PRACTICAL MANUAL

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PRACTICAL MANUAL

Contents

DISCLAIMER: All methods and techniques presented here are discussed keeping in mind the assignment to be done after going through this practical manual

Learning Outcomes

After going through this manual, the learner will be able to:

- Describe research design clearly;
- Identify methods and techniques to conduct research;
- Familiarise oneself with the exact way of doing research; and
- Analyse research results firmly to create knowledge

1.0 INTRODCUTION

In this course on Research Methods (BANC 110) you have extensively read and learnt about the significance of research in a discipline like anthropology, you have been taken through various units which not just provides you with a description of the historical development of research in anthropology but also gives you a critical outlook of whether anthropology is a scientific discipline or not. In the many units in this course, you have learnt about: how fieldwork has a distinct tradition in anthropology (so much so that it is called a field science); the importance of research design, methods, techniques and tools; the significance of ethics in research; the use of statistical analysis and how to finally analyse data and create a report.

These varied aspects of research must have by now given you a clear idea as to how you will behave in the field and gather information. These units gave you a strong theoretical background about tackling your research problem.

However you may still have some uncertainty about how you will carry out research when the time will demand. Hence it becomes imperative that as part of your anthropological training, you are cleared of your doubts and made to feel comfortable when you finally proceed to the field to decipher your research problem at hand. The purpose of this manual is to provide exactly this.

As part of your practical component we try to provide exactly a guide of sorts which assists you to be ready when you finally visit your field, be it a small distant village or the virtual space in your laptop. In this unit you will thus be acquainted with the basic steps briefly (as it has been already covered in Unit 5), the methods to collect data with (this too has been extensively discussed in Units 6 and 7) and finally you will be categorically explained about a few methods to do research which can be helpful in your firsthand research work.

1.1 RESEARCH DESIGN

This has already been covered in Unit 5. However as part of this practical guide, a concise description is being provided so as to hone your understanding of it better. As this is where after reading this component you can become equipped to conduct research convincingly, hence a discussion on research design will prove to be beneficial to you. This portion will act as a recapitulation for you and at the same time make your grasp on it stronger.

Research design can be viewed as an elaborate plan which is made in preparation for collection of data in any research. It is therefore sometimes also called a blueprint of a research. Its main aim is to answer the research questions posed or to test a hypothesis put forward by the researcher. In fact it is this design that helps researchers/ students to better their skills by using the best suitable methodology for their research. To define research design, Caliwan states that it is "any organsied inquiry designed and carried out to provide information for solving a problem" (2014).

The research design has two purposes. i. it helps you to frame a research outline based on the kind of research you propose to do and ii. It makes you design a step by step framework on how you will proceed with your research.

First let us take the former one.

1.1.1 Kinds of Research Design

A research design can be of various kinds namely, descriptive, explanatory, experimental, survey, cross sectional, semi-experimental, review etc.

But first depending on the kind of research to be done, a research design will be formulated. Research can be qualitative or quantitative in nature. Qualitative research is one which is descriptive in style meaning that it is majorly a narrative and does not necessarily allow to be defined by quantitative research. Its main agenda is to comprehend why something occurs in a particular way. Whereas quantitative research is conducted through surveys, censuses, polls etc. It is basically interested in collecting an accurate form of data in the context of numbers, like for example, how many people voted for a particular political party. While qualitative research is conducted among a small sample, quantitative research is conducted among a large sample group which may be random. It uses the help of statistical method to reach its results.

Keeping this as our base, let us now try to briefly look at some of the popular kinds of research design.

a) Descriptive research

It is where a phenomenon is specifically and concretely described. If one would like to proceed with an explanatory form of research design then one has to provide a good description of the research problem. For example to know why there is gap between poor and rich people, it can only be known if such a gap actually exists. Descriptive study can help in viewing this gap if it is there.

b) Explanatory research

It answers the why which arises from any descriptive study. For example, the reason for presence of more women domestic help as compared to men domestic help can be studied through the explanatory research.

