Brief Concepts on

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Social Research

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Preface

Social Research is probably the best known and most widely used research method in the social science today. Its use in the academic world grows daily. It is now taught and used in departments of sociology, political science, psychology, business administration, public health and geography to name a few. Increasingly, Social science graduate students are encouraged to conduct social research to satisfy thesis and dissertation requirements for original research.

This is brief introductory text on social research which is designed as a guideline for the Educational Managers, training participants and the students of social sciences for studying the research methodology. Its main aim is to introduce the research methods and techniques in a very brief and precise manner, so that they can get maximum benefits by putting minimum efforts in the comprehension of the research methods and techniques. The attempt is made to cover all possible aspects and perspectives regarding the social research.

The topics are covered from "Social Research" written by S. Sarantakos" and customized to make it focused, precise and elucidative. It covers basic areas that a young professional need to know about the social research, What it is, what it does, how it is used, when it is used and for what purpose, what method it employs.

The book is divided into four parts the historical, theoretical and methodological foundations of social research. The research process is presented in a series of steps from the initial concepts generation, data collection, data presentation and data analysis. The process of writing a report and the rules and standards followed for this purpose are presented in the final part of the book.

This document is addressed to the subject of social research. It has the dual purpose of assisting readers in the execution of social research of their own and in the understanding of social research conducted by others. Although the document focuses on a particular research methods- survey research. It should be read with in the general contest of science.

Finally this book is written for the beginner who wishes to develop an understanding of social research and want to start their career as a social researcher.

Acknowledgments

The Academy of Educational Planning and Management, Ministry of Education, Islamabad is thankful to S.Sarantakos to reproduce its copyright book titled "Social Research" and presented in a brief form. This effort is to make the research process more convenient and adoptable by considering the requirements of the educational Managers and the training participants of the Academy of Educational Planning and Management. It will provide a guideline in the learning, designing and conducting the research process. It is hoped that this book will prove a help hand for the Researchers and the Educational Managers.

The services of Mr. Muhammad Asif Touqeer, (National Intern) are acknowledged who efficiently perform this task in handling and writing this report under my supervision. Moreover I am very thankful and regardful to Mr. Tauhid-ud-Din Mirza (Coordinator National Education Census) for providing the services of editing and providing the statistical analysis information for the completion of this report.

(Prof. Dr. Haroona Jatoi)
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Chapter # 1

Introduction

1. Social Research

Social research is about measuring, describing, explaining and predicting social and economic phenomena.
In government, this relates to policy development, implementation and delivery and to the estimation of policy impacts and outcomes.
Social research explores:

- Social and economic structures;
- Social attitudes;
- Values and behaviors; and
- The factors which motivate and constrain individuals and groups in a society.

Government social researchers collect data using the methods of social research such as social surveys, focus groups, in-depth interviews and case studies.
They also analyze and interpret data and feed it into the policy process. They have a close relationship with other government analysts, such as economists, statisticians and operational researchers, as well as colleagues working on policy and delivery. Team working is essential in the provision of high quality research data.
Social research informs the development, implementation and evaluation of a wide range of government policies. Government Social Research plays a crucial role in evidence-based policy making today and becoming a social researcher offers an exciting opportunity to work at the heart of government.

2. Social Research: a historical overview

Social research is not only an invention of the modern social science but its history goes back to some 2000 years back. Greek philosopher, Socrates worked on the structure of society and causes of the social problems and produced very impressive accounts of social life and of society. Further the signs of practical science were also existed before Socrates. Thales (640-550 BC) is an example of a researcher who employed an empirical research. The works of Greek philosophers was pioneering.

The methodological approach introduced by the Greek philosophers influenced the researchers through out the Europe and their contribution was considered significant particularly in sixteenth and seventeenth century, the time of scientific revolution.
During the seventeenth and eighteenth century the importance of research was recognized and taken place into its real place, amongst to people, by studying real problems such as poverty and the plight of the working classes which continues up till now in updated versions.
In summary the different approaches were presented in different periods regarding the research. But sociological body is no longer a uniform body of theory and research based

on a one particular approach. Every methodology with diverse theoretical background and diverse methods and techniques are equally acceptable, valid and legitimate.

3. Types of Social Research

a. Quantitative Research

This refers to the type of research is based on the principle of positivism (Science, logic rather than philosophy) which employs quantitative measurement and the use of the statistical analysis.

b. Basic Research

This type of research helps to gain knowledge regarding the social world and provides support in rejecting or supporting existing theories about the social world.

c. Applied Research

It is directly related to social and policy issues, which is helpful to improve the social life in general. For example: Social impact studies, evaluation research and cost benefit analysis.

d. Longitudinal Research

It involves the study of a sample on more than one occasion. Versions of this type of research are panel studies and trend studies.

d. Qualitative Research

It refers to the number of methodological approaches, based on the different theoretical principles (Phenomenology, Hermeneutics and Social interactionism) employing methods of data collection and analysis that are non quantitative.

e. Descriptive Research:

The purpose of this type of research is to describe social systems, relations or social events and providing background information about the issues.

f. Classification Research

The aim of this research is to categories the people according to their preferences, to demonstrate differences, explain relationships and simplify them.

g. Comparative Research

It refers to identify the similarities and differences between units at all levels. For example the difference between the male and the can be find out by using these types of research.

h. Exploratory Research

This type of research is to gather preliminary information that will help to define problems and suggest hypothesis.

i. Explanatory Research

Its aim is to explain the social relations or events, advancing knowledge about the structure and testing and revising the theory.

j. Causal Research

It refers to test hypothesis about cause and effect relationship of an issue.

k. Theory testing Research

Its aim is to test the validity of the theory. It associated with other types of research to their objectives.

l. Theory building Research

Its purpose is to provide data and the evidence that support a theory.

m. Action Research

It is about the application of the fact finding to practical problem solving in a social situation with a view to improve the quality of a social issue.

n. Participatory Action research

It is characterized by the strong involvement and participation of the members of the organization and communities in the research process from the initial identification of the research up to the publication of the findings.

4. Research and Theory

a. Theory Construction in quantitative research

Theory and research are very closely interrelated, especially in two ways: on the one hand, theory guides research by providing guidelines and basic assumptions; on the other hand, research provides the way of establishing, preparing, strengthening and revising a theory, based on concepts.

b. Concepts

The first step towards theory construction is developing concepts. They are words that label, name, sort objects, experience, events, phenomena or relationship. Concepts can be either observables or constructs. Observable concepts refer to items that can be perceived by the senses.

c. Classification Systems

The next step in theory construction is analyzing, testing and understanding concepts and most of all, grading them into systems or categories.

d. Propositions

The next step in theory construction is the development of propositions that is general statements regarding relationship between concepts.

e. Theories

Theories are a set of logically interconnected proposals, presented in a organized way, which describe and explain social events.

f. Variables

Measurement relates to variables. A variable is a concept that can take two or more values. For example, sex (male, female), marital status (single, married, divorced). Variables can be independent and dependent. An independent variable causes change in another, whereas a dependent is affected by another.

4. Hypothetic-Deductive Model

This means that proposals must be arranged in a hierarchical order from the most general to the more specific hypotheses.

B. Theory Construction in Qualitative research

Step I

The Researcher first enters the field without any notion, strict designs, categories, and hypotheses without firm concepts and without relevant theoretical definitions. The Researcher resembles to a new born person.

Step II

The Researcher studies single cases or groups and records the findings, making observations about certain aspects of the research object.

Step III

The study is then expanded to more cases and groups through the process of theoretical sampling.

Step IV

Comparison between groups and other elements are made, which allows the researcher to test and validate the collected facts.

Steps V

Such hypothesis are included into, more general statements related to central objects, and establish what is called a substantive theory.

Step VI

Through out the process of research, collected data are simultaneously analyzed; collection and analysis take place at the same time.

Step VII

When such theories are constructed, the Researcher subjects their findings to a comparative analysis and attempt to simplify their statements.

C. Theory Construction in Comparison

Differences	Quantitative Research	Qualitative Research
Logic of Theory	Based on reasons or logic	Inductive
Direction of theory building	Begins from theory	Begins from reality
Verification	Take place after theory building is completed	Data generation, analysis and theory verification take place at the same time
Concepts	Firmly defined before research begins	Begins with orienting, sensitizing or flexible concepts
Generalizations	Inductive sample to population generalizations	Analytic or exemplar generalizations

5. Aims of Social Research

The aims of social research are:

- To explore social reality for its own sake or in order to make further research possible.
- To understand human behavior and action.
- To offer a basis for an evaluation of social reality.
- To liberate People from the cruel clutches of odd norms.
- To suggest possible solutions to social problems.
- To Empower and liberate People.

6. Motives of Social Research

In most cases the aims of the social research overlap with the motives. But in some cases there are extrinsic and intrinsic motives of the Researcher. Some of the motives are not included in the aims that are discussed above.

- **Educational**: To educate and inform the public.
- **Magical:** To offer credibility to views held by researchers and or their sponsors.
- **Personal:** To promote the academic status of the researcher.
- **Institutional:** To enhance the research quantum of the institution for which the researcher works.
- **Political:** To provide support to political plans and programs.
- **Tactical:** To delay decisions or action for as long as the investigation is under way.

