RESEARCH METHODOLOGY OF SOCIOLOGY
(SOC1C02)

STUDY MATERIAL
II SEMESTER
CORE COURSE
MA SOCIOLOGY

(2019 Admission onwards)

UNIVERSITY OF CALICUT
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STUDY MATERIAL
SECOND SEMESTER
MA SOCIOLOGY (2019 ADMISSION ONWARDS)

CORE COURSE:

SOC1C02: RESEARCH METHODOLOGY OF SOCIOLOGY

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Preface

The process of research has great importance in the construction and reconstruction of human knowledge, especially in the field of academic and other institutions. In a way, today's knowledge is the result of various research studies. From the perspective, 'man as a social being', the construction and redefining of social knowledge is significant. The field of study, social science, plays an important role in the formation of social knowledge. In it, the subject of Sociology seeks to study and understand society or everything related to an individual. Therefore, it is essential to know the types, methodology, and methods, especially the data collection method.

In this material, the 'Research methodology of sociology' is designed to help those interested in social research and learn more about social research as well as apply it in the real context. It mainly looks at the philosophical background of the research to the different dimensions of social research. It also focuses on data collection techniques and major qualitative methods in social research. So, it will help to make a solid foundation for the students and researchers in the research process.

Objectives

- To familiarise the students with quantitative and qualitative research
- To understand the steps and stages of research
- To inculcate research aptitude in the students
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Module- 1

PHILOSOPHICAL FOUNDATIONS OF SOCIAL RESEARCH

1.1- MAJOR PHILOSOPHICAL ORIENTATION-EPISTEMOLOGY, ONTOLOGY AND HERMENEUTICS

1.1. A. – Introduction

Philosophy has a significant position in all sciences, regardless whether it is natural or social sciences. Philosophy discusses the fundamental questions of understanding what the world is like and what we need to know about it. One of the questions is, are there any relations with philosophy and social research? Of course. Both of the disciplines are interrelated and purpose will improve in the field of knowledge. Appropriate comprehension of the philosophical episteme is an important to social science researchers. Social research focused to discover solutions and new knowledge or facts through systematic enquiry. Sometimes our decisions are based on vital philosophical principles. Philosophical knowledge helps to interpret social matters meaningfully and to make appropriate decisions during the phases of the research process.

Philosophical knowledge has a key role in the framework of research design. Prior to entering the research, he/she needs to think about the philosophical notions. Research philosophy in social science concerns the advancement of knowledge and the nature of that knowledge in the social world. Research philosophy incorporates significant suspicions regarding how one observes or perceives the social world. It includes pondering epistemology and philosophy which have significant qualifications that will influence the strategies wherein a researcher considers the research process. Quality of the research outcome may affect if the researcher didn’t have proper knowledge of the philosophy.

As a result of philosophy, the scientist has the potential to develop a reference frame. Notwithstanding, the researcher must choose between the different frames of reference. We can conduct social research without philosophical reflections. Nevertheless, this knowledge acquiring process has related to philosophical orientations. The way of thinking related to philosophy of social science developed out of the exceptional contemplations and issues related with knowing the social world. It is primarily related to the concerns of researchers in the realm of social sciences. This does not mean that philosophy should reflect prejudices that already existed in the social or physical sciences, as it would significantly subvert its
experience and perception, and yet the inquiries raised by philosophers need to be addressed through research discussions.

So as to comprehend and discuss the various methodologies adopted by qualitative researchers, it is useful to have them comprehend the philosophical discussions supporting the improvement of qualitative research by and large. Some of the questions are addressed by social researchers with the traditions of philosophical concepts, such as Ontology, Epistemology and Hermeneutics.

1.1. A.1- Ontology

Ontology as a branch of philosophy and it mainly discusses the nature of being and its existence as well as the kinds and structures of objects. There are many philosophical questions addressed in ontology, such as the questions whether or not there is a god, or the problem of the existence of universals, what is the nature of the social world and what is there to know about it? etc. These are all problems in ontology in the sense that they deal with the nature of reality. Simply we can say that ontology is the study of what there is. Ontology helps researchers recognize how certain they can be about the nature and existence of objects they are researching.

For instance, what ‘truth claims’ can a researcher make about reality? Who decides the legitimacy of what is ‘real’? How do researchers deal with different and conflicting ideas of reality? Key ontological requests concern whether or not there is a social reality that exists independently of human beings and interpretations and, immovably related to this, whether or not there is a mutual social reality or simply various, setting specific ones.

In simple terms, ontology seeks the categorization and elucidation of entities. Ontology is concerning the object of query, what you set to analyse. One of the prime inquiries of ontology concomitant to the existence of being. Philosophers came with various questions about other things, the intention of existence, the nature of a priori reasoning, the meaning of sensory experience and what constitutes valid argument. In the more sensible universe of social exploration pondering cosmology alludes to convictions about the principal idea of the real world, specifically social reality.

There are two significant questions related to comprehension of social realities and entities. On the one hand, an objective reality which exists independent of the observer, and, on the other, reality as it appears subjectively or, more commonly, as negotiated within groups.
Objectivist/realist ontology relates to the existence of one single reality which can be studied, understood and experienced as a ‘truth’; a real world exists independent of human experience. Simply we can say that social entities exist in reality external to social actors concerned with their existence.

Relativist ontology is based on the philosophy that reality is constructed within the human mind, such that no one ‘true’ reality exists. Instead, reality is ‘relative’ according to how individuals experience it at any given time and place. Subjectivism (also known as constructionism or interpretivism) perceives that social phenomena are created from the perceptions and consequent actions of those social actors concerned with their existence.

Philosophy appears to be unique as a thought however inquiries of metaphysics are key to the inquiries posed in social exploration, to the ideas we use and the means taken. For example, the positivist may ask cause and effect type questions, ask, ‘how does class background affect educational attainment?’, while the anti-positivist may rephrase this question to ask ‘what different meanings have been ascribed to concepts of class and attainment?’ and ‘what type of explanation has been put forward to argue that class influences educational attainment?’. Ontology therefore sits at the top of a hierarchy under which epistemology, methodology and methods all ‘get into line’.

1.1. A.2-Epistemology

The term “epistemology” originated from the Greek words “episteme” and “logos”. The word “Episteme” means that “knowledge” or “understanding” and the word “logos” can be converted as the meaning of “science, argument and reason”.

Epistemology is associated with ways of knowing and learning about the world and focuses on issues such as how we can learn about reality and what forms the basis of our knowledge. This deals with learning the How and What part in exploring the truth. I.e. if we know that there is knowledge or a phenomenon than ‘what is it’ and ‘How do we’ discover or reveal it.

Epistemology is concerned with all aspects of the validity, scope and methods of acquiring knowledge, such as a) what constitutes a knowledge claim; b) how can knowledge be acquired or produced; and c) how the extent of its transferability can be assessed. Epistemology is significant in light of the fact that how the researchers frame their research process to find information. By looking at the connection between a subject and an object, we can investigate the possibility of epistemology and how it impacts research design. Objectivist epistemology presumes that reality exists outside, or independently, of the individual mind. Objectivist research is useful in providing reliability and external validity.
Constructionist epistemology rejects the idea that objective ‘truth’ exists and is waiting to be discovered. Instead, ‘truth’, or meaning, arises in and out of our engagement with the realities in our world. That is, a ‘real world’ does not pre-exist independently of human activity or symbolic language. The value of constructionist research is in producing contextual understandings of a characterized subject or issue.

Subjectivist epistemology identifies with the possibility that reality can be communicated in a range of symbol and language frameworks, and is extended and moulded to fit the reasons for people to such an extent that individuals force significance on the world and decipher it such that it sounds good to them. The value of subjectivist research is in uncovering how a person's experience shapes their impression of the world.

All research methods assimilate a variety of epistemological and ontological assumptions. As indicated by Bryman, epistemology is a theory of knowledge and concern of what is considered as admissible information in a specific discipline. Another scholar, Saunders, points out that epistemology is a branch of philosophy that studies the nature of knowledge and what concoct acceptable knowledge in the field of study. Epistemological presumptions can be viewed as a question of what seems to be (or ought to be) viewed as worthy knowledge in a discipline.

The focal issue of epistemology in social science is the issue whether the social world can and ought to be concentrated by similar standards and strategies as the natural sciences. The answer to that question directs the route toward the agreeableness of the information created from the research process. Therefore, epistemological assumption can be regarded as associated with the nature of knowledge and the methods through which that knowledge can be gained. There are two epistemological assumptions that will be discussed in this section namely; Interpretivism/ phenomenological and positivism.

**Positivism and Interpretivism**

Two main philosophies that have influenced the development of social research are positivism and interpretivism. Positivism holds that methods of the natural sciences are appropriate for social enquiry because human behaviour is governed by law. That it is possible to carry out independent, objective and value free social research while interpretivism, claims that natural science techniques are not fitting for social investigation in light of the fact that the social world isn't represented by normalities that hold law-like properties. The philosophy of qualitative research is depend on the principle of interpretivism.
According to Saunders, interpretivism is an “epistemology that it is necessary for the researcher to understand differences between humans in our role as social actors.” Interpretivists researchers are related as the ‘feeling’ researchers. This is because interpretivists researchers play a role as ‘social actors’ where they could decipher their everyday social roles in accordance with the meaning given to these roles and interpret the social roles of others in accordance with our own set of meanings. Apart from that, interpretivists see that the realities and values are not extraordinary and discoveries are affected by the analyst's viewpoints and values.

The fundamental thoughts of a positivist view can be regarded, as the social world exists externally. The positivists approach to deal with research is that the examination attempted beyond what many would consider possible, in a value freeway.

The researchers must be free and its qualities ought to be estimated through objective methods. For example through experimental methods – the testing of theory or hypotheses to gradually develop and refine universal ‘laws of nature.’ Positivist researchers believe that there are obvious connections among things and occasions in the outside world and individuals’ have knowledge on them. This is because of the way that positivist specialists endeavour to explain and anticipate what occurs in the social world via looking through normalities and causal connections between its constituent components. Research methodologies in positivist perspectives are influenced by the rationale of experimental got from natural science. Research methods like large-scale survey of population or representative sample, formal questionnaires, standardized interviews are used to research a wide scope of subjects. The utilization of statistical analysis and measures of association and the development of measurement models are remarkable in this approach.

1.1. A.3- Hermeneutics

Hermeneutics is the theory and philosophy of comprehension and interpretation. The term derived from Hermes, a son of Zeus, who deciphers messages from the Greek gods.

Hermeneutics as the approach of interpretation is concerned with issues that emerge when dealing with meaningful human activities and the products of such activities, in particular the text. Simply, treating issues of the interpretation of human activities, texts and other significant material. Hermeneutic hypothesis perceives that interpretive difficulties can be investigated from different perspectives that set various suppositions about what understanding involves and what the objectives of interpretation ought to be.

Hermeneutics alludes to an interpretive way to deal with science as opposed to a solitary bound together logical way of thinking. Hermeneutics began during the seventeenth
century as a methodology for deciphering scriptural writings. During the late nineteenth century, the area of hermeneutic inquiry began to incorporate the study of human conduct. Philosophers like Wilhelm Dilthey gave more preference to understanding human beings than gaining empirical knowledge of nature. The nature of interpretation in various subjects is different from the interpretation associated with natural science.

If you trace out the history of Hermeneutics tradition related to four philosophical phases. The first hermeneutics research heritage is related to the philosopher Friedreich Schleiermacher. The distinctive characteristic of this hermeneutic research tradition is the conviction that the right interpretation of a text is achieved by the author and how it was enacted in the appropriate situation.

The second hermeneutic tradition is associated with the contribution of Dilthey known as hermeneutic re-enactment and reproductive Hermeneutics. This tradition gives more emphasis to interpretation and empathetic process. Empathetic understanding can acquire through the think from someone else's point of view and imagine recreating the real and possible experiences of others.

The third hermeneutic research method is referred to as hermeneutic reconstruction or basic hermeneutics. This line of thinking was put forward by Carl-Otto Apple and Jurgen Habermas. One of the characteristics of this tradition is the presence of a "false consciousness" that deliberately loses our understanding of human experience. Supporters of hermeneutic reconstructionism propose that science must create theory and techniques touchy to social and tyrant structures so as to comprehend human activity.

The last hermeneutic research convention has been alluded to as productive or projective hermeneutics. These marks help us to recognize this hermeneutic custom from hermeneutic re-authorization. The reader presumes a unique meaning to text due to hermeneutics objectivism. Conversely, hermeneutics keeps up that researchers can't "bracket" their assumptions, nor can they really underline with another's insight. Rather, they. Keep up that a "completely blameless" perusing of text is unthinkable, and that the interpreter assumes a functioning part in making the understanding. Generally, the interpreter or researcher helps to “produce" meaning during the time of analysis.

The modern thoughts of Hermeneutics began in the eighteenth century in Germany and this systematically developed with the contribution of Friedrich Daniel Ernst Schleiermacher in the nineteenth century. In the twentieth century, the two prominent philosophers Martin Heidegger and Hans Georg Gadamer provided great contribution to the development of philosophical Hermeneutics.
The Hermeneutic approach holds that the most fundamental fact of social life is the meaning of an action. Social life is established by social activities, and activities are important to the actors and to the next social members. In addition, subsequent activities are based towards the meaning of earlier activities; so understanding the later activity necessitates that we have an interpretation of the meanings that different members assign to their own activities and those of others. So the different disciplines in social science should be hermeneutic: researchers need to give their attention for the interpretation of the meaning of social activities.

The significant element of philosophical hermeneutics that is so crucial to research is interpretation. The huge component of philosophical hermeneutics that is so urgent to research is translation. Interpretation of text and discourse can accordingly be diagnostically isolated into two separate domains. On one side, the researcher needs to analyse the text and speech by placing it into its authentic and social setting, by interfacing the part to the entire. This development isn't to be puzzled with recreating the original meaning of the text. Because no total reproduction of all relevant factors will ever be possible and no need for that reproduction. Rather, the second analysis emphasises that one can arrive at an adequate comprehension of the text or speech being referred to that is grounded in one's own chronicle situatedness. The undertaking of getting that person accurately doesn't likewise need "going local" and remaking the underpinnings on which current proclamations rest. As individual’s, we as a whole offer a shared belief of building our reality in manners that are significant to us. The utilization of language is at the center of this chance, as our significant developments of reality lay on language as the principle methods for this development, and language additionally establishes the primary vehicle of conveying across ages and societies. Hans-Georg Gadamer points out that language as naturally interpretive, sharp, and self-expressive presses back against the embodiment of words as components to be checked and infers that even sorts of effective assessment must be moved closer with care. For philosophical hermeneutics, understanding is etymological and language is interpretive.

1.1. A.4-Conclusion

As people we are as of now naturally introduced to a world that has been organized. The researcher is an important part of the social reality, he or she is attempting to comprehend. So the researcher should attempt to expect a nonpartisan or objective position toward social realities. Research isn’t just about the question of methodology, yet in addition
the choice of research strategy which includes a few perspectives or beliefs that underlie the circumstance of what is being studied.

Philosophical points of view are significant in light of the fact that, when made express, they uncover the suspicions that researchers are making about their research, leading to decisions that are applied to the reason, design, methodology and methods, data analysis and interpretation for the research. At the most fundamental level, the simple decision of what to concentrate in the sciences forces values regarding one's subject.

With an expansion in interdisciplinary exploration, an assessment of the purposes of contrast and convergence between the philosophical methodologies can create basic reflection and discussion about what we can know, what we can realize and how this information can influence the lead of science and the ensuing decisions and actions.

1.2. SCIENTIFIC METHOD IN SOCIAL SCIENCE

1.2. A- Introduction

Etymologically, the term "science" is derived from the Latin word "scientia", meaning knowledge. Science refers to the systematic and organized body of expertise in some field of study that is obtained by means of the "scientific method." Science can be categorized into two broad classifications: natural science and social science. Natural science is the science of natural objects or phenomena, such as light, objects, matter, planet, celestial bodies, or the human body. Natural sciences can be further categorized as physical sciences, earth sciences, life sciences, and so on. Social science, on the other hand, is the science of individuals or classes of people, including such groups, corporations, populations or economies, and their individual or collective actions. Social sciences can be categorized into fields such as psychology, sociology, anthropology and economics.

1.2. A.1- Scientific Knowledge and Scientific method

Sciences may also be categorized on the basis of their function. Basic sciences, also known as pure sciences, are the ones that describe the most basic structures and powers, the interaction between them, and the laws that regulate them. Examples are mechanics, arithmetic and genetics. Applied sciences, also known as functional sciences, are sciences that relate fundamental scientific expertise to the physical world.

Nicholas Walliman, in his book, Social research methods, mentioning steps in scientific method.

• Identification or clarification of problems.
• Formulation of provisional solutions or hypotheses.
• Practical or theoretical testing of solutions or hypotheses.
• Elimination or adjustment of unsuccessful solutions.

The problem of evaluating hypotheses in real life raises challenges. Realistic scientific theories comprise a diverse series of statements, each of which can be based on observations based on earlier theories. Testing approaches are often based on hypotheses which are affected by environmental factors. If the assumptions of the hypothesis are not carried out in the outcomes of the experiments, it may be the underlying principles that would be at fault rather than the theory itself.

Scientific Knowledge

The goal of research is to establish scientific knowledge. Scientific knowledge refers to a generalized body of laws and hypotheses that describe the phenomenon or action of concern that is obtained by the scientific method. The purpose of scientific study is to discover laws and postulate hypotheses that can describe natural or social phenomena or, in other words, construct scientific knowledge. It is necessary to understand that this experience can be incomplete or far from the facts. Often there may not be a single fundamental fact, but rather a balance of various truth. We must realize that the hypotheses on which scientific understanding is founded are merely reasons for a single phenomenon, as proposed by a scientist.

Theories and experiments are the two foundations of science, while experimental study works at two levels: theoretical and observational. The theoretical level is concerned with the creation of abstract ideas regarding a natural or social phenomenon and the relationship between these concepts, whereas the empirical level is concerned with evaluating theoretical concepts and relationships to see how well they match our observations of reality, with the intention of eventually building better theories.

Obviously it depends on the researcher's expertise and interest, the experimental investigation can take one of two potential forms: inductive or deductive. The researcher's aim in inductive analysis is to derive scientific principles and patterns from the evidence found. In deductive analysis, the researcher's aim is to evaluate testable concepts and patterns using new empirical evidence. Inductive analysis is often also referred to as theory-building research, and deductive research is theoretical-testing research. Notice that the purpose of the theory-testing is not only to validate the theory, but likely to refine, strengthen, and expand it. Notice that inductive and deductive analysis is two-half of the research duration, which is continuously aligned between hypothesis and observation. You cannot do inductive or
deductive analysis until you are familiar with both the theory and the evidence components of
the research. A full researcher is, of course, one who can go through the whole study cycle
and manage both inductive and deductive research. Science is simply a way to an end.
Science gives answers as to how certain activities should be carried out in order to protect
certain ends.

Characteristics

Scientific information is empirical and well-accepted. Objectivity simply requires the
willingness to see and recognize things as they are. Objectivity requires that all types of
individual interests be put aside, such as opinions, desires, ideals and biases. This indicates
that the analyst is absolutely abstaining from contributing his own viewpoints. If the
prosecutor records the true evidence, they are said to have been obtained. Science's main goal
is to uncover the real truth. It is completely necessary to preserve objectivity in order to
maintain the other virtues of science. Although it's easy to speak about upholding objectivity,
it's hard to follow it. This is particularly true in the case of sociology, since it is a topic of
research in society, including the scientific community. Humans have an overwhelming
temptation to illustrate sparkling facets of self-describing. This will disrupt the scientific
mindset of the inquiry.

Scientific data is founded on verifiable facts such that other researchers can detect,
calculate or quantify the same phenomenon and verify the accuracy of the observations.
Accurate and reliable results need to be obtained through systematic methods in science. A
scientist who identifies those who are researching under the same conditions would consent.
It is the responsibility of the scientist to reject his observations as baseless and unreasonable.
Science should not transfer moral judgment on the truth. It doesn't mean they're either good
or evil. It is necessary to note that concepts which cannot be rationally evaluated are
philosophical directives and therefore do not come under the limits of empirical law.

Science is commonly characterized as a systematic analysis of a particular field of
knowledge. The purpose of research thus becomes knowledge, while systematic analysis has
become the mechanism by which the established objective is attained. A systematic approach
by science to the phenomenon to be studied. Scientific knowledge is not the one obtained in a
haphazard manner, but it is compiled with accuracy, rigor and formality. Truth can only be
revealed by a structured approach. And if it is unveiled in the absence of an approach, it can
only be viewed as an unintended final exception. In reality, the purpose of every kind of
analysis is to acquire information or facts. It is only this systemic mechanism that separates
research from other types of methods.
Science is ethically neutral in nature, it’s all searching for information. If this information is to be used is decided by the principles of society. Ethical neutrality does not mean that the scientist has no meaning at all. It clearly implies that it does not cause its principles to distort the nature and conduct of its study. Scientific information is either value-neutral or value-free.

Science (1) offers a way of solving problems, i.e. obtaining values; (2) offers alternative approaches such that marginal costs may be calculated; (3) provides a way of predicting what the other effects of the course of action might be. The scientific approach moves past the solution to the practical dilemma. There is a compulsion to use new tools to help fix the dilemma or to find different ways to solve it more satisfactorily. The scientific approach process requires supervised experimentation. This implies that, although the application of casual scientific observation could solve a fundamental issue.

The scientific solution attempts wider generalizations. As a scientist is focusing on issues, he is mindful that he is creating a science. It looks for certain facts, wherever they may be found, which constitute methodological uniformity. This, in essence, are being analyzed in an effort to find the basic values. The realistic approach, however, is merely an intermediate step and not the end of the journey for the scientist. Scientific experimentation is based on an established body of generalizations. This sentence is a continuation of the previous paragraph. Not only does the scientist pursue generalizations, but he also seeks to expand their usefulness by comparing them to other generalizations; in short, he wants to construct a structure of philosophy.

Science aims to explore certain parts or aspects of fact, with an overarching method of reasoning to explain those fragments, it should not be shocking that each science creates its own words or principles for the purpose of communicating its findings. Too much so that we can apply to the scientific framework of science as a logical system. We use these words to stand for the phenomenon or elements of the phenomena we are researching. As a consequence, when we propose a proposal, we use definitions as representations of the phenomenon we research, and it is essentially these fundamental phenomena that we refer to each other. However, since we interact explicitly with only the meanings, it is clear that we will often confuse the term with the phenomenon that it is intended to symbolize. This is a typical mistake to be addressed in a moment under the word "reification."

Scientific principles must be communicable in a very special way. They must not only give rise to an ambiguous "feeling" but must be so built that all the components are identified. The core processes of description, fundamental to the basic issue of
conceptualization, are the derivation and explanation of the elements of such a construction. Owing to the variations between the common sense paradigm and the empirical way of looking at the universe, careful description has a paradoxical nature. It promotes collaboration within the sciences, but it also establishes obstacles to the comprehension of scientific principles.

Since each specialization deals with various phenomena, a variation of scientific jargon has been created to express these basic information. The difference between these many sciences differs, based on the closeness of the relationship between the frames of the sources. The difference between sociology and the physical sciences is a chasm. The ordinary sociologist cannot read any of the Chemistry and Physics reports in Science, the journal of the American Association for the Advancement of Science, with any great comprehension. He clearly does not know the terms, he does not have the requisite definitions.

The scientific method is commonly used in many fields of science, but does not, and has never enjoyed, absolute superiority in all topics. Any of the world's best philosophers disagreed with the ideals of positivism found in the scientific method. The alternative approach to science is focused on the philosophy of idealism and humanism. It maintains that the vision of the world we see around us is the product of the imagination. This doesn't really mean that the universe is not real, but instead which we can perceive it only directly through our experiences that are conditioned by our preconceived notions and beliefs; we are not impartial, disembodied observers. Unlike natural sciences, the researcher cannot observe events outside the system, but is inextricably tied up with the human condition he/she is researching. In comparison, by focusing on the quest for constants of human behavior, the researcher emphasizes the routine, stagnant and invariant nature of culture and lacks what is contextual, individual and imaginative.

1.2. A.2 Scientific method in social research

Sociologists often begin the research process by raising questions about how or when things are occurring in this world. It may be a new question about a current movement or an old question about things like a general field of life. If the sociologist poses a question, he or she will answer it in an in-depth way. The researcher can adopt a theoretical approach or an interpretive framework to determine how this process is organized. Sociologists use experimental and practical analysis techniques, such as analyses, surveys and field experiments. But human beings and their social interactions have become so dynamic that it can seem impossible to graph or explain those relationships.
Due to its complexity, we use scientific approaches to research human behaviour. The scientific research process carries out criteria to help ensure that the conclusions are objective and accurate. Scientific approaches have strengths and limitations that drive the study and organize its conclusions.

The scientific method is to develop and evaluate world theories on the basis of observable facts. It is marked by a determination to continuously analyse the world of experience, to learn to be empirical, analytical, skeptical and rational. The results of the study are not erroneous, as scientific methods are used in sociological studies. The purpose of optimizing sociological problems allows people access to historically unprecedented material, such as knowledge of a variety of other cultures, comprehension of customs and values, or knowledge of trends and attitudes. No matter what research methods researchers have used, researchers would really like to optimize the efficiency and validity of the research.

Sociologists may use the scientific method not only to collect but also to display and interpret data. Scientific logic and objectivity have been deliberately introduced. They act within their own social or political interests. It does not mean that researchers do not have their own personalities, including interests and viewpoints. However, sociologists actively use the scientific method to maintain as much objectivity, clarity and precision as is possible in such a complex analysis.

The School of Social Thought stresses another component of the scientific method, that is, theoretical and empirical. To this point, they aim to return the very necessary and proper application of the scientific method to social studies. Yet do a lot more wisely. Some of them even go to extremes and reject any relevance to the observational and research approaches of sociology.

Absolute objectivity has thereby practically become a nonsensical term. If seventeenth-century physical advancements tainted it with subjectivity, and nineteenth-century inventions demolished its absoluteness and rendered all physical information relative to the observer (including space, time, and cause), twentieth-century advancement has gone much further and has shown that the "object" of observation and the "subject" observer constantly interact, that there is very definiteness. The cultural perspective maintains that social processes are more adaptable to theory than to natural science approaches, that introspection and "subjective" research must continue to be of utmost importance, that social interactions can only be studied externally to a very limited degree, and that, in place of, and
in contrast to, empirical, experimental, and calculating techniques, social relations can only be observed externally.

Social phenomena are really dynamic in the sense that their existence depends on a variety of variables. Social, cultural and physical conditions can profoundly affect social processes, and it is often difficult to discern the general order in which they occur. It is also very complicated in the social sciences to draw up an all-encompassing generalized theory. There are legitimate protections to this claim. While nuances and variations occur in social phenomena; similarities in specific features are observable. It is true that there are not going to be two absolutely similar individuals. It must be understood, however, that distinctions between individuals are not central, but peripheral. Furthermore, uncertainty is not an absolute term. When man's understanding of complete entities increases, the uncertainty itself will disappear. Once again, the dynamics are not only linked to social phenomena. They can also use in physical phenomena.

Another significant challenge to the application of the empirical method is understood to be the unpredictability of social phenomena. It is impossible to introduce stimuli in the middle of unpredictable actions, because even though they are introduced and the result is accomplished, it is difficult to distinguish the effect of stimuli from the subjective behavior of phenomena.

The qualitative nature of social processes is seen as an obstacle to the successful application of the scientific process. Atomic sciences applying the quantitative aspects to phenomena. Physical challenges include density, weight, etc., which can be expressed in quantitative and specifically calculated terms. How enigmatic is the standard, the routines, the status, etc., as seen from this perspective. In some cases, in the social sciences, it is difficult to distinguish the cause and the consequence. This interdependence of variables poses difficulties in implementing the method. The evolving existence of social dynamics is known to be a significant limitation on the implementation of the system. Phenomena is evolving, and deductions dependent on previous rules are becoming ridiculous.

1.2. A.3 Conclusion

The scientific method has proven valuable in the field of sociological science. The scientific method provides an organized, coordinated series of steps that help to ensure objectivity and consistency in the exploration of the problem of society. They have the tools to enhance
reliability, accuracy and authenticity. In the end, the scientific method presents a common basis for debate and study.

1.2. B. - NATURE OF SOCIAL REALITY

1.2. B. A.1- Introduction

What does the word 'social truth/reality' mean? Truth is the totality of what it actually is. As a consequence, social truth can be systematically and rationally described as that aspect of what is social. An overview of the essence of social existence is an account of that aspect of what is social. What does 'social' mean by that? Whereas the Latin 'socialis' connotes companionship, the term 'social' is used in contemporary days to describe some kind of human coexistence. Think of experience as allowing one insight to reality, to what it really is. What I mean is that reality is, for the most part, irrespective of the perception of any single person, and that experience is something from which people comprehend reality.

1.2. B.A.2- Nature of social reality

All social scientists are interested in the perspectives of people and how these experiences are influenced by encounters with social groups and culture as a whole. As far as a sociologist is concerned, personal and human choices do not occur in a vacuum. Cultural trends and socioeconomic influences are placing pressure on individuals to choose one alternative over another. Social reality lies in the interrelationship of the constant passing of various people's lives. In 1966, sociologists Peter Berger and Thomas Luckmann wrote the book *The Social Construction of Reality*. In it, they argued that culture is formed by human activity and human interaction, which they term Habitualisation. Social truth is the aspect of the universe to which knowledge allows us entry, which is the domain of human coexistence. Social existence consists of a constant, interrelated existence. This indicates that the processes in which social existence has its roots are phenomena constituting and interrelated life: (i) Actions, (z) Intelligibility- determining factors, (3) The entities found in settings, and (4) Interrelations.

Society consists of various structures of relationships between individuals and between individuals and objects, as well as of relationships between individuals and objects. These relationships do not, however, occur between particular persons, but rather between roles held by individuals and activities in which, by nature of their occupation of such positions, they participate. These roles and behaviours form a system regulated by certain connections systems, the explanation of which is the role of social science.
Sociologists aim to define these common phenomena by analysing the actions of large numbers of individuals living in the same community and feeling the same social stresses. When general behaviours continue over time and become repetitive or routinized at micro-levels of involvement, or legitimized at macro or global levels of interaction, they are known as the social systems. The subjects analysed in social science involve social organization, e.g., family structure, historical accounts, cultural and intellectual revolutions, forms of government, socio-economic classes, historical periods, infrastructure, and the workings of the market economy. Clearly, certain phenomena constitute a heterogeneous collection in nature. But if so, it is not clear how the technique of seeing the implications of the existence of its subjects of research for social science can very easily allow one to understand social science.

All social phenomena, and therefore all subjects of social investigation, would be elements or portions of them. As a result, an analysis of social reality makes possible a detailed account of the universe of all the subjects of social science. Developing the latter systemic approach to dealing with problems of social theory and the philosophy of social science includes, first, an analysis of the essence of social fact and, secondly, a tracing of the implications of this analysis for the formation of social processes and the character of social research.

The problem of social reality has been dealt with significant findings by philosophers of the phenomenological tradition, in particular Alfred Schutz, who used the word "social world" to characterize this distinct dimension of reality. Inside the social universe, Schütz differentiated between a social reality that could be encountered immediately and a social reality outside the immediate horizon which could also be experienced if tried.

The challenge with sociology lies with the fact that it sometimes uses ordinary vocabulary to describe a variety of relatively everyday phenomena. The relationship between the individual and society is one of the most complicated sociological concerns. This is partially because of the reified manner in which these two words are used in daily conversation. Reification refers to the manner in which abstract ideas, dynamic structures, or mutable social relations are thought of as "things."

The principle that the individual and society are indistinguishable is a central foundation of social reality. Without the other, it is difficult to research one. The German sociologist Norbert Elias (1887-1990) called for a mechanism of parallel study of the actions of individuals and culture that forms that behaviour. The conceptualization of people and
cultures is far more nuanced than the normative construct implies and needs to be explored by evidence-based instead of moral-based study.

1.2. B. A.3 Conclusion

Social phenomena are deliberating are the products of human behaviour. Scholars have little unity of mind on the empirical essence of disciplines concerned with social phenomena, largely because of their nuances, which limit the application of scientific care to them. There are certain unusual characteristics of social phenomena which are different from physical phenomena. Sociologists, however, strive to sort out social facts from social reality using a scientific method.

1.2. C. - LOGIC OF INQUIRY-INDUCTION AND DEDUCTION

1.2. C. A.1- Introduction

The scientific method requires a logical reasoning procedure. This logical method is used to draw inferences from the finding of an analysis or to arrive at a conclusion. The logical method of inference consists of induction and deduction. The traditional principle of distinguishing between these logical approaches to understanding is that induction is the creation of a generalization derived from the analysis of a collection of particulars, whereas deduction is the recognition of an undefined particular, derived from its similarity to a set of known evidence, both the induction and the deduction of a logical method are very useful in research studies.