c) Experimental design

Experimental design is a tad bit difficult to apply for researchers studying human beings. However if the opportunity arises, such researchers do make use of the experimental design. It is fundamentally the testing of an independent and a dependent variable and include two groups, that is the control group, where things are as it is, and experimental group, where things have been adjusted to get a result. This design in social sciences can be tested in a laboratory, a field and in natural social world. Statistical analysis is done in such design and it is used to mainly find the differences between the control group and the experimental group.

d) Longitudinal design

A longitudinal design which is also known as a panel design involves the study of the same selected variables over a long period of time. It mostly uses observation as its main method of study. Longitudinal studies can range from studying variables as they are and without manipulating them, from over a week to as long as decades. An example can be observation of a person and her weight loss journey. Covid 19 and its impacts can well become a good longitudinal study.

e) Cross sectional design

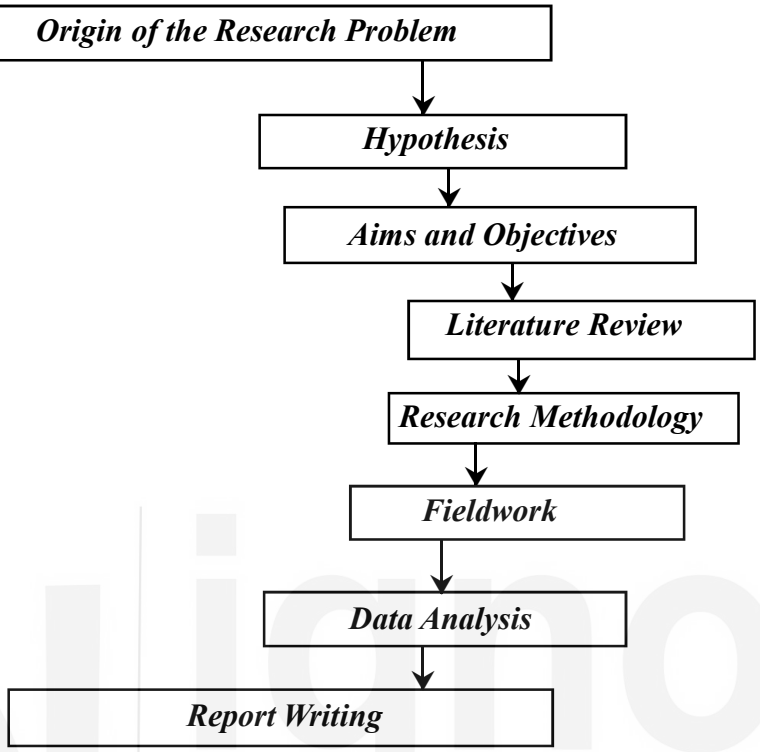
This is the opposite of longitudinal design. In a cross-sectional design different samples or a "cross-section" of a population are studied at a single point of time. As such kind of a study is shorter it is hence also cheaper to carry out. Cross-sectional design falls under the gamut of descriptive studies. It helps in knowing about various characteristics which can be found in a population and informs about present happenings in it. For example it can show the intensity of domestic violence in a community happening at the time the study is undertaken.

1.1.2 Steps in Research Design

Now that you have been reviewed broadly about the kinds of research design available, let us briefly run through the various steps you have to follow from the beginning till the end while doing research. It includes step by step stages of

means by which data is to be collected, what tools will be used, how they will be used and finally the proposed ways by which the data will be analysed.

In anthropology, the steps of a research design may look something like this:



The steps of a research design are nothing but the methods and procedures that will be or are taken into consideration to collect and analyse measures of variables stated in a research problem. The first step in a research design is the research problem and its creation itself. It starts with the designing of a research proposal once the problem or topic is formulated.

a) Formulation of a problem/topic:

The identifying of a topic is the research problem. It has to be focused, doable and achievable. You must be aware of the purpose of your research.

b) Statement of research problem

To be clear about the purpose of your research, it helps to formulate the research problem. Defining the problem acts as a tracking device for your research. It checks whether the research addresses the problem as has been stated in the beginning.