7. Objectivity in Social Research

a. Objectivity in quantitative Research

Objectivity is generally employed to minimize personal prejudice and bias, and to guarantee the social reality presented as it is, rather than as it is interpreted or imagined by the investigator. There are two theories are presented value neutrality and normativism.

b. Objectivity in qualitative Research

This type of research rejects fundamentally the notion of objectivity. From a different perspective, qualitative researchers accept objectivity but see it as being identical to solidarity.

8. Ethics in Social Research

a. Professional practice and ethical standards

1. Accuracy in data gathering and data processing
2. Relevant research methodology
3. Appropriate interpretation of data
4. Accurate reporting
5. Fabrication of data is misconduct
6. Falsifying of data is misconduct

b. Ethical consideration in research

7. It is a basic assumption of institutions conducting research that their staff members are committed to high standards of professional conduct.
8. Research workers should only participate which conforms to accepted ethical standards and have competence to perform the task.
9. Institutions and research workers have a responsibility to ensure the safety of all those associated with the research.
10. If data of a confidential nature are obtained, it must be kept carefully and must not be use for such information for their personal advantage.
11. Secrecy may not be necessary for a limited period in the case of contracted research.

c. The Researcher-respondent relationship

1. Codes of ethics suggest that the researcher should introduce himself with some identification to the respondent and avoid giving false impression.

2. Researcher should inform the respondent of the type of questions, the degree of questions sensitivity and the possible consequences.
3. The researcher should always be concerned for the welfare of the respondent.
4. Respondents should participate in the research freely and not be pressured to do so in any way.
5. Researcher should respect respondent's privacy.
6. Data collected by the researcher should be unnamed
7. Information offered by the respondents should be strictly used only and only for the research study.

d. The Researcher- Researcher relationship

1. Misleading acknowledgment of authorship must not be adopted.
2. Misuse of authority or role must be condemned.
3. Plagiarism must also be abstained.

e. The Researcher- Animal relationship

1. Animals should be maintained under acceptable conditions and should not be deprives of basic needs for food, water, sleep and companionship.
2. There should be good reasons for subjecting animals to research.
3. Animals should not be put under stress or pain, or be injured any way.

9. Representative ness

a. Quantitative Research

True representative ness is one of the aims of the quantitative research. Several methods have been formulated for this purpose. Most of these methods deal with the probability sampling with an appropriate sample size and composition of the sampling units.

b. Qualitative Research

In qualitative research, representativeness and generalizability have different approaches. Some qualitative researchers reject the notion of representative ness as employed by quantitative researchers; others find it a useful and essential element of the qualitative research. Sampling in qualitative research is not based on probability theory and the size of the sample is usually too small to reflect the attributes of the population in question.

10. The politics of social research

Politics means power, Research and its findings are associated with both politics and power: and those who have the opportunity to control research outcome do so, if and when they have the power to do so. The government, industry and the researchers are involved to some extent in the power game and influence the research process significantly.

a. Research and Political interests

- Contract research often involves, completely, or clearly the expectation that results supports the interests of the sponsor. Providing the funds for the research often gives on impression that researchers are hired hands and therefore must produce the findings sponsor prefers.
- Even if the sponsors do not directly influence the process and outcomes of the research, they do have the opportunity to restrict the undesirable result from the public, particularly when the contractual arrangements prohibit researchers from publishing their findings without the permission of the sponsor.
- Equally powerful are political ideology and the power of the status. Those in power can control research funding as well as publication, also can mold according to their personal beliefs and ideologies.
- Political interests also control access to research topics and research material.
- Finally government and funding bodies set priorities on issues to be studied, promoting only what they consider to be important. The assessors of research grant applications to select the proposals that deserve support. But who are the assessors and who determines the parameters of choice?

Chapter # 2

Varieties of Social Research

1. Paradigms

A paradigm is a set of proposals that explain how the world is perceived; it contains a worldview, a way of losing the complexity of the real world, telling researchers and social scientists in general " what is important, what is legitimate, what is reasonable. (Patton, 1990)

A paradigm is a set of beliefs, values and techniques which is shared by members of a scientist community, and which acts as a guide or map, dictating the kinds of problems scientists should address and the types of explanations that are acceptable to them (Kuhn, 1970)

2. Methodologies

A methodology is a model, which involves theoretical principles as well as a framework that provides guidelines about how research is done in the context of a particular model. In this sense, every investigation has a distinct methodology, and every researcher employs his or her methodology.

According to another definition methodology is determined not by research model but rather by principles of research involves in the paradigm. The methodologies that result from this definition are the quantitative methodology and qualitative methodology.

3. Methods

Methods are the tools of the data generation and analysis. Methods are independent from methodology. For instance, observation, interviews, experiments, content analysis and so on can be used in any methodology. The methodology can be used in different methods.

4. Positivism

This theory is introduced by a French Philosopher August Comte. According to Comte Scientific methods are the most appropriate tools of social research. So it is essential to to study society and people as we see them rather than as they are interpreted by the philosophers and theologians.

For positivists, human beings are balanced individuals who are governed by social laws: their behavior is learned through observation and governed by external causes that produce the same results. There is no free will. The world is, however, not deterministic: causes produce effects under certain conditions, and predictions can be limited by the occurrence of such conditions.

5. Quantitative Methodology

a. Theoretical Perspectives

1. Quantitative methodology is based on positivist or neo-positivist philosophy.
2. Reality is objective, simple and positive and consists of sense impressions: there is one reality in nature, one truth.
3. Human beings are determined by their social world.
4. Facts should be kept apart from values; social scientists should not make values judgments.
5. Neo-positivism is set to establish a clear and objective orientation, a vigorous, disciplined and systematic procedure and a reality bound methodology, which allows scientists to arrive at a theory that will be free from vague and sloppy approaches.

b. Criticism on Quantitative methodology

1. Social phenomena exist but in the minds of the people and their interpretation.
2. Reality cannot be defined objectively but subjectively.
3. The over emphasis positivists place on quantitative measurement is wrong and unjustifiable.
4. The use of hypotheses is problematic for many reasons because it restricts the options of the questions and responses.
5. Quantitative research fails to distinguish between appearance and essence of social events.
6. By using methods in quantitative research it restricts the scope of research.
7. Process of neutralization is neither possible nor beneficial.

1. Qualitative Methodology

Strengths and Weaknesses

Strengths	Weaknesses
Researching people in natural settings	Problems of reliability caused by extreme subjectivity
Stressing interpretations and meanings	Risk of collecting meaningless and useless information
Achieving a deeper understanding of the respondent's world	It is very time consuming
Humanizing research process by raising the role of the researcher	Problems of representative ness and generalizability of findings
Allowing higher flexibility	Problems of objectivity and detachment
Presenting a more realistic view of the world	Problems of ethics (entering the personal sphere of subjects)

7. Quantitative Vs Qualitative methodology

Feature	Quantitative	Qualitative
Nature of reality	Objective	Subjective; problematic; holistic; a social construct
Causes and effects	Cause-effects linkages	No cause and effect
The role of values	Values free inquiry, values neutral	Value bound inquiry
Natural and social sciences	Deductive; model of natural sciences; based on strict rules	Inductive; no strict rules; interpretations
Methods	Quantitative; Mathematical; extensive use of statistics	Qualitative with less emphasis on statistics; verbal and qualitative analysis
Researcher's role	Passive, the knower is separate from subject- the known; dualism	Active; knower and known are interactive and inseparable
Generalizations	Inductive generalizations;	Analytical or conceptual generalizations; time and context specific

8. Feminist Research

During the past twenty years the quality and diversity of feminist research and its immense impact on society in general and on the position and role of women are more than obvious. The following methods are adopted in the feminist research.

a. Consciousness raising method

This is a group discussion technique involving groups ; however there is no leader or imposed theme of discussion; the discussion is guided by group facilitator.

b. Group Diaries

Members of a group keep Diaries anonymously. Emphasis is placed on the group and can involve group interview or memory work whereby the group, read to the members, writes stories.

c. Dramatic role play

Views, opinions and feelings are expressed in the form of a drama.

d. Genealogy and network tracing

This involves inquiring into women's history, tracing her relationships, friendships and origin.

e. Non-authoritative and neutral research

Information is collected and presented to the respondent to make sense of it. Emphasis is placed on the respondents and subjectivity.

f. Photocopy and taking picture technique

This technique involves a collection of pictures taken at certain intervals to be used in an interview kit. They can also be analyzed and interpreted according to the information they contain, such as sitting order gesture, posture and so on.

g. Speaking freely

Speaking freely into a tape recorder or answering long, essay type questionnaires. This technique involves a set of questions sent to the respondent with the instruction to recode the answers on tape.

Feminist research is also critical of the sexist orientation of social research and of social sciences in general. Many feminists have pointed a number of ways in which sexist practices exist and affect social life, which are as follows.

1. **Androcentricity**

This refers to the fact that the world is perceived and presented from the view of the male. In this view, woman is presented as passive objects rather than as acting person.

2. Overgeneralization/over specify

This situation occurs when statements are made about sexes, whereas the study might have preferred to one sex only.