1.2. C. A.2 Induction

Inductive reasoning is based on concrete observations and drawing abstract inference from them. Induction was the first and, still today, the most common method of scientific activity. Every day, our experiences lead us to draw lessons about which we prefer to generalize. The introduction of this method by scientists such as Galileo and Newton in the seventeenth century heralded the modern revolution. The philosopher Francis Bacon summed this up by arguing that, in order to grasp humanity, one must consult nature, not the works of ancient thinkers such as Aristotle or the Scriptures. Darwin's theory of evolution and Mendel's discovery of genetics are probably the most popular hypotheses to be derived from inductive reasoning.

Three conditions must be satisfied for such generalizations to be considered legitimate by inductivists:
1. There must be a large number of observation statements.
2. The observations must be repeated under a large range of circumstances and conditions.
3. No observation statement must contradict the derived generalization.

Example- Varun likes math. Today's lesson is about division. Varun will like today's lesson.

**Types of Induction**

Theodorson and Theodorson, in their book, *A modern dictionary of sociology*, classified two basic types of induction; Enumerative and Analytic.

**Enumerative Induction** - it is the most common form of induction used in social science research. This type of induction involves generalization from samples and the generalizations are usually derived through the analysis of data. Enumerative inference is a modest method of logic. It is also used by every one of us, whenever we extrapolate from a uniform past experience. It is not a deductively sound method of logic, since the meaning of the premise leaves open the possibility that the inference is false. But, as we say, this can be inductively potent. By this we say that, if the premises cites enough instances of this sort, and we have any justification to conclude that the investigated instances are indicative of the entire kind with respect to our target property, then the validity of the premises makes it very plausible that the inference is correct.

**Analytic Induction** - Analytical induction is a research logic used to gather evidence, interpret and coordinate the presentation of research results. The formal purpose is the causal interpretation, the determination of the independently essential and collectively required conditions for the appearance of a certain aspect of social existence. Analytic Induction argues for the radical redefinition of the phenomena to be clarified and the reason for preserving a perfect partnership. Primary cases are inspected to identify common causes and preliminary hypotheses. When new cases are investigated and original theories are contradicted, the hypothesis is reworked in one or both respects. The concept of the explanandum may be reinterpreted in such a way that problematic cases either become compatible with the explanans or collapse beyond the reach of the investigation; or the explanans may be amended in such a way that all cases of the target phenomena show the descriptive circumstances.

O R Krishaswami and Ranganatham, in their book, *Methodology of research in social research*, point out different steps in analytic induction.

1 – Specify the phenomena to be explained

2 – Articulate the hypothesis to explain the phenomena
3 - Study the circumstance to determine if the hypothesis suits the situation.

4 – If the hypothesis doesn't really match the evidence, then redefine the hypothesis or reframe the phenomenon in such a manner that the scenario is omitted.

5 – Investigate a small number of cases in order to obtain functional certainty; however, if a negative case that disapproves of the theory is found, reformulate the hypothesis.

6 – Continue this process of analysing cases, reinterpreting the phenomena and reformulating the theory, until a universal relationship is formed.

7 – For the sake of evidence, analyse cases beyond the scope of the concept to decide whether or not the final hypothesis refers to them.

Blaikie, Norman in his book "Designing social research" point out 'Inductive and Deductive strategy' in research process. The research strategies provide different ways of answering research questions with various research steps. The inductive strategy start with data collection, followed by data analysis and then the development of generalizations. The statement based on objective observations become theoretical statements about the order in reality. Inductive strategy is based on three principle;

- Accumulation- Scientific knowledge consists of well-established regularities that are arrived at by the accumulation of much data.
- Induction- General laws are produced by applying inductive logic to the carefully accumulated observations and experimental results.
- Instance confirmation- The plausibility of any general law is proportional to the number of instances of it that have been observed.

The researcher must begin by setting aside all preconceptions about how the world works and then proceed to gather data using objective methods. Inductive logic is used to produce generalizations about the patterns or regularities that exist in the data obtained. The greater the number of instances of the regularity that has been observed, the greater is the confidence that the generalization corresponds to the timeless uniformities in the world.

He point out four characteristics to inductive strategy.

1- All facts are observed and recorded without selection or guesses as to their relative importance

2- These facts are analysed, compared and classified, without using hypotheses
3- From this analysis, generalizations are inductively drawn as to relations between facts
4- These generalizations are subjected to further testing.

Blaikie, Norman also put forward some criticism against inductive strategy

- Preconceptions can be set aside to produce objective observations
- Relevant observations can be made without some ideas to guide them
- Inductive logic has the capacity to mechanically produce generalizations
- Universal generalizations can be based on a finite number of observations
- Establishing regularities is all that is necessary to produce explanations

So we need to make some amendment to the pure form of the inductive research strategy in order to use it in research. Given that presupposition less data collection is impossible, concepts and the theoretical baggage with them are required before any observations or measurements can be made. The choice of concepts, and the way they are defined, will predetermine what data are collected. Therefore, the researcher will begin with some preconceptions and choices about what will be observed. While this procedure infringes the original requirement for the research strategy, if the definitions of the concepts are made explicit the conclusions can be evaluated in terms of them, and other researchers can attempt to replicate the findings. With these modifications, the inductive strategy can be used for two purposes; to pursue explanatory and descriptive objectives to answer ‘what’ questions, i.e. to describe phenomena and establish regularities which need to be explained; or to pursue an explanatory aim i.e. to discover laws or very general regularities that can be used to explain observed regularities.

1.2. C. A. 3 Deduction

The ancient Greeks were the first to develop deductive logic. A case based on deduction starts with abstract statements and, by logical argument, comes to a clear conclusion. Syllogism is the easiest kind of this type of reasoning which comprises a major general premise (statement), followed by a minor, more precise premise, and an inference that follows logically.

In this case, analysis is driven by the hypothesis that precedes it. Theories are speculative solutions to perceived questions that are evaluated through observation and experimentation. Although the probable validity of the hypothesis can be verified by
observations which endorse it, the theory can be falsified and completely refuted by having observations that are inconsistent with its argument.

In this way, research is shown to continue by trial and error: as one hypothesis is ignored, another is proposed and evaluated, and so the most suitable theory persists. In order to evaluate the theory, it must be formulated as an assertion called a hypothesis. The basic essence of the theory is that it needs to be falsifiable. This suggests that it would objectively be possible to make valid observational statements that are at odds with the theory, and therefore can be skewed. The method of falsification, though, leads to a devastating outcome of the correct dismissal of the hypothesis, requiring a totally new beginning.

The deductive strategy begins with an observed regularity that needs to be explained, a tentative theory is acquired or constructed, then hypotheses are deduced and then tested by collecting appropriate data. The deductive strategy is also known as the hypothetico-deductive method, or falsificationism, the deductive strategy was developed by popper. It is the attempt to overcome the deficiencies of positivism and the inductive strategy. The key point put forward is that observations do not provide a reliable foundation for scientific theories and as inductive logic. He provided a solution to accept that all data collection is selective and involve interpretations by the observer, and then to develop an appropriate logic.

Observations are always made from a point of view, with a frame of reference, with a set of expectations, thus making the notion of presupposition less observations impossible. To collect any useful data, it is necessary first to have some ideas about what to look for. It is necessary to have some tentative answers to ‘why’ questions, some hypotheses that have been derived from a theory, to provide direction for data gathering. Popper point out that ‘reality cannot be observed directly, all that can be done is to try to match the theory with the data.

On the perspective of Popper, deductive strategy have different steps;

1- Begin by putting forward a tentative idea, a conjecture, a hypothesis or a set of hypotheses that form a theory.

2- With the help, of other previously accepted hypotheses, or by specifying the condition under which the hypotheses are expected to hold, deduce a conclusion, or a number of conclusions.

3- Examine the conclusions and the logic of the argument that produced them. Compare this argument with existing theories to see if it constitutes an advance in our understanding. If you satisfied with this examination.
4- Test the conclusion by gathering appropriate data, make the necessary observations or conduct the necessary experiments.

5- If the test fails, i.e., if the data are not consistent with the conclusion, the theory must be false. If the original conjecture does not match the data, it must be rejected.

6- If the conclusion passes the test, i.e., the data are consistent with it, the theory is temporarily supported; it is corroborated, but not proven to be true.

Some of the criticism regarding deductive research strategy.

1- If observations are interpretations, and we can never observe reality directly, how can regularities be established confidently and theories be refuted conclusively?

2- The tentative acceptance of a yet unrefuted theory requires some inductive support

3- There is no interest in where tentative theories should come from, or how they might be constructed

4- Science needs to be less logical to allow for chance discoveries

5- Paying too much attention to logic can stifle scientific creativity

6- The process of accepting or rejecting theories involves social and psychological processes, not just logical ones.

1.2. C. A. 4- Conclusion

Induction and deduction are an indistinguishable feature of the rationale method. These two types of logic have a very distinct feel to them when you're doing research. Inductive reasoning, by its own nature, is more open-minded and exploratory, particularly at the beginning. Deductive reasoning is more narrow in nature and is involved with checking or proving theories. At any stage in the experiment, most social science includes both inductive and deductive inference methods. Induction and inference are two methods to problem-solving, generally separate but never incompatible. The dilemma must be overcome by checking the legitimacy of the hypothesis or inference drawn, etc. from any way. Induction and deduction are also useful, often complimentary, methods that make it easier to solve problems.

1.2. D- OBJECTIVITY AND REFLEXIVITY IN SOCIAL SCIENCE RESEARCH

1.2. D.A.1- Introduction-Objectivity

Objectivity must play a significant role in social sciences but it shall not be made alone standard in judging research studies of social sciences. Objectivity is a goal of scientific investigation. Objectivity presupposes an independent reality that can be grasped. Objectivity
is believed to be the most universal trait of the sciences, which differentiates them from unscientific points of view. Simply, objectivity, means the elimination of all subjectivity, is not limited to science alone; but it is an attitude towards life which one can assume also in practical affairs.

1.2. D. A.2- Origin

The ‘objectivity’ is not the product of the 19th century but it is as old as science itself and even before the Renaissance era objectivity was mostly used in philosophical literature. From a philosophical point of view, the word ‘objectivity’ is used to understand the relationship between the human mind and nature (God) and how to get enlightenment. The word ‘objectivity’ is derived from Latin adverbial or adjectival form obiectivus/obiective, introduced by the 14th century Scholastic philosophers such as Duns Scotus and William of Ockham (Daston&Galison, 2008). After this time, many other philosophers used the term objective/objectivity in their philosophical writings; Immanuel Kant gave a new meaning and sense to this term. In different contexts, whatsoever they may be, objectivity has been meant and understood completely incompatible by different people.

1.2. D.A.3- Objectivity in social research

Social science research offers us knowledge about the social world which is not necessarily available by other means, then we are making some privileged claims about our work. Robert Bierstadt states, “Objectivity means that the conclusions arrived at as the result of inquiry and investigation are independent of the race, colour, creed, occupation, nationality, religion, moral preference, and political predisposition of the investigator. If his research is truly objective, it is independent of any subjective elements; any personal desires that he may have”. Objectivity is pre-eminently the basic attitude of the scientist. Since the rise of modern natural sciences, the criterion of such objectivity has been universal validation.

Sociological research has always emphasized the establishment of objectivity. For example, renowned sociologist Emile Durkheim in his book ‘Rules of the Sociological Method’ stated that social facts must be treated as things and all preconceived notions about social facts must be abandoned (Durkheim, 1895 as cited in Jones, 1986). Similarly, Max Weber’s emphasis on ‘sociology must be value-free’ indicates the significance of objectivity in social or sociological research (Sharlin, 1974). Social scientists also seek to establish the same ‘universal validation’, which is used by natural scientists, but it is not as easy for them as for natural scientists. Because natural sciences study ‘objects’, which are not dynamic
while social sciences study the human mind, actions, and behaviours, which are ever-changing and not universal. We cannot reduce the human mind to object experiments. Therefore, universal validation cannot be attained (Bollnow, 1974) in social sciences.

1.2. D.A.4- Problems of Objectivity in Social research:

a) Social scientist is part of human society and their judgments are subjective and coloured by researchers own experience.

b) The subject matter of social science research is too complex. All propositions are limited to particular social groups and contexts. Thus objectivity is a major issue in social science research.

c) All members of the society have different values, social researcher will unconsciously influenced by their values.

d) Social scientist fails to achieve objectivity because the respondents are human beings have certain human problems, e.g. a refusal of the respondent, improper understanding, reluctance, etc. All these problems cause biases and invalidate the research findings and conclusions.

1.2. D.A.5- Factors Affecting Objectivity:

It is very difficult to achieve objectivity in social science research. This difficulty arises out of the adverse influences of (a) Personal prejudices and bias, (b) Value judgment, (c) Ethical dilemma, and Complexity of social phenomena.

a) Personal prejudices and biases: Prejudices and biases are like fantasies to believe what is comforting to believe. It makes you believe something without considering the evidence. The subjective bias in research is a result of adverse influences of personal motives, customs, and social situations. The sources of bias are selfishness, over-ambition, friendship, relationship, caste and community, class, religion, location, nationalism, language, political affinity, profession, opportunism, sexual bias, business, careerism, group bias, temperament bias, power bias, personal bias, pessimism, optimism, fanaticism, and militancy. Guarding against such biases becomes a matter of perpetual vigilance for a true researcher. In social research and is directly related to the investigator’s wishes and feelings. For example, a researcher, who is physically disabled, researches to know the socio-economic problems of the disabled persons. Is it possible for that researcher to be ‘objective’ in his/her research study? Does the researcher keep control over his/her emotions and experience being a
disabled person? It could be hard, if not impossible, for keeping his/her feelings, emotions, and experiences aside. It is mostly believed in social sciences that the selection of topics for research is based on subjectivity, thus the results could not be objective. However, the choice of research topic cannot be free from the personal preferences/interests and ideological biases of the researcher. The first and foremost obstacle or problem to establish objectivity in social science is the researcher’s particular involvement in the topic of choice that relates to both his/her research interest and emotional basis.

b) Value Judgment: It is widely believed that the researcher’s values affect research. Value related problems arise from the social context within which research occurs. A researcher’s attitudes towards socio-economic issues are influenced by his values. He/she possesses cultural traditions, values, mores, religious beliefs, etc. being a member of a particular group. He/she has a strong attachment/involvement with these traditions and values and he/she also considers these traditions superior to all others throughout the world. The objective observer must strive at self-elimination in his judgments and provide an argument that is as true for each mind as his own. He has to overcome his subjective judgment. But all persons living in a society are bound to have a set of values.

This natural tendency of human beings impels investigators to put personal feelings in their research. Every human has some intellectual preferences and standpoints (Agassi, 1974) which affect objectivity in social research.

c) Ethical dilemma: Research relation with other aspects of research creates ethical problems. E.g. Relation with sponsors, relation with source data, relation with research subject etc. Complexity of social phenomena: The difficulty with the humanities/social sciences is that the subjectivity of the knower/researcher cannot be eliminated because of the many factors such as researcher’s feelings, emotions, cultural values and sympathies with the observed community/group.

As the cultural values and beliefs are not universal but vary from society to society, community to community, and group to group, this variation of meaning and sense of cultural values and beliefs create hurdles for the researcher to understand the proper meaning and sense of these cultural traditions and values of an observed community. Here most of the researchers observe the cultural values and traditions of the observed community in the context of their cultural values and traditions, which further lessens the objectivity.

Observation, perception and interpretation are of crucial significance in social research and the ability of the researcher to observe, perceive and interpret the phenomenon
also maximizes or minimizes objectivity. Observation is a technique in social research to receive knowledge of the outside world through senses or record data by using scientific instruments. It could be a particular way we look at things or something. Observation plays an important role in testing hypotheses and coming to conclusions with data gathered in research. It is also believed that personality traits affect scientific observation. The assumption that social inquiry is scientific if proper techniques of observation and record (preferably statistical) are employed.

1.2. D.B. Reflexivity- Introduction

The practice of researchers doing their research, and writing it up, in explicitly self-aware and self-critical ways is particularly important in qualitative research, where it feeds into debates about the ‘validity’ of research findings. The greatest variety and volume of commentary by researchers on their work is to be found in qualitative work (e.g. Ladino 2002). However, at its most basic level, reflexivity is about maintaining high professional standards of investigation, which applies to all modes of social research. It may seem obvious, but good research depends on the selection and proper, systematic application of the right methods for the task at hand. The researcher is the only person who can ensure this happens. It means keeping each step under review, setting performance standards for oneself, thinking about how informants are reacting to being studied and constantly evaluating what is being achieved.

1.2. D.B.1-Reflexivity

Reflexivity is a term that has been in acceptance since the 1960s and has several different meanings, but it has become most closely connected with the crises facing ethnography. On the other hand, it has become customary for field workers to record not only their observations, but their reactions to, and first interpretations of, those observations (Fieldwork; Coding Qualitative Data). This helps to keep the experiences alive so that later analyses do not lose sight of their initial impact and intensity. The researcher retains something of the original emotional energy of events and experience.

To use experience and reflection as a potential resource, researchers convert their rough observation notes at the end of each fieldwork ‘shift’ into proper records, adding the reflections in an identifiable format. This should not become a mechanical process of note-making, because its main purpose is to stimulate fresh thinking about the research. Miles and Huberman suggest including feelings about informants; second thoughts about what their
remarks meant; doubts about data quality; new hypotheses and ideas; and cross-referencing to and clarifying of previous events.

This emphasizes reflexivity as an intellectual resource, rather than a defensive audit. Actively self-aware researchers not only produce more convincing research but may also begin to question the very basis on which they started.

In the ethnographic tradition (Ethnography), research is situated in specific settings, relational in its encounters with informants/members, and textual in the dual sense that it has first to be read/interpreted by the researcher and then communicated via a written document. These elements interact with each other and the research method. They come together in the person of the researcher, who must remain center-stage if an authentic account of the research process is to be achieved.

1.2. D.B.2- Descriptive and analytical reflexivity

In a recent exposition, Stanley usefully distinguished between ‘descriptive’ and ‘analytical’ reflexivity. The former involves reflecting on the impact that various contingencies had on the outcome of the research, such as a description of the social location of the research, the preconceptions of the researcher, power relations in the field, and the nature of the interaction between the researcher and subjects. It requires the development of a critical attitude toward the data.

Ethnographers who seek to rescue their research work from the extremes of postmodernist deconstruction and retain some form of realism, normally end their reflexivity with this type. Descriptive reflexivity can be used to provide a secure realist-like foundation to the research, but it can also be used as part of the postmodern project. If the latter, it is normally done in conjunction with ‘analytical reflexivity’.

‘Analytical reflexivity’ is a much tougher requirement. It deals with epistemological matters and knowledge claims and requires a form of intellectual autobiography in which researchers explicate the processes by which understanding and interpretation was reached and how changed understanding from prior preconceptions came about.

Being reflexive in the descriptive sense requires that ethnographers ask themselves a series of questions and reflect on how the answers are impinged upon and help to situate and shape the data and their analysis or interpretation of it. Reflexive ethnographers should thus account for themselves and their social relations, as well as the substantive findings and construction of the text. Analytical reflexivity requires yet more difficult reflection. In this sense, ethnographers should ask themselves questions about the theoretical framework and
methodology they are working within, the broader values, commitments, and preconceptions they bring to their work,

1.2. D.B.3- Conclusion

In Social Research most social scientists agree upon that complete objectivity in social studies/research is, of course, impossible but they also emphasize that it does not mean that a researcher goes away from the scientific methods of research and presents his/her results. He/she has to follow the set of various existing methods of research that minimize the subjectivity and help to find out the neutral results which could also be acceptable to the other researchers. Thus, objectivity is such a concept that may not completely but somehow binds the social researcher to be ‘objective’ in his/her studies.

1.3. A- SOCIAL RESEARCH- NATURE AND TYPES

1.3. A. 1- Introduction

Research is a systematic and organized attempt to explore a particular issue that needs to be addressed. It adds to the general information body and corrects human knowledge, too. Study is essentially the method of seeking a credible solution to the problem through the scheduled and organized compilation, review and evaluation of the data. Study is the most critical method for the development of science in order to facilitate change and to make it possible for man to react more efficiently to his surroundings in order to achieve his goal and overcome his disputes.

1.3. A. A. 2. Social Research

Every thinking person has a capacity to and should do research. It is an essential and powerful tool that leads human beings towards progress. According to John W Best “the secret of cultural development has been research, pushing back the areas of ignorance by discovering new truths, which in turn leads to better ways of doing things and better products. Today the process of research is not confined to science laboratory rather every fields of life make use of research that adds to or explains the existing knowledge. There are two broad classifications of research; Research in physical or natural sciences and the research in social or human sciences. Research in physical sciences deals with physical and natural phenomena and mainly with things that can be put to laboratory tests under guided conditions. On the other hand the research in social sciences deals with social phenomena and more specifically with human behaviour that is influenced by different physical, social, temperamental, psychological and economic factors. We can never put such human beings to laboratory tests
and even if it is done, their responses will not be natural as it is influenced by the awareness of being studied.

Social research is a scientific tool to study and analyse social problems. It is academic research on topics relating to questions relevant to social life. It involves research that draws on the social sciences for conceptual and theoretical inspiration. Such research may be motivated by developments and changes in society and employs social scientific ideas to illuminate those changes. It is deeply rooted in the ideas and intellectual traditions of the social sciences. There is no single reason why people do social research and it is done because there is an aspect of our understanding of what goes on in society that is to some extent unresolved. Mary Stevenson defines “social research as a systematic method of exploring, analysing and conceptualizing social life in order to extend, correct or verify knowledge, whether that knowledge aids the construction of a theory or in the practice of an art”.

Social scientists face human concerns that natural scientists have not paid much attention to. The problems start from gaining access to individuals as sources of data for the study. The terms in which clients and respondents initially consent to engage in the inquiry decide the essence of the conclusions. Both the respondent and the interviewer, whether they know it or not, take on a position. Initial structuring of this position relationship will affect, in a conscious and implicit fashion, both the fullness and substance of its subsequent responses – much as initial orientation towards any object will influence later actions in its relationship. These details of social life must also be included in the study preparation process. Then simply we can say that the relationship of position between the investigator and the subject is ethical.

1.3. A. A. 3. Nature of social research

Social research deals with social phenomena and it aims at discovering new facts about social life. It is a scientific undertaking in which logical and systematized techniques are used to gain new knowledge about the social phenomena or to verify what we already know about it. It assists in the understanding of existing theories and helps to build new ones. Social research requires deep knowledge and minute investigation of the topic concerned.

Since we are studying social phenomena in social science, experimentation is not always possible. Social research must be objective as much as possible to draw inferences that are free from bias and prejudices. But the absolute objectivity of the social science
research is not achievable as it deals with human beings. Social research is dynamic in nature, because the truth of the past may not be the truth of the present. In social research interrelationship between variables is must. Social research in any field is interrelated. Social research says that the social events are also governed by some rules and regulations like the physical events and it is complementary to the research in physical science.

1.3. A.B- TYPES OF SOCIAL RESEARCH

The purpose of the research is to discover answers to questions through application of scientific procedures. Nature of these questions varies the type of research procedures and methods. Social research can be classified into different types according to its purpose. Types of research can be looked at from three different perspectives:

1. Applications of the findings of the research study.
2. Objectives of the study.
3. Mode of enquiry used in conducting the study.

The classification of the types of a study on the basis of these perspectives is not mutually exclusive: that is, a research study classified from the viewpoint of ‘application’ can also be classified from the perspectives of ‘objectives’ and ‘enquiry mode’ employed. For example, a research project may be classified as pure or applied research (from the perspective of application), as descriptive, correlational, explanatory or exploratory (from the perspective of objectives) and as qualitative or quantitative (from the perspective of the enquiry mode employed).

If you examine a research Endeavour from the perspective of its application, there are three broad categories: pure research, applied research and action research.

1. Pure research/ Fundamental research

In the social sciences, according to Bailey “Pure research involves developing and testing theories and hypotheses that are intellectually challenging to the researcher but may or may not have practical application at the present time or in the future”. Thus such work often involves the testing of hypotheses containing very abstract and specialized concepts. Pure research is also concerned with the development, examination, verification and refinement of research methods, procedures, techniques and tools that form the body of research methodology. Examples of pure research include developing a sampling technique that can be applied to a particular situation; developing a methodology to assess the validity of a
procedure; developing an instrument, say, to measure the stress level in people; and finding the best way of measuring people’s attitudes. The knowledge produced through pure research is sought in order to add to the existing body of knowledge.

2. Applied research

Most of the research in the social sciences is applied. The research techniques, procedures and methods that form the body of research methodology are applied to the collection of information about various aspects of a situation, issue, problem or phenomenon so that the information gathered can be used in other ways – such as for policy formulation, administration and the enhancement of understanding of a phenomenon. In other words, Fundamental research sets principles while applied research utilizes those principles to know the problems with best possible manner. In practice, the researcher applies laws during his field study to draw more and more clear ideas about the problems. It is undertaken to solve an immediate problem.

3. Action research

As the name suggests, action research comprises two components: action and research. Research is a means to action, either to improve your practice or to take action to deal with a problem or an issue. Since action research is guided by the desire to take action, strictly speaking it is not a design per se. Most action research is concerned with improving the quality of service. It is carried out to identify areas of concern, develop and test alternatives, and experiment with new approaches. Action research, in common with participatory research and collaborative enquiry, is based upon a philosophy of community development that seeks the involvement of community members. Action Research is applying scientific thinking to real-life problems and represents a great improvement over teacher’s subjective judgments and their limited personal experiences.

Depending on the objectives or purpose of research, social research can be grouped into three types: exploratory, descriptive, and explanatory.

1. Exploratory research

Exploratory research is often conducted in new areas of inquiry, where the goals of the research are:

(1) To scope out the magnitude or extent of a particular phenomenon, problem, or behaviour,

(2) To generate some initial ideas (or “hunches”) about that phenomenon, or

(3) To test the feasibility of undertaking a more extensive study regarding that phenomenon.
For instance, if the citizens of a country are generally dissatisfied with governmental policies regarding during an economic recession, exploratory research may be directed at measuring the extent of citizens’ dissatisfaction, understanding how such dissatisfaction is manifested, such as the frequency of public protests, and the presumed causes of such dissatisfaction, such as ineffective government policies in dealing with inflation, interest rates, unemployment, or higher taxes. Such research may include examination of publicly reported figures, such as estimates of economic indicators, such as gross domestic product (GDP), unemployment, and consumer price index, as archived by third-party sources, obtained through interviews of experts, eminent economists, or key government officials, and/or derived from studying historical examples of dealing with similar problems. This research may not lead to a very accurate understanding of the target problem, but may be worthwhile in scoping out the nature and extent of the problem and serve as a useful precursor to more in-depth research.

2. Descriptive research

Descriptive research is directed at making careful observations and detailed documentation of a phenomenon of interest. These observations must be based on the scientific method (i.e., must be replicable, precise, etc.), and therefore, are more reliable than casual observations by untrained people. Examples of descriptive research are tabulation of demographic statistics by the United States Census Bureau or employment statistics by the Bureau of Labour, who use the same or similar instruments for estimating employment by sector or population growth by ethnicity over multiple employment surveys or censuses. If any changes are made to the measuring instruments, estimates are provided with and without the changed instrumentation to allow the readers to make a fair before-and-after comparison regarding population or employment trends. Other descriptive research may include chronicling ethnographic reports of gang activities among adolescent youth in urban populations, the persistence or evolution of religious, cultural, or ethnic practices in select communities, and the role of technologies such as Twitter and instant messaging in the spread of democracy movements in Middle Eastern countries.

3. Explanatory research

Explanatory research seeks explanations of observed phenomena, problems, or behaviours. While descriptive research examines the what, where, and when of a phenomenon, explanatory research seeks answers to why and how types of questions. It attempts to “connect the dots” in research, by identifying causal factors and outcomes of the target phenomenon. Examples include understanding the reasons behind adolescent crime or
gang violence, with the goal of prescribing strategies to overcome such societal ailments. Most academic or doctoral research belongs to the explanation category, though some amount of exploratory and/or descriptive research may also be needed during initial phases of academic research. Seeking explanations for observed events requires strong theoretical and interpretation skills, along with intuition, insights, and personal experience. Those who can do it well are also the most prized scientists in their disciplines.

Another classification based on the mode of inquiry used in conducting the study of research can be quantitative, qualitative and mixed method researches.

1. Quantitative research

Quantitative research is characterized by deductive approaches to the research process aimed at proving, disproving, or lending credence to existing theories. This type of research involves measuring variables and testing relationships between variables in order to reveal patterns, correlations, or causal relationships. Researchers may employ linear methods of data collection and analysis that result in statistical data. The values underlying quantitative research include neutrality, objectivity, and the acquisition of a sizeable scope of knowledge (e.g., a statistical overview from a large sample). This approach is generally appropriate when your primary purpose is to explain or evaluate.

2. Qualitative research

Qualitative research is generally characterized by inductive approaches to knowledge building aimed at generating meaning. Researchers use this approach to explore; to robustly investigate and learn about social phenomenon; to unpack the meanings people ascribe to activities, situations, events, or artifacts; or to build a depth of understanding about some dimension of social life. The values underlying qualitative research include the importance of people’s subjective experiences and meaning-making processes and acquiring a depth of understanding (i.e., detailed information from a small sample). Qualitative research is generally appropriate when your primary purpose is to explore, describe, or explain.

3. Mixed methods research

Mixed methods research (MMR) involves collecting, analysing, and in some way integrating both quantitative and qualitative data in a single project. The phases of a research project are integrated or synergistic, with the quantitative phase influencing the qualitative phase, or vice versa. MMR may result in a comprehensive understanding of the phenomenon under investigation because of the integration of quantitative and qualitative data. MMR is generally appropriate when your purpose is to describe, explain, or evaluate. MMR is also
routinely used in applied social and behavioural science research, including that which seeks to prompt community change or social action.

1.3. B- THEORY BUILDING

Human life is full of different questions about different social phenomena. Men interpret these questions using the categories, concepts and assumptions with which they are familiar. These lead them to different conclusions about the same phenomenon. The combination of all the above mentioned elements can be called as theory. Social theory is vital to making sense of social life because it holds assorted observations and facts together: In more precise words theory is a system of generalized statements or propositions about phenomena. The statements and propositions of the theory should be:

a) Logically consistent.

b) Interrelated.

c) The propositions should be mutually exclusive.

d) Capable of being tested through research.

Scientific theories are different from other form of theories in the sense that it explain and predict the phenomena in question along with producing testable and thus falsifiable hypotheses. Different theories about the social life has contributed much to the growth of social sciences hence the process of theory building is significant as far as the academic disciplines are concerned.

Theory building or theory construction is the process of formulating and assembling components of theories into coherent wholes, or the process of revising and expanding theories in light of logical, semantic, and empirical analyses. Every theory in social sciences has gone through some type of construction process. A theory is a set of explicit, abstract, general, logically related statements designed to explain observed phenomena in the natural world. Theory construction is the means to this end.

Currently the building of theories of social life is largely the contributions of researchers in the respective areas. Researches on different social phenomena lead to new theories that systematically explain those phenomena. At the same time theory is important to the social researcher because it provides a backcloth and rationale for the research that is being conducted. Hence there is a two way relationship between research and theory.
1.3. C- THEORY AND RESEARCH DUALITY

Theory-research duality refers to the two way relationship between research and theory. That means both are closely related as they contribute to each other. This duality can be better understood by analysing the Contribution of research to theory and the role of theory in research.

1.3. C. A. 1. Contribution of research to theory

The relationship between theory and research is contributory. Research contributes to the development of theory. Following are the major contributions of research to theory;

- Research initiate theory: - The findings of research may lead to the formulation of theories. Scientific experiments have led to the development of various theories in physics, chemistry etc. Similarly research in social sciences has contributed to the development of several theories.
- Research tests an existing theory: - One major function of empirical research is to test hypotheses deduced from existing theories. If a hypothesis is not confirmed by research, the theory from which the hypothesis is deduced in re-examined and tested.
- Reformulation of an existing theory: - When a theory does not fit into new findings of research, it is rejected and reformulated to encompass the new findings.
- Research refocuses theory: - Empirical research may give a new focus to the existing theory.
- Research clarifies theory: - Concepts are drawn from theory. But researchers cannot proceed on the basis of their theoretical meaning. For research purposes the concepts must be operationalized and defined especially with concrete empirical indications. Such clarifications and redefinitions lead to the discovery of new hypotheses.

1.3. C.A. 2 Role of Theory in Research

Theory provides a framework within which social phenomena can be understood and the research findings can be interpreted. The role of theory in research can be explained as follows;

- Theory delimits the study. Theory narrows the range of facts to be studied. It helps to select a few relevant aspects of a phenomenon. Any phenomenon may be studied from different angles. Theory helps the researcher to work within a framework of science.
Theory provides conceptual model. Theory provides a conceptual framework for a study. It helps a researcher to develop conceptual structure for the proper formulation of the selected problems.