c) Theory building

Theory building approach is one, which is created from the observations that you make in the field and the logical conclusions that come out from them. These theories bring out the meaning of your observations. Merton states that as these theories are produced only after you make your examination of the field, they are frequently termed as post factum theory (1968)

d) Theory testing

In comparison a theory testing process approaches the study with an already existing theory or theories which assists in the observations you may make in the field. Hence it may be said that it progresses from the unspecific to the exact. The field must be in a position to exhibit a test which is creditable to a theory. When a probability is proved to be true then the connected theory is verified. If not then the theory is turned down or altered.

e) Hypothesis

It is appropriate to use a hypothesis when you are testing a theory. A hypothesis is nothing but a speculation about anything that the researcher wants to prove. It is a supposition or explanation (theory) that is provisionally accepted in order to interpret certain events or phenomena, and to provide guidance for further investigation.

For example: **If** cigarette smoking is high in a community **then** it is likely that majority of the people will suffer from lung cancer. So the independent variable (if/smoking) may affect the dependent (then/lung cancer) variable. Testing will let us know if we are correct or not.

f) Aims and objectives

Aims are broad statements of desired outcomes, or the general intentions of the research, which 'paint a picture' of your research project or thesis. It addresses the long-term research outcomes, i.e. it should reflect the aspirations and expectations of the research topic.

When your aims are clear for your research agenda, then the next job is to formulate the associated objectives of the aim. The objectives should be focused, connected and not too many so as to not get distanced from the main agenda at hand.

Hence Objectives are subsidiary to aims and are the steps you are going to take to answer your research questions to accomplish the goals of the project. They should be sensible and precisely described and deal with the more immediate research outcomes.

g) Literature Review

A literature review is vital to assemble before proceeding to the field. It is also employed during breaks from the field to know more on the topic of research. Literature review is the critical evaluation of similar earlier research. Literature review does not imply the using of quotations and summarising from these sources. It is in fact an assessment of already available material and attempting to amalgamate the previous research to the proposed one and providing an explanation for the same emphasising on the points of agreement and disagreement. Hence you are expected to place one's original work in the context of existing literature; interpret the major issues surrounding your topic; identify new ways to interpret, and shed light on any gaps in previous research; ensure which literature makes a significant contribution to the understanding of your topic and points the way to further research on your topic.

h) Unit and Universe of study

The unit of analysis is the major entity that is being analysed in a study. It is the 'what' or 'who' that is being studied. In your research, typical units of analysis will include individuals (most common), groups, social organisations and social artifacts.

The universe is the population which represents the entire group of units that is the focus of your study. Thus, the population could consist of all the persons in the country, or those in a particular geographical location, or a special ethnic or economic group, depending on the purpose and coverage of your study.

i) Research Methodology

The methods section describe actions to be taken to investigate a research problem and the rationale for the application of particular processes or modes of operation used to categorise, choose, deal with and evaluate data employed to understanding the problem, thereby, allowing the audience to judiciously examine a research's complete legitimacy and dependability.

The methodology section of your research answers two main questions: How was the data collected or generated? And, how was it analysed? The writing should be direct and precise and always written in the past tense. For a better understanding, let us explain methodology, methods and tools and techniques separately.

***Methodology*:** It is the outline strategised to understand how research is to be commenced. It identifies the methods to be used.

***Methods*:** Methods are the means of data collection.

***Tools and Techniques*:** The ways by which methods are actually put to action are the techniques and tools. For example: If interviewing is a method, then the technique will be an interview guide and the tool can be an interview schedule.

Depending on the kind of research or investigation you are doing, the tools for data collection will be chosen.

j) Fieldwork

Methods and techniques are used in the field. Fieldwork which is our identity in anthropology is investigation where the researcher (you) stays in or visits the place of investigation for long periods of time, not less than a year, receives firsthand experience and collects data. Powdermaker defines fieldwork as "the study of people and of their culture in their natural habitat. Anthropological fieldwork has been characterised by the prolonged residence of the investigator, his participation in and observation of the society, and his attempt to understand the inside view of the native people and to achieve the holistic view of a social scientist" (cited in Robben and Sluka 2007: 7). Others like Luhrmann points out that, "Anthropology is the naturalist's trade: you sit and watch and learn from the species in its natural environment" (1991:1)

This is followed by analysis of data and writing of the report. We will discuss these portions at the end of this manual after a comprehensive description of some major methods used in anthropological fieldwork. This will give you a fairly good idea about how to use the methods while conducting research.