3. **Gender sensitivity**

This occurs when gender as a factor is totally ignored.

4. Double Standards

Here different standards or instruments are used to measure issues related to males and females.

5. Sex Appropriateness

This problem is derived from the application of double standards and related to attitudes and expectations that assign behavior patterns, traits, attributes or roles considered appropriate to a particular gender.

6. Familism

It refers to the issue in question concern, men women or members of the family. It is assumed that a particular issue or problem uniformly affects all members.

7. Sexual Dichotomism

It refers to practices that tend to consider gender as distinctly separate without considering the interrelationship and interdependence that exist between them.

Chapter # 3

Measurement and Scaling

1. Measurement

Measurement involves categorizing and assigning values to the variables in question, and can be different in nature and level of function. Generally measurement is quantitative and qualitative. Quantitative measurement concentrated on numerical values and attributes. Qualitative refers to labels, names and qualities.

2. Levels of measurement

Measurement can be performed at four levels.

a. Nominal level measurement

At this level measurement involves classification of events into categories that must be distinct and comprehensive. Such a measure indicates that there is difference between the categories considered.

b. Ordinal level measurement

The characteristics of ordinal level are:

1. It refers to position based on a clear order of scale of low and high suggesting that Some elements have more value than others.
2. The numbers have actual mathematical meaning as well as having identification properties.
3. It is essentially a quantitative measurement.
4. It shows a relative order of importance.

c. Internal level measurement

This method allows the researcher to judge differences between respondents and to obtain more detailed information about the research topic. Characteristics of this level of measurement are that it includes equal units, and that it is essentially a quantitative measurement.

Example:

If the IQ of two students is 105 and 125 respectively, in nominal terms this means that they have a different IQ: in ordinal terms that the first students has a lower IQ than the second; and in interval terms, that the IQ of the second student is 20 points higher than that of the first students, but not, say, one fifth smarter than the other student.

d. Ratio Level of Measurement

Measurement at this level includes all the attributes the other three forms offer, plus the option of the absolute true zero as its lowest value, which in essence indicates absence of

the variable in question. It has all the same characteristics of internal measurement along with additional characteristics. In the context of social scientific research, age would be an example of ratio measurement.
Fro example; a comparison of speed of response of two students to a stimulus, say, 10 seconds and 20 seconds, allows the researcher to conclude that the first is twice as fast as the second.

e. Implications of Level of Measurement

Different analytical techniques may require specific levels of measurements. If the researcher is analyzing the relationship between two nominal variables, some analyst techniques would be inappropriate for use.
It is important to realize that a given variable may be treated differently in terms of the level of measurements. For example, age is the ratio measurement; the researcher would be justified in computing a regression equation linking age with heights. There fore in designing a questionnaire, types of analysis must be considered after the collection of data.

3. Validity

Validity means to produce the accurate results and to measure what it is suppose to measure. There are two instruments to check the validity, Empirical or experimental and theoretical validity.

a. Empirical validation

Empirical validity tests the realistic or criterion validity. For instance, produced results indicating that students involved in students union activities produce better results in exams and this is supported by available data, the instrument in question has pragmatic validity.

b. Theoretical Validity

Theoretical validation is employed when practical confirmation of validity is difficult or not possible. There are several types of theoretical validity.

1. Face Validity

An instrument has face validity it seems to measure what it is expected to measure.

2. Content Validity

A measure is supposed to have content validity if it covers all possible aspects of the research topic.

5. Reliability

Reliability is the ability of an instrument to produce consistent results. A method is reliable if it produces the same results whenever it is repeated. Correctness and objectivity are the core components to achieve the reliability.

6. Validity and Reliability

Both these term are a bit confusing. An example might help to distinguish them. If a male student weighs himself on a scale 20 times and every times he receives a reading of 65 kg (which is also his true weight). The scale is both reliable and valid. If all recorded readings are 40 kg, the measure is reliable but not valid. But if he obtains different reading each time he weighs himself (40 kg, 45kg, and 63 kg) the scale is neither valid nor reliable.

Chapter # 4

The Research Process

1. Quantitative Research: the research model

a. Basic Assumptions

Research consists of the interrelated steps and in which the success of the one depends on the successful completion of the preceding steps. The steps must be executed in the given order.

b. Content of the research model

The form of the research model employed in practical situation varies according to the nature and purpose of the project and the type of the method used. Despite of this there are several common points to be considered.

Research Decisions

- Which topic?
- Which methodology?
- Which sampling procedure?
- How to collect data?
- Method of analysis?
- How is research to be administered?
- True representative (sample size).
- Well knitted questionnaire.

The research model

Steps	Elements
Preparation	Selection of research topic Selection of research methodology Formal definition of a topic Exploration, Review of literature Operationalisation Formulation of hypotheses
Research Design	Selection of sampling procedures Selection of methods of data collection Selection of methods of analysis Arrangement of administrative procedures
Data Collection	Designing of questionnaire Data collection
Data Processing	Grouping and presentation of data Classification, Tabulation Analysis and interpretation of data
Reporting	Publication of the findings Recommendations Conclusion Bibliography

For instance

1. Topic

Traditional families and their family size.

2. Methodology

Quantitative methodology

3. Exploration

(1) Literature review; (2) Expert surveys (3) case studies

3. **Hypotheses**

The family size of traditional families is larger than the national average.

4. Sampling

The sample size should consist of 300 traditional families.

5. **Method of data collection**

Data is collected through interviewing and questionnaires as per the requirement.

6. **Administrative procedures**

It may be decided to include female research assistance, employ and train interviewers in due time and opt for a large number of assistants so that the study is completed in a minimum amount of time.

7. **Data processing and analysis**

It may be decided that statistical analysis should be considered, using computer; the services of a statistician must be secured, and accessibility to relevant computers arranged.

8. **Reporting**

It may be decided that a report will be prepared and will be widely disseminated.

The qualitative research: research model

Procedure	Qualitative methodology
Preparation	Definition: general, and loosely structured Hypotheses: Formulated through the study Employs sensitizing concept
Design	Design: well planned but nor prescriptive Sampling: well planned but during data collection; it is not representative Measurement: most nominal
Data collection	Uses qualitative methods; usually single handed
Data processing	Mainly qualitative; often collection and analysis occur simultaneously; analytical generalizations
Reporting	Mostly not integrated findings

2. Action Research

It is the application of fact finding to practical problems solving in a social situation with a view to improving the quality of action.

a. The research model

Step I: Preparation

The researcher will begin with the choice and definition of the topic.

Step II: Research Design

The sampling and methods procedure employed by action researchers are the same as those employed by other researchers.

Note: Data Collection, Data Analysis, Reporting, All these steps are the same that are employed by the investigators in other research methodologies.

Chapter # 5

Initiating Social Research

1. Selection of the research question

The first step that the investigator has to take is to choose the research topic. There are three major questions associated with the selection of the research topic that deserve some attention and which the researcher must be aware of namely:

1) What can be studied in a research topic?
2) Who decides about the selection of the research topic?
3) What are the factors that influence the decision to study a certain research question?

2. What can be studied in a research topic?

The research topic can be related to individuals, groups, ideas, ideologies, attitudes and opinions, structures and processes, methods and practices, and cause and effects of social events.
The only restrictions relate to issue of research ability, feasibility, relevance and ethics.

a. Research ability

It means whether the research topic is approachable and realistic.

b. Feasibility

It relates to whether the researcher has means and resources to complete the study.

c. Relevance

It relates whether the study of the research topic is relevant to the purpose of the study.

d. **Ethics**

It refers to whether the proposed study is ethically justifiable and follows ethical standards and principles in its design, execution and application of the findings.

3. Who decides about the selection of the research topic?

a. The researcher
b. The social reality
c. The sponsor

Researcher see a working hypothesis as a preliminary assumption about the research topic, particularly when there is not sufficient information available to establish a hypothesis.

2. Statistical Hypotheses

A statement or set of statements developed by means of statistical models related to a probable distribution of certain criteria of the population characterized by the use of parameters and statistics.

3. Research Hypotheses

It is used in a study with out reference to its particular attributes.

4. Null Hypotheses

Null hypotheses might state for example, that all the differences identified between samples are by chance and caused by the sampling procedures; or that all samples stem from the population and that their means are equal.

5. Alternative Hypotheses

This is one of the set of hypotheses referred to above which is applied when the null hypotheses is rejected. In statistical tests of null hypotheses, acceptance of H0 means rejection of the alternative hypotheses.

6. Scientific Hypotheses

Containing statements based on or derived from sufficient theoretical and experimental data.

Chapter # 6

Sampling Procedures

1. Introduction

a. Reasons for sampling

In many cases a complete coverage of the population is not possible.
Complete coverage may not offer substantial advantage over a sample survey.
It takes less time and produce quick results.
Sample offers more detailed information and a high degree of accuracy.

b. Problems of sampling

- Sampling procedures requires more planning, administration and programming than saturation surveys.
- Sample studies may not be as valid as saturation survey.

c. Principles of Sampling

The following are the most important principles of the sampling procedures.