Theory summarizes. Theory summarizes what is already known about the object of study. From time to time in any science there will be changes in the structure of relationship between propositions. In each area, scientists move from older systems of theory towards a more acceptable new system.

Theory states universal law. Theory states a general uniformity beyond the immediate observation. E.g. A person sitting under a mango tree, observes mangoes falling on ground. But beyond this observation there is a general law of gravitation.

Prediction. Theory helps to predict further facts. For example we may observe a low birth rate in modern societies. From this, we can predict that if modern way of life is introduced into a traditional rural or tribal community, its birth rate would decline.

Theory fills gap in knowledge. Theory also points to areas which have not been explored. The gaps in knowledge are brought to light through the questions arising out of theory.

In short, theory and research are inseparable complementary components of scientific endeavour.

1.3. D. INTER-DISCIPLINARY AND MULTIDISCIPLINARY DIMENSIONS

1.3. D.A.1- Introduction

An interdisciplinary approach is one of the approaches to cross the borders of conventional research boundaries. It is mainly used to incorporate various thoughts and concepts into their studies. It is helpful to solve complicated problems existing in society. So the researchers have the opportunity to correct misconceived or misinterpreted explanations that exist in the knowledge fields. A problem can have many vistas and dimensions. These different aspects can be studied and understood only with the help of an interdisciplinary/multidisciplinary approach.

1.3. D.A.2- Interdisciplinary approach

Social sciences the generally recognized disciplines are sociology, anthropology, economics, history, geography, political science and psychology. Within each discipline, there are rational, accidental and arbitrary factors responsible for the peculiar combination of subject matter, techniques of investigation, orienting thought models, principles of analysis, methods of explanation and aesthetic standards. Each social science discipline looks at a part
of the world of human behaviour in its peculiar way. They have divided this same material field into "several conceptually distinct levels, aspects, functions and dimensions." Brewer (1999: 328) puts it, “interdisciplinarity generally refers to the appropriate combination of knowledge from many different specialties – especially to shed new light on an actual problem.”

Disciplines in any field are characterized by their special filtering and interpreting devices. Over time, the members of a particular discipline acquire a shared set of principles by which their inquiries are directed. These principles direct the disciplinarian to observe certain facts out of the virtually infinite variety of possibilities. Interdisciplinary research has vast potential for societal good in the form of new kinds of knowledge.

1.3. D.A.3- Multi-disciplinary

The multi-disciplinary approach involves the simple act of juxtaposing several disciplines. This approach involves no systematic attempt at integration or combination, but merely exposure to more than one discipline.

A multidisciplinary approach means that knowledge of several disciplines are used to a given problem and are supplementary to one another in such a way that it is possible to draw a clear cut conclusion, free from being branded as an isolated or partial one. In a multidisciplinary approach, several fields are involved in a certain line of inquiry that is specific to a problem or region. But the individual findings of the disciplines involved are only brought together in a cumulative. Therefore, modern research is tending to be more and more multidisciplinary.

1.3. D.A.4- Need and Importance of interdisciplinary and multi-disciplinary approach

Research at present has become the most viable and efficacious way to solve the problem. In this era of fast-moving society, numerous types of socio-economic problems, having relation to other disciplines like politics, anthropology, psychology, have arisen which demand a comprehensive approach to get their solution. Sociologists on empowering the poor and addressing social inequity; Anthropologists on acknowledging local customs, practices and social structures; Economists, for example, may focus on cost-effective mechanisms, etc. on relations with the local community without the inclusion of these diverse perspectives, and the interaction of sociological, economic and anthropological/cultural variables, etc., the risk of confirmation bias becomes, logically enough, elevated.

Multidisciplinary research has a lot of importance to study all aspects of a problem. It minimizes the partial or one-sided result of the issue. As it has been pointed out earlier that human life is influenced by various factors, therefore, studying any aspect in isolation, that is,
in absence of other disciplines would not give a clear cut picture. Disciplines are separate from each other but this is true academically only, actually, they are not. Overlapping is there at many points. Therefore, the study of any issue necessarily demands recourse of other disciplines. The approach of multidisciplinary research in this connection reveals its importance to find out the overall aspect

1.3. D.A.5- Conclusion

All the disciplines have their peculiarities. Therefore, the thrust must be to co-ordinate and secure the chief characteristic of all disciplines. An interdisciplinary and multi-disciplinary approach provides multidimensional perspectives on your research questions and enhances thoughts in your discipline. Interdisciplinary or multi-disciplinary knowledge helps the researcher to understand or solve the problems, which could not be possible through single disciplines. The utilization of different source of information, from different disciplines, increase reliability and validity of your study

1.3. E. CHALLENGES IN SOCIAL RESEARCH

Enhancing development largely hinges on research. Researcher’s particularly social scientists have faced a number of challenges in their attempt to arrive at and get the truth and facts. Much more is in developing countries where challenges of development are far too many than solutions. Social research is a complex work, as it mainly deals with human beings. There are a number of limitations in social search as follows:

- **Facts and values**

  At a popular level there is most probably the oversupply of crude information about social science issues, and facts are much more difficult to establish. A major problem is the deficiency of reliable source material. Much of government business and transactions done on behalf of the public is regularly shrouded in ambiguity. The social scientist will never have at his disposal sufficient evidence to give a definitive answer to the questions.

- **Conceptual limitation**

  Conceptual analysis is important because it offers some prospect of reducing this confusion and misunderstanding which bedevils certain issues. But it demands a degree of awareness about language, which does not come naturally to us. Most people use words quite unreflectively, which often distorts the meaning. One of the most daunting tasks in social science research is trying to find the meaning of words. Scientists are directed towards the fruitful activity of exploring the various ways in which, over the years, particular expressions
have been used. This creates the problem of arriving at what might be acceptable truth. In political science for instance there are so many slippery concepts that minds rarely meet. The spotlight has recently focused on ‘rights’, but more fundamental concepts like ‘liberty’, ‘freedom’, ‘power’, ‘order’ and ‘justice’ are used in equally diverse and confusing ways.

❖ Technical limitations

These limitations pertain to technical difficulties in collecting data on human activity. An important step is selecting an appropriate means of collecting data. There is always lack of confidence that the results can be the expectations of the researchers. Thus questions often arise as to the lack of control in social science as it applies to researchers as well as the technique they use. At times questions are attuned and asked in an altered manner. According to Shipman bias enters observations and the personal feelings of the researcher influence the data recorded. Other technical issues pertain to data sought disregarding the rights of others—giving away confidences, reporting illegal practices, obtaining information by fraud and breaking promised anonymity.

❖ Organizational limitations

There are personal, professional and political hopes of researchers that influence the choice of topics, the way it is organised and the results are interpreted. Researchers work within communities that have established traditions and maintain these through managing the rewards available to the ambitions and the funds for research. These communities and organisations have a great bearing on the choice of topics and lines of arguments deemed to be acceptable. It even follows that publications or discussions of certain issues are acceptable in some quarters being denied in some leading to narrow representation of research findings damaging innovativeness for the benefit of the entire society. It is important that communities, countries and organisations move further beyond ideological underpinnings that influence negatively on research.

❖ General Policy limitations

At the end of everything decisions have to be made but there is always lack of information to buttress relevance of these decisions. When the political climate is sensitive to do a certain line of inquiry, it is often difficult for the social science researchers to come up with objective policy decisions. Generally, sensitive issues are not for grabs and discussion especially in Africa where demands for openness is largely restricted by certain policy measures that guard secrets.
Ethical Considerations

Two main assumptions of the ethics in social science research are voluntary participation and no harm to subjects. There are six key principles of ethical research that the ESRC expects to be addressed, whenever applicable: research should be designed, reviewed and undertaken to ensure integrity and quality; research staff and subjects must be informed fully about the purpose, methods and intended possible uses of the research, what their participation in the research entails and what risks, if any, are involved. Some variation is allowed in very specific and exceptional research contexts for which detailed guidance is provided in the policy guidelines; the confidentiality of information supplied by research subjects and the anonymity of respondents must be respected; research participants must participate in a voluntary way, free from any coercion; harm to research participants must be avoided and that the independence of research must be clear, and any conflicts of interest or partiality must be explicit.

The other difficulties in social research are:

- **Complex Nature of Problem**: If the problem is complex type, then the research remains incomplete. So, it depends on the nature of the problem.
- **Difficulty in Problem Identification**: To know about the causes of the problem and identify it is very difficult. It is the block in the way of rapid research.
- **Difficulty in Designing**: The formation of study design is also a difficult work therefore it is a problem.
- **Difficulty in Hypothesis Formulation**: The hypothesis formulation is very difficult. Every person cannot form a hypothesis about a problem, but it requires the skill of the research.
- **Problem of Questionnaire**: The construction of a good questionnaire is also required skill. The questionnaire should be simple, easy and in local language, otherwise it is difficulty.
- **Dependent on Others**: A researcher cannot do everything by himself. He involves other persons in the field and they have no interest in study.
- **No Use of Terminology**: Research has its own terminology. If a research has no knowledge about the terminology then it is a problem in the way of social research.
- **Problem of data Collection**: If people are not ready to provide correct information to a researcher, the data collection is difficulty to a research.
• **Lack of Economic Stability**: If visiting team have financial problems, then it will hinder the way of social research to complete the research in a more efficient and effective way.

• **Issues of Transport & Communication**: Transport and communication gape also hinder the way of social research.

• **Difference in Languages**: If there is some difference in languages b/w people and researcher, then they do not know the purpose of the investigator which leads to difficulty in research.

• **Accommodation Problem**: The research teams should be provided to them the facility of stay. When these things are not available, the problem faced by them in the field.

• **Time Management**: Research is completed in a specific time but some projects are not able to complete it in defined time.

• **Political Instability**: In some areas political instability hinder the way of research process. The research remains incomplete.

• **Environmental/cultural and religious Differences**: Sometimes the difference between various environments/ difference in cultures as well as religious differences brings hurdle in the way of social research.

1.4. A. METHODS AND METHODOLOGIES IN SOCIOLOGICAL ENQUIRY

Research methods might be perceived as every one of those techniques/methods that are utilized for the conduction of research. Simply we say that every one of those techniques which are utilized by the researcher over the span of contemplating his research problem is referred to as research methods. Since the object of research, especially the applied research, is to solve the research problem, the accessible information and the obscure parts of the issue must be related to one another to make an answer possible. According to this view, the research method can be included in three ways;

1. In the primary group, we incorporate those methods which cover the collection of information. This method is mainly used where the information is not adequate to reach a solution.

2. Subsequently comprises those statistical techniques which are utilized for building up connections between the data and the unknowns.

3. The third group comprises those methods which are utilized to assess the precision of the outcomes acquired.
The research methodology is an approach to solve the problem systematically. It might be perceived as a science of concentrating on how research is done scientifically. In discussing the research problem and logic behind the research problem. The researcher needs to know the research methods/technique as well as the research methodology. A research process demands ideas regarding statistical techniques, such as mean, mode or median, standard deviation, or chi-square. Researchers likewise need to know which of these methods or techniques, are significant and which are not, and what might they mean and why.

Every researcher likewise needs to comprehend the suppositions underlying different methods and they have to know the criteria by which they can decide that specific techniques and strategies will be pertinent to specific issues and others can’t do. So the researcher should need to build a systematic methodology for the success of the research. It was due to the nature of the problem that differently existed. The researcher needs to decide on the evaluation and research procedure before they are executed. He/she needs to specify unmistakably and correctly what choices are selected. The scope of research methodology is more extensive than that of the research method. It addresses matters like Why these research study has been embraced, how the research issue has been formulated, how and why the hypothesis has been formulated, what information has been gathered and what specific method has been received etc. researchers should need to think about the philosophy related to research problems or study.

Both the methodology and methods have a significant role in the research process. These give a framework and direction to the entire research. The two terms, methods and methodology, may seem to be equivalents, but the methodology is more extensive and covers all methods. Methodology implies understanding the whole research process—including its social-organizational setting, philosophical assumptions, moral standards, and the political effect of new information from the exploration endeavour. Methods allude to the assortment of explicit methods we use in a study to choose cases, measure and observe social actions, collect and refine the information, analyse information, and report on results. These are closely interrelated and play a significant role in the research process.

1.4. B. ETHICAL CONCERN IN SOCIAL RESEARCH
1.4. B. A.1. Introduction

Ethics is defined by Webster’s dictionary as conformance to the standards of conduct of a given profession or group. Such standards are often defined at a disciplinary level though a professional code of conduct, and sometimes enforced by university committees called even
Institutional Review Board. Even if not explicitly specified, scientists are still expected to be aware of and abide by general agreements shared by the scientific community on what constitutes acceptable and non-acceptable behaviours in the professional conduct of science. For instance, scientists should not manipulate their data collection, analysis, and interpretation procedures in a way that contradicts the principles of science or the scientific method or advances their personal agenda.

Research ethics is because, science has often been manipulated in unethical ways by people and organizations to advance their private agenda and engaging in activities that are contrary to the norms of scientific conduct. Ethics is the moral distinction between right and wrong, and what is unethical may not necessarily be illegal. These ethical norms may vary from one society to another, but there are some ethical standards as applied to scientific research.

1.4. B. A. 2. Ethical Principles in Scientific Research

Some of the expected tenets of ethical behaviour that are widely accepted within the scientific community are as follows.

- Voluntary participation and harmlessness: Subjects in a research project must be aware that their participation in the study is voluntary, that they have the freedom to withdraw from the study at any time without any unfavourable consequences, and they are not harmed as a result of their participation or non-participation in the project. All participants must receive and sign an Informed Consent form that clearly describes their right to not participate and right to withdraw, before their responses in the study can be recorded.

- Anonymity and confidentiality: To protect subjects’ interests and future well-being, their identity must be protected in a scientific study. This is done using the dual principles of anonymity and confidentiality. Anonymity implies that the researcher or readers of the final research report or paper cannot identify a given response with a specific respondent

- Disclosure: Usually, researchers have an obligation to provide some information about their study to potential subjects before data collection to help them decide whether or not they wish to participate in the study.

- Analysis and reporting: Researchers also have ethical obligations to the scientific community on how data is analysed and reported in their study. Unexpected or
negative findings should be fully disclosed, even if they cast some doubt on the research design or the findings. Similarly, many interesting relationships are discovered after a study is completed, by chance or data mining. It is unethical to present such findings as the product of deliberate design.

Researchers need to protect their research participants; develop a trust with them; promote the integrity of research; guard against misconduct and impropriety that might reflect on their organizations or institutions; and cope with new, challenging problems.

Ethical issues in research command increased attention today. The ethical considerations that need to be anticipated are extensive, and they are reflected through the research process. These issues apply to qualitative, quantitative, and mixed methods research and to all stages of research. Researchers need to anticipate them and actively address them in their research plans. Accordingly, it is helpful to address them as they relate to different phases of inquiry. Attention needs to be directed toward ethical issues prior to conducting the study; beginning a study; during data collection and data analysis; and in reporting, sharing, and storing the data.

**Prior to Beginning the Study**

- Consider codes of ethics. Consult early in the development of your proposal the code of ethics for your professional association.
- Apply to the institutional review board. Researchers need to have their research plans reviewed by an institutional review board (IRB) on their college and university campuses.
- Obtain necessary permissions. Prior to the study, researchers need to obtain approval of individuals in authority (e.g., gatekeepers) to gain access to sites and to study participants.
- Select a site without vested interests. Selecting a site to study in which you have an interest in outcomes is not a good idea.
- Negotiate authorship for publication. If you plan to publish your study (often the case for a dissertation project), an important issue to negotiate before beginning the study is the question of authorship for individuals who contribute to the study.
Beginning the Study

- Identify a beneficial research problem. During the identification of the research problem, it is important to identify a problem that will benefit individuals being studied, one that will be meaningful for others besides the researcher.
- Disclose purpose of the study. In developing the purpose statement or the central intent and questions for a study, proposal developers need to convey the purpose of the study that will be described to the participants.
- Do not pressure participants into signing consent forms. When collecting consent for a study, the researcher should not force participants to sign the informed consent form.
- Respect norms and charters of indigenous cultures. The researcher needs to anticipate any cultural, religious, gender, or other differences in the participants and sites that need to be respected.

Collecting the Data

- Respect the site, and disrupt as little as possible. Researchers need to respect research sites so that they are left undisturbed after a research study.
- Make sure that all participants receive the benefits.
- Avoid deceiving participants. Participants need to know that they are actively participating in a research study.
- Respect potential power imbalances. Interviews (and observations) should begin from the premise that a power imbalance exists between the data collector and the participants.
- Avoid exploitation of participants. There needs to be some reciprocity back to the participants for their involvement in your study.
- Avoid collecting harmful information. Researchers also need to anticipate the possibility of harmful, intimate information being disclosed during the data collection process.

Analysing the Data

- Avoid going native. It is easy to support and embrace the perspectives of participants in a study. In qualitative studies, this means “taking sides” and only discussing the results that place the participants in a favourable light.
• Avoid disclosing only positive results.
• Respect the privacy of participants.

**Reporting, Sharing, and Storing Data**

• Falsifying authorship, evidence, data, findings, or conclusions. In the interpretation of data, researchers need to provide an accurate account of the information.
• Do not plagiarize. Copying extensive material from others is an ethical issue. Researchers should give credit for the work of others and quotation marks should indicate the exact words claimed from others. The key idea is to not present the work of another as your own.
• Avoid disclosing information that would harm participants.
• Communicate in clear, straightforward, appropriate language.
• Share data with others. It is important to release the details of the research with the study design so that readers can determine for themselves the credibility of the study.
• Keep raw data and other materials (e.g., details of procedures, instruments).
• Do not duplicate or piecemeal publications. Also, researchers should not engage in duplicate or redundant publication in which authors publish papers that present exactly the same data, discussions, and conclusions and do not offer new material.
• Complete proof of compliance with ethical issues and a lack of conflict of interest.
• Understand who owns the data.

**Module- 2**

**Prologue to research**

**2.1- Problem Formulation**

The formulation of a research problem is the most important step in the research process. It is the foundation, in terms of design, on which you build the whole study. Broadly speaking, any question that you want answered and any assumption or assertion that you want to challenge or investigate can become a research problem or a research topic for your study. However, it is important to remember that not all questions can be transformed into research problems and some may prove to be extremely difficult to study. Potential research
questions may occur to us on a regular basis, but the process of formulating them in a meaningful way is not at all an easy task.

It requires considerable knowledge of both the subject area and research methodology. Once you examine a question more closely you will soon realize the complexity of formulating an idea into a problem which is researchable. It is essential for the problem you formulate to be able to withstand scrutiny in terms of the procedures required to be undertaken. Hence you should spend considerable time in thinking it through.

**The importance of formulating a research problem**

The formulation of a research problem is the first and most important step of the research process. It is like the identification of a destination before undertaking a journey. In the absence of a destination, it is impossible to identify the shortest – or indeed any – route. Similarly, in the absence of a clear research problem, a clear and economical plan is impossible. The research problem serves as the foundation of a research study: if it is well formulated, you can expect a good study to follow. If one wants to solve a problem, one must generally know what the problem is.

You must have a clear idea with regard to what it is that you want to find out about and not what you think you must find. A research problem may take a number of forms, from the very simple to the very complex. The way you formulate a problem determines almost every step that follows: the type of study design that can be used; the type of sampling strategy that can be employed; the research instrument that can be used or developed; and the type of analysis that can be undertaken.

The formulation of a problem is like the ‘input’ to a study, and the ‘output’ – the quality of the contents of the research report and the validity of the associations or causation established – is entirely dependent upon it.

**Sources of research problems**

Most research in the social sciences revolves around four Ps:

- People;
- Problems;
- Programmers;
- Phenomena.
Most research studies are based upon at least a combination of two ps. You may select a group of individuals (a group of individuals – or a community as such – ‘people’), to examine the existence of certain issues or problems relating to their lives, to ascertain their attitude towards an issue (‘problem’), to establish the existence of a regularity (‘phenomenon’) or to evaluate the effectiveness of an intervention (‘programme’).

Considerations in selecting a research problem

When selecting a research problem/topic there are number of considerations to keep in mind which will help to ensure that your study will be manageable and that you remain motivated. These considerations are:

• Interest – Interest should be the most important consideration in selecting a research problem. A research endeavour is usually time consuming, and involves hard work and possibly unforeseen problems. If you select a topic which does not greatly interest you, it could become extremely difficult to sustain the required motivation and put in enough time and energy to complete it.

• Magnitude – You should have sufficient knowledge about the research process to be able to visualise the work involved in completing the proposed study.

• Measurement of concepts – If you are using a concept in your study (in quantitative studies), make sure you are clear about its indicators and their measurement.

• Level of expertise – Make sure you have an adequate level of expertise for the task you are proposing.

• Relevance – Select a topic that is of relevance to you as a professional. Ensure that your study adds to the existing body of knowledge, bridges current gaps or is useful in policy formulation. This will help you to sustain interest in the study.

• Availability of data – make sure that the data will be available and in the format you want before finalizing your topic.

• Ethical issues – Another important consideration in formulating a research problem is the ethical issues involved

Steps in formulating a research problem

The formulation of a research problem is the most crucial part of the research journey as the quality and relevance of your research project entirely depends upon it. As mentioned
earlier, every step that constitutes the how part of the research journey depends upon the way you formulated your research problem.

Step 1: Identify a broad field or subject area of interest to you.

The researcher needs to think about the subject area of your interest. You should identify the field in which you would like to work a long time after your academic study or graduation. It will help you tremendously to get an interesting research topic. The selected discipline and expertness in the subject area will help you to formulate a problem. Suppose, if you are a sociologist, you may consider or form research problems related to different aspects or dimensions of society as well as social problems like Pandemic or epidemic disease and employment loss, unemployment, drug abuse, social inequality etc. Likewise, if you are an economist, you may form research problems related to economic aspects, such as opportunity cost, production and consumption, economic inequality, monetary deficiency and other economic problems.

Step 2: Dissect the broad area into subareas.

You need to break down and define your broad research field of study in some sub-areas at this point. In this respect, you should consult your supervisor and discuss writing the sub areas. If you choose a research topic related to urban problems within urban studies, you need to identify sub areas such as homelessness, urban infrastructure and social life, the different types of pollution etc. This allows the researcher to identify specific areas and causes of a particular problem.

Step 3: Select what is of most interest to you.

It is almost impossible to do research in all sub-areas. That is why it is essential to identify your area of interest. Your curiosity should be the most crucial factor in your research studies. Once you have selected a research-worthy research topic, you can exclude other sub-sectors that are not participating in it. Bear in mind that it will not ultimately carry any outcomes if you lose your confidence in your research report.

Step 4: Raise research questions.

In this phase of formulating a research problem, you will point out your research questions in the field of interest. "The central task involved in problem formulation is that of framing the terms of inquiry. The specific terms of inquiry may be formulated either in terms
of research questions or guiding hypotheses. Merton, for instance, has underlined the importance of research questions for framing the terms of inquiry. In particular, he mentions three types of questions: originating question, the question of rationale and the specifying questions.

- Originating question is a statement of what one wants to know and it can range from ascertaining facts to explain empirical uniformities or variations.

- The question of rationale states why the originating question is worth asking and what will happen to other parts of knowledge or practice as a result of answering the question.

- The specifying questions are concerned with specifying the conditions that point toward possible answers to the originating question in terms that satisfy the rationale". (Sharma, S.L)

Step 5: Formulate objectives.

The basic and sub-objectives of the study need to be clearly stated. Basically, learning priorities arise from research issues. It is important to define clear main and sub-objectives.

Step 6: Assess your objectives.

Now, you should review your objectives and ensure that your research analysis offers the ability to accomplish them. Assess the objectives at the hands in terms of time, expense, money and technological skills. In view of fact, you can also analyse your study questions. Determine what result your analysis would offer. It can bring substantial outcomes in the long-term if you can correctly determine the intent of the research analysis.

Step 7: Double-check.

Go back and give final consideration to whether or not you are sufficiently interested in the study, and have adequate resources to undertake it.

Conclusion

Identification and formulation of a problem represent the starting point in a research process. The meaning of entire research cannot be emphasized without appropriate selection or formulation of research problems. Simply, we can say that success of the research process
mainly depends on appropriate formulation of the research problem. Improper formation of the research problem may, in later times, create unexpected difficulties for the researcher.

2.1. B. Review of Literature

2.1. B.A.1. Introduction

In social science research, a relevant literature review is a fundamental part and guiding factor to the whole research process. The researcher needs to identify relevant existing literature in your area of study. The researcher can go through various resources such as books, journals, internet, and electronic journals, audios or videos, Government documents archives, etc. to collect information. Through the process of literature review, the researcher can strengthen the base of knowledge and amalgamate your research finding with existing knowledge. This consideration may support or contradict other research findings already done.

The initial stage of every research is the formation of research questions or problems. The acquisition of available knowledge helps the researcher to make a theoretical background and develop the methodology of your research topic.

2.1. B.A.2- Function

Ranjit Kumar proposing four functions of literature reviews;

1- A literature review helps the researcher to bring “clarity and focus to research problems: It helps the researcher to whole understand your subarea and what others enquired before your study. It helps to conceptualize or clarity your research problem. The literature review helps the researcher to focus on his study based on what other researchers suggested to further study as well as if there is any gap in existing knowledge into a selected area of study.

2- Improving your research methodology: A review of literature helps the researcher to understand how other researchers studied and used methodologies for their inquiry. It is helpful to researchers to understand the drawback of methodologies other used and problems faced with them. It is helpful to choose appropriate methodology in their study through the analysis of different methodological perspectives.

3- Expanding knowledge in your research area: Literature reviews helpful to widen your knowledge in your research study. The researcher gets ideas of theories, puts forward other researchers in their studies, “how the findings of your study fit into the existing body of knowledge”.

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4- Enabling you to contextualize your findings: One of the different parts is that, how research findings fit into the existing body of knowledge. The researcher can compare findings with other findings of the research and can put forward novel findings from the study.

The researcher should not write the entire reviewed literature in one heading. The researcher should develop or list out the main theme from selected literature and should write a subheading based on the main theme. These subheadings should be precise, descriptive, or the theme in question and follow a logical progression. It means that in writing of reviewed literature, a thematic presentation should follow a logical progression. The researcher should provide academic reference styles to the quotations and citations from the literature selected for your study.

Review of literature helped to understand;

- Existing knowledge about the topic.
- Concepts and theories used for a particular topic.
- To know research methods pertain to the topic
- What controversies about the topic and how it is studied exist.
- To know key contributors their findings to the topic.

When you going to review literature, the following point should keep in mind;

1- Should note down the details of materials. You go through as a part of the literature review, otherwise, you may forget to include in the bibliography.

2- Researchers should approach literature with a critical point of view. Developing critical reading skills not merely entirely criticism of other works, but it is a way to understand the significance of the work. It helps you to understand the strength and drawbacks of the study, including its methodology, theoretical background, and credibility of the findings.

3- The selection and reading of literature should be based on your research question. Reviewed literature represents ``how your research questions are important”.

4- Review literature helps in the stage of your findings and conclusions.

5- No need to include everything you need in the literature. Review literature helps you to develop an argument and useful thought that is appropriate to your selected topic.

6- A researcher should not stop reading when your research design starts. Searching and reading of relevant literature should continue to end your writing of the findings and
conclusions. “Indeed, you may want to make quite substantial revisions of your review towards the end of writing up your work”.

2.1. B.A.3- Types- Review of literature

We can classify the review of literature into three types. That’s are, Systematic review, Narrative review, and Integrative review

❖ **Systematic review**

The term met synthesis coined by Stern and Harris. The prefix Meta derived from Greek, meaning that beyond or transcending and the word Synthesis means, merging or bringing together.

The systematic review emerged based on two reasons; one is that it eliminates biases of the researcher and it promotes through reviewing the existing literature in an area. Secondly, it provides evidence-based solutions to all problems. The systematic review method is also more effective in the field of social policymaking. It provides a comprehensive review of the literature.

**Definition**

A systematic review has been defined as a “replicable, scientific and transparent process that aims to minimize bias through exhaustive literature searches of published and unpublished studies and by providing an audit-trial of the reviewer's decisions, procedures, and conclusions”

**Steps**

1- Define the purpose and scope of the review: The researcher should define, purpose of research questions and scope of the review according to key topics of research and sample of the research.

2- Seek out studies relevant to the scope and purpose of the review: the selected article should be relevant to the research questions. According to the research questions, the researcher can use keywords and terms to find out relevant articles. Researchers can include an appropriate article from databases through the use of keywords and terms.

3- Appraise the studies from the second step: the reviewer should consider the area/region and time of the study. “Based on the strict application of the criteria formulated, the appraisal process will lead to the production of a list of all the published outputs on which the review will be based”. The quality of the review is based on the research questions and criteria used by researchers for their study. These
criteria should represent the research design and research methods. Research efficacy, design, and research methods can analyse through a systematic review.

4- Analyse each study and synthesize the result: the reviewer's synthesis results and findings of the studies. Reviewers can summarise quantitative data with statistics. In both qualitative and quantitative studies, the researcher can summarise the findings in narrative and summary tables. The crux findings and results should specify systematically.

The systematic review provides a foundation to form research design and transparency. A systematic review includes findings of a large number of quantitative studies, this meta-analysis approach provides comprehensive results of different studies, including its cause and effects of variables. A qualitative research meta-ethnography approach is used to synthesize findings in qualitative research studies and secondary sources.

**Four types of systematic reviews**

1- Meta-analysis- meta-analysis coined by Glass, to integrate results of various quantitative studies, According to research hypotheses. Two major goals of the meta-analysis are; estimate the means and variability of effect size across the resulting studies.

2- Rapid view- the rapid view is comprehensive and instantaneous reviews within a limited time. Rapid reviews are mainly used by government policymakers, health care administrators, and health professionals. Rapid view most appropriate when limited time and insufficient resources and funding. A systematic review was completed within 6 months or 1 year. But rapid view completed within weeks or a few days. It provides only an abstract of the selected literature and methodological contributions of the studies.

3- Meta summary- it is a method to synthesis qualitative research findings in topical or systematic-based data through a review of selected literature. According to “Sandelowski and Barroso, Meta summary is a form of systematic review or integration of qualitative findings in a target domain that are themselves topical or thematic summaries or surveys of data”. Findings are presented based on a thematic or topical level not on an interpretative level.

4- Meta-synthesis- Meta-synthesis is a method of systematic review or synthesis of qualitative research findings in an interpretative manner. During the late 1960s and early 1970s, this method, Meta-synthesis, was primarily used by sociologists Glaser
and Strauss, to study Status passage. They synthesized four studies within the theme of “process of dying and various other major life transitions”. But they didn’t represent their study as a meta-synthesis.

**Difference between Meta-synthesis and meta-analysis**

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<th>Meta-synthesis</th>
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<td>Integrate qualitative findings</td>
<td>Integration of quantitative findings</td>
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<tr>
<td>Interpretative analysis</td>
<td>Involves aggregating quantitative findings</td>
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<tr>
<td>Theory development</td>
<td>Theory testing</td>
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<tr>
<td>Goal- more hermeneutic, aims to understand and explain a phenomenon</td>
<td>Simply Meta-synthesis provides novel knowledge through the incorporation of findings in existing studies.</td>
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Meta-synthesis also tries to include translated findings of other studies. In this translation, metaphors, concepts, and themes are common to both studies, it is known as reciprocal translations. If the findings have any disparity, it is known as Refutational translations. Apart from these, “studies that overlap without being substitutional, which is known as overlapping translations”.

One of the specific types of Meta-synthesis is “Meta Ethnography”, coined by Noblit and Hare in 1988. It synthesis findings and thoughts of ethnographies. The scholar interprets cultural aspects of the phenomenon, including knowledge, beliefs, behaviours, and lifestyles of various cultural groups. Noblit and Hare point out that Meta ethnography is “a complete study in itself”. It involves comparison and analysis of texts, as well as providing new interpretation to all aspects related to culture.

❖ **Narrative review**

We can see the majority of reviews are in the form of narrative. It provides broad perspectives on a topic in a comprehensive and objective analysis. This approach is suitable for qualitative researchers those studies based on interpretative / inductive research methods.

Flexibility is one of the advantages of the narrative review. Narrative reviews provide critique and summarize the crux of part of literature, do not provide extensive information on the studies. It analyses and synthesizes past research methodologies findings and research gaps of the existing studies. But also provide the background to present scenarios and accentuate the importance of new studies. So it brings up to date knowledge and relevant bodies of certain issues. The narrative review helps the researchers to formulate research
questions and hypotheses. Simply it is a process of including findings of primary studies and provides descriptive analysis rather than the use of statistics. The narrative review helps us to establish a theoretical framework and provide guidance for your whole research process. A narrative review is a traditional way of reviewing existing knowledge.