1.2 METHODS TO CONDUCT RESEARCH

A method is a way of conducting and implementing research, while methodology is the science and philosophy behind all research (Adams John et al 2007). In section 1.1.2 under heading **i.** you have already been told about what methodology, methods and tools and techniques entail and how each has a different meaning though each work together. In this section you will be explained about some major methods which are used in anthropological research and the tools and techniques which assist these methods to conduct research. These methods and techniques are discussed keeping in mind the exercises which will be given to you in your assignment.

1.2.2 Observation

Observation in anthropological parlance means watching with intent. This method is the least intrusive while the anthropologist triflingly participates or mixes herself/himself into the culture s/he is studying. Data is collected through what is observed and through verbal communication while remaining the least interfering as possible. Observation can be conducted alongside interviewing or conversing with the community studied. Much can be learnt by observing the day to day happenings which Malinowski called the "paraphernalia of everyday life" (1922).

Observation for the benefit of the researcher can be divided into two kinds broadly, with a third kind thrown in to employ in certain situations. The two kinds of observation are Participant observation and Non-participant observation and to these one can add the Quasi-participant observation method.

Participant observation is a method where it is expected that the researcher would try as much as possible to be a part of the culture or society s/he is studying. It is mostly used to study rituals being conducted or a ceremony having intrinsic meaning, or for that matter any social event. Here the researcher becomes a participant by following the existing norms of such events without questioning or doubting them, for example, partaking of certain kinds of food which the researcher has not seen or tasted before. The aim is to behave like a member of the society studied. This may help to get an entry into it in a comfortable manner and allow further focused investigation to be conducted with trust and conviction.

Non-participant observation on the other hand is the opposite of participant observation as clearly the name suggests. Here though the researcher enters the community s/he studies it without much interference. There is limited interaction with the culture studied. This is best used when an etic (the view of the researcher) is required to study communities, like body behaviour, language pattern, food habit etc. For example, to know if a family consumes rice or chapattis as their staple food item. Many a times, however this method is viewed to be limited in scope and biased as it only places the opinion of the researcher which might be in contrast to the people's views inhabiting the community studied.

It is to do away with such biases that a middle way is mostly chosen by the researcher, which is called the quasi-participant observation method.

Quasi-participant observation falls between participant and non-participant observation method. Though here too, the researcher gets involved in the daily life of the community studied but rather than imposing her/his perspective about any particular aspect studied the researcher looks for the perspective of the community and tries to bring forth the native's point of view. The involvement of the researcher is not such that s/he gets captivated by the occurrences unfolding in front of her/him nor does s/he completely distances from the culture studied and only offers her/his own assumed perspective. In quasi-participant observation method, the researcher carefully and patiently brings out the happenings of a community in a neutral manner.