- Sample units must be chosen in a systematic and objective manner.
- The selection process should be based on sound criteria and should avoid errors, bias and distortions.
- Sample units must be easily identifiable and clearly defined.
- Once selected, units can not be discarded.
- Researcher should adhere to the principles of research.
- Sample units must be independent and of the same size and free from duplication.

2. Types of Sampling

There are two types of sampling, random or probability sampling and Non- Probability sampling.

A. Probability Sampling

Probability sampling is employed by many researchers because of its high reliability and high degree of representative ness. In other words, probability sampling method is that in which every individual of population has an equal chance for selection. The following are the probability sampling techniques.

a. Simple random sampling

This type of sampling gives all unit of the target population an equal chance of being selected. It is also known as restricted sampling. When the population is too large, simple random sampling is not suitable.

b. Systematic Sampling

n systematic sampling, every *K th* element in the total list is chosen (systematically) for inclusion in the sample. If the list contains 10,000 elements and the researcher desires a sample of 1000, he will select every 10^{th} (N/M =10,000/1000) for his sample. To ensure against any possible human bias in using this method, the researcher selects the first element at random. Thus he would begin by selecting a random number between 1 and 10, the element having that number, would be included in the sample plus every 10^{th} element following it. This is technically referred to as a systematic sample with a random start.

c. Stratified random sampling

Usually a population is composed of different characteristics (heterogeneous). The sample in such a situation is not true representation. Therefore population is divided into sub populations having the same characteristics (homogenous). Each sub population is referred to as stratum. From each stratum samples are drawn using simple random sampling technique. Such samples are termed as stratified random samples and process termed as stratified random sampling technique.
The main advantage of stratified random sampling is that a greater degree of representative is obtained and it helps in reducing the probable sample error.

d. Cluster sampling

Cluster sampling is a popular method and is employed primarily; when no sampling frame is available for all units of the target population. Economic considerations are more significant. When cluster criteria are significant for study.

B. Non-Probability sampling

This type of sampling procedures does not employ the rules of probability theory and are usually used for exploration and qualitative analysis.

a. Accidental Sampling

This type of sampling is employed in qualitative research and in other studies where representative ness is not the issue. In this techniques researcher accidentally comes in during contact with during a certain period of time are considered.

b. Purposive Sampling

The researcher purposely chooses subjects who, in their opinion are thought to be relevant to the research topic.

c. **Quota sampling**

The researcher sets a quota of respondents to be chosen from specific chosen group by defining the basis of the choice (marital status, education) and by determining its size. The choice of the actual respondents is usually left up to the interviewer.

Quantitative sampling and Qualitative sampling: a brief summary

Sr. #	Quantitative sampling	Qualitative sampling
1	It is relatively large	It is relatively small
2	In most cases it employs statistics	In most cases it employs no statistics
3	Often based on probability theory	Often based on saturation theory
4	Allows no researcher bias in selection	Allows researcher influence in selection
5	Size is statistically determined	Size is not statistically determined
6	Occur before data collection	Occur during data collection
7	Complex procedure	Simple procedure
8	Parameters are fixed	Parameters are flexible
9	High cost	Low cost
10	Time consuming	It is not time consuming
11	It is Laborious	It is easy
12	It treats respondents as a unit	It treats respondents as a person
13	Facilitates inductive generalizations	Facilitates analytical generalizations

Chapter # 7

Methods of data collection: Experiments and focus groups

1. Introduction

In principal qualitative methods have the same purpose as quantitative methods, namely to collect the data that will provide the basis for further thinking and operation. Nevertheless their structures are rather different. The following some designs are mentioned.

a. Closeness of researcher

In this design the researcher to become a part of the research environment and experience interaction as it is experienced by the respondents.

b. Openness of the methods

Methods in qualitative research are open in the sense that they can be changed and adjusted while they are employed and while data are being collected.

c. Flexibility of design

The design is as flexible as the methods in the qualitative research.

A. Experiments

Experiments have always been used in everyday life.

1. Steps in experimental research

Step I: Selection of the topic

Experiments begin with the selection of the topic.

Step II: Formulation of the topic

Research topic is followed by the methodological formulation of the questions. Concepts are defined; variables must be chosen and operationalized, and categories are established.

Step III: Research design

Experimental design includes decisions related to the selection of the subjects the respondents to certain conditions that will guide execution of the experiments.

Step IV: Collection of the data

It includes a number of steps that ultimately consists of subjecting the respondents to certain conditions and ascertaining the effects that resulted from the procedures.

Step V: Analysis and interpretation

The methods of analysis employed in experiments are quantitative and concentrate on experimental conditions on assessing the difference between pretest and post test results and on statistical techniques.

1. Types of experiments

The following three types are the most common forms of experiments in the social sciences.

a. Laboratory experiments

This is the traditional form of experimentation which is usually referred to by writers when they talk about experiments without qualification. Their major characteristic is that they are conducted in a laboratory, where all external factors can be controlled.

b. Field Experiment

These experiments are performed not in laboratory but in natural situations, such as in city blocks, meeting places of migrants, villages, churches and classrooms.

c. Demonstration Experiments

Demonstration experiments are field experiments or laboratory experiments but with one group (Experimental group) only. Although they help to demonstrate highlight or illustrate trends in or aspects of human behavior.

3. Focus Groups

Focus groups involve persons specially selected owing to their particular interest, expertise or position in the community in an attempt to collect information on a number of issues, as well as to brainstorm a variety of solutions, and ultimately facilitate group discussion as a tool of data collection and possible policy construction. This method is therefore often referred to as group discussion.

Chapter # 8

Field Research and Grounded Theory

A. Field Research

Field research is a form of social inquiry into real life situations. Field research takes place in the fields that is in a natural settings, a setting that is not established for the purpose of conducting research.

1.Types of Field Research

a. Exploratory studies

They are usually developed in a qualitative context and aim at gaining general information for the purpose of defining the research topic.

b. Descriptive Studies

As a rule qualitative studies produce descriptions of the research topic and in a number of cases with out the use of quantitative measurement or statistics.

c. Hypotheses testing studies

This form of research is geared towards hypotheses testing, which can be a qualitative as well as a quantitative.

B. Case Studies

A case study is an experimental inquiry that investigates a contemporary observable fact with in its real life context when the boundaries between phenomenon and context are not clearly evident.
Case studies are employed indiscriminately in both quantitative and qualitative research, although to a different extent and for different reasons.

C. Ethnographic Research

Ethnography and ethnology are considered to be the areas of interest of anthropologists who were generalists and interested in the relationships between people and the physical , sociopolitical , personal, cultural and historical aspects of the their life, and they are kept out of the area of social sciences. In this type of research we study culture, holism

(human actions in the context of the whole system) and chronology (interest in primitive cultures).

Ethnography

"When used as a method, ethnography typically refers to fieldwork (alternatively, participant-observation) conducted by a single investigator who 'lives with and lives like' those who are studied, usually for a year or more." --John Van Maanen, 1996.

"Ethnography literally means 'a portrait of a people.' Ethnography is a written description of a particular culture - the customs, beliefs, and behavior - based on information collected through fieldwork." --Marvin Harris and Orna Johnson, 2000.

"Ethnography is the art and science of describing a group or culture. The description may be of a small tribal group in an exotic land or a classroom in middle-class suburbia." --David M. Fetterman, 1998.

a. Variations in observational methods

Observational research is not a single thing. The decision to employ field methods in gathering informational data is only the first step in a decision process that involves a large number of options and possibilities.

c. Methodological Principles

Following are three methodological principles that are used to provide the basis for the specific features of the ethnographic method.

1. Naturalism.

This is the view that the aim of social research is to capture the character of naturally occurring human behavior, and that this can only be achieved by first-hand contact with it, not by inferences from what people do in artificial settings like experiments or from what they say in interviews about what they do elsewhere. This is the reason that ethnographers carry out their research in "natural" settings, settings that exist independently of the research process, rather than in those set up specifically for the purposes of research. Another important implication of naturalism is that in studying natural settings the researcher should seek to minimize her or his effects on the behavior of the people being studied. The aim of this is to increase the chances that what is discovered in the setting will be generalizable to other similar settings that have not been researched. Finally, the notion of naturalism implies that social events and processes must be explained in terms of their relationship to the context in which they occur.

2. Understanding

Central here is the argument that human actions differ from the behavior of physical objects, and even from that of other animals: they do not consist simply of fixed responses or even of learned responses to stimuli, but involve interpretation of stimuli and the construction of responses. Sometimes this argument reflects a complete rejection of the concept of causality as inapplicable to the social world, and an insistence on the freely constructed character of human actions and institutions. Others argue that causal relations are to be found in the social world, but that they differ from the "mechanical" causality typical of physical phenomena. From this point of view, if we are to be able to explain human actions effectively we must gain an understanding of the cultural perspectives on which they are based. That this is necessary is obvious when we are studying a society that is alien to us, since we shall find much of what we see and hear puzzling. However, ethnographers argue that it is just as important when we are studying more familiar settings. Indeed, when a setting is familiar the danger of misunderstanding is especially great. It is argued that we cannot assume that we already know others' perspectives, even in our own society, because particular groups and individuals develop distinctive worldviews. This is especially true in large complex societies. Ethnic, occupational, and small informal groups (even individual families or school classes) develop distinctive ways of orienting to the world that may need to be understood if their behavior is to be explained. Ethnographers argue, then, that it is necessary to learn the culture of the group one is studying before one can produce valid explanations for the behavior of its members. This is the reason for the centrality of participant observation and unstructured interviewing to ethnographic method.

