

Preface

In previous chapters we read about emergence of sociology as a social science and its relation with other social sciences as well as the subject-matter.

If we look into the history of development of social science in our changeable society, we find that earlier knowledge about physical and social world was stored in philosophy only. However, in line with the evolution of different cultures in society, the creation of knowledge in the field of understanding of the physical and social world started receiving serious attention of the scholars. Thus, the progress initially made to the understanding of the physical world inspired the scientific study of the social world. This necessitated the increasing dependence on the scientific research method for understanding of human society. Eventually, this concern culminated into search for research methods in sociology. In the following chapter we will know about the meaning of social research and also various tools and techniques of research in sociology.

As a social science, the aim of sociology is to obtain systematic knowledge about emerging and associated social events by studying them in a scientific way so that these events could be understood meaningfully and related theories can be examined. In-depth research of social events is the core of sociology. Thus, it becomes necessary to acquire systematic understanding of sociological research methods.

Definition of social research

According to Redman and Mory, "Research is a systematized effort to gain new knowledge".

In short, social research is a scientific activity or process through which social events are scientifically analyzed and on the basis of such analysis concepts and theories relating to social life are formed. In other words, research is a systematized attempt to obtain knowledge.

Purposes of social research

According to Pauline V. Young, there are three aims or purposes of social research: (1) investigation and verification of facts, (2) investigation of relations between facts and (3) establishment of scientific theory.

We will understand them in a little more detail :

(1) Investigation and verification of facts : Social research aims to discover new facts and verify and test old facts. Facts are interrelated and they are not separate from each other. Relation of a social fact with other social fact makes the former meaningful. Thus we can say that social research is an effort to investigate the secrets lying behind facts.

(2) Investigation of relations between facts : The second important aim of social research is investigation of relations between facts by logical screening of collected data, analysis of relations between facts and investigating the form of relations (correlation or causal relation) between facts.

(3) Establishment of scientific theory : At the end of research process the researcher aims at

formation of precise concepts and theories related to social life along with development of scientific tools which can be helpful in understanding human behaviour.

Main steps of social research :

Social research is a scientific process and it has following steps :

(1) Selection of research problem, (2) Planning of research, (3) Formation of research questions, (4) Construction of tool for data collection, (5) Data collection, (6) Classification and tabulation of data, (7) Analysis of data.

These steps are described below in a little more detail :

(1) Selection of research problem : The first step in social research is selection of research problem. Considering different research fields from all aspects, the researcher needs to select the topic of research in a precise way. It is very important to select the topic or the problem in any kind of research work because in absence of this, research is not possible. A researcher can select a research problem such as problem of sex-ratio in Gujarat, for example.

(2) Planning of research : Scientific research requires pre-planning. Planning of research is a logical and designed tool that helps the researcher in deciding the direction of research. However, complexity of social events makes precise planning a little difficult and as research work proceeds it becomes necessary for the researcher to make some changes in the planning of research. Therefore, it can be said that pre-planning is a temporary one and helps only in identifying the direction of research. The researcher, thus, needs to take some important decisions such as from when to start research work, deciding the limit of research-field, method to be adopted for data collection etc. as these decisions play an important role in the planning of research.

(3) Formation of hypothesis : Formation of hypothesis is an important and fundamental part of the process of research, though all scholars do not consider it as an independent step of research. Hypothesis is a temporary statement about the correlation between facts and substances of an actual event which is to be verified. For formation of hypothesis, the researcher makes an attempt to identify the variables responsible for the similar kind of event in the past and then makes an interrogative statement about relations between them. This interrogative statement is hypothesis which is examined in the process of research. For example, with the increase in the rate of female-infanticide the number of women declines.

(4) Selection of tools for data collection : This is also an important step of research and the researcher with the help of tools s/he selects, collects the information regarding her/his topic of research. S/he has to examine the hypothesis on the basis of information gathered. It is very important for the examination of hypothesis that the information collected is precise, valid and reliable. For this purpose, the researcher has to carefully select the tools of data collection such as observation, interview, questionnaire, etc. considering the field of research, source of information, size and form of information etc. For example, for the research study of sex-ratio in Gujarat, the researcher needs to decide about tools for data collection.

(5) Data collection : It is essential to collect data in order to examine the hypothesis formed by the researcher relating to his research problem. Hypothesis, if not examined is not accepted by the science.

The researcher needs to validate his hypothesis on the basis of precise information. The collection of precise information is based on the use of tools of data collection and collection of data in an objective manner. Prejudices of researcher prove harmful in research.