ACTIVITY 1

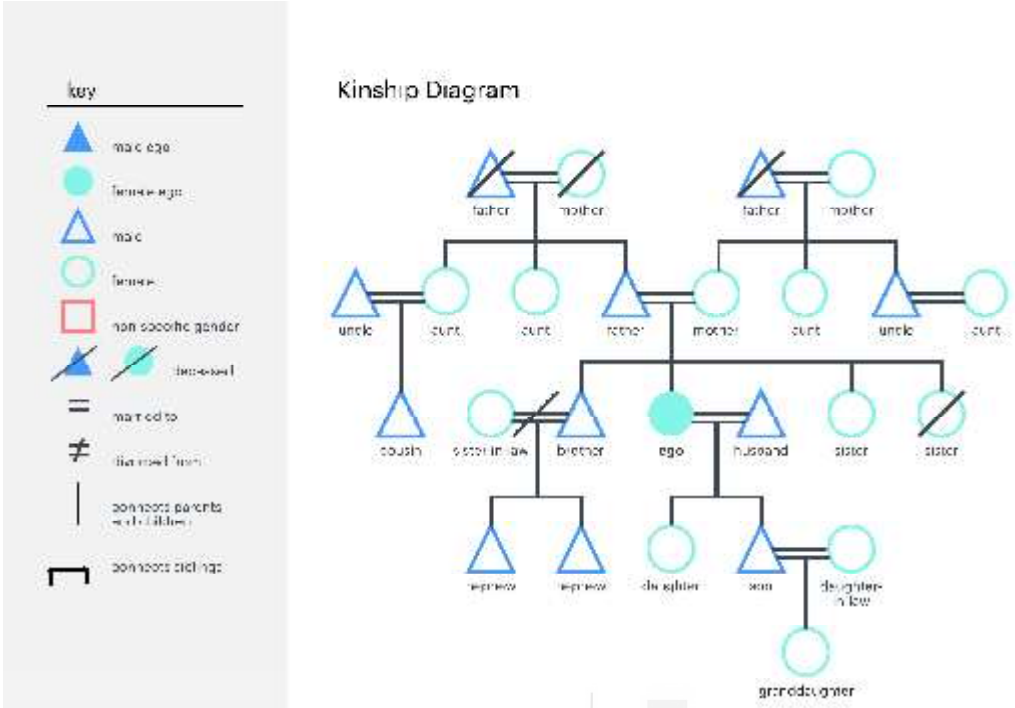
Make a project report on any method of your choice on any social event and give your interpretation/observation of the same.

1.2.4 Genealogy

Let us now move on to another method of study which helps in anthropological research. This is called the genealogical method. This study or method is used in anthropological ethnographic studies to find out the history of a family. It was basically introduced by early anthropologists to study kinship from the perspective of descent and marriage. Once information is collected through the interview technique about one's family including ancestors and descendants, it is then graphically represented displaying the connection between each family member. It tries to trace a historical representation taking the connection to the known ancestors and linking it to the present and newest generation. It is a popular anthropological method and has been used in their ethnographies by W.H.R Rivers in his study of the Todas, by Raymond Firth while studying Tikopia and many others. In fact it was W.H.R. Rivers who developed this method in anthropology during his expedition to the Torres Straits in 1898-99.

The graphic symbols are varied. For example females are shown with a circle and males are represented with a triangle. Below a diagram is placed to see the various graphic symbols used in making a genealogical chart which helps in building a family tree clearly exhibiting the kind of relationship everyone holds in the family. You can use this as a simple example and take it further to expand on more genealogical connections.

This method is important in anthropological research as it helps you to collect data about family history, events in a family, inheritance, ownership etc. It is used during fieldwork mostly to collect and categorise data for various research usages. It can help you understand relationships between people and social organisation of a culture better. It involves intense interviewing and is used with an ego at the centre to have a systematic creation the genealogical chart. The ego is the reference individual and the chart is a diagrammatic representation displaying the bonds of kinship (see genealogy chart on next page). Besides kinship relations this chart can also show structural demography of the population under investigation. It can thus show how a society functions and also the actual size of a population.



A basic genealogical chart, Source: https://www.lucidchart.com/blog/make-a-kinship-diagram-online

ACTIVITY 2

Make a three generational genealogical chart/ family tree of your choice as per your anthropological interest.

1.2.4 Case Study

Case study which is a known and valid method of conducting research was introduced by Herbert Spencer. It is used to carry out thorough and extensive study of an individual, or a group, an institution, an event etc. For example in a case study the researcher can study a case of a person with a deviant behaviour. Employing qualitative analysis, you can with the use of this method obtain a full and comprehensive account of a phenomenon, a person, a family etc. Thus a case study can be called an intensive method of study. It helps to know more specific and particular aspects of the entity studied. Case Study can be obtained through a combination of interview, observation etc. There are different types of sources which assist in the collection of a case study. Some of the important ones are Life Histories, Personal Documents, Records, Biographies along with data collected from interviews and observation.

ACTIVITY 3

Collect case-studies of 10 individuals of any gender working in any organisation to understand how their jobs are adversely or positively affecting their lifestyles. Give your interpretation of the same.

Life History is a popular method of collecting a case study. It is a qualitative method of collecting data where individuals are asked to talk about their life events starting from their childhood to the present informing about certain particular and important incidents or occurrences from their lives. It has been

found to be very effective in studying one's health status and medical choices through the person's medical history.