A book, *seven steps to a comprehensive literature review*, by Anthony Jonwuegbuzie and Rebecca K Frels, points out four types of narrative reviews.

1- General literature review- This review focused on the important features and critical aspects of existing knowledge. It generally describes different information of the literature, including significant findings, theoretical and methodological aspects of the particular subject. This type of literature can be used for giving an introduction to a research report, thesis, dissertation, and essay. Through a general literature review, the researcher can form and define what are the objectives of the research hypotheses.

2- Theoretical literature review- The reviewer examines the role of theory in the frame and shape of research. The reviewer can understand which theory is applied to a particular topic.

3- Methodological literature review- Every research study is based on research questions, methodology, and design. In this type of review, the reviewer analyses design and methods used in research studies. So scholars can find out the strengths and weaknesses of the study. It helped to minimize the drawback of methods and designs in their studies. A methodological literature review provides direction to future studies.

4- Historical literature review- reviewer goes through wide literature in fields of history. It provides the historical background of the situation or particular problems. Historical literature review tries to trace the evolution of the problems mentioned in literature or previous studies.

❖ Integrative review
An integrative review is a combination of empirical and theoretical literature to obtain streamlined knowledge of a particular topic or phenomenon. Integrative review using both qualitative and quantitative-based methodologies. It helped to describe concepts and issues thematically. Integrative review addressing the role of research methods and theories in the entire research process as well as the strength and weaknesses of the selected literature. Pittway in his article, systematic literature review points out principles behind systematic
2.1. B.A.4- Steps to writing a review of literature

The researcher should have an idea about what you want to study and focus on research topics. Ranjit Kumar also points out four steps to conducting a literature review. Firstly, searching for the existing literature in your area. The researcher can use mainly three sources such as books, journals, and the internet, according to the selected problem.

The second step is reviewing the selected literature. After the collection of relevant literature, the researcher needs to arrange literature based on the themes of the study. Through the literature review, a researcher can develop many themes based on the major topic that a researcher can also build a theoretical framework for their study.

The third step is developing a theoretical framework. The researcher can obtain information from various sources. Researchers develop a theoretical framework based on your research topic and main theme. Review of literature and theoretical framework are closely connected. The researcher can’t develop a theoretical framework without a review of the literature and vice versa.

The fourth step is that, developing a conceptual framework. “The conceptual framework is the basis of your problem. It stems from the theoretical framework and usually focuses on the section which becomes the basis of your study”.

Apart from these steps, we can use the following steps to do a review of literature.

● Selecting a review topic

The selection of the review topic is based on the research topic and research questions. The review preparation should be based on theme and topic-oriented. So the reviewer should be aware of the availability of relevant literature to avoid obstacles at the time of writing the review. The formed topics and subtopics should address the main objectives of the research.

But choosing a topic is a difficult task due to a lack of knowledge in a selected area. The scholar needs to go through broadly available reading materials of your selected area of the research. It will help the reviewer familiar with keywords and issues regarding areas of the study. Primarily reviewers can collect information and relevant themes through findings of articles available in the library and inquiry with experts in the fields of study.
• **Searching relevant articles**
  After the selection of the topic, the reviewer can search and identify appropriate literature for reviewing. Searching relevant articles enhance quality and influence the entire research process. Today, scholar’s mainly search literature through computers and electronic databases. We can access vast information and data through an electronic database quickly. Nowadays, innumerable databases are available which deals with different fields of information. So the reviewer needs to identify which databases are suitable for the selected topic. Most of the universities provide a database facility to students with usernames and passwords. The reviewer can access enormous e-journals and articles through database examples for the social science database, Social science citation index, Proquest, Jstor, inflibnet.shodhganga, Scopus, Google Scholar, EBSCO, Gale, Sage e reference, etc. most universities and organizations promote e-publication through their sites.

  Use of suitable keywords helps the reviewer to identify appropriate literature for their study. The reviewer may get more relevant literature through searching for alternative terms and the use of synonyms. A scholar can search literature in a database with the use of combining keywords. The situations commands are called Boolean Operators, most commonly using Boolean operations are, And, Or and Not. In the use of keywords narrowing focus and productive results of the topic.

• **Analysing and synthesizing the literature**
  After the selection of relevant literature, you can begin to analyse and synthesize data from the included literature. The reviewer can identify relevant information and findings from the resources. The extracted data should organize in a meaningful way. The reviewer can synthesize qualitative and quantitative findings through methods and techniques like meta-analysis, narrative analysis, met ethnography, etc.

  Most articles include a summary or abstract at the beginning of the paper. It makes a sense of brief ideas about the article. Later, the reviewer can make decisions that literature includes or excludes in the research study.

  The scholar should extract and point out information from the resources such as author, publication, date, used method and purpose used in the study, major findings, and similarities or differences with other studies. Reviewers can classify and review selected literature by type of sources.

• **Organization and writing the review**
  Literature review leads leaders to understand the exact theme or topic presented in your research. It also demonstrates the profound and precise knowledge of a specific area of
Systematic review shows how existing literature relates to your study and it mentions how existing problems are solved through your research work.

The reviewer should demonstrate knowledge clearly and comprehensively. Reviewers should avoid long confusing words at the time of writing a review. The written review should follow a logical structure with information, body, and conclusion. The introduction part must include the purpose of the review and abstract of the problem. It not only elaborates the main theme of the research topic but also a scope of knowledge in a particular area. Main body of the review should comprise findings from the selected literature. Some key points must be kept in mind to write the main body of the literature review.

1- Extract major information such as qualitative or quantitative approach, purposes, theories, methodologies, or conclusions, etc from selected works of literature.
2- Summarize and compare with other studies. Also, demonstrate how it is relevant for your research.
3- Integrate abstract data and findings from figures and tables used in the original literature. Main body of the review should contain the strength and weakness of selected literature and a clear description of current knowledge.
4- Your research, the reviewer should point out some recommendations for future studies.

- **Reference or Bibliography**

Reference should include a full bibliographical list of all the books, articles, and other databases that are referred to in your study. Simply, the reference part includes all sourced materials that you have read as a part of the research. The cited text source must be included in reference sections. The details of referred literature need to record immediately as soon as complete. Provide a reference to each literature helpful to understand the historical development of the subject and “recognize that your research builds on the works of others. The researcher should keep a record regarding what literature, you read, details of bibliography, and reference from the beginning of your research”.

If you are engaged in large project work, you can use note cards and electronic data management systems for preparing references. It helps to release tension, at the final stage of your research. Sometimes styles of referencing depend on the decisions of institutions. Some universities provide referencing systems for students. The software tools like ProCite, endnote, and reference manager, used for managing bibliographies. It helps to create your
reference database. One of the free software, Biblioexpress (a version of Biblioscape), offered bibliographic referencing with user support, especially for students. The reference list also provides a way to future studies those who are interested in studying this topic. Accurate and adequate details should include in reference or bibliography.

**Avoid plagiarism**

When writing a literature review, you do not take and use another person’s thoughts and words without giving an appropriate citation. The reviewer needs to give appropriate citations to the source you mentioned in research. Webster dictionary defines “plagiarist as one who plagiarizes, or purloins the words, writings, or ideas of another, and passes them off as his own; a literary thief”. So simply we can say that, plagiarism as “taking someone words or ideas as if they were your own”

Simply plagiarism means “reproducing another person's work without attribution”. The reviewer should provide a citation to the source of information. Newsome and Bruce's Oliver point out that what you need to cite or don’t cite when writing a literature review.

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<th>Do cite</th>
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<td>● Quotes or paraphrase</td>
<td>● Common knowledge</td>
</tr>
<tr>
<td>● Summaries or reviews</td>
<td>● A fact that is easily verified</td>
</tr>
<tr>
<td>● Information is derived from any source other than yourself.</td>
<td>● Every sentence, if the same source contribute to several sentences</td>
</tr>
<tr>
<td>● A source of further information that you lack to include</td>
<td>● Each subsequent time you use the same information with the same source</td>
</tr>
<tr>
<td>● Intellectual property belonging to any source other than your self</td>
<td>● Your own observation, or opinion, unless you have published them elsewhere</td>
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Plagiarism is considered academic cheating and unethical. Nowadays, different software is used for detecting plagiarism.

**Tactics to avoid plagiarism**

- Follow instructions provided by authors
- Provide citations and acknowledge all information and data, even thoughts, ideas, and words from other sources.
- Provide quotation marks to material taken directly from other sources.
- Provide accurate citation and references
- To make a summary and paraphrase in a simple and objective way
- Aware of copyright law
Express factual information in your own words

2.1. B.A.5. Conclusion

Review of literature a significant process in your whole research. It provides deep knowledge in the fields of study, including different methodologies and theories. Scholar develops knowledge in their fields through existing literature and should follow thematic or topic-oriented. As well as a researcher can build methodological and theoretical background with the help of relevant literature. A Literature review provides clarity to your research problem and conceptual framework. So, researchers need to involve great effort in the complete process of literature review.

2. 1. C- RESEARCH QUESTION

2. 1. C.A.1- Introduction

Systematic research process begins with formulations of research questions from your research area. Researchers can develop one or more research questions from your interested area. It is a question(s) that represent what you want to investigate. The entire phases of your research depend on the research questions. Literature review, theory, and research methods as well as research design closely linked with research questions. Most of the research begins with general ideas of the topic. The formulation of research questions gives focus and direction to your research. Research questions may differ according to the research approach of the study, whether it is quantitative or qualitative research.

2.1. C.A.2- Research questions

The formulation of the research question has a pivotal role in the research process. It helps the researcher to decide on research design and methods. Research question trying to portrait, what the researcher is trying to find out, and how to conduct the remaining phases of the research. But you need to think of a few possible relevant questions before the formation of the final question. So the researcher should go through appropriate literature regarding your study. Good research questions, enhance quality of research otherwise it may lead to poor research results.

Research questions are a significant phase in the research process. The unambiguous research question may lead to poor or unfocused research. Alan Brayman, points out the significance of research questions.

- Help to select relevant literature
- Research questions will help to make decisions regarding research design
• Guide your decisions about what data to collect and from whom
• Guide your analysis of your data
• Guide your writing up of your research report
• Help you from going off in unnecessary directions
• Provide your readers with a clearer sense of what your research about

Research questions and literature review are closely related. Reading relevant literature helps researchers to formulate new questions and revise already formed questions.

Zina O’Leary demonstrates the relevance of research questions. Well expressed research questions define and provide tremendous information of your project- the topic, the nature of the research endeavour, the questions you are interested in, constructs variables and indicates whether you foresee a relationship between variables, it means, impacts, increases, decreases, relationships, correlation, and causes. “A well-defined, well-articulated research question will act as a blueprint of your project”.

2.1. C.A.3- Types of research questions

Social scientists developed diverse typologies of research questions. These typologies are useful to answer different problems arising in the research. De Vaus’s, proposed two types of social research questions, one is, Descriptive and another is, Explanatory.

In descriptive questions, a researcher describes answers in an explanatory way. But who needs a thorough understanding of facts and dimensions of problems selected for your research. Acquiring enumerable data helps to construct research questions. De Vaus’s classified “W questions” under the heading of descriptive and explanatory questions.

Descriptive questions include, what, who, when, and where questions. In explanatory questions comprises how and why questions. This categorization helps you to classify research questions into descriptive or explanatory. It will give priority to research questions. So the researcher can direct concentration toward the sort of information you will require.

Denscombe (2010) in his book, Ground rules for social research, points out 6 types of research questions.

1- Forecasting an outcome- it predicting future events.
2- Explaining causes or consequences of event/phenomenon
3- Criticizing or evaluating a phenomenon
4- Describing something
5- Developing good practice
6- Empowerment

These typologies help to make an idea, what kind of questions are put forward through research questions. Apart from these typologies, Patrick White, proposed a new typology, is “Comparison”. “Making an appropriate comparison is a vital part of the descriptive stage of social research”. In social research comparisons helpful to analyse differences descriptively. But keep in mind that, should give priority to descriptive questions before addressing explanatory ones. So appropriate categorization of research questions provides guidance and enhances the quality of your research work.

The researcher can formulate numerous questions on your interested topics. But you need to prioritize the most important questions and then eliminate other questions. The researcher must be able to give justification for selected questions. Researchers can arrange questions hierarchically into “main and Subsidiary questions”.

Subsidiary questions were formulated from the main questions. Answering subsidiary questions helpful to answer the main questions. But ancillary sub-questions didn’t help to answer the main questions. To address ancillary sub-questions expand scope of your study, not provide focus and direction. So it is better to avoid conducting small research projects. Hierarchical classification, “main and subsidiary questions” useful to identify and remove any ancillary questions and to contribute your efforts on developing the main and contributory questions” (Patrick White). This classification helps the researcher and readers to focus on the main theme of your research. Formulated questions sometimes may need to change before completion of your project.

Researchers should use brief and clear language in research questions. These questions should be written in a single sentence, including important details. So the precise questions provide aim and focus on your research. Well-defined research questions help the researcher to set limitations and boundaries to your research. The prepared research questions should have clarity, otherwise, these may lead to misinterpretation about your research project. Researchers need to care about the use of words in research questions. Reckless use of words may be misinterpreted and lead to minimizing the relevance of the inquiry. To avoid unambiguous and unnecessary technical language is a significant point while writing research questions.
Patrick white, in his book, *Developing research questions*, points out some problems related to the forms and content of research questions.

Problems of forms- problems of forms associated with the formation of question structure. This formulation is related to three problems; questions and other statements, many questions and false dichotomies, Tautological questions.

Questions and other statements- Researchers need to make “open-ended” types of questions. These questions should follow a “question mark” otherwise it cannot be considered as a question.

How can I avoid problematic questions while preparing research questions?

- Should construct open-ended questions
- Use a question mark after the questions
- Construct research design after the formation of a set of the set of questions
- Avoid compound questions
- Avoid use of the term “or” in your questions
- Do not ask tautological questions (not same questions repeatedly)
- Don’t use false presumption in your research questions
- Research questions must be answerable through empirical inquiry and evidence
- Reduce the use of “why” questions in your research questions. These questions are difficult to define and lack direction as well as clarity
- Use “w” questions such as who, what, when, where, and how, instead of why questions
- Avoid value judgment questions
- Not to confound your research questions with your data collection questions

2.1. C.A.4- Conclusion

Research questions are a central part of your research. It includes whole information of the research. It provides focus and guidelines until the completion of your research. Research starts with an idea that comes from life experience or from reading. The researcher elaborates this idea through relevant literature and it helps to create significant research questions. At the same time, more reading helps you to reformulate the research questions.

2.1. D- Objectives

2.1. D.A.1- Introduction

Research is a systematic and organized investigation of a problem to attain a solution or to the enhancement of existing knowledge. To get the right solution to a problem, a clear statement of objectives is essential. So research objectives have a significant role in the research process. Simply we can say that objectives are a goal proposed to accomplish
through a study or activity. Basically, the research objectives are formulated from the purpose of the study. So a thorough understanding of “research objectives” is necessary for the framework of entire research. The proper formulation of research objectives will help you to develop research methodology as well as the collection, analysis, and interpretation of data. Objectives should be written at the primary stage of research. So they can be assessed at the conclusion of the research whether they were accomplished.

2.1. D.A.2- Objectives

Researchers try to find out new topics or issues in order to study. Scholar formulates precise Questions and finds out answers in a systematic inquiry. It helps to create new ideas and lead to future research in that area. It addresses the “what” Question such as what are the causes of corruption in a public organization. So the researcher needs to formulate objectives according to the new topic of problem belated for study.

Objectives are an essential component in social science research. It is a goal-oriented statement that reveals intention, nature, and purpose of your study. So the reader gets an idea about what you are proposing through research. Researchers need to use clear and doubtless words in objectives.

Why research objectives?

- It provides focus to your research
- Helps to identify variables to be measured.
- Provide limitations to your research.
- Helps to avoid unnecessary data in the phase of collecting data.

Objective should write in the format of action verb, for example, to calculate to describe, to explain, etc. Do not use vague non-active verbs, it may create difficulty in analysis and misleads your actual intention. It helps to organize study in your different phases of research. The logically and systematically formulated objective helps to develop research methodology and leads to the systematic collection of data, analysis, and interpretation of data.

Researchers need to give attention or take care at the time in of formulation of research objectives the major factors are following:

- Research objectives should form in the format of action-oriented.
- Should be aware of the context of the research topic.
- Should point out in a logical manner with an emphasis on research problems.
- Put forward achievable objectives.
Should not use unambiguous and complex words. It may create doubts in your research study so use clear and precise language while writing research objectives.

Research objectives are a crucial role in any research. Research objectives determine the reliability and influence of every phase of your research.

2.1. D.A.3- Characteristics of Objectives

Ranjit Kumar points out that researchers should be careful to frame objectives. He specifies some characteristics of the wording of objectives.

1. Clear
2. Complete
3. Specific
4. Identify the main variables to be correlated
5. Identify the direction of the relationship

These characteristics are attributed to a different type of research. As per objectives, Ranjit classified research into descriptive, correlational, explanatory, and exploratory. In descriptive research, researchers systematically analyse and describe the phenomenon and problems of issues. So the main objectives should distinctively describe with emphasis on the research topic. In correlation research, researchers try to discover the relationship between two or more phenomenon variables or situations. The researcher needs to correlate main variables with the main objectives in explanatory or exploratory research. Researcher tries to find out the answer to the question of “how and why” situations or phenomena happening in society and there is any relationship between them. In this type of research, the researcher needs to formulate main objectives to test the relationship between phenomenon and variables.

Norman Blaikie points out some essential factors or characteristics to research objectives. Research objectives include exploration, description, explanation, understanding, prediction, change, evaluation and impact assessment. The first five characteristics are related to basic research and the rest of them include in applied research.

- To explore – Researcher begins to investigate or understand social phenomena or subjects never been researched before.

Exploration: - Researcher can effectively apply exploratory research when the topic has not been investigated yet or have no more knowledge or information about the topic. In this research, the researcher mainly explores more in the area of existing
little information or knowledge. Ranjit Kumar mentioned that exploratory studies were also conducted to develop, refine, and/or test measurement tools and procedures. Exploratory research is also known as formulative research studies. This research helps us to gain a detailed or accurate understanding of the target problem or better ideas about the present situation as well as new insights into the topic.

Mainly exploratory research conducted at the beginning of a project. So it helps to vanquish arising problems or comprehend unexpected findings. The researcher can use flexible methods to access information from required fields. Due to its flexibility, researchers can easily make rapport with the studying individual or group. But sometimes it may also lead to raising doubt and developing obstruction from the sample of the study. It may affect your entire research process.

Anol Bhattacherjee, points out goals of explorative research. 1- To scope out the magnitude or extent of a particular phenomenon, problem, or behaviour. 2- To generate some initial ideas about that phenomenon. 3- To test the feasibility of undertaking a more extensive study regarding that phenomenon.

- To describe – Researcher provides a systematic descriptive analysis of social phenomenon’s or variables

  **Description:** - Researcher provides a detailed description of a phenomenon as a result of scientific observation. Scholar carefully observes what is happening in a particular condition. It analyses the relationship and characteristics of selected samples in a particular time and conditions. So scholar’s portrait the observed phenomenon through words or numerical terms.

- To explain – “to explain is to establish the elements, factors or mechanisms that are responsible for producing state or regularities in the social phenomenon”.

  **Explanation:** - The researcher tries to identify the causes of occurrence outcome of a phenomenon. It provides a detailed analysis of “social phenomena, attitudes, behaviour, social relationships, social process, and social structures” (Norman Blaike). The explanation will help us to more understanding. We can use 3 explanatory strategies to understand; inductive, deductive and reproductive.

  - Inductive: “Explanation is achieved by locating a particular pattern within a known and more general pattern or network of relationships”

  - Deductive: “Explanation is achieved by constructing a deductive argument to which the phenomenon to be explained is the conclusion”.

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● Retroductive: It tries to explain the cause and effect of a pattern produced in society.

● To understand – Researchers find out reasons for social action or social phenomenon or events.

● To predict – To predict future conditions of a social phenomenon or human actions.
  Prediction: - It makes some statements about future conditions within particular situations. These predictions are related to existing knowledge at a particular time. This prediction can be achieved through two ways- “Well established pattern of association between concepts (Inductive research strategy) second by shifting the emphasis in a theoretical argument (Deductive research strategy). It analyses observed patterns on the basis of other factors. It also analyses one pattern on the basis of existence of other imagined parts.

● To change – To understand and explain changes in social phenomenon or situations.
  Change: In this type of research, objective “change “tries to make may or changes in society as a part of the analysis of an existing system or outcome of the research. Change can bring through well planning, explanation and understanding of a particular situation. Researchers formulate research objectives with the intention of change of existing conditions.

● To evaluate – To evaluate the impact or outcome of social programmers as well as for policy formation.
  Evaluation: - In evaluation research, researcher evaluates the policy and programmes implemented in the society. It tries to look at the come or effectiveness of the implemented programme, especially whether the programme's goals achieved its aim or not. Through this evaluation help to form advanced programmes in future.

● To assess impacts – To analyse consequences of each factor existing in society, including implementation of projects, technological impacts and social structure or actions.
  Impact assessment: - Researcher analyses the impact of particular implemented action. Social impact assessment is regarded as “Assessment of predicting the demographic, socio-economical, institutional, community and psychological impact of resource development and large scale construction projects, as well as economic practises and programmes.” So the impact assessment tries to analyse positive and negative consequences of present or proposed actions.
2.1. D.A.4- Formation of Research Objectives

Singh, Kultar proposed criteria for formation of an objective, it is popularly known as SMART. He suggests that researchers need to create an objective on the basis of SMART criteria.

- Specific – Objective should form specifically with preference to aim for the study you are trying to achieve.
- Measurable – Objective should be measurable.
- Attainable – The researcher or organization needs to from attainable objective unattainable objective may discourage research participants.
- Realistic – Need to form an objective in realistically with preference to human and economic resources.
- Time-bound – Should formulate objectives attainable in a specified time frame.

2.1. D.A.5- Classification of Objectives

Generally, objectives can be divided into two:

- Main objectives
- Sub objectives

The main objectives provide an overall view of the study. The objective generally states what you expert through your research. It separates general objectives into different small themes. In a logical manner. But sub-objectives provide specific aspects of the research topic within your main objectives. Specific/sub-objectives systematically break down various aspects and key factors of the problems. It addresses questions like what, where and what purpose of your study. The researcher can numerically point out one specific theme in a sub-objective. A reader can understand, through objectives, which type of research is adopted by researchers. It also helps researchers to determine which type of research design is suitable to achieve main and sub-objectives. In a Qualitative study, objectives put forward aren’t exact as in a Quantitative study. Due to its flexibility, a researcher can include new ideas while collecting data. The researcher should use action-oriented words at the time of writing objectives such as to determine, to understand, to find out, etc.

Main objectives

To find out the impact of flood on the life of human beings.

Sub objectives
1-To identify the employment status of people after a flood.

2-To ascertain psychological condition after a flood.

3-To identify the relationship between environmental conditions and life changes.

Doodly, O and Bailey, ME, in their book portrait that, Newell and Burnard, divide objectives into primary objectives and secondary objectives. The objectives should be; “related to a research question, cover all aspects of the problem, specifically ordered in a logical sequence, take into consideration the available resources, including time.” It should be;

- Grounded in the problem statement.
- Clear and concise.
- Logically and conceptually linked.
- Clearly phrased in operational terms.
- Available with the expected time frame and available resources for the study.

2.1. D.A.6- Common Errors

- One of the common errors that researchers portrait research aim and objectives into a single paragraph. It may be difficult to comprehend to the readers what the research is trying to achieve. So general research objectives and specific research objectives should clearly be distinguished in a separate sentence with usually numbering.

- Vague and ambiguous use of words in research aims and objectives. It may lead to the consequences of misunderstanding and misinterpretation from the researchers.

- Combining Research objectives and research questions in a “single list.” This can be very confounding and hard to follow. So researchers need to list out either series of research objectives or series of research objectives.

- Another common error is confusing research objectives and projective objectives.” We know that research objectives emphasize to expand knowledge in a particular area through your research. But projective objectives emphasize what tasks need to be completed every day as a part of the project. These objectives are more practical oriented such as time for data collection or field works and report writing.

Researchers point out projective objectives in the part of ‘Research objective’. So combining both objectives may lead to confusion; scholars need to properly arrange and point out projective objectives in the part of project management.
2.1. D.A.7- Conclusion

Objectives are logical and concrete assertions, which explains what the researcher is trying to understand. The formulation of clear and concise objectives helps the researcher to focus on the study and in the phase of data collection, the researcher, can avoid the data which are not relevant for study. A research objective must be attainable, it means that a researcher should remember about the accessible time, infrastructure facilities, and other resources necessarily required for research. Before framing the research objective, you should go through all the advancements in the area of your research and discover any gap in the existing knowledge that should be tended to. This will help you to frame suitable objectives for research study.

2.1. E- HYPOTHESES

Construction of a hypothesis is an important step in research. Hypotheses primarily arise from a set of ‘hunches’ that are tested through a study and one can conduct a perfectly valid study without having these hunches or speculations. However, in epidemiological studies, to narrow the field of investigation, it is important to formulate hypotheses. The importance of hypotheses lies in their ability to bring direction, specificity and focus to a research study. They tell a researcher what specific information to collect, and thereby provide greater focus.

As a researcher you do not know about a phenomenon, a situation, the prevalence of a condition in a population or about the outcome of a programme, but you do have a hunch to form the basis of certain assumptions or guesses. You test these, mostly one by one, by collecting information that will enable you to conclude if your hunch was right. The verification process can have one of three outcomes. Your hunch may prove to be: right, partially right or wrong. Without this process of verification, you cannot conclude anything about the validity of your assumption. Hence, a hypothesis is a hunch, assumption, suspicion, assertion or an idea about a phenomenon, relationship or situation, the reality or truth of which you do not know. A researcher calls these assumptions, assertions, statements or hunches hypotheses and they become the basis of an enquiry. In most studies the hypothesis will be based upon either previous studies or your own or someone else’s observations.

Definitions of hypothesis

According to Kerlinger, ‘A hypothesis is a conjectural statement of the relationship between two or more variables’.
Webster’s Third New International Dictionary (1976) defines a hypothesis as ‘a proposition, condition, or principle which is assumed, perhaps without belief, in order to draw out its logical consequences and by this method to test its accord with facts which are known or may be determined’.

Black and Champion define a hypothesis as ‘a tentative statement about something, the validity of which is usually unknown’

From the above definitions it is apparent that a hypothesis has certain characteristics:

1 It is a tentative proposition.

2 Its validity is unknown.

3 In most cases, it specifies a relationship between two or more variables.

**The functions of a hypothesis**

While some researchers believe that to conduct a study requires a hypothesis, having a hypothesis is not essential as already mentioned. However, a hypothesis is important in terms of bringing clarity to the research problem. Specifically, a hypothesis serves the following functions:

- The formulation of a hypothesis provides a study with focus. It tells you what specific aspects of a research problem to investigate.

- A hypothesis tells you what data to collect and what not to collect, thereby providing focus to the study.

- As it provides a focus, the construction of a hypothesis enhances objectivity in a study.

- A hypothesis may enable you to add to the formulation of theory. It enables you to conclude specifically what is true or what is false.

**The testing of a hypothesis**

To test a hypothesis you need to go through a process that comprises three phases: (1) constructing a hypothesis; (2) gathering appropriate evidence; and (3) analysing evidence to draw conclusions as to its validity. It is only after analysing the evidence that you can conclude whether your hunch or hypothesis was true or false. When concluding about a hypothesis, conventionally, you specifically make a statement about the correctness or otherwise of a hypothesis in the form of ‘the hypothesis is true’ or ‘the hypothesis is false’. It is therefore imperative that you formulate your hypothesis clearly, precisely and in a form
that is testable. In arriving at a conclusion about the validity of your hypothesis, the way you collect your evidence is of central importance and it is therefore essential that your study design, sample, data collection method(s), data analysis and conclusions, and communication of the conclusions be valid, appropriate and free from any bias.

**The features of good a hypothesis**

There are a number of considerations to keep in mind when constructing a hypothesis, as they are important for valid verification. The wording of a hypothesis therefore must have certain attributes that make it easier for you to ascertain its validity. These attributes are:

- A hypothesis should be simple, specific and conceptually clear. There is no place for ambiguity in the construction of a hypothesis, as ambiguity will make the verification of your hypothesis almost impossible. It should be ‘unidimensional’ – that is, it should test only one relationship or hunch at a time. To be able to develop a good hypothesis you must be familiar with the subject area (the literature review is of immense help). The more insight you have into a problem, the easier it is to construct a hypothesis.

- A hypothesis should be capable of verification. Methods and techniques must be available for data collection and analysis. There is no point in formulating a hypothesis if it cannot be subjected to verification because there are no techniques to verify it. However, this does not necessarily mean that you should not formulate a hypothesis for which there are no methods of verification. You might, in the process of doing your research, develop new techniques to verify it.

- A hypothesis should be related to the existing body of knowledge. It is important that your hypothesis emerges from the existing body of knowledge, and that it adds to it, as this is an important function of research. This can only be achieved if the hypothesis has its roots in the existing body of knowledge.

- A hypothesis should be operationalisable. This means that it can be expressed in terms that can be measured. If it cannot be measured, it cannot be tested and, hence, no conclusions can be drawn.

**Types of hypothesis**

Theoretically there should be only one type of hypothesis that is the research hypothesis – the basis of your investigation. However, because of the conventions in scientific enquiries and because of the wording used in the construction of a hypothesis,
hypotheses can be classified into several types. Broadly, there are two categories of hypothesis:

1. Research hypotheses;

2. Alternate hypotheses.

The formulation of an alternate hypothesis is a convention in scientific circles. Its main function is to explicitly specify the relationship that will be considered as true in case the research hypothesis proves to be wrong. In a way, an alternate hypothesis is the opposite of the research hypothesis. Conventionally, a null hypothesis, or hypothesis of no difference, is formulated as an alternate hypothesis.

When you construct a hypothesis stipulating that there is no difference between two situations, groups, outcomes, or the prevalence of a condition or phenomenon, this is called a null hypothesis and is usually written as H0. A hypothesis in which a researcher stipulates that there will be a difference but does not specify its magnitude is called a hypothesis of difference.

A researcher may have enough knowledge about the smoking behaviour of the community or the treatment programme and its likely outcomes to speculate almost the exact prevalence of the situation or the outcome of a treatment programme in quantitative units. Examine the third hypothesis in both sets of examples: the level of infant mortality is 30/1000 and the proportion of female and male smokers is 60 and 30 per cent respectively. This type of hypothesis is known as a hypothesis of point-prevalence. The fourth type of hypothesis stipulates the prevalence of a phenomenon in different population groups (‘twice as many female as male smokers’). This type of hypothesis is called a hypothesis of association.

Hypotheses in qualitative research

One of the differences in qualitative and quantitative research is around the importance attached to and the extent of use of hypotheses when undertaking a study. As qualitative studies are characterised by an emphasis on describing, understanding and exploring phenomena using categorical and subjective measurement procedures, construction of hypotheses is neither advocated nor practised. In addition, as the degree of specificity needed to test a hypothesis is deliberately not adhered to in qualitative research, the testing of a hypothesis becomes difficult and meaningless. This does not mean that you cannot construct hypotheses in qualitative research; the non-specificity of the problem as well as methods and procedures make the convention of hypotheses formulation far less practicable and advisable. Even within quantitative studies the importance attached to and the practice of
formulating hypotheses vary markedly from one academic discipline to another. For example, hypotheses are most prevalent in epidemiological research and research relating to the establishment of causality of a phenomenon, where it becomes important to narrow the list of probable causes so that a specific cause-and-effect relationship can be studied. In the social sciences formulation of hypotheses is mostly dependent on the researcher and the academic discipline, whereas within an academic discipline it varies markedly between the quantitative and qualitative research paradigms. Hypotheses bring clarity, specificity and focus to a research problem, but are not essential for a study. You can conduct a valid investigation without constructing a single formal hypothesis. On the other hand, within the context of a research study, you can construct as many hypotheses as you consider being appropriate.

2.2. CONCEPTS

Concepts are basic elements of scientific method but by and large all concepts are abstractions and represent only certain aspects of reality. In the words of P.V. Young “Each new class of data, isolated from other classes on the other basis of definite characteristics, is given name, a label in short hand concept. A concept is in reality a definition in short hand of a class or group of facts”. A concept is an abstract symbol representing an object, a property of object, or a certain phenomena.

Categories of Concept

Concepts are divided into two categories i.e. Concepts by postulation and concept by intuition. The concepts following in the first category have meaning except from the specific theory; When these concepts are used in two different theories these communicate two different meanings, sometimes even different and opposite from each other on the other hand concept by intuition devotes something which is immediately apprehended. The meaning of these concepts is constant whoever uses it. Both the categories of concepts have equal importance and significance in social science research.