4. **Discovery**

Another feature of ethnographic thinking is a conception of the research process as inductive or discovery-based; rather than as being limited to the testing of explicit hypotheses. It is argued that if one approaches a phenomenon with a set of hypotheses one may fail to discover the true nature of that phenomenon, being blinded by the assumptions built into the hypotheses. Rather, they have a general interest in some types of social phenomena and/or in some theoretical issue or practical problem. The focus of the research is narrowed and sharpened, and perhaps even changed substantially, as it proceeds. Similarly, and in parallel, theoretical ideas that frame descriptions and explanations of what is observed are developed over the course of the research. Such ideas are regarded as a valuable outcome of, not a precondition for, research.

d. Ethnography as a method

In terms of method, generally speaking, the term "ethnography" refers to social research that has most of the following features (M. Hammersley, 1990).

- People's behavior is studied in everyday contexts, rather than under experimental conditions created by the researcher.

- Data are gathered from a range of sources, but observation and/or relatively informal conversations are usually the main ones.
- The approach to data collection is "unstructured in the sense that it does not involve following through a detailed plan set up at the beginning; nor are the categories used for interpreting what people say and do pre-given or fixed. This does not mean that the research is unsystematic; simply that initially the data are collected in as raw a form, and on as wide a front, as feasible.
- The focus is usually a single setting or group, of relatively small scale. In life history research the focus may even be a single individual.
- The analysis of the data involves interpretation of the meanings and functions of human actions and mainly takes the form of verbal descriptions and explanations, with quantification and statistical analysis playing a subordinate role at most.

e. Summary guidelines for fieldwork

It is difficult, if not impossible, to provide a precise set of rules and procedures for conducting fieldwork. What you do depends on the situation, the purpose of the study, the nature of the setting, and the skills, interests, needs, and point of view of the observer. Following are some generic guidelines for conducting fieldwork:

- Be descriptive in taking field notes.
- Gather a variety of information from different perspectives.
- Cross-validate and triangulate by gathering different kinds of data. Example: observations, interviews, program documentation, recordings, and photographs.
- Use quotations; represent program participants in their own terms. Capture participants' views of their own experiences in their own words.
- Select key informants wisely and use them carefully. Draw on the wisdom of their informed perspectives, but keep in mind that their perspectives are limited.
- Be aware of and sensitive to the different stages of fieldwork.
- Build trust and rapport at the entry stage. Remember that the researcher-observer is also being observed and evaluated.
- Stay alert and disciplined during the more routine middle-phase of fieldwork.
- Focus on pulling together a useful synthesis as fieldwork draws to a close.
- Be disciplined and conscientious in taking detailed field notes at all stages of fieldwork.
- Be as involved as possible in experiencing the observed setting as fully as possible while maintaining an analytical perspective grounded in the purpose of the fieldwork: to conduct research.
- Clearly separate description from interpretation and judgment.
- Provide formative feedback as part of the verification process of fieldwork. Time that feedback carefully. Observe its impact.
- Include in your field notes and observations reports of your own experiences, thoughts, and feelings. These are also field data.

- Fieldwork is a highly personal experience. The meshing of fieldwork procedures with individual capabilities and situational variation is what makes fieldwork a highly personal experience. The validity and meaningfulness of the results obtained depend directly on the observer's skill, discipline, and perspective. This is both the strength and weakness of observational methods.

f. Summary guidelines for Interviewing

There is no one right way of interviewing, no single correct format that is appropriate for all situations, and no single way of wording questions that will always work. The particular evaluation situation, the needs of the interviewee, and the personal style of the interviewer all come together to create a unique situation for each interview. Therein lie the challenges of depth interviewing: situational responsiveness and sensitivity to get the best data possible.

There is no recipe for effective interviewing, but there are some useful guidelines that can be considered. These guidelines are summarized below (Patton, 1987).

Throughout all phases of interviewing, from planning through data collection to analysis, keep centered on the purpose of the research endeavor. Let that purpose guide the interviewing process.

- The fundamental principle of qualitative interviewing is to provide a framework within which respondents can express their own understandings in their own terms.
- Understand the strengths and weaknesses of different types of interviews: the informal conversational interview; the interview guide approach; and the standardized open-ended interview.
- Select the type of interview (or combination of types) that is most appropriate to the purposes of the research effort.
- Understand the different kinds of information one can collect through interviews: behavioral data; opinions; feelings; knowledge; sensory data; and background information.
- Think about and plan how these different kinds of questions can be most appropriately sequenced for each interview topic, including past, present, and future questions.
- Ask truly open-ended questions.
- Ask clear questions, using understandable and appropriate language.
- Ask one question at a time.
- Use probes and follow-up questions to solicit depth and detail.
- Communicate clearly what information is desired, why that information is important, and let the interviewee know how the interview is progressing.
- Listen attentively and respond appropriately to let the person know he or she is being heard.
- Avoid leading questions.
- Understand the difference between a depth interview and an interrogation. Qualitative evaluators conduct depth interviews; police investigators and tax auditors conduct interrogations.
- Establish personal rapport and a sense of mutual interest.

- Maintain neutrality toward the specific content of responses. You are there to collect information not to make judgments about that person.
- Observe while interviewing. Be aware of and sensitive to how the person is affected by and responds to different questions.
- Maintain control of the interview.
- Use tape record whenever possible to capture full and exact quotations for analysis and reporting.
- Take notes to capture and highlight major points as the interview progresses.
- As soon as possible after the interview check the recording for malfunctions; review notes for clarity; elaborate where necessary; and record observations.
- Take whatever steps are appropriate and necessary to gather valid and reliable information.
- Treat the person being interviewed with respect. Keep in mind that it is a privilege and responsibility to peer into another person's experience.
- Practice interviewing. Develop your skills.
- Enjoy interviewing. Take the time along the way to stop and "hear" the roses.

g. Ethics in ethnographic Research

Since ethnographic research takes place among real human beings, there are a number of special ethical concerns to be aware of before beginning. In a nutshell, researchers must make their research goals clear to the members of the community where they undertake their research and gain the informed consent of their consultants to the research beforehand. It is also important to learn whether the group would prefer to be named in the written report of the research or given a pseudonym and to offer the results of the research if informants would like to read it. Most of all, researchers must be sure that the research does not harm or exploit those among whom the research is done.

D. Grounded Theory Research

This theory was developed by Glaser and Strauss and has become popular among many social scientists. It is grounded because it is related emerges out of, is created through and grounded on experiential data.

1. Central Criteria of grounded theory

There are four main points of this theory, which are given below.

a. An Autonomous Unit

This means that a case is not considered to be not an amorphous piece of reality but an autonomous unit with its structure, boundaries and history.

b. Interpretation of reality

This element suggests that social scientists who employ grounded theory as their guide approach and interpret reality the same as way as artists do.

c. Everyday Thinking

Grounded theory is very close to every day behavior and action. Every knowledge is an unpronounceable resource, which this theory makes a central element of its structure and approach.

d. Development of Concepts

This element suggests that the development of concepts and categories is made in a form that does not demand continuous validity, concepts changes as the knowledge and their environment changes.

Chapter # 9

Observation

1. Introduction

Observation is one of the oldest methods of data collection. Literally observation means a method of data collection that employs vision as its main means of data collection. It is used as the only technique of data collection or jointly with other techniques.

2. Types of Observation

There are several types of observation, some more popular than others. Although basically similar, they do differ from each other in the degree of the observer's participation in the environment.

a. Naive and scientific observation

It refers to everyday observation, unstructured observation which people use when they interact with others in social situations.

b. Participant and Non-participant Observation

In participant observation the observer observe from inside the group and ideally there identity as a researcher is not known. In the non-participant observation the observer are not parts of the environment in which they study. Their position is clearly defined and different from that of the subjects.

c. Structured and Unstructured Observation

Structured observation employs formal and strictly organized procedures, with a set of well defined observation categories. Unstructured observation is loosely organized and the process of observation is largely left up to the observer to define.

3. The Observer

The observer must have particular skills and trainings for his efficient observation.

a. Observer Skills

Skills are more demanding especially when the observer is carrying out the study single handedly. Observers who possess the qualities required to complete their tasks successfully must be chosen. An observer must possess the qualities of intelligence, previous experience with observation, exact knowledge of the topic, flexibility,

adoptability, ability to get along with others, to be unbiased and free from ideological constraints and to be honest and trustworthy are of paramount importance.

b. Observer Training

The careful selection of the observer is not only sufficient but also an effective and well planned training. It should be kept in the observer's mind that what will be observed, when and how are issues with which the observer must be familiar.

4. The process of Observation

Observation takes place in the same form as the general research model introduced earlier in this book.

