It is a pre-testing of your research methods and techniques in order to perfect them. Pilot study will ensure that right questions have been put in the questionnaires for making the fieldwork fruitful. It makes you aware of the difficulties beforehand and provides you an opportunity of modifying your techniques to suit field conditions. Pilot study depends upon the size of the population, the time available and the availability of funds.

Once data is collected, it has to be classified and analyzed to check whether the hypothesis / hypotheses i.e. the assumption that the researcher had begun to test its logical or empirical consequences.