(6) Classification and analysis of data : In order to make the information collected meaningful, the researcher needs to link them reciprocally on the basis of logical relation. This requires classification and analysis of data collected. This is also necessary for the understanding of relation between various data. No scientific theory or finding can be accomplished on the basis of scattered information. Therefore, it becomes necessary for the researcher to classify the information on the basis of its similarities and dissimilarities. For example, for above mentioned research topic, data can be classified by sex, marital status, caste etc.

(7) Findings of research and generalization (report writing) : This is the last step of research process. Through classification of data the researcher attempts to understand relation between different facts and then makes precise statements about those facts. These statements are the conclusions or findings of his/her research which are then presented in a research report.

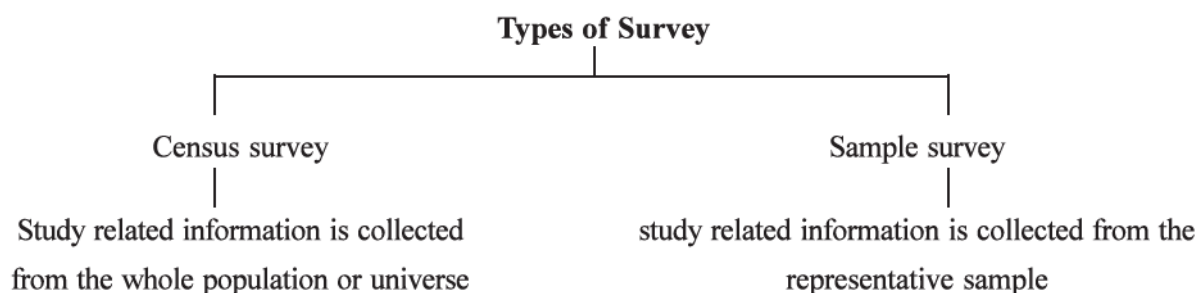
It is not that the conclusions made by the researcher are only applicable to the event s/he has studied. They may also be applicable to other similar events. Thus, when conclusions made by studying an event are made applicable to other similar events, it is known as generalization. These generalizations lead to the emergence of theories.

Sociological research methods

(1) Survey method : Survey method is most commonly used method for data collection in sociology. Survey method is widely used by governmental and non-governmental institutions for variety of purposes. Its use is not restricted to social research only. You might have also associated with such survey sometimes. Generally, this method is used in studies related to attitudes, behaviour, perceptions, views, expectations of people. In brief, it is a popular method of data collection. Survey method begins with a theoretical or practical research question and completes with its measurement and analysis of information.

Two types of tools are used in survey method for data collection: (1) Interview, (2) Questionnaire. For majority of research questions, questionnaire or interview schedule is used for collection of data from the universe or part of it. Such studies based on collection of data are generally known as survey.

In brief, survey is a scientific method of collection and description of information which is related to social life.



Purposes of social survey : (1) Descriptive purpose, (2) Theoretical purpose

(1) Descriptive purpose : Descriptive surveys are undertaken from the viewpoint of utility. The aim of such survey is collection of information on any socially relevant aspect and its interpretation. The main purpose behind description of information is to present constructive programmes for social welfare or suggest steps to be taken.

(2) Theoretical purpose : The aim of surveys undertaken from theoretical point of view is to understand and explain the facts. Hypotheses indicated by social theories are examined in such surveys along with assessment of the impact of different variables on social events. Such surveys are also known as analytical surveys.

In social survey, information about social life is collected according to steps of scientific research.

Interview

Interview is one of the tools of collection of information in social research. In interview, the researcher collects relevant information by visiting the respondent personally and asking him/her study related questions. Interview has two parties, interviewer (researcher) and the respondent. The researcher meets the respondent personally and gathers information by asking research related questions. In this sense interview is a process of verbal exchange between researcher and the respondent. Thus, interview can also be termed as an interaction between two persons.



Interview

In interview, information is collected through two ways, one is interview schedule and the other is interview guide.

(1) Interview schedule : Interview schedule is a detailed list of questions prepared in relation to the research problem. It is a set of questions created in advance and organized in a sequential order.

During interview, the researcher asks the questions and writes the answers given by the respondent in the schedule.

(2) Interview guide : According to Denis and Stefan, "Interview guide is a guide indicating the outline of the type of information required. It is not a set of questions but a list of topics, themes or areas to be covered. Keeping in mind the items listed in the interview guide the researcher asks questions to the respondent and gathers information".