ACTIVITY 4

Collect life-history to see the different kinds of medical system a person has followed for an ailment through his/her lifetime.

1.2.6 Secondary Data (Published and Unpublished Sources)

Other than collecting data from primary sources, there are many a time data from secondary sources which can also help you in your research. Secondary data is information which is not first-hand suggests that they have already been collected primarily before and now are available in various places for you to access. These places may be a library, an archive, a database, the internet etc. Secondary sources helps you to authenticate either your own planned research problem or test your research findings.

There are mainly two kinds of secondary sources: 1. Published sources and 2. Unpublished sources-

Let us first discuss Published sources. Published sources are printed material. Examples of printed or published material may be:

a. Published articles, research papers
b. Statistical records, Census records, reports of the government
c. Official statements and publications of the foreign governments
d. Magazines, journals, and periodicals
e. Reports presented by research scholars, anthropologists etc.

Unpublished sources may include:

a. Research thesis, dissertations etc., of academics, scholars etc.
b. Records of private companies
c. Field diaries
d. Letters
e. Unpublished biographies or autobiographies etc.

ACTIVITY 5

Make a project report incorporating all processes based on any published or unpublished material depicting any biological or socio-cultural concern.

1.3 TOOLS AND TECHNIQUES

In order to actually carry out the methods discussed above, you will have to employ tools and techniques to get your results. The most commonly used techniques in anthropological research are questionnaire and interview. There are a variety of tools which are used under these techniques. Let us discuss them in detail to know what tools to use and when.

1.3.1 Questionnaire

A questionnaire as a tool is mainly used when the researcher cannot completely be with the respondent or is not required to conduct intense in-depth investigation. The questionnaire helps in collecting basic information about an individual's personal life. It is mainly seen in the form of a survey. A questionnaire thus includes a set of questions which is connected to the theme or purpose of study at hand and the respondents have to fill it themselves. Questionnaires can either be open ended or close ended. In the former the respondents can write the answers that they want. In the latter, however the answers are placed as options already in it, and the respondents have to tick or choose an appropriate one. The options are generally like: Strongly Agree, Agree, Disagree, and Strongly Disagree or Yes and No etc. A questionnaire can also be a combination of these two types.

There are also different types of questionnaire, like structured, semi-structured, pictorial etc.

Structured ones have fixed questions whereas the semi-structured ones have questions which can be modified according to any situation experienced so that good amount of valid information can be collected. Pictorial questionnaires have questions in the form of images.

A questionnaire should be self-explanatory. The questions should be such that they are clearly understood by the respondents as the researcher would not be there to explain the questions to them. Hence each question should be crisp and precise. To collect good data from questionnaires, the respondents also have to be carefully selected. Questionnaire though is one of the oldest tools of data collection has mostly been seen as a rigid method as it does not allow much scope for answering the why of the problem investigated. This tool cannot be employed on illiterate people. Questions may be misunderstood as the researcher is not present to explain them to the respondents. Hence one should choose the questionnaire as a tool of investigation only when the situation demands. Questionnaire can on the positive side lead to the use of statistical analysis thus accommodating quantitative research while conducting surveys or collecting census.

1.3.2 Interview

Just like observation is watching something with an objective, similarly, interview is having a conversation with a purpose. Interview is one of the most rational techniques to collect data. It allows face to face interaction with the researcher and the respondent. Unlike questionnaire, here the researcher has the opportunity to mould questions, add new ones to take the conversation ahead in context of the investigation conducted. Interview is considered as a direct method of data collection. It is used as a technique when questionnaires do not give the expected data or when a sample is specifically selected from the answers received from filling up a questionnaire. This is to collect more in-depth data. What we cannot observe, we will have to ask. Hence interview works as a beneficial alternative to collect data. However to actually conduct successful interviews, the researcher has to build a strong rapport with all respondents, for them to trust enough and answer personal and sensitive queries. Interviews can be individual interviews or group interviews. Group interviews are popularly known as Focus Group Interviews. Individual interviews have open ended questions and ask questions