Features of Good Concept

- The concepts should be clear, definite and precise.
- The concept should be comprehensive and clear information and understanding.
- The concept should avoid multiple meaning and as far as possible should convey exactly what was intended when the concept was coined.
Types of Concepts

- Concrete concepts: Symbolize material objects which can be seen, touched and fret.
  e.g. book, table etc.
- Abstract concepts refer to properties or characteristics of objects. e.g. weight, height

Characteristics of concepts

- Concepts are symbols which we attach to the bundle of meanings we hold.
- Concepts represent only one part of reality.
- Different people hold different concepts of the same thing.
- Concepts also represent various degree of abstraction.

2.2. B- VARIABLES

2.2. B.A.1- Introduction

Variable is a measurable quantitative value of an image, perception and concepts. Black and Champion defined a variable as a rational unit of analysis that can assume anyone of several designated sets of values. We can’t directly observe these abstract entities as perception, concepts, etc. Some of them believe that we can’t use scientific methods of measuring feelings, judgments, preferences, values and sentiments. Rajiv Kumar points out that we can observe these things by providing appropriate indicators. Everyone’s feelings and sentiments are based on everyday life. So these situations of human beings are different from individuals to individuals. Variables mean attributing quantitative values means to concepts. These quantified values can be measured through use of various scales. On the basis of some attributes, researchers can quantify the qualitative phenomenon. The main focus of the scientific study is to analyse the functional relationship of the variables. A variable is a quantity that can vary from one individual to another.

2.2. B. A.2- Why variables?

Variable has a significant role in all types of research processes. Researchers need to identify variables within the chosen topic. Kerlinger defines that “variable is a symbol to which numerals of values are attached”. Researchers try to analyse independent and dependent variables as well as causes and effect relationships of these variables. In case of study research, researchers engaged in an in-depth or detailed study of a person, group, event, organization, or community. These entities are considered variables. The value of one variable is closely related to the value of other variables. So to analyse or link these variables in terms of cause and effect, help us to predict future conditions.
One of the questions emerging in our mind is that, is there any difference between concepts and variables? Yes, of course. Concept is a cognitive idea, imagination or perception about a thing. These concepts may vary from person to person. We can’t directly measure these concepts. But variables can numerically quantify. One to the subjectivity of concepts, the symbolized construction may vary and it is difficult to compare responses from individuals. Concepts are more subjective and diverse understanding of individuals is difficult to measure.

Example: - concepts-effectiveness, satisfaction, impact, excellent

Variables- Gender, attitudes, age, income, height, weight, religion

How can I convert concepts into variables? If they use concepts in a study, firstly researchers need to identify indicators of that concept with a set of criteria. These indicators should have a logical connection with concepts. For example, take a concept, such as rich; primarily researchers need to identify indicators for the concept “rich”. The concept rich (to consider wealth), may analyse with the indicators of income and assets. To determine the assets, scholars need to find out further indicators, it may include house, vehicles, and investments. Then scholars need to convert each value of indicators into dollars. It will give a total value of assets owned by a person. Based on defined criteria and available information, a scholar can classify or determine if the person is rich or not.

Researchers try to identify variables according to the research topic. Variable is a unit of data that can be changed between different cases. We can analyse it on the basis of the value of the variable. Variables can be analysed on their own (Univariate analysis) with one other variable (Bivariate analysis) or with several others (Multivariate Analysis). A variable analysis is a distinctive feature of quantitative research. The data collected through use of different methods such as a survey or observation method. These may represent characteristics of factual matters or opinion. The type of analysis that can be undertaken depending on the nature of the variable. Scholars try to analyse the relationship between these identified variables. “A statement containing the variable is called a proposition. It may contain one or more than one variable. The proposition having one variable in it may be called a univariate variable. Those with two variables a bivariate proposition and then of course multivariate containing three or more variables.

Before the formulation of a proposition, the researcher has to develop strong logical arguments that could help in establishing the relationship. If the relationship refers to
observable reality, then the proposition can be put to test, and any testable proposition is hypotheses.

2.2. B.A.3- Types of variables

Ranjit Kumar classified variables under three major headings- the causal relationship, the study design, the unit of measurement

Based on causal relationship

A- **Independent variable**- The cause opposed to being responsible for bringing about changes in a phenomenon or situation. Variables that are antecedent to the dependent variable- termed as independent variables. “The cause variable or the one that identifies forces or conditions that act on something else is the independent variable”. The independent variable is “independent of” the prior cause that acts on it, whereas the independent variable “dependent on” the cause.

B- **Dependent variable**- The outcome or changes brought about by the introduction of an independent variable. “The variable that is the effect or is the result or outcome of another variable is the dependent variable. One variable depends upon or is a consequence of the other variables. It is termed as a dependent variable.

Larry B. Christensen and Barke Johnson point out the independent and dependent variables. The Independent variable is an antecedent variable because it must come before another variable if it is to produce a change in it. Dependent variable is the variable that is presumed to be influenced by one or more independent variables. The dependent variable is the variable that is “dependent on” the independent variables

It is not always easy to determine whether the variable is independent or dependent. Two questions help you to identify an independent variable.

First, does it come before other variables in it?

Second, if the variable occurs at the same time, does the researcher suggest that one variable has an impact on another variable?

Independent variables affect or have an impact on other variables. When an independent variable is present, the dependent variable is also present, and with each unit of increase in the independent variable, there is an increase or decrease in the dependent variable also.

The dependent variable also refers to as criterion variables. In statistical analysis, the variable is identified by the symbol (X) for independent variable and by the symbol (Y) for the dependent variable.
For example, if we say that height depends upon age, then height is a dependent variable and weight is an independent variable. Further if in addition to being depend upon age, height also depends upon the individual sex, then the height is a dependent variable and sex is an independent variable.

A cause and effect relationship between an independent variable and a dependent variable is present when changes in the independent variable tend to cause changes in the dependent variables. Sometimes researchers call the dependent variable an outcome variable or a response variable because it is caused to measure the effect of one or more independent variables.

C- **Extraneous variable**- Independent variables that are not related to the purpose of the study, but may affect the dependent variable are termed as an extraneous variable. “An almost infinite number of extraneous variables exist that might conceivably affect a given relationship. Some can be treated as an independent or moderating variable, but most must either be assumed or excluded from the study. Such variables have to be identified by the researcher. In order to identify the true relationship between the independent variable and the dependent variable, the effect of the extraneous variables may have to be controlled. This is necessary if we are conducting an experiment where the effect of the confounding factor has to be controlled. A confounding factor is another name used for extraneous variable”.

Several other factors operating in a real-life situation may affect changes in dependent variables. These factors may increase or decrease the magnitude or strength of the relationship between independent and dependent variables.

Extraneous variables, on the other hand, are more readily observed or measured and thus are more easily controlled. An extraneous variable can be controlled by removing the variable causing distraction. It may be eliminated by selecting cases with uniform characteristics and through randomization. Whatever effect is noticed on dependent variables as a result of an extraneous variable(s) is technically described as an ‘experimental error’.

D- **Intervening variables**- also called confounding variables. It links independent and dependent variables, in certain situations the relationship between an independent and dependent variable cannot be established without the intervention of another variable. If you take an example, the researcher needs to study the relationship between unemployment and crime. Unemployment is one of the major factors of crime. The
problem of unemployment may result in a global recession, financial crisis, technological change, geographical immobility etc.

For example, the researcher needs to study the relationship between smoking and cancer. Smoking is one of the causes of cancer. The various factors are to determine those relationships. Such use cigarettes or tobacco in a day, how many times it is used in a day. Food habits and exercise etc.

To consider this example, smoking is the independent variable, cancer is the dependent variable, as well as cause and effect of variables in this relationship, are extraneous variables.

Based on study design

A- Active variables- those variables can be manipulated changed of controlled

B- Attribute variable- those variables cannot be manipulated, changed or controlled and it reveals the characteristics of the sample or population.

Based on the unit of measurement

A- Categorical variables- measured on nominal or ordinal measurement scale.

B- Continuous variables- In continuous variables, means have continuity in their measurement. E.g. age. It can be measured through year and month, income, measured in terms of rupees or Dollars. Measurements are made all either an interval or ratio scale. It classified into 3 types

a- Constant variables- has only one category
   E.g. taxi, tree, water

b- Dichotomous variables- has only two categories
   E.g. male/female, good/bad, yes/no, rich/poor

c- Polytomous variable- can be divided into more than two categories
   E.g.-Religion-Christian, Muslim, Hindu, political parties, labour, liberal, democratic

John W Crosswell and J. David Cresswell put forward some types of variables related to quantitative research.

A- Predicator variables- (Antecedent variable) - The variables used to predict outcome in survey method studies.

B- Outcome variables- (Criterion or response variables) are variables that are considered outcomes or result of predictor variables in survey method studies. Criterion variable is the basis on which the effectiveness of the experimental variable is studied.
C- Intervening or mediating variables- “a basic causal relationship requires only independent variable and dependent variable. The third type of variable, the intervening variable, appears in more causal relationships. It comes between the independent and dependent variable and shows link or mechanism between them”. It stands between independent and dependent variables. It transmits the effect of independent variables on a dependent variable. We can test mediating variables through use of various statistical techniques. It analyses how an independent variable influences a dependent variable. Intervening variables are commonly called mediating or mediator variables. It occurs between two other variables in a causal chain. There are a number of abstract variables in educational/social experiments, which intervene in the effect of experimental or criterion variables. For controlling intervening variable appropriate research design should be used. Intervening variables are hard if not impossible, to observe because they usually have to do with an individual’s feelings like boredom, stress, fatigue, excitement, etc.

D- Moderating variables- Moderator variable is a variable that changes the relationship between other variables. It is a variable that delineates how a relationship changes under different conditions or contexts or for different kinds of people. “Predictor variables that affect the direction and or the strength of the relationship between independent and dependent variables or between predictor and outcome variables”. “These variables act on or intersect with the independent variables, and then together with combination with the independent variables influence the dependent variables”.

E- Categorical variables- any number that is applied to a value has no meaning, other than as a label. A variable that is made up of different types or categories of a phenomenon. Nominal variable- also known as categorical variable comprises categories that cannot be rank-ordered. Example of categorical variables- religion, social class, colour, type of school, etc. E.g. the variable gender is made up of the categories of male or female. In the case of religions, we can categorize it based on a different type. It may include various religions in the world. Such as Christianity, Hindu, Islam, Judaism.

F- Quantitative variables- a variable that varies in degree or amount of a phenomenon. E.g. the variable annual income varies from zero income to a very high-income level.

G- Mediating variables- (intervening variables) - a variable that comes in between other variables, helping to delineate the process through which variables affect one another.
Extraneous variables- a variable that may compete with the independent variable in explaining an outcome. Moderator variable- is a variable that changes the relationship between other variables. It is a variable that delineates how a relationship changes under different conditions or contexts or for different kinds of people.

Other variables

A variable that varies in type or kind. It usually involves different groups. Apart from the above variables, scholars also identified the following variables.

In quantitative analysis, Bryman points out one variable is that **Interval/ ratio variable** - these are variables where the distance between the categories is identical across the range of categories. The highest level of measurement and a very wide range of techniques of analysis can be applied to interval/ratio variables. There is a distinction between interval and ratio variable with a fixed zero points. E.g. percentage score, distances

**Confounding variables**- refer to an extraneous variable that was not controlled for by the researcher and are the reason a particular result occurred. Confounding variable- those aspects of the study of a sample, that might influence the dependent variable (outcome measure) and whose effect may confuse with the effects of the independent variable.

**Continuous or discontinuous variables**- each variable has quantified values. “If the values can be divided into fractions then we call it a continuous variable”. We can assume any numerical value within a specific range. Such a variable can take an infinite number of values: income, temperature, age, or test score; time is an example of continuous variables. Phenomena which can take on quantitatively different values even in decimal points are called “continuous variable”. But all variables are not continuous. If they only are expresses in integer values, they are noncontinuous variables or in statistical language, a discrete variable`. e.g., age is an example of a continuous variable, but the number of children is an example of a noncontinuous variable.

Any variable that has a limited number of distinct values that cannot be divided into fractions, is called a **discontinuous variable**. This variable is also known as a **categorical variable, classificatory variable, or discrete variable**. Some variables have only two values, rejecting the presence or absence of property: employed or unemployed, male or female.
**Discrete variable**- a variable for which the individual values fall on the scale only with distinct gaps is called a discrete variable.

**Controlled variable**- the effectiveness of an experimental variable is examined by comparing it with another variable is known as a controlled variable.

**Organismic variable**- those variables which cannot be manipulated and cannot themselves point out causal relations are called organismic variables.

**Measuring variable**

The type of univariate analysis that can be undertaken with a categorical variable is restricted to identifying the frequency with which values occur or calculating the percentage of responses falling into one or more categories.

Ordinal variable (these are variables whose categories can be rank-ordered, but the distances between the categories are not equal across the range. E.g. - letter grades) and cardinal variables (represent a ‘real value’ for example someone height in centimetres or number of children that they have) can be discussed in terms of measures of central tendency- the mean, median and mode. And measures of dispersion such as range and standard deviation.

An inferential statistical test can be used to measure the relationship between variables in bivariate and multivariate analysis. Inferential tests like the Chi-square test of independence- which examines the relationship between two categorical variables. And t-test, which can be used where there is one cardinal variable and one dichotomous categorical variable. (One that can take two possible values, such as Gender)

There are four levels of measurement on a continuum of discrete and continuous-nominal scale, ordinal scale, interval screen, and ratio scale.

- Nominal scale- when the variable can be categorized but cannot be ranked. For example, gender, marital status, race, diagnosis, blood group scale
- Ordinal scale- one where the variables are categorized that can be ranked. For example, levels of pain- mild, moderate, and severe.
- Interval scale- measure equal numerical distances between the intervals. It can be categorized as well as rank. Example differences between 70 degrees and 80 degrees will be the same as differences between 30 degrees and 40 degrees. So the interval is to 10 degrees in both the categories.
• Ratio scale—measure variable which can be categorized, ranked have equal intervals, and can represent a continuum of values.

2.2. B.A.4- Conclusion

Variables are measurable units of data that can vary between different cases. In sociological research, the researcher mainly considers a human being as the unit of analysis, it may include class, age, gender, race, etc. Sociological research primarily gives emphasis to understanding the relationship between variable or cause and effect relations between variables, etc. Variable is a term commonly used in research, especially in quantitative research. Because it mainly explains the relationship between variables. These variables can be measured through different scales or criteria.

2.2. C. Conceptual and theoretical framework
2.2. C.A.1- Introductions

Social science research can be characterized as the methods and techniques researchers follow to understand, clarify, and describe the social world. Social science research isn't typically led under fixed lab conditions. Sociology research is concerned about complex social conduct and unique social context, for example, culture, economic status, and educational status, etc. The theoretical and conceptual framework clarifies the way of research and grounds it immovably in theoretical development. The overall aim of the two frameworks is to make research findings more meaningful, acceptable to the theoretical constructs in the research field, and ensures generalizability.

2.2. C.A.2- Conceptual framework

A Conceptual framework is a structure that the researcher accepts can best clarify the phenomenon to be studied. It is connected with the concepts, empirical research, and significant theories utilized in advancing and systemizing the information upheld by the researcher. The conceptual framework is a vital portion of a research project and a key success factor in the research.

In such a manner, the conceptual framework works as a vital tool, point of convergence, mental guide, and outline for the entire research study. An investigation without a good conceptual framework may contain unimportant hypotheses and experience frail methodological contentions. We previously examined the importance of the term "concept". Explanation of concepts is besides basic as complemented by qualitative research. The researcher needs to present the advancement of key concepts with a complete working
definition that will apply to the specific study. Researchers are at freedom to choose existing theories or frameworks, however, need to refine it to suit the idea of the context of their research as well as the nature of the research questions.

The quantitative researcher is intrigued by the connections between the variables, instead of in portraying the variables. Ordinarily, every variable has a specific conceptual status in the researcher's reasoning. This implies that the researchers have a conceptual framework for considering the variable as well as their connections and context. The peculiarity of a quantitative survey is that its conceptual framework can be plainly portrayed.

From a statistical point of view, the conceptual framework depicts the connection between the principle concepts of a study. It should be logically arranged that will help you to give an image or visual view of how ideas in an investigation identify with each other. It is a visual depiction of the main theory and concept of research. Such a system is typically presented as a graphical or schematic outline portraying the key ideas and their connections. In this view, a conceptual framework is needed at the start of a research project to distinguish key concepts, conceptualize these, and show their interrelationship. Ordinarily, such portrayal is performed graphically as well as narrative way.

2.2. C.A.3- What is a Theoretical Framework?

The researcher makes his/her research project based on theory. Theory or theories about parts of human undertaking that can be helpful to the investigation of events. The researcher should thoughtfully choose the important theory or theories that support the information base of the phenomenon to be researched. The research question of the study and the purpose behind the research must involve recognizable parts of the theoretical framework and must concur with the attestations proclaimed by the theorists of the selected theory.

Consequently, it directs a researcher's decision for a research plan and an information analysis plan. The theoretical framework likewise manages the sort of information to be gathered for a specific report. The theoretical system, subsequently, helps the researcher in finding a suitable research approach, analytical, and methodology for his/her research inquiry. It makes research discoveries more significant and generalizable.

2.2. C.A.4- Conclusion

The theoretical and conceptual frameworks offer life to research. Accordingly, their research discoveries become insignificant because of the wrong use of a reasonable theoretical framework or conceptual framework. Research without the theoretical or
conceptual framework makes it difficult for readers in learning the scholastic position and the hidden variables to the researcher's attestations as well as a hypothesis.

The framework makes it simpler for the researcher to effortlessly indicate and characterize the concepts inside the problem of the study. Theoretical and conceptual interface the different components of the research process, for example, the researchers from the earlier information and interests, the literature review, hypothesis, techniques, data analysis, and findings.

2.3- RESEARCH DESIGN

2.3. A.1- Definition

The research design refers to the overall strategy that the researcher chooses to integrate the different components of the study in a coherent and logical way, thereby, ensuring the effective addressing of the research problem. It constitutes the framework for the collection, measurement, and analysis of data. It is a “blueprint” for empirical research aimed at answering specific research questions or testing specific hypotheses, and must specify at least three processes: (1) the data collection process, (2) the instrument development process, and (3) the sampling process. Decisions regarding what, where, when, how much, by what means concerning an inquiry or a research study constitute a research design. It can be viewed as the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. In fact, the research design is the conceptual structure within which research is conducted. As such the design includes an outline of what the researcher will do from writing the hypothesis and its operational implications to the final analysis of data.

2.3. A.2. Functions of research design

The function of a research design is to ensure that the evidence obtained enables the researcher to effectively address the research problem logically and as unambiguously as possible. In social sciences research, obtaining information relevant to the research problem generally entails specifying the type of evidence needed to test a theory, to evaluate a program, or to accurately describe and assess meaning related to an observable phenomenon. The major functions of a research design can be identified as follows;

1. As a Blueprint of the study

Perhaps the most important function of research designs is that they provide the researcher with a blueprint for studying social questions. Without adequate drawings and plans, a homebuilder would become burdened with insurmountable problems such as where to place the foundation, what kinds and qualities of materials to use, how many workers are
required, how large should the home be, and so on. By the same token, a social researcher faces comparable obstacles if he commences his study without some kind of research plan. To minimize these research problems, there are several decisions the researcher should make before beginning the project. These problems are given strong consideration in a research proposal, prospectus, or study outline that many investigators elect to construct in advance of their research.

2. Directional Function

Research designs dictate boundaries of research activity and enable the investigator to channel his/her energies in specific directions. Without the delineation of research boundaries and/or objectives, a researcher's activities in a single project could be virtually endless. With clear research objectives in view, however, investigators can proceed systematically towards the achievement of certain goals. The structure provided by the research plan enables the investigator to reach closure and consider any given project completed.

3. Anticipatory Function

A third function of a research design is that it enables the investigator to anticipate potential problems in the implementation of the study. It is customary for researchers to review current literature central to the topic under investigation. In the course of the literature review, they may learn about new or alternative approaches to their problems. At the same time they can acquire information concerning what can reasonably be expected to occur in their own investigation. More important, many authors provide criticisms of their own work so that future investigations of the same or similar topics may be improved. In addition, the design can function to provide some estimate of the cost of the research, possible measurement problems, and the optimal allocation of resources such as assistants (manpower) and material.

2.3. A. 3. Types of research design

There are various types of research design accruing to the nature of the study and methods employed.

1. Action research design

The essentials of action research design follow a characteristic cycle whereby initially an exploratory stance is adopted, where an understanding of a problem is developed and plans are made for some form of interventionary strategy. Then the intervention is carried out (the action in Action Research) during which time, pertinent observations are collected in various forms. The new interventional strategies are carried out, and the cyclic process repeats, continuing until a sufficient understanding of (or implementable solution for) the
problem is achieved. The protocol is iterative or cyclical in nature and is intended to foster deeper understanding of a given situation, starting with conceptualizing and particularizing the problem and moving through several interventions and evaluations.

Action research design is a collaborative and adaptive research design that lends itself to use in work or community situations. Design focuses on pragmatic and solution-driven research rather than testing theories. When practitioners use action research it has the potential to increase the amount they learn consciously from their experience. The action research cycle can also be regarded as a learning cycle. Action search studies often have direct and obvious relevance to practice. There are no hidden controls or pre-emption of direction by the researcher. It is harder to do than conducting conventional studies because the researcher takes on responsibilities for encouraging change as well as for research. Action research is much harder to write up because you probably can’t use a standard format to report your findings effectively. Personal over-involvement of the researcher may bias research results. The cyclic nature of action research to achieve its twin outcomes of action (e.g. change) and research (e.g. understanding) is time-consuming and complex to conduct.

2. Case study design

A case study is an in-depth study of a particular research problem rather than a sweeping statistical survey. It is often used to narrow down a very broad field of research into one or a few easily researchable examples. The case study research design is also useful for testing whether a specific theory and model actually applies to phenomena in the real world. It is a useful design when not much is known about a phenomenon. Case study approach excels at bringing us to an understanding of a complex issue through detailed contextual analysis of a limited number of events or conditions and their relationships. A researcher using a case study design can apply a variety of methodologies and rely on a variety of sources to investigate a research problem. Design can extend experience or add strength to what is already known through previous research. Social scientists, in particular, make wide use of this research design to examine contemporary real-life situations and provide the basis for the application of concepts and theories and extension of methods. The design can provide detailed descriptions of specific and rare cases.

A single or small number of cases offers little basis for establishing reliability or to generalize the findings to a wider population of people, places, or things. The intense exposure to study of the case may bias a researcher's interpretation of the findings. Design does not facilitate assessment of cause and effect relationships. Vital information may be
missing, making the case hard to interpret. The case may not be representative or typical of the larger problem being investigated. If the criteria for selecting a case is because it represents a very unusual or unique phenomenon or problem for study, then your interpretation of the findings can only apply to that particular case.

3. **Causality research designs**

Causality studies may be thought of as understanding a phenomenon in terms of conditional statements in the form, “If X, then Y.” This type of research is used to measure what impact a specific change will have on existing norms and assumptions. Most social scientists seek causal explanations that reflect tests of hypotheses. Causal effect (nomothetic perspective) occurs when variation in one phenomenon, an independent variable, leads to or results, on average, in variation in another phenomenon, the dependent variable.

Conditions necessary for determining causality:

- **Empirical association**—a valid conclusion is based on finding an association between the independent variable and the dependent variable.
- **Appropriate time order**—to conclude that causation was involved, one must see that cases were exposed to variation in the independent variable before variation in the dependent variable.
- **Nonspuriousness**—a relationship between two variables that is not due to variation in a third variable.

Causality research designs helps researchers understand why the world works the way it does through the process of proving a causal link between variables and eliminating other possibilities. Replication is possible. There is greater confidence the study has internal validity due to the systematic subject selection and equity of groups being compared. Not all relationships are casual! The possibility always exists that, by sheer coincidence, two unrelated events appear to be related. Conclusions about causal relationships are difficult to determine due to a variety of extraneous and confounding variables that exist in a social environment. This means causality can only be inferred, never proven. If two variables are correlated, the cause must come before the effect. However, even though two variables might be causally related, it can sometimes be difficult to determine which variable comes first and therefore to establish which variable is the actual cause and which is the actual effect.

4. **Cohort Study Design**

Often used in the medical sciences, but also found in the applied social sciences, a cohort study generally refers to a study conducted over a period of time involving members of a
population which the subject or representative member comes from, and who are united by some commonality or similarity. Using a quantitative framework, a cohort study makes note of statistical occurrence within a specialized subgroup, united by same or similar characteristics that are relevant to the research problem being investigated, rather than studying statistical occurrence within the general population. Using a qualitative framework, cohort studies generally gather data using methods of observation. Cohorts can be either "open" or "closed."

- **Open Cohort Studies** [dynamic populations, such as the population of Los Angeles] involve a population that is defined just by the state of being a part of the study in question (and being monitored for the outcome). Date of entry and exit from the study is individually defined, therefore, the size of the study population is not constant. In open cohort studies, researchers can only calculate rate based data, such as, incidence rates and variants thereof.

- **Closed Cohort Studies** [static populations, such as patients entered into a clinical trial] involve participants who enter into the study at one defining point in time and where it is presumed that no new participants can enter the cohort. Given this, the number of study participants remains constant (or can only decrease).

5. **Cross-sectional research design**

Cross-sectional research designs have three distinctive features: no time dimension, a reliance on existing differences rather than change following intervention; and, groups are selected based on existing differences rather than random allocation. The cross-sectional design can only measure differences between or from among a variety of people, subjects, or phenomena rather than change. As such, researchers using this design can only employ a relative passive approach to making causal inferences based on findings. Cross-sectional studies provide a 'snapshot' of the outcome and the characteristics associated with it, at a specific point in time. Unlike the experimental design where there is an active intervention by the researcher to produce and measure change or to create differences, cross-sectional designs focus on studying and drawing inferences from existing differences between people, subjects, or phenomena.

6. **Descriptive research design**

Descriptive research designs help provide answers to the questions of who, what, when, where, and how associated with a particular research problem; a descriptive study cannot
conclusively ascertain answers to why. Descriptive research is used to obtain information concerning the current status of the phenomena and to describe "what exists" with respect to variables or conditions in a situation. The subject is being observed in a completely natural and unchanged natural environment. True experiments, whilst giving analysable data, often adversely influence the normal behaviour of the subject. Descriptive research is often used as a precursor to more quantitatively research designs, the general overview giving some valuable pointers as to what variables are worth testing quantitatively. If the limitations are understood, they can be a useful tool in developing a more focused study. Descriptive studies can yield rich data that lead to important recommendations. This Approach collects a large amount of data for detailed analysis.

7. **Experimental Research Design**

A blueprint of the procedure that enables the researcher to maintain control over all factors that may affect the result of an experiment. In doing this, the researcher attempts to determine or predict what may occur. Experimental Research is often used where there is time priority in a causal relationship (cause precedes effect), there is consistency in a causal relationship (a cause will always lead to the same effect), and the magnitude of the correlation is great. The classic experimental design specifies an experimental group and a control group. The independent variable is administered to the experimental group and not to the control group, and both groups are measured on the same dependent variable. Subsequent experimental designs have used more groups and more measurements over longer periods. True experiments must have control, randomization, and manipulation.

Experimental research allows the researcher to control the situation. In doing so, it allows researchers to answer the question, “what causes something to occur?” It permits the researcher to identify cause and affect relationships between variables and to distinguish placebo effects from treatment effects. Experimental research designs support the ability to limit alternative explanations and to infer direct causal relationships in the study. This approach provides the highest level of evidence for single studies.

8. **Exploratory design**

An exploratory design is conducted about a research problem when there are few or no earlier studies to refer to. The focus is on gaining insights and familiarity for later investigation or undertaken when problems are in a preliminary stage of investigation. The goals of exploratory research are intended to produce the following possible insights:

- Familiarity with basic details, settings and concerns.
• Well-grounded picture of the situation being developed.
• Generation of new ideas and assumptions, development of tentative theories or hypotheses.
• Determination about whether a study is feasible in the future.
• Issues get refined for more systematic investigation and formulation of new research questions.
• Direction for future research and techniques get developed.

This Design is a useful approach for gaining background information on a particular topic. Exploratory research is flexible and can address research questions of all types (what, why, how). Provides an opportunity to define new terms and clarify existing concepts. Exploratory research is often used to generate formal hypotheses and develop more precise research problems. Exploratory studies help establish research priorities.

2.3. A. 3. Conclusion

There are three aspects a good research design does. It includes, first of all, a summary of the different elements of the inquiry. It defines the general approach to science which will be followed and describes the data collection techniques and interpretation that will be used. Second, the design of research gives a basis for the choice of research approach in relation to research problems. It describes how the different techniques of data collection and analysis apply to the particular study questions being studied and demonstrates how they can yield data that are relevant for the form of research questions being investigated. In this way, the design needs to be suitable for purpose. Third, the research architecture explains how the core elements of the research project are connected together. It describes the rationale of the testing process as it passes from one step to the next, and illustrates how the processes of data collection and interpretation are compatible with their general philosophy.

2.4- PROPOSAL, SYNOPSIS AND ABSTRACT, PREPARATION OF RESEARCH PROPOSAL
2.4. A. 1- Introduction

Research proposals mainly need two contexts; one is related to academic fields and especially to acquire a qualification, degree, PG, or doctoral degree. Another is research proposed by an organization or institution with an adequate fund grant. Research proposals should be clear and unambiguous. You need to demonstrate what the researcher is trying to find out? What and how it will do? As well as significance and context of research should be
pointed out with simple languages and systematic ways. A careful and thorough research proposal will show the scholar sense of topic and existing available knowledge regarding the topic. For most of the research, the scholar needs to produce a research proposal according to some guidelines provided by an institution or organization. You need to produce it in a specific format. The funding organization for institutions provides some guidance and advice to the preparation of the research proposal.

2.4. A.2- Characteristics of proposal documents

❖ A proposal is a straightforward document
A proposal should open with a straightforward statement of the problem to be researched”. No need to describe “why the researcher became interested in the problem of feels a burning desire to research it”. Simply proposal is an action plan for future

❖ A proposal is not a literary production
The proposal is not a creative work of the researcher. It should avoid complexity and write in a precise language. The explicit description of research problem, Collection of data method, data analysis process want to elucidate in research proposal.

❖ A proposal should be organized clearly and systematically
Proposals are written in a common style with basic paragraph form. Heading and subheading are the absolute most regularly utilized procedure to communicate the organizational structure. You should convey the outline of your logical thought in your own words. The appropriate headings are essential for organized structure of the research proposal. Apart from the chapter title, the scholar can include subheadings within chapter heading for the research proposal.

2.4. A.3- Functions of Research Proposal
Keith proposed three functions of research proposal- communication, plan, and contract. Communication- research proposal provides a clear idea about researcher's target and plan of the research. It provides the details of the funding organization and human resource requirements for the research. In academic research, the scholar needs to submit the proposal to the research committee and the approval of the project depends on committee judgment. The researcher's intention should clearly communicate to the research committee.

Contract- according to the research funding context, the Grant approved and made a contract between researcher and funding resources. But in the context of an academy, the
contract is between student and supervisor or university. Sometimes this funding may change at the ongoing process of entire research.

Plan- the proposal should contain an action plan for your entire research. The plan changed according to different research methods or methodologies. The plan addresses questions like “how you are going to do and what you are going to do”. Researchers can take appropriate decisions in each phase of the research process.

Punch Keith points out that the research proposal should deal with what you are going to study? What is the proposed research about? What is trying to find out or achieve? How is this research planned? How will it go about doing that? What is the outcome and how is it relevant?.
The author proposed three major useful tips to develop a proposal.
1- Firstly, we need to outline the study, it may in the format of sentence, words or a visual format
2- Begin to write a draft and identify major ideas
3- Modify and edit each sentence
A research proposal should include a “statement about the purpose of the research, how it is to be carried out, the resource implications of the proposed investigation, as well as the time scale for completion”.

Through research proposals, researchers need to convey 3 major aspects of the entire research project.
1- Research objectives and significance
The researcher should portrait the Intention, purpose, and importance of research study through ‘research proposal’. It is an action plan for the entire research process. The research questions and hypotheses need to be stated in the research proposal. A scholar needs an appropriate justification for selection of samples, its characteristics and Research Design choice for research study. The relevant literature should be reviewed with an emphasis on the research topic.

2- Your technical qualification
Researcher experience and expertise are essential factors to develop a research proposal, even in the subject knowledge and methodological qualifications.

3- Required budget for the study
The financial budget of research projects is mainly related to organizational research. Not give more importance to academic studies, such as Masters Dissertation and doctoral
thesis. A scholar needs to consider the adequate resources available for completing the research project.