Questionnaire

The other tool for collection of information in social research is questionnaire. It is a set of questions prepared by the researcher in relation to the research problem. In your student life you might also have filled up such schedule for getting admission in school or hostel. Thinking of that admission form you will be able to understand that questionnaire is a list of questions which is to be filled up by the person concerned.

According to Goode and Hatt, "Questionnaire is a device for securing answers to questions using a form which is filled up by respondents".

The researcher can either give the questionnaire personally or send them through someone to the respondents or send them through post or email.

If the respondents associated with the study are residing at a certain place the researcher can meet them personally and handover the questionnaire. Besides, the researcher can also make a request to the respondents to assemble at one place and fill up the questionnaire. If the respondents are residing at distant places, questionnaire can be sent to them through post or email. Following are the advantages and disadvantages of questionnaire :

Merits of questionnaire

- (1) Information can be collected easily from a large number of people who are scattered in a large area.
- (2) Sending questionnaire through post or email saves time and money of researcher.
- (3) In the absence of researcher, the respondent can express his views in a free-flowing manner without feeling any kind of pressure at the time of filling up the questionnaire.

Limitations of questionnaire

- (1) Questionnaire can be used only by educated respondents.
- (2) Sometimes, questionnaires sent through post or email are not returned by the respondents and it also happens that the questionnaires are returned with incomplete information.
- (3) Many times respondents do not return the questionnaire in time.
- (4) It is difficult for the researcher to construct questions focussing on all the respondents.

Types of questionnaire

On the basis of the form of questions, questionnaire can be of four types: (1) closed questionnaire or the questionnaire with optional answers, (2) open questionnaire or the questionnaire with free answers, (3) questionnaire with direct and indirect questions and (4) pictorial questionnaire.

(1) Closed questionnaire or the questionnaire with optional answers : The answers in this type of questionnaire are pre decided such as 'yes', 'no' or 'do not know' or the answers to the questions asked are given in the form of options or the respondent has to show his/her agreement or

disagreement with the statement asked in the form of a question. Therefore, the questions asked in this type of questionnaire are known as closed questions and the questionnaire is known as closed questionnaire.

(2) Open questionnaire or the questionnaire with free answers: The questions contained in open questionnaire can be answered by the respondent in his/her own words in a free flowing manner without any restriction. For example, what steps should be taken for the development of the nation?

(3) Questionnaire with direct and indirect questions : In this type of questionnaire the questions are formed in such a way that they indicate the aim of researcher and which is clearly understood by the respondent. In other words, they are direct questions indicative of the aim of the researcher.

These direct questions are compatible with the aim of research and associated with the research problem. Besides, these questions can be of closed or open form. Such questions are much useful in understanding thoughts, attitudes, views, and beliefs etc. of respondents.

Questionnaire with indirect questions is made of indirect questions and they are formed in such a way that the respondent cannot understand the aim of the researcher clearly. They do not seem compatible with or related to the aim of research but they are linked with the aim of research through concept or theory. In such a questionnaire, for example, respondents are shown ambiguous pictures and then they are asked 'What do these pictures indicate?' or 'Whose picture is this ?' Similarly, an incomplete sentence is given and the respondents are asked to complete it. These questions can be termed as indirect questions.

All types of questions – closed, open, direct or indirect are useful in research work. Therefore, any questionnaire, in more or less degree, is a combination of above types of questions. Such questionnaire is known as 'mixed questionnaire', a sample of which is given in the appendix.

(4) Pictorial questionnaire :

In order to collect information from illiterate respondents or children, pictures are also used. Questionnaire containing such pictures is known as 'pictorial questionnaire'.

Observation

Observation is one of the various methods of gathering information. When information is collected by directly experiencing it, it is known as observation. Observation employs the senses.

When the observation is precise, planned and helpful in fulfilling the aims of research, it becomes scientific observation. Thus, observation is a process of collection of information with the help of sense organs, keeping aims of research in focus.

According to Pauline V. Young, 'Observation is a process of collection of information about a thing, person or situation through spontaneous eye occurrence'.

In short, observation includes study of the event by remaining present at the place of event and directly experiencing it with the help of senses.

Types of observation

There are two types of observation: (1) Participant observation and (2) Non-participant observation

(1) Participant observation : When the researcher mingles with or becomes a part of the group under study and observes the activities of that group, it is known as participant observation. The word participant observation was first used by Edward C. Lindeman in his book 'Social Discovery' in 1924. Participant observation was promulgated by the anthropologist Malinowski.