Advantages and Limitations of Observation

Advantages

1. It provides information when other methods are not effective.
2. It is very less time consuming.
3. It can offer data when respondents are unable or unwilling to cooperate or to offer information.
4. It approaches reality in its natural structure.
5. It offers first hand information.
6. It is relatively inexpensive.

Limitations

1. It cannot be employed when large groups or extensive events are studied.
2. It cannot provide information about past, future and unpredictable events.
3. It cannot offer data related to frequency of behavior.
4. It cannot study opinions or attitudes directly.
5. It is relatively laborious and time consuming method.
6. It is exposed to observer's bias, selective perception and selective memory.
7. It cannot offer quantitative generalizations on the results.

Chapter #10

Surveys: Mail Questionnaires

1. Introduction

Surveys are most commonly used method of data collection in the social sciences, especially in sociology. Surveys are methods of data collection in which information is gathered through oral or written questioning. Oral questioning is known as interviewing and written questioning is accomplished through questionnaires.

2. Advantages and Limitations of Questionnaires

Advantages

1. It is less expensive than other methods.
2. They produce quick results.
3. It can be completed at the respondent's convenience.
4. They offer greater assurance of anonymity.
5. They offer less opportunity for bias.
6. It is stable, consistent and uniform measure, without variation.
7. They are not affected by problems of no contacts.

Limitations

1. They do not allow probing, prompting and clarification of questions.
2. They do not provide opportunity for motivating the respondents to participate in the survey or to answer the questions.
3. Due to lack of supervision partial response is quite possible.

3. Structure of the questionnaire

There are three elements each have a certain purpose: the cover letter, the instructions and the main body.

a. The Cover Letter

1. The points that a cover letter must possess are:
2. The main objective and the significance of the study.
3. The research team and its sponsors.
4. The reasons why the respondents should complete the questionnaire.
5. Assurance of anonymity and confidentiality.
6. Requirements for completion such as maximum time, conditions etc.
7. Issues related to ethics.

b. Instructions

Instructions about how to fill in the questionnaires are mentioned only briefly in the cover letter. Instruction should be given on the questionnaire or on the separate sheet.

c. The main body

The main body of the questionnaire includes the questions that are to be answered. This part should be dealt carefully in regard to content, structure, wording, flow, format and so on.

4. The Questionnaire format

a. Funnel format

The questioning moves from general to specific, from impersonal to personal and from non sensitive to sensitive.

b. Inverted Funnel format

The questioning moves from specific to general, from personal to impersonal and from sensitive to non-sensitive.

c. Diamond Format

A combination of funnel format and inverted funnel format is called diamond format.

e. X-format

The first part of the questionnaire is funnel format and the second part an inverted funnel format.

f. Box format

Questions are uniform through out the questionnaire, with all questions being kept at the same level.

g. Mixed format

Here questions appear according to the logic of the project, shifting from general to specific and so on as required.

5. Question content

In order to achieve the purpose of questionnaire, the content of the questions must be organized according to the following criteria.

a. Composition

The composition of each question is expected to address one item only. Double parallel questions are not allowed.

b. Relevance

The content of each question must be related to the research topic.

c. Symmetry

The question should address a specific element of the research topic and be symmetrical.

d. Clarity and Simplicity

The content of each question must be clear and simple in language and content.

e. Language

Questions should be formulated in the language of the respondents.

f. Attitude

Questions should convey a positive attitude towards the respondents and study.

6. Size of Questionnaire

The size of the questionnaire depends on factors such as the research objective, the type of respondents, the methods of analysis and availability of resources. The number of questions ranges from only a few to several hundred. However, the golden rule with respect to questionnaire size is that one should include as many as questions as necessary and as few as possible.

Chapter #11

Surveys: Interviewing

1. Introduction

Interviews are employed as a method of data collection in most research designs regardless of the underlying methodology.

2. Types of Interviews

a. Structured versus unstructured interviews

Structured interviews are based on a strict procedure and a highly structured interview guide, which is no different from a questionnaire. A structured interview is in reality a questionnaire read by the interviewer as prescribed by the researcher.
Unstructured interviews have no strict procedures to follow of the kind described above. In their extreme form they are theoretically inconceivable, for every interview has a structure of some kind. The interviewer acts freely.

b. Standardized and Unstandardised

In standardized interviews are the answers are determined by a set of response categories given for this purpose. Respondents have to choose one of the given options as the answer.
Unstandardised interviews are characterized by the fact that their responses are left open. In this way we speak of open questions.

c. Individual versus group interviews

Individual interviews are employed the researcher interviews one respondent at a time. This is the most common form of interviewing.

d. Unique versus panel interview

Unique interviews take place once. The interviewer approaches the respondents; collect the information and concludes the interview at the same time. In the case of panel interview the interviewer collects the information from the same group of respondents two or more times at regular intervals.

e. Oral and written interviews

By definition all interviews are oral; as such this division does not seem to be of any significant. A written interview is used among the some researcher.

f. Telephone and computer interviews

Telephone and the computer are used as the medium of data collection for interviewing to the respondents.

g. Analytical interview

It is based on certain theoretical principles and serves to analyze concepts, theories, social relationship and events.

3. The process of interviewing

a. Seeking the respondents

The interviewer after having been trained for a certain period of time is supplied with a list of names and addresses of individuals, whom she or he has to approach and seek cooperation from. To avoid the refusal the interviewer can be equipped with the right argument to motivate the respondents to change his or her mind.

b. Asking and recording the questions

Asking questions depends on the type of interviewing. Some ways to overcome such difficulties include writing down key words only and completing the notes at the end of the interview and writing down more detailed notes.

c. Field supervision and checks

Administration should not be left entirely on up to the interviewer during data collection. Especially when more than one interviewer is employed, supervision and checking are indispensable. The researcher or supervisor might have to contact the respondents to determine whether the intended interview has take place or not.

d. Completion of the interview

Ending the relationship between the respondents and the interviewer should be accomplished in a spirit of trust, cooperation and mutual respect and by letting the respondent feel that the contribution made to the research and to society through interview was appreciated.

Chapter # 12

Indirect methods of data collection

Indirect methods do not rely on direct participation of respondents. In these methods data are obtained with out the knowledge of the subjects. Indirect methods are diverse in nature and can be divided into the following groups.

1. Physiological methods
2. Non-reactive methods including:
a. Analysis of the physical traces
b. Analysis of documents
3. Projective methods
4. Concealed methods (observation)

1. Physiological methods

Physiological methods study the physiology of the respondent's body and aim at measuring aspects of its functioning. For example: criminal behavior, interpersonal relationships in marriage, state of mind and attitude.

2. Non-reactive methods

Method in which the respondent is aware of being investigated but does not know how and in what context the responses will be evaluated.

a. Analysis of the physical traces

It can offer information about the culture and life of past communities. Studies of traces can provide useful information and are employed as the sole method or in addition to other methods.

b. Documentary methods

They are employed in the context of many diverse studies.

3. Projective methods

It helps to gather information about the personality of the respondents and to bring about an understanding of their behavior, relationships and problems. Projective methods study individuals by confronting them with a situation or a motivation and prompting them to react according to the meaning they assign to this stimulus. This response is analyzed and interpreted in the context of the research question and explains how the regularities between reaction and projected traits take place.

Types of Projective Methods

a. Word Association

In this method, the investigator reads out a set of words in succession and asks respondents to reply with a word which in their opinion is associated with that read by the investigator. The respondents answer shows the representation of his thoughts and inner feelings.

b. Count tests

The respondent is asked by the investigator to count in a set period of time 10 objects of their environment. The speed, at which the task is accompanied, as well as the type of objects, is evaluated to indicate the structure and organization of the respondent's personal world.

c. Comic strip tests

In this test the respondent is offered drawings or pictures containing empty speech bubbles, depicting people showing aggression, frustration or other feelings. The respondent is asked what each person is saying.

Chapter # 13

Data Collection

After the planning stage of a research program is completed the researcher moves to the next step, namely data collection.

1. Pre- tests and pilot studies

a. Pre-tests

There are cases in which the researcher is not sure about the effectiveness or suitability of one small part of the instrument developed for the study, for example one question or a small section of the questionnaire or the interview is lacking something. So they gave the extra option to the respondents.

b. Pilot studies

A pilot study is a small scale model and rehearsal of the main study. Pre-tests help to solve mechanical problems of an instrument whereas the pilot studies are concerned with administrative and organizational problems related to the whole study. The purpose of pilot study is to estimate the time, cost and level of response as well as to practice of the assistants and possible problems.

c. Designing pre-tests and pilot studies

The design of pre- test and pilot studies varies with many factors, such as availability of resources, the nature of the study, type of methodology, nature of the population, size of the sample and degree of necessity for the study. However it must be accurate and valid.

2. Data collection in qualitative and quantitative research

In principle there is no difference in data collection between quantitative and qualitative studies. In both cases data will be collected as designed by the researcher.

3. Interviewing

During interviewing the following tasks must be accomplished.

- To advertise for the selection of interviewers and supervisors in the newspapers, journals.
- Final selection of interviewer, supervisors and personnel.
- Provide training to the interviewers.
- Arranging work conditions, payment and duration of employments.
- In case of refusals the respondents must be convinced and then choose the time and place where the interview took place.
- The interview must be complete, uniform and objective.