A research proposal is an outline or blueprint of the research you want to do. It is a systematic plan for future studies. Research proposals provide focus, set boundaries, and provide direction to what actions are needed into a different stage of the research. All academic or professional fields of research, whether it is qualitative, quantitative, or mixed methods require a research proposal before entering into research. It helps the readers to comprehend the conceptualization of the entire research process that you are going to do. So it helps to prove the validity and appropriateness of the study. The research proposal gets approval from a research committee or any particular organization. Unless it can’t take further action or start your research. Another points out that we can use similar headings in both quantitative and qualitative research. But only differences in use of procedure and methodologies adapting to the research.

The research proposal changes according to university to university, or discipline to discipline. The researcher acquires to take a decision on which is most appropriate to your situation. Ranjit Kumar emphasizes that “research proposal's main function is to detail the operational plan for obtaining answers to your research questions. In doing so it ensures and reassures the reader of the validity of the methodology for obtaining answers to your research questions accurately and objectively”.

John W Cresswell emphasizes that you need to answer the following questions in your research proposal.

1- What do readers need to better understand your topic?
2- What do leaders need to know about your topic
3- What do you propose to study
4- Where is now study proposing and who are the people you will study
5- What method do you plan to use to collect with atom collect data
6- How will analyse the data?
7- How will you validate your findings
8- What ethical issues will you study present?
9- What do preliminary results show about the practicability and value of the proposed study?

To answer these questions into one section provides different phases to the research proposal. In the case of qualitative research, there is no one structure existing to research proposals. The author proposes two models of qualitative research proposal, one is based on
the “Constructivist of interpretivist perspective” and another is based on the “participatory or social justice model” of qualitative research.

2.4. B- Synopsis

2.4. B.A.1- Introduction

Synopsis is primarily provided a brief explanation of research work or outline of the research on a scientific basis. It provides the logical justification for the research, the research objectives, the proposed methods for data collection and recording formats, and/or questionnaires and interview guides. The synopsis is based on the information provided by the experienced resource person and by secondary sources of information. The full synopsis should be a maximum of 3-4,000 words, excluding appendices. The process of a synopsis is a prerequisite for approval and registration of research topics by the said university/funding organization.

2.4. B.A.2- Steps in synopsis


1- Title-
The scholar/researcher needs to provide a short and explanatory title to the synopsis.

The following point, proposed by Prabhakara, G.N, needs to care while providing title to your study.

- “The title should be concise but informative
- The title must be short, active, and brisk in flavour to attract the attention
- The title should not be abbreviated (except on certain usage of internationally accepted abbreviation)
- Research/Dissertation topic given should be as brief as possible but should carry as much information as required”.

2- Abstract-
The abstract should briefly express the issue, the main objective(s), the theories/conceptual framework using. It mainly depends on the research topic and attitudes of the researcher, and the method(s). The theoretical alone should give the reader a clear and precise idea about the research in not more than 150 words.

3- Introduction
Here the researcher needs to describe the main problem of the study. In this part, the scholar needs to describe the significance or rationale for your research context. You need to address the questions like, why you choose a particular project or why you are research essential. How is it different from existing research reports? How this research fills the gap in existing knowledge? The scholar needs to point out the relevance of his/her research according to existing literature observation/ experience.

4- Objectives

Most of the research synopsis should incorporate aims and objectives. In the part of aim, you need to provide the overall purpose or intention of your research and in the part of objectives, a specific statement to accomplish the aims. Generally, objectives of the study can be outlined, looking to the feasibility, applicability, and utility of the study. Objectives should focus on the key questions raised in the need of the study. The main objectives should be clearly stated with a logical structure. If any sub-objective, need to provide a precise and specific manner.

5- Review of literature

Review of literature is always a significant part of any research. Reading this part reflects the proficiency and capability of the researcher. Review of Literature shall present the previous work published in literature related to the topic of the investigation. Each review requires a separate write up. The degree and accentuation of the Literature will rely upon the nature of the study. Review in different heading is valued. It is suggested to write 3 to 5 references about the subject and work already done and published. It should be related to the objectives of the study Methodology/ methods

In this part, the scholar/researcher needs to describe accepted research methodology and method in your research to fulfil the research objectives. You need to address the questions like why did you choose this methodology or methods for your research? How these methods and methodology are relevant to your study other than other methods or methodologies. A scholar needs to include details like sample methods of data collection and analysis.

6- Time table

Researchers need to make a feasible time framework for the entire research process. Scholars should have an idea about the time taken for each phase of the research. Also need to provide an appropriate period to conduct background study, data collection, including question framework, review of literature data analysis, and report writing. If you have a scheduled time frame, help you to research complete successively.
7- Budgets and resources

Researchers should have an idea about available funding and resources. Adequate funding helps you to complete research in its aim and objectives. Scholars should be aware of the available funding for your research. Student researchers should not bother about this part. You need to make the research methods and methodology according to the available resources and budget.

8- Dissemination

In this part, the researcher needs to decide, how to disseminate the findings of your research? This may be in the form of dissemination, written report, journal article or public presentation.

9- List of reference

Reference gives us the source to where the material is available. The preferred material is put acceptably, like author, title, volume number, a serial number of the said volume, page numbers, year of publication, place of publication in case of a journal. For chapters in books and contributions to conference proceedings, the editors and title of the book/proceedings must be added. You can choose a standard form, e.g., a scientific journal, and follow it consistently. All references in the text must be in the list of references and vice versa.

2.4. B.A.3- Conclusion

Synopsis is the first document of any research work. It ought to be mulled over that this report is the initial introduction of the researchers and his/her research work. Consequently, it ought to be made with care. Above data about synopsis will work as a sort of guideline for the further advances we have to take to guarantee that our synopsis arrives at the necessary scholarly level and that we finish on schedule. Therefore, it is especially the responsibility of the researcher to present a synopsis in a reasonable way for our research, and therefore to be present without any contradiction in the views of the readers.

2.4. C-PREPARATION OF RESEARCH PROPOSAL

2.4. C.A.1- How to make a proposal

Most of the research follows a common set of heading in all phases. Keith Punch, proposing a set of heading to a research proposal. 1- Title and title page, 2- Abstract, 3- Introduction: area and topic, background and context, statement of purpose, 4- Research question- General or specific, 5- Conceptual Framework, theory, hypothesis, 6- Literature, 7- Methods: design- strategy and framework, sample, Data Collection- instruments and
procedures, data analysis, 8- Significance 9- Limitations and delimitations, 10- Consent, access, and participant protection, 11- References, 12- Appendices.

These heading can be used for both quantitative and qualitative research. The researcher has the opportunity to make decisions regarding which sections are appropriate to the research, which sections need to combine or reject. Due to the methodological differences, the quantitative and qualitative studies used different headings in research proposals. Some research proposals require the definition of certain terms. It will help to understand technical terms and avoid occurrence of misunderstanding.

❖ **Abstract and title**

An abstract is a summary of a proposal or finished work. It provides a summarized view and intention of the study to readers. An abstract is commonly used in proposals, theses, and research articles in journals. The context research proposal, it mainly deals with two questions.

1- “what the study is about and aims to objectives”
2- “How it intends to do that”.

Researchers need to use precise and unambiguous words at the time of abstract writings. The title should have great significance in research. It must clearly state with the use of a few words. Not make any confusion or misunderstanding in the title. So need to care in the formulation of the title with simple language.

An abstract is a brief explanation of the significant peculiarities of your study. It mainly suggests a final report of your study. Researchers make decisions in abstract, whether it is included or excluded in a research proposal. Generally, the abstract part is mentioned before the introduction and easy to write after completing your research proposal. It should include a brief and precise description of each component in your research proposal, especially the research hypothesis and questions, sample size and characteristics, planning of data collection as well as method of analysis of your collected data.

A brief synopsis of planned research study is mainly placed at the initial part of the proposal. It should include two major factors; one is the objectives of the study and another is the procedure and methodological design that is used in your research. The abstract should be written within one page or less than one page. The Abstract help the readers in three ways;

1- It reveals a significant important perspective of the study before entering a full research proposal.
2- It is a means to comprehend natural of the study
3- It will sometimes be the only part of the proposal that is real when making preliminary sections of applicant proposals

❖ **Introduction: area and topic, background and context and statement of purpose (or aims)**

In the introduction part, the researcher needs to include a background of the research problem. A well-structured introduction helps you to convince the proposal to the readers or research committee. It also points out the already known things and how they connect with existing knowledge. Keith emphasizes that the introduction must include the following contents. a) establishing the problem leading to the study, b) casting the problem within the larger the scholarly literature, c) discussing deficiencies in the literature about the problem, d) targeting an audience, and noting the significance of the problem for the audience.

The introduction part needs to include a clear portrait of the research area and Tropic. As well as what is the purpose of your research? So it reveals the significance and intention of the study. In introduction, the researcher needs to introduce the research topic and its intention to the readers. The researcher needs to emphasize the sensibility of your topic to provide appropriate documental evidence. Research topics get significance through demonstrating the relations between topic and real life. Giving a real-life example not only helps define the concepts you are studying but also provides a vivid illustration of its importance.

In a qualitative research proposal, the researcher needs to consider two important points; the first one is that perspectives behind Research and the other are used to structure the proposed study. In the case of a prestructured qualitative study, research process moving based on an action plan and General or specific research questions. But the unfolding type of research, focus, and structure develop during the proceed of research. It includes “general orienting research questions”. He gives a suggestion that “it is a good idea to get it to the point of your research, stated as purpose in the introduction and leading to the Research questions.

❖ **Research questions- general and specific**

The research questions can classify in terms of specificity. General research questions are more general and abstract. We could not answer it directly due to its general nature. Specific research questions are more specific, detailed and concrete”. We can directly answer the specific research question. It mentioned the required data in its specific questions. There are numerous possible general Research questions within the research topic. These general research questions are subdivided into the form of a specific research question.
Conceptual Framework: theory and hypothesis
Researchers need conceptual clarification in the research proposal. In the case of an unfolding study, “conceptual framework develops during the study”. Theory and hypothesis can be included in a proposal if it is essential. If it is included, the theory should state with the relations of your research topic. Sometimes may conduct to generate new theory or may verify theory, “theory behind them should be shown”.

Literature
Researchers need to point out the relevant literature related to the research topic. It shows how the existing literature deals with the proposed study. A review of literature needs to address all parts of the research topic incomprehensibly. Literature review provides for focus and structure to the proposed study. Researchers need to describe relevant literature reviews regarding the topic. It helps that “how your research study fits in with existing work by building on the existing literature and existing knowledge”. As well as logical statements about “why it is important to conduct this particular study or why the research problem you want to study is important”. Review of literature is an initial step to state the purpose of study as well as through review literature, the researcher convinces the significant study.

Research Design
Design is the arrangement or strategy you will use to examine research question(s). The design to framework may have slight changes in a different form of research. In the case of quantitative research, the researcher may use different variables. Those variables need appropriate descriptions in research proposals. But in the qualitative research, the fact that the plan is less organized and all are more effortlessly portrayed in the procedure section. Design sections are more essentials to mixed research. The appropriate design reveals “what you purpose to do and the order in which you will do it”.

In this section, scholars need to portray how you are going to execute the study from the beginning to the end of the research. It describes the instructions to participants to step by step phases of the research.

Researcher needs to specify “how you propose to analyse your data”. You have to think about how the collected data can be used to test hypotheses or objectives of the study. The “analysis of data” related to our research design. If you can’t identify an appropriate method to analyse data, from research design you need to rethink research design and change it appropriately. In fact, analysis of data primarily depends on forms of research, such as qualitative, quantitative, or mixed-method.
Methods

Researcher needs to indicate the strategy you are applying to research, whether it is a qualitative constitutive or mixed-method. You should have an explanation as to why this method was selected for this research study? “A clear statement of the strategy helps to orient the reader and leads naturally to a description of the design. The design connects the research questions to the data”. Researchers need to take a decision on the specific actions to acquire the specified purpose. Which plan or strategies accepted to answer framed research questions or test hypotheses. These actions are formed on certain needs such as number of samples, instructions to select sample size, which way, and what method is used to collect information from samples. Each researcher should have a corrective action plan for the entire research and needs to be described in the research proposal. These methods are changing according to the research methods, as quantitative, qualitative, or mixed methods. So simply state that, in the part of methods the researcher needs to elucidate the research design and the methods of data collection.

For example, the researcher proposing experimental research needs to formulate an experimental design. In the case study research, scholars need to put forward the case study design, like single or multiple, cross-sectional, or longitudinal.

Sample

Researchers need to indicate the sample size for the study. The choosing or possible sample selection should emphasize rationality or logic of the study”. Scholars need to point out “who or what will be studying and why?” It means that the chosen samples need to be pointed out in the research proposal. It must include details like number of samples, why these samples are chosen? Characteristics of sample, how they will be selected? And why it is important to your research etc. need to be mentioned in your research proposal. So the researcher needs to follow a general guideline for selecting research participants.

- If the study is quantitative- the proposal should include:
  - Sampling strategy- whether it is purposive or what claims will be made for the generalizability of findings.
  - Size of the sample and why
  - How was the sample chosen?
- If the study is qualitative-
  - The sampling strategy, including what intention there, is for the generalizability of findings
  - The extent of the proposal sample
• How was the sample chosen?

❖ Data collection
In this part, the researcher needs to describe the methods used to collect the data or how you are going to collect data. Scholars have the responsibility to prove reliability and validity of the method, and end how these apparatus are relevant to your research. If the interview methods are used for research, scholars need to mention the type of research and what contents are included in the interview. Validity and reliability of the data depend on the apparatus or instruments used in research. If the questionnaire is for data collection, a scholar needs to point out the type of questionnaire and what data collecting through this questionnaire.

A- Instruments for quantitative data collection
If the decision is to already existing data collection instruments, “a brief description of their historical use in research and their basic psychometric characteristics (especially, reliability and validity of information if available) should be included”. If the researcher using new instruments needs to describe the phases involved in it and details of the pre-test.

B- An instrument for qualitative data collection
Researchers need to mention in the proposal what instruments are using for data collection. If the researcher using an interview technique, needs to describe how it developed and pre-tested? Whatever the research, qualitative or quantitative research, a scholar should indicate the data collection methods and what strategy you propose to increase validity and reliability of data. In a qualitative study, data mainly collected from observation, interview, documents, etc. “these are then interpreted by using some schema”. In the case of mixed-method, “you will need to explain your proposed quantitative and qualitative analysis as well as any integrated analysis you might plan”.

❖ Significance
Proposal should mention the significance of the study topic and context have great importance in the research proposal. There are three general areas for the significance and contribution of study to knowledge in the area, to policy consideration, and practitioners. Researchers need to convince the importance and contributions of study to the research committee through research proposals.
❖ **Limitations and Delimitations**
Selected research topics have any limitations, it should be pointed out in the research proposal. Delimitations mean defining the limits, or drawing boundaries around a study, and showing clearly what is and is not included” Consent, access, and participants protections.

The researcher needs to anticipate the particular ethical issues involved in the proposed project, and to indicate in the proposal how they will be dealt with”.

❖ **References**
The referred books should be mentioned in the proposal.

❖ **Appendices**
“These may include any of the following: a timetable for the research, a budget for the research, letters of introduction or permission, consent forms, measuring instruments, questionnaires, interview guide, observation schedules and example of a pilot study or other relevant work already completed”.

Sometimes if a research proposal may not be prepared properly, which can lead to research failure. Some of the imprecise factors in the research proposal are as follows:

➢ Unambiguous statement of aims and objectives
➢ Distinction between a research topic and accepted research methods
➢ Due to broad ‘time framework’ and difficult to achieve the aim in schedule
➢ Chosen topic is not relevant and interesting
➢ Due to failure in the adequate description in data collection method
➢ Lack of description of data analysis
➢ Not appropriate indication of a method, budget and time framework

2.4. C.A.2- Conclusion

Research proposal summarizes details of a research topic and the research questions need to be addressed. It also includes strategies and procedures to acquire answers for research questions. Sometimes a research proposal is analysed by the research committee and provides valuable comments to improve the proposal.

It helps you to take decisions and guidance in various stages of research. It communicates the validity and reliability of your proposed study to the research committee or supervisor and this proposed proposal should be able to answerable its objectives. Research proposals should follow guidelines and academic style.
Module- 3
Data Collection

3.1- Techniques of primary data collection

Collection of data is one of the most important steps in research before the actual collection of data is started. The investigator must prepare a plan for the collection of data. A number of preliminary steps should be taken in planning investigation. The first thing to be observed is whether the problem under study is capable of quantitative expression. The purpose of study must be clearly defined before data collection so that many difficulties can be avoided. It helps the investigator to decide on the data to be collected and the data not to be collected. Moreover, with the object of enquiry in mind, it is always possible to have a uniform approach to different problems. The scope of enquiry should also determine beforehand. If a very large quantity of data are collected they are likely to become unmanageable and a waste within the limits of the scope of the study. Similarly inadequate quantum of data will also lead to serious draw backs ending up in wrong conclusions.

Sources of data collection usually confined to two viz primary sources and secondary sources. Primary data are those collected for the first time by the investigators or enumerators from the field direct. Whereas, secondary data are those that have already been collected by others in some other context. These may be available for reference in journals and other published works. Primary data are original and up to date in character, Secondary data are those which have already been collected by some other persons for their purpose. Primary data are in the shape of raw materials to which statistical methods are applied data are usually in the shape of finished products.

Action research has the dual purpose of inviting social change and the task of contributing to basic social science involvement of action personal in research is very important from several respects. Here are two main features here, (I) Agencies interest in research increases on such occasions of collaboration (2) such a step helps to ensure the relevance and applicability of research in daily life (Experience survey, Leadership studies in industrial groups. Farming surveys Nutrition studies in Education Studies etc). In addition to the Agencies or Organisation and the two other audiences for action research are social scientists and the general public, Application of research findings and their presentation are usually carried out through intern reports and final reports. In this process the role of the mass media, press, radio, TV motion picture etc. are important.
3.1. A- SOURCES OF DATA

In terms of gross divisions, there are only three methods of obtaining data in social research; one can ask people questions, one can observe the behaviour of persons, groups or organisations, and their products or outcomes; or one can utilize existing records or data already gathered for purposes other than one’s own research. In the long established physical sciences, the instruments and techniques of data collection are well developed. In social science the development of techniques for measurement recently become a focus of effort and attention. To some extent the needs of social science for data can be met through techniques of observation and physical measurement. To an increasing degree, however, social science is demanding data which must be reported by individuals out of their current experience. In a sense social scientists have always communicated with people and derived insights from such communications. The problem for social science is to transform the highly subjective process of insights into a systematic method for the collection of data. The collected data to be properly processed and analysed. Here coding and tabulation including cross tables and statistical computations are significant steps.

Data collection is mainly carried out though (1) observation, (2) Questionnaire (3) Schedule and Interview guide (4) census and sample survey

3.1. A. OBSERVATION

3.1. A. A.1 Introduction

Science usually begins through observation and must eventually return to observation for final confirmation. The sociologist should be trained to observe carefully. If he will become a successful observer, he can continue his research with more data at his hands, will be less likely to realize that his object of study is social behaviour, and will also be able to carry out a continuous check on his results more easily. Observation can take on many forms and is at once the most rudimentary and advanced of testing techniques. There are many observational methods available, and each has its own applications.

3.1. A.A.2. Observation

Observation is a way to collect primary data. Observation is a purposeful, systematic and selective way of watching and listening to an interaction or phenomenon as it takes place. There are many situations in which observation is the most appropriate method of data collection; for example, when you want to learn about the interaction in a group, study the dietary patterns of a population, ascertain the functions performed by a worker, or study the behaviour or personality traits of an individual. It is also appropriate in situations where full
and/or accurate information cannot be elicited by questioning, because respondents either are not co-operative or are unaware of the answers because it is difficult for them to detach themselves from the interaction. In summary, when you are more interested in the behaviour than in the perceptions of individuals, or when subjects are so involved in the interaction that they are unable to provide objective information about it, observation is the best approach to collect the required information.

Most of the information people have about social relations is extracted from uncontrolled observation, whether it is a participant or a non-participant. Controls in this context refer to standardization of observational methods or, in some situations, control of variables in an experimental situation. In other words, we have learnt about social activity from experiences we have observed or engaged in, and our findings have not been verified by other observers, by a list of concrete things to be recorded, or by a detailed description of experimental standards.

3.1. A. 2. Types of observation
There are two types of observation:
1 participant observation;
2 non-participant observation.

Participant observation is when you, as a researcher, participate in the activities of the group being observed in the same manner as its members, with or without their knowing that they are being observed. For example, you might want to examine the reactions of the general population towards people in wheelchairs. You can study their reactions by sitting in a wheelchair yourself. Or you might want to study the life of prisoners and pretend to be a prisoner in order to do this.

Non-participant observation, on the other hand, is when you, as a researcher, do not get involved in the activities of the group but remain a passive observer, watching and listening to its activities and drawing conclusions from this. For example, you might want to study the functions carried out by nurses in a hospital. As an observer, you could watch, follow and record the activities as they are performed. After making a number of observations, conclusions could be drawn about the functions nurses carry out in the hospital. Any occupational group in any setting can be observed in the same manner.
Problems with using observation as a method of data collection

The use of observation as a method of data collection may suffer from a number of problems, which is not to suggest that all or any of these necessarily prevail in every situation. But as a beginner you should be aware of these potential problems:

• When individuals or groups become aware that they are being observed, they may change their behaviour. Depending upon the situation, this change could be positive or negative – it may increase or decrease, for example, their productivity – and may occur for a number of reasons. When a change in the behaviour of persons or groups is attributed to their being observed it is known as the Hawthorne effect. The use of observation in such a situation may introduce distortion: what is observed may not represent their normal behaviour.

• There is always the possibility of observer bias. If an observer is not impartial, s/he can easily introduce bias and there is no easy way to verify the observations and the inferences drawn from them.

• The interpretations drawn from observations may vary from observer to observer.

• There is the possibility of incomplete observation and/or recording, which varies with the method of recording. An observer may watch keenly but at the expense of detailed recording. The opposite problem may occur when the observer takes detailed notes but in doing so misses some of the interaction.

Situations in which observations can be made

Observations can be made under two conditions:

1 natural;

2 controlled.

Observing a group in its natural operation rather than intervening in its activities is classified as observation under natural conditions. Introducing a stimulus to the group for it to react to and observing the reaction is called controlled observation.

Recording observations

There are many ways of recording observations. The selection of a method of recording depends upon the purpose of the observation. The way an observation is recorded also determines whether it is a quantitative or qualitative study. Narrative and descriptive recording is mainly used in qualitative research but if you are doing a quantitative study you
would record an observation in categorical form or on a numerical scale. Keep in mind that each method of recording an observation has its advantages and disadvantages:

• Narrative recording – In this form of recording the researcher records a description of the interaction in his/her own words. Such a type of recording clearly falls in the domain of qualitative research. Usually, a researcher makes brief notes while observing the interaction and then soon after completing the observation makes detailed notes in narrative form. In addition, some researchers may interpret the interaction and draw conclusions from it. The biggest advantage of narrative recording is that it provides a deeper insight into the interaction. However, a disadvantage is that an observer may be biased in his/her observation and, therefore, the interpretations and conclusions drawn from the observation may also be biased. In addition, interpretations and conclusions drawn are bound to be subjective reflecting the researcher’s perspectives. Also, if a researcher’s attention is on observing, s/he might forget to record an important piece of interaction and, obviously, in the process of recording, part of the interaction may be missed. Hence, there is always the possibility of incomplete recording and/or observation. In addition, when there are different observers the comparability of narrative recording can be a problem.

• Using scales – At times some observers may prefer to develop a scale in order to rate various aspects of the interaction or phenomenon. The recording is done on a scale developed by the observer/researcher. A scale may be one-, two- or three-directional, depending upon the purpose of the observation. The main advantage of using scales in recording observation is that you do not need to spend time on taking detailed notes and can thus concentrate on observation. On the other hand, the problems with using a scale are that it does not provide specific and in-depth information about the interaction.

• Categorical recording – Sometimes an observer may decide to record his/her observation using categories. The type and number of categories depend upon the type of interaction and the observer’s choice about how to classify the observation. For example, passive/active (two categories); introvert/extrovert (two categories); always/sometimes/never (three categories); strongly agree/agree/uncertain/disagree/strongly disagree (five categories). The use of categories to record an observation may suffer from the same problems as those associated with scales.

• Recording on electronic devices – Observation can also be recorded on videotape or other electronic devices and then analysed. The advantage of recording an interaction in this way is
that the observer can see it a number of times before interpreting an interaction or drawing any conclusions from it and can also invite other professionals to view the interaction in order to arrive at more objective conclusions. However, one of the disadvantages is that some people may feel uncomfortable or may behave differently before a camera. Therefore the interaction may not be a true reflection of the situation.

The choice of a particular method for recording your observation is dependent upon the purpose of the observation, the complexity of the interaction and the type of being observed. It is important to consider these factors before deciding upon the method for recording your observation.

3.1.A. 3. Conclusion

Scientific observation evolves from the most common experience with the subject to some of the most structured, abstract calculation of variables by means of precision instruments. And as science has evolved enormously, easy methods of seeing and hearing are not superseded. Not only do they add to the simple, varied knowledge of social relations from that we all initiate our research, but they're also the key data-gathering tools for several contemporary investigations.

3.1. B- QUESTIONNAIRE

3.1. B.A.1- Introduction

The term questionnaire is refers to record a responses to questions by using a method, questionnaire, that the respondent fills himself or fill with the aid of investigators. In terms of study, this is a collection of issues that are all theoretically connected to a key issue or problems. The use of questionnaires as a means of collecting social data increased rapidly in the twentieth century, alongside the advancement of statistical techniques that allowed researchers to focus on a vast range of cases and complicated data sets. During the nineteenth century and the twentieth century, information about people were obtained not only by the government, but also by medical, industrial and charitable organizations to try to find out more about the social circumstances, especially of people in industrialized cities. Social analysts have tried to find out about people's opinions and values and started to build methods to test them using a variety of questions.

3.1.B. A. 2. Questionnaire

Questionnaire is the structured set of questions to collect data from the respondents of the study. It is described as a document that contains a set of questions, the answers to which
are to be provided personally by the respondents. Questionnaire is used as a tool when: 1) very large samples are desired, 2) costs have to be kept low, 3) the target groups, who are likely to have high response rates are specialized, 4) ease of administration is necessary, and 5) moderate response rate is considered satisfactory.

The questionnaire is a series of questions that the test subjects will answer in a variety of ways. Most questionnaires are intended to collect already structured data and thus provide a collection of responses that the respondent may select from, but others can include more flexible questions that require the respondent to respond to the question in their own way. Both participants are asked the same questions, in the same order and in the same wording and have the same set of responses to pick among.

In deciding whether questionnaire is an appropriate tool for data collection, following four aspects must be born in mind:

1) Identify situations for which questions are best suited.
2) Discuss advantages and disadvantages of a questionnaire as a research tool of data collection,
3) Delineate dimensions to be associated with questionnaire construction.
4) Differentiate between several types of questionnaires

Questionnaires are typically used where a random sample has been collected from a population or when a quota sample is used. The selected sample would depend mostly on study issue and the quality of the data being obtained. However, it is also very popular to use a questionnaire to collect data about all individuals attending a specific event or who have a certain medical condition. In terms of size, the two key points must be remembered are: (a) if it is a representative sample from a population, care must be given to size and to ensure that small populations are appropriately represented; and (b) if it is not a random sample, the groups to be compared must be used in adequate numbers.

The inevitably limited representation which can be drawn from the plan imposes on the researcher the duty to understand as much as possible about his subject matter before the questions begin to be formulated. Ideally, each object in the questionnaire represents, in itself, a hypothesis or part of a hypothesis. In other words, the addition of each object must be justifiable on the basis that the researcher would reasonably assume the response to be important to his core problem. This clearly includes the fullest possible understanding of the field in which he works.
Any questionnaire should be constrained in length and scope. In general, in the absence of special motivations for the respondent, the interview does not stretch much past half an hour, because even this period of time is impossible to manage without the informant getting exhausted. Self-administering questionnaires do not typically take longer than 30 minutes to complete, although an even shorter amount of time is ideal. Such constraints result in an almost terrifying yet required narrowness in the production of a questionnaire. If one considers the difficulty of daily life, there are very few questions that can be answered.

3.1. B. A. 2. Guidelines to prepare the questionnaire

Questionnaires are being used in a variety of ways. Often the questionnaire is used as the foundation for the interview such that there is any connection between the respondent and the interviewer (or at least an interviewer). This can be face to face, by phone, or by e-mail. In such cases, the questionnaire is structured as a self-completion questionnaire for the participant to answer the questionnaires without any of the intervention of the researcher. The respondent may apply a questionnaire to the researcher or send a questionnaire by mail or e-mail, or may access the questionnaire on the Internet.

However, whatever the condition in which the participant addresses the questions, the questions and the option of answers will be the same. If the questionnaire is used as an interview, the interviewer should read the questions and answers in the same manner for all respondents and not give extra support, prompts or suggestions to the respondent, as this can influence the way the respondent listens and answers the questions. The contact between the interviewer and the respondent is essentially confined to questions and responses.

1. The length of the questionnaire should be reasonable.
2. Branching of questions is necessary and it should be clearly typed.
3. There must be adequate space for answers in the questionnaire.
4. Questions should be relevant and avoid abbreviations in the questionnaire.
5. Proper instructions should be given to fill the questionnaire.
6. Negative questions should be avoided and determine the number of response categories.
7. Questions should be clear and unambiguous.
8. Questions should be short and biased terms should be avoided.
9. Respondents must be willing to answer and competent to answer.
10. The questions should be properly and logically arranged.
Formulation of a questionnaire is no different from the more general issue of deciding, as has already been said, what are the relevant questions to be answered. The fact that a questionnaire would be placed into the field at a later does not separate the logical methods to be pursued from the scientific study of the data already obtained. Attempting to develop a questionnaire can be thought of as going from the inside out. What it really suggests is that even the researcher can first try to set down the logical implications of his dilemma and then rely with his own knowledge and literature for questions that are applicable to certain logical implications.

3.1. B. A. 3. Steps in Questionnaire Construction

Questionnaires are constructed in a systematic manner. The process goes through a number of interrelated steps. The most important steps involved in a questionnaire construction are:

1. Preparation: The researcher thinks of various items to be covered in the questionnaire. Arrangement of these items in relation to one another, and taking into consideration questions prepared and used in other similar studies.

2. Constructing the first draft.

3. Self evaluation: the researcher thinks about relevance, symmetry, clarity in language etc.

4. External evaluation: The first draft is given to one or two peers for scrutiny and suggestions for changes.

5. Revision: some questions are eliminated after suggestions.

6. Pre-test or Pilot Study: A pre-test or a pilot study is undertaken to check the suitability of the questionnaire as a whole.

7. Revision: The minor and major changes may be made on the basis of experience gained in pre testing.

8. Second pretesting if amended.

9. Preparing final draft after editing, checking spelling, space for responses, pre-coding.

3.1. B. A. 4- Advantages of Questionnaire

Written or Internet-based questionnaires are less cost-effective relative to face-to-face interviews. It help us to rapidly gather vast quantities of information from a large number of individuals within a very brief period of time. Questionnaires are also very simple to interpret, so that they answer specifically defined study questions. Data entry and tabulation can be achieved with computer program packages, which can also minimize the time and resources needed. Questionnaires are common and non-threatening to most individuals, since
virtually everyone has had the knowledge with completing them. Questionnaires often have the ability to minimize researcher bias, since each question is answered in a clear way.

Questionnaires are usually not as time-consuming or invasive as interviews or focus groups: they may be done when they please, if they follow the answer deadline. A questionnaire can be posted on your websites or submitted to your participants via email. These strategies have little to no cost, but effective targeting is important if you really want the maximum possible response rate to achieve the most reliable results. A strong questionnaire is almost like a discussion. The questionnaires are also a realistic means of gathering data. They can be aimed at groups of your choice and handled in a number of ways. You can select and choose the questions you have asked as well as the style (open-ended or multiple choice). They provide a way to collect large quantities of data on every subject. They can be seen in a number of ways. You will use both closed-ended and open-ended questions to construct a questionnaire. Investigators uses more open-ended questions for extensive information.

3.1. B. A. 5. Disadvantage of questionnaire

The loss of influence over the answers is a significant drawback of postal questionnaires. Answer rates as low can occur with poorly constructed surveys, which limits our ability to trust the representativeness of the findings. One of the biggest challenges investigators face when conducting surveys is that respondents give dishonest answers. It is also probable that the person who completed the anonymous questionnaire might not be the person whom it was submitted. And if people give their questionnaires back, it is likely that certain questions might have been skipped or answered wrongly.

Respondents usually neglect questions that they do not think are essential. It may be due to poor construction, but it is often normal for some respondents to have trouble reading and understanding. Another drawback of the questionnaires is the linear existence of such a standardized instrument. It is necessary to consider the target demographic before developing a questionnaire. This way, you will get rid of the questions that are not needed and keep the questionnaire short.