In participant observation the researcher attempts to hide his/her identity and the aims of research. This helps the researcher in studying the original behaviour of the members of the group under study and also in obtaining detailed information about them. Besides, validity of the detailed information collected can also be checked, which makes the research reliable. For example, the study of tribals of Trobriand Islands by Malinowski.

However, participant observation, though useful, has some limitations. If the members of the group under study come to know of the researcher or aims of the research, they start behaving in an artificial manner. Besides, it is also difficult for a researcher to validate the information collected by other. Sometimes, the researcher needs to wait for a long time to collect required information which leads to waste of time. If the researcher loses objectivity by becoming too much a part of the group under study, reliable information cannot be collected.

(2) Non-participant observation : Unlike participant observation, when the researcher does not mingle with the group under study and observes the facts, it is known as non-participant observation. In other words, the researcher observes the activities of the group as a spectator and collects information.

In non-participant observation, the researcher observes the activities of a group as an outsider. This type of observation is useful in study of strikes, religious festivals or rituals, relation between students and teachers in school etc.

The role of observer has led to the emergence of these two types of observation. In fact, only participant or only non-participant observation is difficult in research and therefore a third type of observation technique, namely quasi-participant observation, has developed which is actually a combination of participant and non-participant observation techniques sans their deficiencies.

Case study method

Case study method is essential for qualitative analysis through which any person or institution or the whole community is studied. In sociology, this method was first used by Hebert Spencer. In social research, two types of information are collected: (1) Quantitative information, and (2) Qualitative information. Case study method is an important method for collection of qualitative information.

According to Bisenj and Bisenj, "Case study method is a form of qualitative analysis in which a person or a situation or an institution is completely and carefully studied". In sociology, this method is widely used for in-depth investigation of socially relevant events. In brief, case study method is not the study of a single person but it is a study of any person, institution or community as a social unit.

Features of case study method :

- (1) Social unit (from a person to a group or community) is the center of study.
- (2) An attempt is made to identify the variables affecting the social unit and causal relation between the social unit and the social atmosphere is examined.
- (3) The case study of social unit is carried out keeping aims of study in focus.
- (4) A detailed and intensive study of any social unit is carried out.
- (5) This method is also known as qualitative study.
- (6) This method involves direct use of many methods and techniques such as historical accounts, library, observation, interview, etc.

Two types of studies can be undertaken with the use of case study method: (1) Study of an individual and (2) Study of a group or community

In this method, primary information is collected through interview schedule and observation and secondary information is gathered through diaries, letters, life-histories, daily notes etc.

Usefulness of case study method

- (1) Study of social units can be done.
- (2) With the use of this method new hypothesis or theory can be formed.
- (3) Information obtained through this method inspires other research works.
- (4) Researcher's knowledge gets enriched.

Limitations of case study method

- (1) In this method, different groups cannot be compared.
- (2) Case study is more useful in limited sphere of research.

Despite having limitations, case study method is used in many new fields of research and also by many disciplines, particularly, business management, modern criminology, history and psychology.

In this chapter, we learnt about various methods and techniques of research being used in qualitative and quantitative research in sociology. Change in subject of research leads to the change in technique to be used. However, all these methods and techniques we learnt are useful in scientific investigation of social events.

Exercises

1. Answer the following questions in detail :

- (1) Discuss the steps of social research.
- (2) Explain survey method in detail.
- (3) Explain the meaning and types of questionnaire.
- (4) Explain participant and non-participant observation.
- (5) Explain case study method.

2. Answer the following questions concisely :

- (1) State the aims of social research.
- (2) Explain interview technique.
- (3) Describe advantages and disadvantages of questionnaire.

3. Answer the following questions in brief :

- (1) Give definition of social research.
- (2) What is census survey ?
- (3) Give definition of interview guide.
- (4) Give definition of questionnaire.
- (5) What is observation ?

4. Answer the following questions in one sentence :

- (1) What kind of science is sociology ?
- (2) What is sample ?
- (3) Who is the promulgator of participant observation ?

5. Choose the right options from the following and write :

- (1) Which technique is used to collect information from children and illiterate respondents ?
 - (a) Mixed questionnaire
 - (b) Pictorial questionnaire
 - (c) Closed questionnaire
 - (d) Open questionnaire
- (2) Who used the word participant observation first ?
 - (a) Malinowski
 - (b) Pauline Young
 - (c) Goode and Hatt
 - (d) Lindeman

Activity

- Carry out a survey on any event in your locality.
- Select a research topic and construct a questionnaire accordingly.
- Get acquainted with the problems of your neighbouring area, use interview technique, collect relevant information and prepare a report.