- Supervisors will monitor the process of interviewing.
- Ensure devotion to ethics and honesty.

4. Non response in survey research

The respondents who fail to return questionnaires create serious problems. The researcher can adopt different techniques to raise the response rate such as employing social, psychological and economic techniques. There can be different reason of not responding to the response. They are unwilling to do so, disapprove the research study, don not like the sponsors. They can not be interviewed due to communication problem. The researcher should remind the respondents off and on.

5. Observational research

Data collection varies with type of observation employed in the research, especially with respect to participant and non participant observation. Observer should be neutral, not take sides, and develop trust in the group they observe. He should not disrupt the functioning of the society. Moreover the presence of the observer and the use of questions should not alter the environment or the routine of the group life.

6. Experiments

Experiments are usually in the laboratories but in the fields as well. Fields experiments are conducted in natural settings. It is divided into four steps. At the first stage identification of the field is take place in which the experiments are going to be made. Secondly the arrangements of the conditions are made which varies from situation to situation. Thirdly induce the stimulus according to the instructions. Finally the eventual changes are recorded which provides the data for analysis.

The first steps of qualitative analysis are made during the process of data collection. During that time data are collected, coded, conceptually organized, interrelated, evaluated and used as a facilitator for further data collection. Collection is thus merged with the data analysis.

1. The cyclical process of analysis

Stage I: Data reduction

Data reduction involves careful reading of the recorded material, identification of the main themes of the studied process, behavior and so on.

Step II: Data Organization

This is the process of assembling information around certain themes and points, categorizing information in more specific terms and presenting the results in some forms.

Step: III Interpretations

This involves making decisions and drawing conclusions related to the research questions.

2. Qualitative interviews

This type of analysis takes place after data collection; here the interviews have been conducted and the answers recorded on tape, video, audio cassettes. A model of analysis made up of five steps can be described as follows.

Step 1: Transcription

The data is transcribed in the original form on to the paper.

Step 2: Checking and editing

Transcripts are checked and edited related to parts of data and preparing data for analysis.

Step 3: Analysis and interpretation

Here categories will be developed, coding and data reduction will be completed.

Step 4: Generalization

The findings of the individual interviews are then generalized and differences and similarities identified, allowing the development of typologies.

Step 5: Verification

This involves a process of checking validity of interpretation by going through the transcripts alone or with the assistance of the other researchers. This will allow the other researchers to verify or modify hypotheses already arrived at previously.

B. Quantitative Analysis

1. Types of Quantitative Analysis

There are three major types of quantitative analysis.

a. Primary analysis

It refers to an original analysis conducted by the researcher that produces findings on a specific topic.

b. Secondary analysis

The analysis of existed findings by another researcher focuses on already gathered, analyzed data and conduct an analysis for the second and third time.

c. Meta Analysis

It is the analysis of information already gathered and analyzed from several studies.

2. Data preparation in quantitative analysis

Data preparation first involves coding, editing and checking. After this accomplishment, a decision is made about whether the data will be analyzed manually or by means of computers. When electronic data processing is employed, the data will first be entered in the computer.

a. Coding data

Coding is the process in which statements and answers are translated into numbers. This facilitates easy reduction of the data, analysis, storage and dissemination of the data. Coding can be performed either before the study is completed, that is, before the data are collected (pre coding or after data collection (post coding).

b. Editing and checking data

It is important that information appearing on a questionnaire is clear, legible, relevant and appropriate. It is therefore essential that the researcher take every precaution to ensure that these standards are upheld. In addition interview schedules and questionnaire must be edited before they are passed on to the assistants for further processing.

c. Feeding the computer

Coded data are fed to the computer for further processing and analysis.

d. Manual preparation of data

Manual reduction of the data is also employed in small quantitative studies and when accessibility to computers is impossible or in appropriate.

3. Processing open-ended questions

The content of the answers is carefully studied and then fitted into a pattern of categories, which is developed after the responses have been studied. These categories are accurate, undimensional, mutually exclusive and exhaustive and allow some degree of quantification.

4. Counting

Counting is the first step of analysis. What goes on inside the computer while it is counting is not of importance to the beginner and is also beyond the limit of the treatise.

Chapter # 15

Data Presentation

1. Introduction

In quantitative research the most common forms of grouping and presentation of data are distribution, tables and graphs. Here data are integrated in a form that provides, at a glance, summarized information about the research topic or aspect of it.

A. Presentation of data in quantitative research

1. Distribution

A distribution is a form of organization or classification of scores obtained for the various categories of a particular variable. There are several types of distributions, proportional distribution or percentage distributions and cumulative distributions. In social research frequency distribution are the most common.

2. Tables

Tables are the most common way of presenting data and usually contain a vast amount of information. They enable the researcher to gain an overall view of the findings, ti identify trends and to show relationships between parts of the findings.

a. Table Structure

A table contains five elements.

- A title contains a clear and specific description of the table.
- A heading is the label of the columns and rows.
- The body of the table contains the information offered in the table.
- Marginal are the sums of the columns and rows.
- Footnotes contain additional information explaining the origin of the information provided in the table.

3. Graphs

Graphs are figures that offer a visual presentation of the results. Most cases the format of the graphs consist of two lines placed at right angles to each other intersecting at the lower left hand part of the figure and are called coordinate axes. The point of presentation is called the origin.

B. Central tendency and Dispersion

Statistical methods assist significantly in the analysis of data. For many researchers, analysis of data means statistical analysis and that any analysis can not be successful without statistical operations.

1. Relational measures

It relates parts of a group of scores to each other or to the whole. For instance the relationship of males to females or the relationship of males to the whole group.

$$\text{Rate} = \frac{\text{Number of actual occurrences}}{\text{Number of possible occurrences}}$$

2. Measures of Central Tendency

These measures represent the average or typical value in a distribution. There are many ways to determine central tendency.

a. The Mean

It describes central trend of the results or the average of all observations. The computation of mean varies according to the nature of the data either it is the grouped data or ungrouped.

b. The Median

The median is a point on a distribution that divides the observations (not their values) into two equal parts. So that the half of the observations are above and half below this point. For example in the distribution 36, 33, 30, 28, 26, 23, 18, 12, 11, 8, 4 showing the reading hours per week reported by the 10 students of education class, the median is 23 because it divides distribution into two parts with equal number of scores: there are five scores in each side of 23. When there is even number of scores, the median is the mean of the two adjacent middle scores.

3. Measures of Dispersion

a. Variance and Standards Deviation

Measures of dispersion give information about the different quality of data, the degree to which the data is spread around the mean. Variance and the standard deviation are the two most popular measures of dispersion in the social research. The standard deviation is

the square root of the variance: and hence the variance equals the square of the standard deviation.

b. The range

The range demonstrates the range that the distribution covers the difference from the lowest to the highest score. It describes the distance between the highest and the lowest score of a distribution.

C. Associations

1. Correlation

Most social researchers are interested in the relationship between events. For this reason, the analysis of data tends to focus on the relationship between two variables. For example such measures provide a useful tool for examining the relationship between a high education level of women and liberal social attitudes, between poverty and criminality. Measures of correlation are used to find out three points.
Presence or absence of correlation, that is there a relationship between two variables or not?
Direction of correlation, if there is a correlation, whether it a positive or negative relationship?
Strength of correlation, that is, whether an existing correlation is strong or weak.

2. Regression and prediction

Regression is method that allows social researchers to make predictions about the value of one variable (Y) if another variable is given (X). The definition of regression is given by a formula.

$$Y = a + bX$$

Where Y and X are variable and *a* and *b* are constant.

D. Test of Significance

1. Introduction

Making generalizations is an important element of the research process and one that is close to the purpose of almost every investigation. Most studies are conducted with the purpose of being able to produce findings that can be generalized in some way or another to the whole populations.

Checking the significance differences facilitated by means of significance tests. These tests follow a strict procedure, beginning with setting research hypotheses, formulating the Null hypotheses and the alternative hypotheses, computing test statistics and then checking whether the null hypotheses can be rejected or accepted.

One tail and two tail tests

There are two types of tests: one tail test and two tail test. One tail tests begin with the premise that population parameters are different from those hypothesized and show the direction of that difference. In other words when two means are tested, one is considered to be greater than or less than the other. It specifies the direction of the difference.
The two tail test are based on the assumptions that the population parameters are different those are hypothesized. They do not suggest any direction of the difference.

2. Tests of significance

Tests are significance are many and diverse and are an integral part of every quantitative study but here we discuss a few but important tests.

3. Nominal level tests

a. the chi-square test

Chi- square (pronounced kye- square) tests are the most popular and most frequently used tests of significance in the social sciences in general sociology in particular. It provides information whether the collected data value is close or whether two variables are related to each other. There are two types of chi- square tests, namely the goodness of the fit test and the test of independence. The general procedure employed to calculate chi square in both cases is also similar. It contains following steps.

- A simple table or contingency table is constructed.
- The observed frequencies are identified.
- The expected frequencies are identified.
- The expected frequencies are subtracted from the observed frequencies.
- The difference are squared and then divided by the number of expected frequencies.

b. The Z - test

The z- test is similar to chi square test with one basic difference, namely that it is used for data expressed in proportions. It is to find out whether the differences between proportions are significant or not.