In an interview, we can inquire specifically, 'What's that you don't like about your work,' however in a questionnaire, we will need to include a lengthy list of choices that may take a long time to get across and yet not catch the exact flavor of the issue. Open ended questionnaires help you to acquire more information. Having a free space for responses may
help you to acquire large amounts of data. But unlimited text answers are difficult to tabulate as well as also negate one of the key benefits of a questionnaire.

3.1. C- Schedule

Schedule is one of the popularly utilized techniques for gathering information in a research survey. This method for information collection is similar to the assortment of information through questionnaires, but the schedule is being filled by the enumerators or researchers who are delegated for inquiry. Schedule, simply we can say that it is a proforma containing a set of questions. In this method, researchers or enumerators go to the respondent with the schedule. They ask questions according to the proforma and then record the answers in the space provided by the proforma. In specific circumstances, schedules might be given over to respondents and at that time, enumerators will help them in recording their responses to different questions in the schedules. Enumerators clarify the aims of the investigation and eliminate the confusions in which any respondents may feel incomprehension of specific questions or the definition or concepts of troublesome terms. So through this method, the researcher or enumerators can answer all questions and possibly collect information even from the illiterate. If you take in the method of a questionnaire, there is no chance of personal contact, if the questions are sent through post. But in the case of schedule, researchers or enumerators have direct personal contact and a chance to observe the respondents.

The selection process of enumerators is very significant. This is due to the enumerators filling the answers from the participants of research and helping respondents to fill up schedules. So the enumerators ought to be trained to perform their occupation well and the nature and extent of the investigation ought to be disclosed to them altogether. By doing so they may surely understand the nature and significance of various questions put in the schedule. It will help them to ask questions conveniently.

On account of schedule much relies on the genuineness and capability of enumerators or researchers. Enumerators ought to be shrewd and must have the ability to question to discover the reality. Most importantly, they ought to be straightforward, hardworking, and ought to have persistence and determination. This strategy for information assortment is helpful in broad inquiries and can prompt a genuinely reliable outcome. It is, notwithstanding, over the top expensive and is generally embraced in investigations conducted by government agencies or by big organizations. Schedules, the data gathered is commonly finished and precise as enumerators can eliminate the challenges. Therefore, the data gathered through the schedule is generally more valid and reliable.
3.1. D- INTERVIEWS

3.1. D.A.1- Interview

As a research tool personal interview has to play an important role. The interview has been defined as a meeting of persons face to face, especially for the purpose of formal conference on some points`. The interview approach, simply, involved a person designated the interviewer asking questions (mostly) in a face to face contact (generally) to the other person or persons, designated the interviewees who gave answer to the questions. It is the interviewer who ask the questions. Rarely, the interviewee may also ask certain questions and the interviewer responds to these. Any way it certain that the interviewer initiates the interaction and the interviewee is all the receiving end. Interview may be said to be one of the most commonly used techniques of data collection in studies of human behaviour.

3.1. D.A.2- Principles of interviewing

The manner in which interviews ought to be conducted will vary somewhat by survey population and will be affected somewhat by the nature of the survey content as well. Nevertheless it is possibility to provide some guidelines that would apply to most if not all interviewing situations.

The first step is the most difficult for the interviewer, because at the initial contact the respondent must be motivated to permit the interview. Ordinarily the interviewer will follow a sequence of procedure approximately as follows 1) Explain the purpose and objectives of the research, 2) Describe the method by which the respondent was selected, 3) Identify the sponsor or the agency conducting the research and 4) State the anonymous or confidential nature of the interview. In the early phases of the interview the “interviewer plays one of his most important and one of his most autonomous roles, The establishing of rapport at the beginning of the process is a skill which depends primarily on the knowhow experience and sensitivity of the interviewer. It is this function of the interviewer which makes great demands on the qualities of clinical insight and intuition.

The forces leading a respondent to communicate can be thought of in terms of a means end or path goal sequence in which the respondent gives information because he sees the information giving process as a means of attaining some goal which he considers desirable. Secondly, the respondent is motivated to give accurate and complete information as a means of attaining some satisfaction out of the relationship with the interviewer. Thirdly, the respondent communicates in the interview situation only in the absence of certain specific kinds of barriers to communication.
The positive motivation in terms of the respondents’ goals comes from a careful statement of the purpose of research. Another motivation the interviewer should tap comes from the personal relationship which he builds with the respondent. Often, the interviewer’s contribution to the respondent motivation is referred to as rapport. Rapport refers to the atmosphere or climate of the entire relationship between the respondent and the interviewer. Though the use of carefully worded questions of the interviewer, through the use of carefully worded questions of the interview schedule transmitted to the respondent verboten that we achieve much of the standardization in the interview. In many cases the use of the question in the schedule evokes a response which is incomplete or which is unclear. The interviewer must have some technique which will enable him to stimulate the respondent to further verbalization. The accurate way to reproduce the responses is to record them during the time of the interview. A good deal of relevant information is almost certain to be lost if the recording is left until the interview has been completed.

3.1. D.A.3- ADVANTAGES OF INTERVIEW METHOD

1- The personal interviews, compared especially to questionnaires, usually yield a high percentage of returns.

2- The interview method can be made to yield an almost perfect sample of the general population because practically everyone can be research by and can respond to this approach.

3- The information secured through interviews is likely to be more correct compared to that secured through other techniques.

4- The interviewer can collect supplementary information about the informant’s personal characteristics and environment which is often of great value in interpreting results.

5- In as much as the interviewer is present on the spot, he can observe the facile expressions and gestures etc. of the informant and also the existing pressures obtaining in the interview situation.

6- The personal interview may take long enough to allow the informant to become oriented to the topic under investigation.

7- The languages of the interview can be adapted to the ability or educational level of the person interviewed.

8- The interview is a more appropriate technique for revealing information about complex, emotionally laden subjects or for probing the sentiments underlying an expressed opinion.
3.1. D.A.4- Limitations of interview method:

1- In terms of cost, energy and time the interview approach possesses a heavy demand.
2- The efficiency of interviews depends on a thorough training and skill of interviewers.
3- The presence of the interviewer on the spot may over stimulate the respondent.
4- In the interview method, the organisation required for selecting training and supervising a field staff is more complex.
5- Interviewing may also introduce errors.

3.1. E. census and sample survey

3.1. E. A.1- Introduction

Census and sample surveys are two methods for gathering information about the population that is utilized by numerous countries. A well-organized technique of gathering, recording and analysing information regarding the population. Many scholars interpret census as the opposite of the sampling survey. Census, in which all the members of the population are taken into account instead of considering a part of the population. Both of these methods are used for statistical testing and recording relevant data about a particular region. Researchers can use this information to enhance the reliability of the study.

3.1. E. A.2- Census and sampling survey

All things in any field of inquiry establish a 'Universe' or 'Population.' A total enumeration of all things in the 'populace' is known as a census inquiry. It tends to be assumed that in such an inquiry, when all things are included, no component of chance is left and most noteworthy exactness is obtained. However, practically speaking this may not be valid. Indeed, even the smallest component of bias in such an inquiry will get bigger and bigger as the number of observation increments. Simply we can say that, as the sample volume increases, the magnitude of the bias increases proportionally. We don't have any option to check the element of bias or sample through a resurvey. Also, this sort of inquiry includes a lot of time, money and energy. Consequently, when the field of inquiry is enormous, this strategy gets difficult to receive as a result of the resources in question. On occasion, this strategy is essentially beyond the range of conventional researchers. Maybe, the government is the main institution that can get the total count did. Indeed, even the legislature receives this in uncommon cases, for example, population census directed once in 10 years. Further, for a period it is absurd to expect to inspect each thing in the population, and now and then it is conceivable to get adequately precise outcomes by concentrating just a part of the all-out population. In such cases, there is no utility of census surveys.
If the sample size is small, no need to conduct the census survey. At the point when field contemplations are embraced in practical research, considerations of time and cost constantly lead to a choice of respondents i.e., determination of a couple of things. The respondents chose to be as representative of the complete population as possible to create a little cross-area. They chose respondents to comprise what is called a 'sample' and the selection process is called sampling technique. The overview so directed is known as a sample survey. Researcher must set up a sample design for his research i.e., he/she should plan for how a sample ought to be chosen and of what size such a sample would be.

3.1. E.A.3- Conclusion

The universe may comprise a specific place, a group of individuals, or a particular region which is the complete set of things and which are of interest in a specific circumstance. Census method primarily used by the government for collecting information regarding their citizens, especially the number of population (national population), housing enumeration, etc. It gives an intensive and detailed description of data covering numerous aspects of the issues. Since in this kind of investigation each thing of the universe is considered, the ends are more accurate and valid. A sample survey is conducted to decide the viewpoint of people in a population about a specific subject. Researchers can use this information as secondary data in their study. This information helps the researcher to understand specific data of a particular locality. To the little size of the sample, it is possible to cross-check the information to test the validity.

3.2. Sources of secondary data
3.2. A.1- Introduction

According to W A Bagley, the sources of information in the field of sociology are classified into primary and secondary sources. Primary sources include the actual information received from the individuals directly concerned with the problems of the study. It also includes social phenomena by observing which some information and facts may be discovered. The secondary source of information includes all types of published and unpublished, public or private documents and other such types of information. Data or information acquired indirectly by researchers. Researchers do not directly enter into the field for the collection of data.
Secondary data means that might be already available, these data are already been gathered and compiled by another person. In the case of secondary data, researchers should have an idea about where he gains them?. So the researcher didn't confront any problems that are related to the collection of primary data collection. Secondary data may be published or unpublished. Unpublished data are- Diaries, letters, unpublished biographies, and autobiographies. Kothari points out some examples of published data.

A) Various publication of the cultural, state are local government
B) various publications of a foreign government or international bodies and their subsidiary organization
C) technical and trade journals
D) books, magazines, and newspapers
E) reports and publications of various associations connected with business and industry, banks, Stock Exchange
F) reports prepared by research scholars, universities, economist, etc in a different field
G) Public records and statistics, historical documents, and other sources of published information.

Researchers need to be careful in the selection of secondary data. So it should follow certain characteristics, that are;

1- Reliability of data: The reliability of data needs to assure through various factors. The researcher requires to consider who obtained the things such as data and authenticity of sources, as well as methods of data collection.

2- Suitability of data: The data may not be suitable for all types of inquiries. Researchers should go through the terms and concepts used during the primary data collection. If the data are incompatible, researchers should not use it for your study.

3- Adequacy of data: If the researcher found that the secondary data are insufficient for the cause of the prevailing enquiry, should not include data in your study. “The data will also be considered inadequate if they are related to an area of the present enquiry”. Researchers have responsibility to check relevance, suitability, adequacy, and authenticity of data for research.

4- Personal bias- Personal bias may include when access information from personal diaries, newspapers, and magazines. The use of biased prejudice data may lead to decreased objectivity and authenticity of data.
3.2. B. Archives

3.2. B.A.1- Introduction

Archive reveals the information about past, contemporary, and future. The data may be organized by an individual or institution. With an intention to disseminate knowledge. These collected data may be a result of day to day activities of human beings. These activities are recorded and kept preserved in an organization or institution. One of the facts is that, these recorded materials are collected with the use of primary data collection methods. Obviously, in archives, the data are mainly kept concerning historical events.

The word “archive” derived from the Greek term “Archeia”, which means that Public records. “Archive” records are very useful to researchers. It provides evidence of past activities or phenomena. We commonly use terms such as national archive, community archive, gallery archive, museum archive related to the term archive”. The archive data is now available in electronic or through the internet. These data can easily retrieve.

3.2. B.A.2- Archival records

Archival records can be divided into two; public Archive Research and Private archive research. Public archive records are referred to as records that are accessible to the public for their examination. But some of the records, like secret nature, prepared for certain groups of audiences and written in pretty much-standardized structure and organized in the archive efficiently. But the private archive records are instead of these public directions and formal structure. Private archive records mainly proposed for a personal audience. Aside from distributed variants of a diary or individual memoirs, private archival records reach only tiny audiences. Notwithstanding giving enormous amounts of modest information, archival records material is nonreactive to the presence of researchers. Numerous researchers consider that recorded materials are very attractive and useful. These recorded materials are easily available as well as systematically arranged. However, the archive records are kept in organized systematically and standardized format. These arrangements may be based on the alphabet, chronological periods, etc. Archived data mainly used for research purposes and these data are stored in further study. The archived data may be in the format of print (in terms of book) or any type of objects. Nowadays these documents are stored on a computer. For example, census data.

3.2. B.A.3- Public archive records

The word archive mainly infers some type of library. Undoubtedly we can consider libraries as is a form of archives. Archive data more produced for “general or mass
consumption”. The public archive records are records like “hospital admittance records, motor vehicle register, newspaper, arrest records” etc. also part of public archive records. Bruce L Berg in his book, *Qualitative research methods for social science*, points out three categories of public archive records. Those are commercial media accounts, actuarial records, and official documentary records. The following are the records that come under these three categories:

- **Commercial media accounts**: Commercial media accounts deal with any composed, drawn, or recorded (Video/(Audio) material delivered for general or mass utilization. E.g.; newspapers, books, magazines, television program transcripts, videotapes, drawn comics, maps, etc.

- **Actuarial records**: Actuarial records likewise will in general be created for uncommon or restricted audiences yet are regularly accessible to people in general in specific situations. E.g. birth and death records; records of marriage and divorces; application information held by insurance and credit companies; title, land, and deed information; and demographic or residential types of records.

- **Official documentary records**: Official documentary records are initially created for some extraordinarily restricted audiences, regardless it will later be discovered to the public except the secret documents. E.g. Official court transcripts, police reports, census information, financial records, crime statistics, political speech transcripts, internally generated government agency reports, school records, bills of lading, sales records.

### 3.2. B.A.4- Private Archive Records

Personal archives are related to the personal life of an individual especially about their family and work. Archival methods used in social research caused the challenge of conventional methods of finding and data collection. This approach helps to interpret social biographical and social-historical aspects in the social world. The archival materials help researchers to trace out human activities and are useful for social-historical research with the use of scientific methods.

Private Archive Records are made for tiny or specific audiences than public audiences. Private records are especially helpful for making case studies or life histories. Normally these documents have a private nature, alongside the manners in which they figure out their day by day living schedules. So this helps the researcher to draw out the exact perceptions of their life experiences. E.g.: diaries and letters, home movies and videos, and artistic and creative artifacts including drawing and sketches. The most accepted form of
personal document is an autobiography. Allport distinguishes three types of autobiography; Comprehensive autobiographies, Topical autobiographies, and edited autobiographies.

Recorded materials are normally put away in limited zones or shut stacks to which benefactors are quite often denied physical access. Researchers must ask for or “page” materials for use, and this gives a system by which archivists monitor the nature and amount of material consulted by researchers. Structurally, researchers have no chance to check what materials are really in the stacks. The structural arrangements of archives furnish archivists with a system to deny admittance to materials. So the researcher needs to carry on friendly and proficient relations with archivists and their staff.

3.2. B.A.5- Conclusion

Archival method used searching for and extracting data and evidence from original archives. Archives have a prominent role in sociological research. Archives may be books, newspapers, photographs, films or videos, and even technological assisted documents. These materials represent different chronological periods and portray routine activities of individuals and other social organizations such as Government records, university documents, families and individual’s records like census data, etc. so these records need to be kept for future references. Archive preserves these documents and allows others to use it. Through these documents, researchers can find out identities and specific features related to a particular community, region, or organization.

3.2. C. Census

Organizations or institutions take the initiative to collect data from society and produce it in statistical data. These data are very useful to researchers. It provides organized data of large samples and is easily accessible to researchers. These documents help to understand development and performance of society”. Official statistics are produced to inform the need for policy change implementation or to provide monitoring and management information. Government official statistics provide open access to the public and the possibility to analyse the progress of working.

Primarily census was conducted in 1872 during the period of British viceroy Lord Mayo and a complete census conducted in 1881. In India, census conducts in regular intervals that are common in every decade. It collects data from all over the country. It includes data concerning population traits such as age, sex, profession, income, and religion, etc.

3.2. C.A.1- Importance of census

In India, census data are very important due to they include all data of the country, especially population statistics, size and type of families, communities, languages, profession,
education, income, birth and death rate, age groups, sex groups, etc. In terms of political and administrative levels, census data are very relevant. It provides information to formulate policies and programmes. Based on different aspects of populations, the government formulates welfare programmes and political as well as economic planning also based on population data. Authorities can analyse the economic progress and development through analysis of census data. It is also helpful to understand social problems in the nation. These data are helpful to eradicate social evils in society.

According to sage publication, the census can be understood in two ways. Firstly, the data collected from every member of the population and second “specific forms of a social survey organized by the government with an aim of collecting information from every household in the country”. It covers all relevant items of the universe or populations. But in terms of practicability, the accuracy of data could not be possible.

Indeed, even the minute bias or incorrect data collection may lead to affecting whole collected data. We don’t have any possibility to recheck or resurvey the entire collected data. Conducting a census survey requires more time, money, and energy. The data collected and compiled by official agencies or agencies of the state. In India, census conducted by the office of the registrar general and census commissioner, under the ministry of home affairs.

3.2. C.A.2- Advantage

- It is an intensive study. It covers a wide area and collects a large amount of information regarding social, economic, and political matters.
- The information easily available to the researcher, especially through libraries, Government offices, or the internet.
- The data collected by officials and require a technical expert for analysis and compilation. So it provides a high degree of authenticity.
- It provides whole details of the universe within a period.

3.2. C.A.3- Disadvantage

- High cost- to conduct a census requires a large amount of money. It covers every region of the whole country and collects every data personally.
- Time-consuming- to complete census surveys, require more time as well as need a high number of enumerators.
- Possibility to error- at the time of census investigation, there has a possibility of errors and data bias. The enumerators collect a large amount of data directly. So collect misinformation or wrong data may affect whole data.
3.2. How to use researchers

Census is considered an exceptional resource for a researcher to acquire information regarding every person in a country. A researcher can develop a research topic from the census data as well as use it as a source of secondary data. The researcher can understand specific issues in a country through a census. Census provides vital information on social and economic information about a particular area as well as provides statistical data of the whole country. So it can be used as authentic data for the research. As a researcher, from census data, who can identify the marginalized section of society and develop appropriate programmes or policies for upliftment of particular society.

3.2. Survey report

Survey is one of the best research methods in descriptive, exploratory, and explanatory research. The survey provides broad information about unobservable data, especially people's behaviour and attitudes, individual traits, factual information, beliefs, etc. Survey also ideally suited for remotely collecting data about a population that is too large to observe directly. A researcher can use a questionnaire or interview method for data collection especially from the marginalised section of society. This method can be used conveniently by the researcher in terms of time and cost.

Sage dictionary points out that “social survey is social, it deals with human behaviour, knowledge, attributes, beliefs, and attitudes”. The survey report provides information about summarized information about the cases and their differences and relationship between variables. It also reveals the cause and effect relationship between variables. Through a survey, the researcher could understand the attitudes of individuals that could not be identified through observation. The entire endeavour can be ruined if the survey report isn’t elegantly written. The entire research process is logically and systematically arranged in the survey report.

3.2. Gazetteers

Gazetteers incorporate well organized and structured information about named places. The word Gazetteer derived from the Greek word “Gaza” which means “treasury of news”. But this geographical location is considered as a social construct and vice versa. The primary use of these Gazetteers for locating a place, especially the settlement; geographical or manmade features. The term Gazetteer came into modern use after the publication of Gazetteers or newsman’s interpreter by Laurence Echard in 1703. He gave the name “Gazetteers” to his second volume in 1704. It primarily emphasized, description of a
particular place but later, it includes widened information regarding population, industrial places, and major facts about the regional administrative system.

Gazetteers simply are alphabetically arranged names of geographical places. It provides the details of historical sites, museums, industries, rivers, mountains, deserts, lakes, and other geographical characteristics. Apart from that information, detailed gazetteers provide broad information regarding the population and economic features of a particular place. So it helps us to locate a geographical area. William Katz, in his book, “Introduction to reference work”, point out that, Gazetteers included following;

1- Geographical explanation of the selected places.
2- Provide social, economic, and historical factors of an area.
3- Pronunciation
4- Provide geographical measurement of an area
5- Update new name instead of old names

Gazetteers are one of the major sources of a geographical type of information. Researchers can gather detailed information regarding the population and geographical characteristics of a particular region. Gazetteers help the researcher to choose an appropriate sample for their study. The Gazetteers are a very useful resource to understand the area where the sample needed to spread-out for the researcher's study.

It also enables the researcher to understand historical and socio-economic information about a particular region. This provides an opportunity for descriptive and predictive analysis of a specific region. The researcher develops the main theme or research topic through analysis of Gazetteers. A researcher can take a topic like the differentiation between human lives in various geographical areas. The geographical location is one of the major factors.

These Gazetteers provide free and elaborate information on a particular area. It could access easily to the mass. So it helps to understand where the particular place and geographical features. Nowadays, we have the facility to store and share innumerable content online as well as easily accessible to those who need the data. Gazetteers play a crucial role in information dissemination not only provides a geographical location but also describes its characteristics and type.

3.2. F. District Handbook

District handbook is one of another important secondary sources began to publish from 1951 onwards. It includes both census and non-census information/data of urban and rural regions for each district. The census data provide demographic and socio-economic
features of the entire population within a district. The non-census data provide information, especially it includes education, medical, water, electricity, Banking, post office and communication facilities, etc…

In 1961, District Handbook provided data regarding a district, managerial measurements, census tables, and village and town directory including essential primary abstracts. In the years 1971 and 1981, these handbooks include more features of a particular village or town with a logical table and highlights the rebuilding or enhancement of information of village or town directory. After each census, the district handbook restructured and organized with new distinctive features as villages or towns.

As a researcher, who will get all detailed data of a particular district, including Amenities and basic infrastructure facility? The researcher gets authenticate and reliable data through refer to the district handbook. If the researcher engages in a careful study of a particular village, who can use the district handbook for basic understanding and data collections.

In 2011, District Census Handbook Malappuram includes broad details of amenities of a particular district. The major Data included in District Hand Book are following:

- Status and growth history of towns
- Physical aspects and location of towns
- Civic and other amenities
- Medical facilities
- Educational, Recreational and cultural facilities
- Industry and banking
- Civic and other amenities in slums.

By researcher District handbook will help us to engage in the formation of planning and development of a particular region. As well as analysing the District handbook, will help us to generate a new developmental plan for a region. The District census handbook of Malappuram, emphasizing the importance of the District handbook, points out that “The need for data at the grass-root level for the administrative and planning purpose at a sub-micro level as well as academic studies prompted the innovation of the District census handbook.

3.2. G- Film and Visual Artifacts

Film and visual artifacts are a potent secondary source for social science research. These artifacts provide insight into the culture, customs, beliefs, traditions as well as a period
of the incidents. Researchers can find the film and visual artifacts from many sources such as historical archives, online sources or digital archives, etc. Through identifying and analysing a film and visual artifacts, it may have a historic sense. So, the researcher can develop hypotheses tested from these secondary resources.

“From the standpoint of content analysis, every artefact is a document bearing some content of evidence about its culture and in this role, it can serve as primary source material for the cultural historian.” (Artifact study). Most of the film is based on a certain socially relevant theme.

Weber points to reasons to include an image in the research process.

- Images used to capture the ineffable, the hard- to put into words.
- Images can make us pay attention to things in a new way.
- Images are likely to be memorable.
- Images can communicate more holistically, incorporating multiple layers and evoking stories or questions.
- An image can enhance empathetic understanding and generalizability.
- Through metaphor and symbol, artistic images can carry theory elegantly and eloquently.
- Images encourage embodied Knowledge.
- Images can be more accessible than most forms of academic discourse.
- Images can facilitate reflexivity in research design.
- Images provoke action for social justice.

Researchers can use artifacts for narrative visual research. Who can use videos, photographs, or other material resources for study? Researchers should have an idea of how these images/videos are appropriate for your research study. Otherwise, it may lead to a problem of misinterpretation. It helps to approach a topic from a different perspective and stimulate new discussions on the basis of a new topic. It is a way to understand society, especially its social structure and system as well as social life. Recorded videos and images possible for accurate and precise observation, these sources of data help the researcher to systematic analysis.

A researcher can easily access, copy and transfer these digital files through film and visual artifacts, researchers can view and analyse historical events as appropriate to their study. Photographs and films of historical incidents are relevant to today’s researcher and provide historical Background for your research. If the researcher takes film and visual
artifacts into their study, they need to delineate the historic and contextual matters related to the sources. As a source of data, the researcher can systematically collect and sort the films and visual artifacts into appropriate categories as per the study. The use of images or film help us to understand the nature and significance of individuals as well as social behaviour.

3.3 - Types of sampling- Probabilistic and Non probabilistic
3.3. A.1- SAMPLING
A research study can be carried out by collecting data from

1. Every unit of the universe under census study
2. or a small number taken out from the whole (sample study)

Census study is obviously more reliable as it surveys every unit of the universe.

1- In some cases the exhaustive survey of the universe is possible, but considerations of time, place and expense do not allow it to be carried out. Conditions of time, place as well as the psychology of the groups concerned, are always changing of conditions. In several problems especially in business surveys late submission of results render them of little use.

2- In some cases measurement of the whole series is possible but experience tells us that it is neither necessary nor desirable. All rice or grapes, need not be examined before purchasing. The whole sambar curry need not be tested. The whole blood of a person need not be tested or test a sample is enough.

3- In some cases even if time and resources are available, examination of every part may be impracticable as only a portion of the whole universe may be possible contents of a mine cannot be examined unless it is completely used up.

So usually the researcher is forced to resort to a sample. Sample is across, section or small sub group, which is representative of the larger one. This cross section is known as a representative sample.

Sampling consists in choosing at random an adequate number of items from a large mass in order to study them and following the Law of Statistical Regularity, to find out the characteristics of the whole.

3.3. A.2- Objective of sampling

The main object of sampling is to get as accurately as possible a picture of the whole universe by examining a portion of it possessing the same characteristics as the entire universe with a view to economize in point of money and time.

Another object of sampling is to determine the reliability of our estimates once obtained. Inference from the sample to the universe can only be expressed in terms of
probabilities, not with certainty of a mathematical proof. We may say that the whole theory of samplings is linked up with the theory of probability.

3.3. A.3- Essentials of sampling

1. Sample must be representative of the entire universe. Each sample should contain characteristics in proportion to their presence in the entire universe. The value of sample depends upon the degree to which a portion represents the entire universe, E.g. of representative sample, is the teaspoon of rasam or sambar, which the housewife is testing to find out whether the whole rasam or sambar is the same proportion. If it is found that salt is less, the housewife will add a bottle more salt and stir it very well and then test.

2. The sample should be adequate in size, so that accurate generalisations can be possible.

A proper estimate of the sampling error must be obtainable. It is necessary for determining the adequacy or otherwise of the number of samples taken so that the required degree of accuracy may be obtained from the results. The number of samples is directly proportional to the square of the sampling error and inversely to the square within which the desired result should be correct.

A sample that is not representative is known as BIASED SAMPLE bias may be due to

* Implement instruments,
* The personal qualities of the observer,
* Defective techniques or other causes.

Like experimental error, it is difficult to eliminate entirely but usually may be reduced to relatively small dimensions by taking proper care... Experience in fact showed that the human being is an extremely poor instrument for conducting a random selection. Whenever there is any scope of personal choice or Judgment on the part of the observer bias is almost to creep in (Yul and Kendal. An introduction to the theory of statistics).

The Literary Digest Public Opinion poll of the 1936 presidential elections is a dramatic example of the consequences of a biased sample. It would be considered extraordinarily large, but the goodness of statistical samples is not dependent merely on size. The FORTUNE POLL on the other hand, with a sample of 4500 cases predicted the outcome of the total popular vote for Roosevelt with an error of 1.00 percent, from the stand of sampling technique what were some of the factors that will explain the debacle of the Literary Digest 1936 presidential poll?
1- The mailing lists of the Literary Digest were taken largely from Telephone Directories and Automobile Registration lists which tended to overweight the proportion of cases in the upper socio-economic classes.

2- The Literary digest sent its ballots by mail, people in the higher income bracket are more likely to return their ballots than those in the lower income brackets; besides other selective factors such as “Protest” voting against the incumbent administration were also operative.

3- In 1932, and especially in 1936, there were definite shifts in political alignments drawn very sharply along economic interests. The wage earners and those on relief voted solidarity for Roosevelt, the farmers, Negroes and other groups returned large majorities from him. With these new alignments the biased sample of the Literary Digest assumed major proportions in the 1936 poll. (Karz and Cantrill, “Public Opinion Polls”).

3.3. A.4- Sampling techniques

The techniques can be grouped under A. Probability sampling techniques and B. Non probability sampling techniques or Random and non-random (Purposive method).

A. Probability sampling

The universe is divided into certain homogeneous groups of regions and from each region or group some units representative of the group or region are purposely selected according to the discretion of the researcher. Exercise of personal discretion makes it liable to be affected by personal bias which influences the whole result in the same direction.

Types of Probability Sampling

1- Random sampling

Random sampling does not mean haphazard selection. The sociologist must start with a sampling frame, which would be up to date and can be chosen at random. This allows the possibility that every member of the population will have an equal chance of being selected in the same proportion which they bear to the total population. However, there is a danger that the same type of people may be picked, e.g. all young males or all smokers, which would make the sample unrepresentative. The method is cheap and quick.

One of the following methods can be used for giving equal clearance to all in the universe.

1 Drawing lots
2 Using a pack of card
3 Selecting digits at random from Tables e.g. Trippetts Table of numbers and on the basis of numbers, select the units.

4 Arranging the units alphabetically, numerically or geographically as the case may be and selecting every fifth or tenth or another number which may be obtained by dividing the total number of units by the number to be investigated. This is known as systematic sampling or sampling by regular intervals.

2- **Stratified sampling**

   Stratified sampling is where the population is divided into blocks or strata according to certain characteristics e.g. Age, sex, class etc. and each strata is then sampled by random. This method attempts to improve the representativeness of the sample. It may be possible, for instance, to make sure that the sample keeps the right balance between men and women, or age, group, or between upper and middle and working classes. By the right balance, or it means these group would appear in the sample in the (sometimes called proportional stratified sampling). This approach was used by Golthorppe and Lockwood in “The Affluent Worker’. In their study of different types of workers (skilled semi-skilled, and unskilled) in three Luton factories.

3- **Cluster sampling**

   Cluster sampling is when the population is divided into a large number of group called clusters, and a sample is taken among the clusters. This method is frequently used in social surveys in order to cut down on the cost of gathering data by reducing expenses such a listing costs and travel costs involved in interviewing.

4- **Multi state sampling**

   Multi state sampling is where samples are selected from clusters several times over, e.g. a random sample of census tracts may be selected, then within each tract a random sample of streets could be taken. The interviewer might be instructed to select every fourth house within the streets chosen, and to interview every third adult within each of these household.

5- **Multi phase sampling**

   Multi-phase sampling is where certain questions are confirmed to a fraction of the sample, and general information is gained from the total sample.

**B. Nonprobability sampling /purposive sampling or random sampling**

To secure accurate results a sample must be representative and selected objectively. i.e. free from personal discretion. You must leave everything to chance.
Types of Non-Probability Sampling

1- Convenience Sampling/accidental sampling

Convenience sampling is probably the most common of all sampling techniques. This method is also called accidental sampling. Within convenience/accidental sampling, the samples are selected because sampling units are conveniently accessible to the researcher. Respondents are accidentally included in the sample. It is primarily used for simple purposes such as obtaining new ideas or testing existing ideas according to the subject of interest. But it is also used for a necessary purpose, e.g., the researcher didn't have an accurate list of population or no other sampling is suitable. This sampling technique is highly biased and does not follow the systematic method to collect a sample. This technique is considered easiest, cheapest, and least time-consuming.

2- Quota sampling

Quota sampling is where a sample is selected from the whole population according to choose categories, e.g. Age, sex, occupation social class, etc. it allows the interviewer to pick out people in the street, or ground knocking on doors until the quota for each category will have been calculated in advance to be representative than random sampling, but suffer from interviewer bias in the choice of prospective interviewers.

3- Snowball Sampling

Snowball sampling usually executes when there is a very small population size. Snowball sampling is particularly helpful when you are attempting to arrive at populaces that are out of reach or elusive. In this type of sampling, the researcher asks the primary informants to identify another potential subject who also meets the criteria of the research. For example, a researcher studying the problems of the homeless may not be able to compile a complete list of homeless people in an area. At such stages, information about other homeless people can be gathered from the first individual. This method helps examine social groups or informal groups in a formal organization. Researchers can apply just this method within a little population. So it does not include all elements in the list.