to find out social and cultural experiences of the respondent. Here the respondents recount their life occurrences in a logical and intelligible manner. These kinds of interviews are semi-structured to allow more questions to be added or reframed as the interview is conducted. In a group interview there is a group of people interviewed together who have similar characteristics or experiences which allows them to clubbed together to get certain answers. Characteristics may include belonging to the same caste, or gender or economic status etc. Experiences may include rape victims, or alcoholism, or some illness etc. Depending on the category or selected group, it will bring better or not so responsive results. For example youngsters may like to share their experiences about a certain situation better in the presence of their peers, for example their aspirations. However the same group may respond cautiously if asked about habits like drug abuse.

On the basis of individual or group interviews, interviews can be structured or unstructured. In the former the questions are pre-determined and the kind of questions prepared, their sequence, language etc. are all standardised. The questions are close ended. The latter one allows flexibility in the way the questions are framed and asked. Here the aim is to collect as much information as possible. The researcher can adjust the questions if necessary during the time of interviewing.

On the basis of the above explanation interviews can be created through an interview guide or an interview schedule.

Interview Guide contains a set of questions related to the research problem which are prepared randomly without a sequence to assist during the main interview. It does not have a set framework. It helps the researcher to maintain a flow with the respondent while conversing and helps the respondent stay focused in case s/he gets carried away while sharing incidents from her/his life. The interview guide is immensely helpful while collecting case studies and life histories.

Interview Schedule is a format made by the researcher before conducting an interview. The schedule too can be structured or unstructured. Though similar to a guide, it is created to collect quantitative data. Hence it contains a fixed format of questions that the researcher makes use of while conducting interviews, mostly while conducting surveys. Census data too is collected with the help of an interview schedule, and is mostly structured.

1.4 ANALYSIS OF DATA

The findings of the field finally have to be given meaning. This is done by analysing all material gathered. In terms of quantitative data it is simpler compared to qualitative data.

When talking about quantitative data there are generally accepted guidelines for how to display data and summarise the results of statistical analyses of data about populations or groups of people. However, this display needs to be presented in an informative way. They are:

a. Describe the sample;

b. Remind the reader of the research question being addressed, or the hypothesis being tested;

c. Tell the reader what you want him/her to get from the data;

d. State which differences are significant;

e. Highlight the important trends and differences/comparisons; and

f. Indicate whether the hypothesis is confirmed, not confirmed, or partially confirmed.

In the case of qualitative data, the analysis cannot be neatly presented in tables and figures, as quantitative results can be. It must all be expressed in words, and this results in a large quantity of written material, which we call a narrative, through which you must guide your reader. Structure is therefore very important. Try to make your sections and subsections reflect your thematic analysis of the data, and to make sure your reader knows how these themes evolved. Headings and subheadings, as well as directions to the reader, are ways which you can use to make your chapters in a report easy to navigate.

1.5 WRITING THE REPORT

The report is the final presentation of the research work done by the researcher. It involves several steps and is what you finally call your project report, thesis or dissertation. It is a logical analysis of the data collected. The report contains preface; table of contents; introduction; main content; conclusion; tables and figures; use of quotations in the main text; glossary; appendix; references; bibliography; review and index; photographs etc. The final presentation should be meaningful, have clarity and should be useful to at least disseminate knowledge to the world.

You can read about analysis of data and report writing in detail from Unit 10 and 11. Also see Practical Manual from the Course BANC 102 to go through the section on References (1.1 **k**)

1.6 SUMMARY

Now let us summarise what you have read in this practical manual. In this manual you have been carefully reprised on conducting research with the use of valid existing methods. To do so, you have been explained about what a research design is, what kinds of research design there are and what are the various steps in a research design that one has to follow. Keeping the method of testing your understanding and as part of your training you have been guided on a few important methods which you can test and work on from your own locations. The tools and techniques which are actually used in the methods described have also been explained to you. Finally analysis of data and writing of the report have been crisply covered for your clarity. To understand this manual better and to clear doubts you can read Unit 5, 6, 7, 10 and 11 carefully again. Some activities have been placed in this manual. After going through the manual, do attempt the activities. This will help you in your learning process to become a good researcher.

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