4. The t-test

The t-test is a very popular and useful test. t- Test is used for both small and large samples. T-tests can be employed for single samples and for two samples.

a. The one sample test

When this test is employed we only have one sample to work with. In such cases, a single sample t-test compares the sample mean and the population mean and tests whether there is difference between them.

b. The two sample t- test

In this type of test the differences between the two means of two samples are tested, one refers to independent samples and the other dependent.

5. Analysis of Variance (ANOVA)

This test is suitable for interval/ ratio- level distributions. It is knows as analysis of variance or as the F-test and is used as factorial tests. These tests are also known as one-way (when one criterion is used), as two way (when two criteria is used). It is called F-test after its creator, Sir R.D.Fisher. ANOVA is similar to the t-test. This test is used when more than two variables are used.

a. Conditions of ANOVA

There are following three conditions to apply ANOVA.

- Scores should me independent from each other.
- Scores should be normally distributed.
- Variances should be equal.

Chapter # 19

Reporting

1. Introduction

The last step of the research process is publication of the data, that the dissemination of information which was collected during the investigation. This is the important step because it is the only way for the research findings to reach the community and become public knowledge and to encourage the community, interest groups and the govt. to take notice.

2. Factors of reporting

Research report is the face of investigation. It should reflect technical as well as political and ethical issues, for research reports depend very much on at least three important factors, namely ethical considerations, the nature of the reader for whom the report is published and the purpose of the report.

3. Reporting Outlets

Research findings are reported through a number of channels. Some may be published in newspapers only, others in journal, monographs, books or conferences and Newspapers.

4. Structure and content

Briefly researcher preparing research reports must be fully aware of

1. What is to be included in the report?
2. How the information contained in the report should be structured?
3. How the text is to be presented?

Generally the content of the report is expected to adhere to certain following rules.

- The content of the report should communicate and discuss the findings of the project, as well as problems and frustration experienced during the study.
- The content should be presented in a simple and orderly way, with every aspect of the project being properly introduced and explained.
- Structure of the publication covers a number of points.

a. The main body of the report

There are usually five points in a report

1. The introduction
2. Methodology
3. Findings
4. Discussion
5. Conclusion

1. The introduction

The author describes, explains and introduces the topic of the report; the purpose and significance of the research; the findings of the exploratory study, a review of literature, problem encountered and finally adjustments undertaken to arrive at the topic ultimately studied and presented in the report.

2. Methodology

This section will inform the reader in simple terms about how the research was done. In a summary form the methodology section will include the following.

Research design

- How has the research questions been addressed?
- What type of methodology has been employed in the study?
- What is the overall framework that contains the research process?

Sampling

- Who are the respondents who took part in the study?
- What was the size and composition of the sample?
- What were the sampling procedures used to select the sample?
- What are the measures employed to avoid errors?
- What are the characteristics of the population?

Methods of data collection

- What are the methods of data collection?
- What were the actual procedures of data collection, including ways of preventing non response?
- How were the validity and reliability assured in the study?

Instrumentation

- What types of instruments were used to measure the variables?

Data analysis

- How were the data analyzed?
- Were statistical measures and computing employed?

Ethics

- How the ethical issues were addressed?

2. Findings

In finding we discuss what are the answers to the questions raised in the previous section of the study?

Reporting findings

The actual content and format of a qualitative report will depend on the information needs of primary stakeholders and the purpose of the research. Even a comprehensive report will have to omit a great deal of the data collected by the researcher. Focus is essential. Analysts who try to include everything risk losing their readers in the sheer volume of the presentation. This process has been referred to as "the agony of omitting". The agony of omitting on the part of the researcher is matched only by the readers' agony in having to read those things that were not omitted, but should have been.

Balance between Description and Analysis

In considering what to omit, a decision has to be made about how much description to include. Detailed description and in-depth quotations are the essential qualities of qualitative accounts. Sufficient description and direct quotations should be included to allow readers to understand fully the research setting and the thoughts of the people represented in the narrative. Description should stop short, however, of becoming trivial and mundane. The reader does not have to know absolutely everything that was done or said. Again the problem of focus arises.

Description is balanced by analysis and interpretation. Endless description becomes its own muddle. The purpose of analysis is to organize the description in a way that makes it manageable. Description is balanced by analysis and leads into interpretation. An interesting and readable final account provides sufficient description to allow the reader to understand the analysis and sufficient analysis to allow the reader to understand the interpretations and explanations presented.

3. Discussion

The findings are summarized, explained and interpreted establishing more general trends and departing from individual observation and individual data. Findings and discussions are merged into one, usually labeled presentation and discussion of the findings.

4. Conclusion and Recommendations

Here the author puts the results of the study in a normative context and makes some general and specific recommendations.

b. Other sections of the report

5. References/Bibliography

References are literature referred to in the report should be adequately documented and listed in alphabetically order at the end of the report. Referencing can be done in many ways and adopted according to the publishers.

Abstract

An abstract is an accurate, comprehensive, concise and informative summary of the report. It provides a useful summary of the report (between 150 and 200 words), allowing the reader to gain an insight into the findings of the study.

c. Optional Elements

Finally the report may include acknowledgments, a list of contents and an appendix. All three parts are optional and are included in the report only if required or relevant.

6. Size

The size of the report depends among other things, on the nature of the research, the type of publication and on the reader whom it is addressed.

7. Self Assessment

The author should check point by point, so that if there are any errors or omissions they will be detected before it is printed.

8. The Politics of Publishing

Quality of the report is an important factor: high quality manuscripts are more likely to reach the shelves of a bookseller or to be accepted by journals for publications than poor quality reports.

Companies or political parties who have contracted the research may not publish the research report unless it supports their views and practices.

Finally it must be kept in mind that the success of a research project is not always reflected in the amount or publication. The success of project is measure in terms of their soundness and the type of findings they produce.

Glossary

Abnormality: Any situation that is generally not considered to be normal.
Association: The relationship between two or more variables.
Analysis of Variance: A test of significance of data related to many samples.
Bias: A systematic error in data collection.
Case Study: A qualitative method of data collection (or a research design) concentrating on studying a single case.
Central Tendency: An attribute of distributions showing the general trend of the data and measured by means of the mean, median and mode.
Chi -Square Test: A test of significance for the comparison of empirical frequencies for nominal values.
Code Book: A book containing a set of rules and guidelines regarding coding.
Computer Interviews: Computer aided interviews in which the interviewer is replaced party or fully by computer.
Contingency: A form of correlation related to nominal data.
Correlation: A statistical measure of relationships between variables describing the presence, direction and degree of association between them.
Delphi method: A method of data collection that relies on the opinion of experts.
Dogmatic Hermeneutics: A branch of hermeneutics that adheres to certain dogmatic principles, such as in religion or ideology.
Empiricism: A school of thought stressing the significance of experience as the source of all knowledge.
Ethnography: A discipline with the task of describing life customs, etc of people living in various cultures. It is a branch of ethnology.
Grounded Theory: A type of theory thought to emerge out of the direct study of social reality; introduced by Glaser and Strauss.
Hermeneutics: A school of thought aimed at studying and interpreting texts and other manifestations of cultures.
Interviewer Bias: Data distortion stemming from the presence and certain traits of the interviewer.
Interviewer Guide: A set of questions and instructions used by the interviewer during interviewing.
Interviewer Training: A process of training aimed at preparing research assistants to perform interviews.
Linear Regression: A method of estimating the value of a dependent variable when the values of two intervally scaled and normally distributed variables are known.
Null hypotheses: A hypotheses that defines traits of a sample and on which hypotheses testing is based.
Objectivity: The notion that the social scientist should exclude subjective research process.
Pilot Study: A complete replica of the main study employed in a fraction of the sample.

Positivism: A school of thought developed by Comte seeing reality as the sum of sense impressions, equating social sciences with natural sciences, employing a deductive logic and quantitative research method.
Pre-Test: A small scale test administered before the introduction of a study aiming at measuring the efficacy of one or more elements of the main study.
Propositions: A set of logically interrelated concepts establishing some degree of regularity.
Qualitative Methods: Methods of social research that employing quantitative standards and techniques; based on theoretical and methodological principles.
Quantitative Methods: Methods employing quantitative theoretical and methodological principles, techniques and statistics.
Quota Sampling: A sampling procedure that allows interviewers to choose the respondents in the contest of given quota.
Random sampling: A type of sampling employing the theory of probability as the basis of choice of respondents.
Regression Curve: The graphic presentation of the regression equation.
Reliability: Consistency; the quality of an instrument to produce the same results when employed under the same conditions.
Representative Reliability: Reliability a cross groups.
Representativeness: The attribute of a sample to reflect all relevant elements of the population, and so to represent the population in the research study.
Theory: A set of logically and systematically interrelated propositions describing and explaining social phenomena.
Validity: The ability to produce findings that are in agreement with theoretical or conceptual values. The capacity ti measure what a method is intended to measure.
Variance: A measure of dispersion; the average distance of the elements of a distribution from the mean.
Verification: The process of empirical validation, mainly of hypotheses.