4- Judgemental Sampling

Judgemental sampling is more commonly known as purposive sampling. In this type of sampling, subjects are deliberately chosen to be part of the sample with
specific predetermined criteria. With judgmental/purposive sampling, the researcher believes that some subjects are more appropriate for the research compared to other individuals or samples. It decides based on judgment by a researcher or expert. So in this type of sampling, subjective evaluation of the researcher may occur. This method demands previous knowledge of the selected sample, otherwise, the researcher can't incorporate a suitable sample to the study. As we compared to the random sampling, this technique is less generalizable. "The method is appropriate when what is important is the typical and specific relevance of the sampling units to the study and not their overall representativeness to the populations". It is also economically beneficial and easily executed in the field.

Module- 4

Qualitative methods in social research

4.1. Nature and scope of qualitative research methods

4.1. A- Introduction

Research is to discover answers to questions using the systematic technique. Qualitative examination properly searches for answers by investigating diverse social settings and the gatherings or individuals who possess these settings. Qualitative research is for the most part captivated by how individuals organize themselves and their settings and how inhabitants of these settings sort out their ecological variables through pictures, customs, social structures, social positions, and so forth. The researcher emphasizes here on the need to decipher what is happening regarding comprehension of the entire society and the importance it has for the members. The fundamental message that qualitative researchers pass on is that whatever the arena wherein information is being gathered, we can comprehend occasions just when they are arranged in a more extensive social and historical setting.

4.1. A.1- Nature and scope of qualitative research

Like other types of research, qualitative research needs some research questions. Research questions envelop a scope of themes, however most spotlight on participant comprehension of implications and public activity in a specific setting. In qualitative research, there is a nearby connection between the researcher's objectives and the researcher's theoretical frames. The theoretical frames comprise of the apparent multitude of past investigates, findings, and theories, existing on the points to be examined that are prepared by the researcher.
Qualitative research responds to totally different questions to those tended to by quantitative research. Qualitative research can make obvious and unpick the factors which interface-specific variables, by looking at the explanations, or accounts, provided by those involved. Yet, the quantitative method addresses the questions like 'What number of?'; 'What are the causes?'; 'What is the strength of the connection between variables?'. Albeit qualitative and quantitative research answer altogether different inquiries, analysts regularly have basic interests in looking to comprehend a specific phenomenon and the two methodologies can be integral.

Methodological decisions are another highlight set up a qualitative research paper. These rely upon which cases are chosen, how the data is gathered, and how the information investigation is picked. The researcher is submerged in the subtleties determined by settings. Qualitative research needs to utilize key standards of examination plan, for example, connecting the research questions to the methodological approaches, considering issues of investigation and information assortment as coordinated, and being clear about the reasons for the research.

Qualitative researchers favour a methodology where the definition and testing of hypotheses and ideas continue to couple with information assortment. Qualitative methodologies permit respondents to recognize those issues which are remarkable for them and to explain how these impact their everyday lives and how these influence how they approach their work and how these influence their occupation fulfilment.

Most ethnographers say that one of the primary reasons for their research style is to give detailed depictions of the social settings. Qualitative research displays an inclination for contextualism in its responsibility to getting occasions, behaviour, and so forth in their specific situation. Obvious shallow random data and particulars of regular daily existence are deserving of assessment as a result of their ability to assist us with understanding what is happening in a specific setting and to give pieces of information and pointers to different layers of the real world. A significant commitment of descriptive details for the ethnographer is to the outlining of a setting for the comprehension of subjects, understandings of what is happening and for the researcher to create analyses and explain which do equity to the milieu in which their perceptions.

Because of open and unstructured nature, it is contended that an open research technique upgrades the chance of running over altogether unforeseen issues which might bear some significance with the ethnographer. Participant observation especially fits this direction in light of the fact that the scientist is inundated in a social setting and can concede
investigation until completely familiar with it. Qualitative researchers watch out for the view
that the transcendentally open methodology which they receive in the assessment of social
phenomena permits them admittance to suddenly significant points which might not have
been noticeable. Researchers are additionally situated inside the social world and their
background and disciplinary socialization shape their way to deal with doing qualitative
research– with concern to the questions they try to address, the techniques they utilize, and
the methodologies they adopt. Qualitative research is especially appropriate in considering
context. It likewise dominates at the enlightening process, regardless of whether this is a
hierarchical change or individual dynamic since it permits us to inspect how changes
influence day by day strategies and communications.

4.1. A.2- Characteristics

- **Real or Natural setting**: Research is done in real or normal life settings. This very
close data accumulated by really talking directly to individuals and seeing their
activities inside their setting is a significant attribute of subjective examination. To
develop a comprehension of how individuals experience their general surroundings,
and scientists endeavours to distinguish the human conduct, activity, and talk as it
normally happens, with as meagre disturbance to individuals’ carries on with as could
be expected under the circumstances. Qualitative researchers will in general gather
information in the field at the site where members experience the issue or issue under
investigation.

- **In-depth description**: The aim is to illustrate the social meanings of people by
taking detailed descriptions of their behaviour and thoughts. This infers receiving an
insider viewpoint in research, in which there is probably going to be a closeness
between the researcher and participants, instead of an impersonal or distinctive
relationship. The scientist will plan to build up a rapport with representatives so as to
urge them to talk completely and honestly about issues that might be related to
truancy.

- **Flexibility in nature**: The researcher is probably adopting to embrace a
methodology in which there is no exact beginning detail of research issues and ideas.
The focal point of the research may change over the span of gathering information, as
thoughts create and specific issues become significant. This implies that the
underlying arrangement for research can't be firmly recommended, and a few or all
periods of the cycle may change or move after the analyst enters the field and starts to
gather information. These movements signal that the researchers are plunge further
and more profound into the subject or the phenomenon under examination. Simply, the key thought behind subjective examination is to find out about the issue or issue from members and to deliver the exploration to acquire that data.

- **Multiple sources of data:** Qualitative researchers collecting different types of information through various ways, for example, interviews, perceptions, archives, and audio and visual data, as opposed to depending on a solitary information source. These are generally open-ended types of information in which the members share their thoughts uninhibitedly, not obliged by foreordained scales or instruments. At the time of analysis, the researchers go through the entirety of the information, sort out it, and arrange it into codes and topics that cut over the entirety of the information sources.

- **Inductive approach:** Qualitative researchers normally work inductively arranging the information into progressively more conceptual units of data. This inductive process outlines working to and for between the subjects and the information base until the researchers have set up a complete arrangement of topics. At that point deductively, the researchers glance back at their information from the topics to decide whether more proof can support each topic or whether they have to gather extra data. Accordingly, while the process starts inductively, deductive reasoning likewise assumes a significant function as the investigation pushes ahead.

### 4.1. A.3- Distinction between Quantitative – Qualitative Research

<table>
<thead>
<tr>
<th></th>
<th>Quantitative Research</th>
<th>Qualitative Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number – Quantitative or statistical method used for analysis of social life.</td>
<td>Words – Narrative or words using for analysis of social life.</td>
<td></td>
</tr>
<tr>
<td>Point of view of Researcher – Researcher frame investigation structure and control participants involvement</td>
<td>Point of view of participant – Understand social life through the perspectives of participants or samples.</td>
<td></td>
</tr>
<tr>
<td>Researcher is distant – Researcher involves more formal investigation and less relation with sample.</td>
<td>Researcher is close – Informal type of investigation and close relation with participants.</td>
<td></td>
</tr>
<tr>
<td>Theory and concepts tested in research – Theoretical framework leads to data collection as well as test theory and concepts through research.</td>
<td>Theory and concepts emergent from data – Researchers develop theory and concepts from data collection.</td>
<td></td>
</tr>
<tr>
<td>Static – Introducing a static picture of social reality with its emphasis on connection between variables.</td>
<td>Process – Depicted as attained to the unfolding of events over time and the interconnection between the actions of participants of social settings</td>
<td></td>
</tr>
<tr>
<td>Structured – Highly structured and investigate the problem down of concepts in focus.</td>
<td>Unstructured – Nature is unstructured and new concepts or meaning emerging during data collection.</td>
<td></td>
</tr>
<tr>
<td>Generalization – Findings are generalizable.</td>
<td>Contextual Understanding – Needs to understand social life through contextual settings.</td>
<td></td>
</tr>
<tr>
<td>Hard, reliable data – Clear and vigorous data propound to measurement.</td>
<td>Rich and Deep data – Due to its contextual nature, it provides interpretative data.</td>
<td></td>
</tr>
<tr>
<td>Macro- Engaging large scale comprehensive connection between variables.</td>
<td>Micro – Understand small scale aspects of social settings.</td>
<td></td>
</tr>
<tr>
<td>Artificial Setting – Research conduct in a controlled setting and design.</td>
<td>Natural Setting – The investigation taking place in a natural environment.</td>
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</tbody>
</table>

**SIMILARITY**

- Both are concerned with data collections.
- Both are answering research questions.
- Both are relating data analysis to the research literature.
- Both are concerned with a variation.
- Both treat frequency as a springboard for analysis.
- Both seek to ensure that deliberate distortion does not occur.
- Both argue for the importance of transparency.
- Both must address the question of error.
- Research methods should be appropriate to the research questions.

**4.1. A.4- Criteria for evaluating Qualitative research**

Some of the researchers argue that reliability and validity are closely related to quantitative research, not in qualitative research. But we need to demarcate the relation of reliability and validity in qualitative research. Some of the researchers emphasize that, we can evaluate qualitative research with the use of some criteria other than in quantitative research. Alan Bryman points out in his book, *social research methods*, provide two criteria, to assess qualitative research. The two key criteria for assessing qualitative research: trustworthiness and authenticity. These two criteria are alternative to reliability and validity in qualitative research.

- Trustworthiness

It classified into four – Credibility, Transferability, Dependability, and Confirmability

1- Credibility: - Researcher needs to provide credible information and findings from your study. Through credible and accurate data, we could establish trustworthiness. Research conclusions should follow research findings, to acquire accurate and credible data. Researchers need to frame appropriate research questions and aim,
methodology, and design as well as data collection methods. Researcher requires to demonstrate a valid aspect of social reality.

2- Transferability: - Qualitative research mainly following an in-depth study of a small group, individual, or a social institution. Qualitative research is encouraged to provide a broad explanation of cultural aspects of society. So this explanatory nature Geertz called “thick description” and research findings should be transferable and applicable to other contexts or situations.

3- Dependability: - Irne Korstjens and Albine Moser point out that, “ Dependability includes aspects of consistency. You need to secure the intersubjectivity of the data. A researcher should not provide interpretation based on your peculiar preferences and approaches/ viewpoints but should base on grounded in the data. Here the focus is on the interpretation process embedded in the process of analysis. The strategy needed to ensure dependability and confirmability is known as an “audit trail.”

4- Confirmability: - Another criterion for assess’ qualitative research is confirmability. Trustworthiness can acquire through confirmability. Researchers need to establish confirmability through research findings and these findings are based on the perspectives of participants. So the participants, narrative, and words have more roles to shape findings than researchers.

❖ Authenticity

Apart from trustworthiness, the other foremost criterion is authenticity. The criteria are following:-

● Fairness – Does the research reasonably speak to various perspectives among individuals from the social setting?
● On to logical Authenticity - Research provides an opportunity to understand the social environment.
● Educative Authenticity – Research helps to understand the perspectives of other members of the social environment.
● Catalytic Authenticity – Research helps the members to change their social conditions.
● Tactical Authenticity – Research provides an enhancement opportunity to take action as a part of research study.

Authenticity criteria are greatly relevant to qualitative research. Authentic data helps to understand social problems to the readers, through your research.

4.1. A.5- Critique of Qualitative research
Alan Bryman proposed some criticism against qualitative research data. That is the following:-

- **Qualitative research is too subjective**

  One of the main criticisms against qualitative research is that it is more subjective than objectives as forwarded by quantitative research. Some of them criticized that “researchers often have unsystematic views about what is significant and important? Research personal bias and prejudices indulge in the data collection process. Generally, qualitative research starts with open-ended questions and reaches into the precise research questions or problems.

- **Difficult to replicate**

  Due to understanding the nature of qualitative research, we could not make genuine replication of attained research findings. In qualitative research, researchers are the main instrument of data collection and directly enter into fields to acquire data. So a researcher may centralize his/her interested area for their observation. The researcher gives more significance to his interested fields, especially in ethnography. The researcher's characteristics, such as gender, age, personality influence the participant's responses due to unstructured nature of qualitative research. It gives more importance to the subjective interpretation of the responses from participants. Because of these difficulties, qualitative researchers do not have confidence to replicate qualitative research.

- **Problem of Generalization**

  A qualitative researcher does not dispense the opportunity to generalize findings into another social setting. Generalization means findings or outcome of the study can be generalized from the sample of the entire population. Quantitative researchers opposed that qualitative studies are not generalizable and a quantitative study sample cannot be considered as a representative of population. Bryman points out that “the findings of qualitative research are to generalize to theory rather than to population”. The acquired qualitative data have significance to theory building and evaluation of speculation.

- **Lack of Transparency**

  It is some of the time hard to build up from qualitative research what the researcher did and how the person in question comes to the investigation’s results. Sometimes researchers fail to establish or clear how the sample chooses for interview or observation. Bryman points out that “Readers have the right to know how far
research participants were selected to correspond to a wide range of people. Also, the process of qualitative data analysis is frequently under”. In other words, what the researcher was doing when the information was analysed and in this manner how this study reached its conclusion.

4.1. A.6- Role of Researcher

Researchers have an important role in Qualitative research. “Brinkmann (2007) revisits the list of requirements offered by Kvale (1996: 148–149) in defining the ‘good’ qualitative researcher. These capabilities involve the researchers being: knowledgeable; structuring; clear; gentle; sensitive; open; steering; critical; remembering, and interpreting”. Researchers themselves acquire information through multiple sources and methods such as document, observation, or interview or through directly/Indirectly in a natural situation. For most of the research, he or she directly enters the field to gather information. So they should have face to face contact with the research participants with help of a questionnaire or instruments developed by the researcher.

One of the foremost features of qualitative research is that researchers can change the process or phases, according to the gathered information from the fields. It helps us to direct the research contents according to the obtained information. So research can develop an extensive character of the real problem: it analyses the actual problem with the experience of a participant in an interpretative way. Researchers can identify real problems or issues from the participants.

4.1. A.7- Conclusion

Qualitative researchers contend that this is unequivocally how individuals experience social reality, so the tendency to emphasize process is partially a result of the subjective analyst's responsibility to members' viewpoints. The overall picture that qualitative research passes on about the social request is one of interconnection and change. Qualitative research is its express responsibility to review occasions, activity, standards, values, and so on from the point of view of the individuals who are being studied. Evaluative standards for qualitative studies are expected to pass judgment and honesty of the investigation discoveries. Credibility is a real estimation of the discoveries and is situated in the environmental setting of the members. Conformability is the foundation of undeniable direct proof from the encounters the researcher has with the participant involved in the study. Transferability demonstrates that correlations can be moved to comparative circumstances, conditions, and settings.
4.1. B- Methodological issue in Qualitative research

4.1. B.A.1- Introduction

Research methodology is a systematic approach to a problem to find out an appropriate solution. It simply means how research is done scientifically. Researchers should have a clear and thorough understanding of the research methodology. Apart from the known research techniques or methods, one needs to know what they mean and indicate and why. Researchers should have an idea about why this particular methodology is appropriate to understand the problem and others are not suitable for it. There should be a variation in methodology according to the problem of the study. So the researcher needs to evaluate research decisions before the implementations. So clear demarcation of research methodology helps the researcher as well as others in terms of evaluation of findings. But in qualitative research methodology have many dimensions and confronting some issues by researchers.

4.1. B.A.2- Issues in Qualitative research

➢ **Nature of research**

Qualitative research practices differ significantly in the measure of predefined, or prespecified, structure and procedure that shapes the research process. The research strategy begins from the prespecified structures and methodologies, especially it starts from considering theory, operational definition to collect information to analysis of collected data. In much qualitative research, these structures and systems are seen as indicative and tentative instead of as mandate and rigid. Understanding is relied upon to develop as a feature of the research process and guide the change of prespecified constructs and methodologies or the formation of new ones. So the method of research is too flexible or not well planned.

➢ **Researcher role as an interpreter**

Qualitative research comprises a set of interpretive, material practices that make present reality obvious. The primary trait of qualitative research is that qualitative investigators examine things in their real context and endeavour to decipher phenomena dependent on data acquired from individuals in the field. Numerous qualitative issues and practices emerge inside the setting of the certain interpretive action of all people including researchers. It gives more emphasis to understanding reality in the view of participants. Producing helpful and trustworthy qualitative discoveries from gathered qualitative data requires practices, creativity, and hard work. The qualitative study depends on a small number of extraordinary cases and gives a significant source of knowledge from the practice. The sharing of interview records with the participants is an example of a practice that tends to
this issue, by permitting the members an occasion to see and respond to their translation. In this way, researchers are challenged to precisely decipher witnesses' voices to develop new comprehension of the explored phenomenon through research.

- **Data collection**
  Qualitative research is essentially dependent on fieldwork. Information gathered through fieldwork in a real social context and the researchers also keep a field note during the observation. Field notes contain rich, definite portrayals of activities, practices, behaviours, interaction, etc., including the detailed description of the context where the observation is made. The researcher ought to demonstrate the nature and scope of the information hidden ends through consideration of participant’s quotes from the information in the study report. The qualitative research findings are longer, more descriptive as compared to the quantitative findings. Due to the broad nature of qualitative research, a definite depiction of the unique circumstance and attributes of the populace that partake in the research, analysis of qualitative data is more difficult and time-consuming.

- **Need philosophical orientation**
  Numerous researchers accentuate the significance of characterizing a philosophical position and direction towards the investigation, and some of them suggest considering philosophical foundation right off in the research process. In this manner, it is important to plainly express the philosophical and methodological foundations that administer research. The fundamental challenge in leading research utilizing sociological methods was not only identified with methodology, set of methods, but also the philosophical viewpoint that impact methodology and research design. In any case, for a new researcher or a researcher, with a foundation in specialized controls, the selection of a philosophical position can be a difficult assignment, due to a huge measure of literature concentrated on various philosophical roots.

- **Trustworthiness of the research**
  Kirk J and Miller M L (1986) in their books *Reliability and validity in qualitative research*, define “reliability as the degree to which the findings are independent of an accidental circumstances of the research”. Validity mainly relies upon the research methodology. It provides guidance and credibility to the research process. It also alludes to the goodness or sufficiency of an investigation. Validity isn't a fixed idea, but instead, it is a perplexing build grounded in the process and goals of a particular research. Most researchers that accomplish qualitative work concur that the legitimacy of the research ought to ensure that research methods stay coherent and straightforward, research results are obvious, and research conclusions are convincing.
Credibility alludes to the satisfactory representation of the developments of the social world under investigation and can be evaluated both regarding the process utilized in inspiring those representations and as far as the validity of those representations for the community under investigation. As more researchers work inside qualitative traditions, the rules for dependable research are being investigated, refined, and constantly discussed. Trying to direct research in reliable manners that are evident and reasonable to others is an on-going process in qualitative traditions. Researcher is answerable for doing important, reliable, and valid research, which implies that analysts ought to consider all conditions that impact research and know about the constraints of her or his knowledge. This implies that validity ought to be outlined with regards to the researcher’s obligation and decision making during the research process.

4.1. B.A.3-Conclusion

Researchers occupied with qualitative research are given various methodological difficulties. Once the research question is identified, the researcher then thinks about the appropriate methodology, for example, ethnography or grounded hypothesis, case study, etc. The researcher should take decisions regarding data collection and need to ensure these are suitable to research questions or methodology. It is challenging to make an excellent qualitative research outcome for the new researcher. But the researcher has the facility to access numerous literature in a qualitative study. So it allows an understanding of the methodologies used in different research questions. It helps him/her to overcome the methodological issues confronting while doing qualitative research.

4.2. METHODS IN QUALITATIVE RESEARCH

4.2. A- Ethnography and visual ethnography

4.2. A.1- Introduction

Ethnography is one of the approaches in social research within the background of anthropological traditions. This approach originates in the 19th century, with emphasis on descriptive analysis of community and culture, including people and their mode of behaviour, understanding their beliefs and practices, or to consider culture as a whole. We can be seen mainly in the influence of the progress of two independent intellectual traditions; first is British and another is North American. The first tradition related to social Anthropology with the writings of Bronislaw Malinowski, Radcliffe-brown, and Evans Pritchard. These anthropologists were either British or worked in Britain. The second tradition related to the Chicago school in Sociology. The researchers actively participated in the field of study for collecting information. The sociologist mainly tries to understand the various problems from
different groups in society especially Deviant subgroups and various unordinary urban occupations.

4.2. A.2 - Ethnography

The term “Ethnos” means People, race, or cultural group and ‘Graphe’ means writing; so the literary meaning of ethnography is “writing culture”. Primarily it emphasizes historical and comparative analysis and description of other cultures especially non-western societies; it is termed ethnology. If you trace out the history of cultural writing, it is primarily provided by travellers and missionaries. After that anthropologists engage in fieldwork “in situ observation” to acquire primary data and publish their work with the support of theoretical background or comparative analysis related to culture and Organisation. The approach, ethnography, became important in anthropological study in the 20th century.

With the emergence of a method of research, during the 20th century, the approach, ethnography, began to be used in western sociology. The researcher traced to find out the pre-Industrial and cultural group as well as the impact of urbanization and industrialization in villages and towns. At the University of Chicago, began to study human social life, especially urban industrial society, concerning anthropological study. They termed it, case study, or participant observation.

Anthropological methods influenced Sociologists and caused the emergence of various subfields within disciplines from 1960 onwards. At the same time, anthropologists engaged in studies in rural and urban areas within Western societies. The ethnographic method began to integrate historical analysis and textual approaches within cultural studies. Simply we can say that “ethnography plays a complex and shifting role in the dynamic tapestry that the Social Sciences have become in the twenty-first century”.

Nature of ethnographic studies

In terms of data gathering, ethnographers directly enter into the field, for understanding people's daily life including behaviour, relationships, social action, art, and other cultural values which took a long period. David Silverman in his book, *Qualitative research, theory, method, and practices*, points out the three initial features of an ethnographic research study. That is following;

1- Ethnographic studies require an empirical approach

Researchers need to engage empirical observation for studying social phenomena. So the investigators engaged in real-life situations and collected data through methods in social research.

2- Need to remain open
The study of ethnography promotes an open method of communication with those involved in the research rather than making plans for research observation. The researchers observe and interact with research participants in their real-life settings rather than a laboratory experiment. Ethnographer needs to explore various aspects of social phenomena, especially cultural aspects, in a detailed manner. So the ethnographer needs to keep moral responsibility and unite his or her research work with prior studies in the same area for satisfying the principle of openness.

3- Grounding observed phenomena in the fields

The facts obtained through observations from the field needs to be linked to historical and cultural matters. Empirical observations can be used to interlink between facts formation of general laws. But this ethnographic study is not only related to real-life studies but also it's connected to time and space of fields. Anthropologists also try to understand the culture of a particular society, with systematic comparison to other cultures. It gives more emphasis on how a “cultural whole” portrait is in the study.

Martyn Hammersley and Paul Atkinson, the book, *Ethnography, principles in practice*, points out some of the features of ethnographic research.

1- Need to study every aspect of individuals including actions and behaviour, in the context of real-life situations. No need to set an artificial arrangement to collect information. So simply we can say that it is a direct field study.

2- Researchers have the opportunity to gather information from various sources such as documents, visual media, and archival sources. But the participant observation and informal methods of gathering data are more prominent in ethnographic research.

3- The data collection process is not based on rigid or fixed methods. Due to the flexibility of research methods, research designs weren't put forward at the beginning of research.

4- It mainly focuses on small sample size as well as a group of people. So this helps the researcher to do an in-depth study of a research participant.

5- Researchers provide a descriptive analysis of the functions and results of human actions as well as institutional practices. Researchers need to provide analysed, collected from the fieldwork through participant methods such as observation interviews rather than quantitative data analysis.
So these characteristics reveal that ethnographers are following an "open-ended approach" and concluding the research in a natural setting.

Ethnography and participant observation used as synonyms in Qualitative research. Participant observation "done at least through implicit and probably also through explicit, negotiation with people in that field". Researcher engaged in a social setting for observation and gain data, especially cultural and social life of human beings one relevant example is that, William Whyte's contribution on "street corner society", who try to understand the use of people in slum society. But in terms of the interview method, the researcher needs to make a rapport with the participant. It will help you to make an informal conversation with participants.

Data recorded in terms of written or with the help of audio-video equipment. However, these data are in the unstructured form or an interpretative manner. A researcher needs to take great effort and time to analyse these types of data. Each one of us tries to understand our surroundings, the activities of people, and the things we do in our daily lives. But such approaches, ethnography, put forward a systematic and deliberate method of gathering information from the perspective we normally see the matters. The interpretative analysis includes findings and Critical perspectives that emerged in previous research.

John W Brewer defined ethnography “is the study of people in naturally occurring setting or fields’ utilizing methods which capture their social meanings and ordinary activities, involving the researcher participating directly in the setting, if not also activities, to collect data systematically, but without the meaning being imposed on them externally”.

John W Brewer proposed a strategic plan that means research designs for ethnographic study. The major factors to consider while entering ethnographic research are mentioned below;

- Provide an outline of the topic and objectives of the study
- Need to give a rational explanation to the selection of research sites and cases involved in the study
- Identify available resources for research such as money, time etc.
- Need to consider sampling availability and scope
- Identify the appropriate method or methods for data collection
- To solve the problems in the field especially the accessibility of the fields
- Need to address the role or roles of the fieldworker, especially in field or interaction with informants
- Identify form of analysis
Identify the form of presentation

All aspects of cultural anthropology were based on fieldwork. All researchers emphasize that first-hand information is obtained through the ethnographic method. This is mainly through constant monitoring of the research participant and interaction with them. Besides, the method of ethnography provides a very analytical approach to all cultural matters. Therefore, information about all the activities that take place in the field, especially their daily activities, behaviour, etc., is collected through observation or formal-informal interviews.

4.2. A.4- Introduction- Visual Ethnography

Visual data are universal in our society. Visual portrayal can conceivably be used for all investigations of society. Pictures are inseparably tied up with our day by day life, individual personalities, ways of life/culture, and social orders. A visual record can provide a "thick depiction" to convey ethnographic information. Visual ethnography helps us to re-examine the visual regarding its associations with different components of involvement and portrayal. Visual strategies which generally rose out of anthropology, starting in the mid-1900s. "Flaherty's Nanook of the North (1922) is one case of this wonder, as is Margaret Mead's and Gregory Bateson's video and photographs of the Balinese, and Evans-Prichard's photos of the Nuer".

4.2. A.5-Visual ethnography

Visual ethnography has a wide scope. It includes the creation and examination of still photographs and movies, the investigation of craftsmanship and material culture, and the study of signals or gestures, facial expression as well as behaviour and interaction. An ethnographic examination is in like manner interweaved with visual pictures and socio-cultural representation. Ethnography pictures are as inescapable as sounds, smells, tastes, words, or some other part of culture and society. After ethnographic fieldwork, when ethnographers produce photos or video as a research product, that is turned out to be an important part of the ethnographic knowledge.

Visual ethnography typically utilized film and photography as apparatuses in their research. The visual examination includes the utilization of visual-catching technology such as a camera to find out the meaning of the social world. Visual strategies frequently use a few media, for example, moving pictures, film, photos, craftsmanship, drawings, and compositions, in looking to comprehend the social world. Empirical methodologies permit researchers to consistently re-examine the connection between the world we experience and
the creation of anthropological information through visual materials. Pictures and tangible materials are utilized to provide new diagnostic and methodological points of view on visual ethnography.

**Picture and photographs**

Researchers incorporate images in the creation or collection of data that might be able to reveal some sociological insight that is not accessible by any other means. In visual ethnography, the researcher's primary task is to study or explain culture. Which provides detailed knowledge of how people feel, think, imagine, and perceive their world. Photographs were a prominent feature of ethnographies and a resource for anthropologists in the recording of ethnographic data. It is used to document/record and represent knowledge about society. Ethnographers recognized that the photographic image is ‘true’ in the sense that it holds a visual trace of a reality the camera was pointed at.

The photographs were regarded as a part of the process of observation. The photographer must become conscious of the theory that guides one’s photography. Photographic projects concerned with exploring society it means learning to understand society better. Researchers must be sensitive to local perception of photography and should always try and establish rapport with people before taking photographs or shooting video. If the researcher uses images not only as representations of the objective world but also to communicate “thick description”, “thick interpretation” and thick meaning.

**Use of photography**

- Photography as an apparatus to record and figure out different society
- Photography as a method for conveying ethnographic information
- Photographs not just communicate stronger than words but also provide broad meaning.
- Photographs are open reports where watchers can comprehend and develop layers of social and cultural significance

**Film**

An ethnographic film developed during the 1960s as a significant instrument for research in anthropological studies. Film cameras have become a fundamental bit of anthropological instrument to record the regular daily existence of individuals. Film devices have gotten successful to record social evidence. So in visual ethnography, the camera can be utilized as an examination device to record genuine functions and investigate social information. Film would give a superior anthropological comprehension of information. It
incorporates a wide scope of visual structures film, photography, tribal or primitive art, TV and film, computer media—all are joined by their materials present in the physical world.

Visual ethnography provides real and valid knowledge about another culture. It allows the crowds to comprehend and detect different societies by underlining simple types of portrayal not entirely clear. Ethnographic movies are a way to crowds building their meaning depending on their perception of the film.

Ethnographers must present a "thick depiction" about realities as well as of critique, interpretation, and understanding of those remarks and understandings. Cameras can be utilized to record thick portrayals of participants and their socio-social setting through their voices and activities, in light of their understanding of their reality. Through ethnographic movies, crowds can watch circumstances and make sense of events.

Photography and film have a significant role in visual ethnography both in its contemporary practice and its historical beginnings. Visual anthropology tries to understand noticeable cultural forms. The visual ethnography that utilizes the visual media to portray and analyse culture with interdisciplinary methodology. It is related to the whole research process, from the recording data to reveals of the research results.

4.2. A.6- Visual methods in social science research

The use of visual ethnography helps the researcher to decipher and interpret complex miniature social activities inside one time span. The images and videos help the researcher to understand the social, environmental, and life changes of a specific region. Visual information is an amazing asset of analysis, investigation, and social narrating that gives visual depictions to social phenomena. Researchers can clarify realities and real factors through the utilization of film and picture, it might be hard to enter or clarify through interviews, observations, and text alone. Visual pictures and videos do not only provide information regarding regular day to day activities of the participants in the research. It also provides an opportunity to comprehend social patterns, perceptions, and practices.

Researchers utilize visual backings not exclusively to depict, decipher, or represent a social reality, however, to make and envision new understandings of social experience through visual techniques. Visual materials can be utilized to portray and decipher people groups' lives. New perspectives help on the ethnographic utilization of material culture to contemplate regular day to day existence.

These visuals can incorporate art, family photos, and other visual portrayals or images that establish the material and social build-up. When moving toward those who participate in the study, making information through their reactions or the researcher using participant
methods to make visual information. Visual segments become part of the researcher field notes, documentation, and notices that add to our comprehension of the field. Images can assist with disclosing our examination to other people. Visuals are a type of answer and to draw in with them with an explanatory goal, perceiving designs gets essential.

4.2. A.7-Conclusion

Visual Ethnography, a methodological approach that permits us to describe, decipher, insight, and speak to cultures and society through long-term participant practices. Doing visual exploration through participative and reflexive systems gives another method of making and sharing information through visual methods. The construction of ethnographic information inside a visual and sensory methodology. It is a method of drawing closer the genuine instances of public activity, by considering the images as a material both explicit and general, theoretical, and concrete. The visual image/video has become central to many of the contemporary social and political movements throughout the world. The Images/photographs or videos have played a large role in transforming our understanding of nature and the world.

4.2. B- Archive Methods

4.2. B.A.1- Introduction

This type of research is typically done either by academicians and understudies students with regards to committed educational projects or by groups drove either by scholastics or experts with regards to investigating projects. Some research centres on objects, methods, and activities are considered a major aspect of archive research. A few researchers access a lot of information without direct interaction with research participants. Rather, the researcher finds out answers to a problem through the use of existing available materials. This kind of research approach is known as archival research/method. Archival research is predominantly interconnected with records and data. These records may incorporate newspaper articles, autobiographies, photographs, audio-visual materials, censuses, Letters, Greeting cards, Manuscripts, Telegrams, Memoirs, Reports, Diaries, and even speeches.

4.2. B.A.2- Archive methods

Archival method is one of the research methods for analysing preserved historical documents and data, to answer various research questions. Primarily this method is also used for nonhistorical investigation or research methods such as field methods, survey methods, ethnographic studies, etc. The archival records may include organizational documents,
public announcements, and personal narratives. Considering existing sources gathered by different scientists is a basic piece of research in sociologies. The investigation of sources gathered by somebody other than the scientist is known as secondary data research. Archival research isn't around gathering new information but about considering existing texts.

Encyclopaedia Britannica defined “An archive or record office constitute a repository for an organized body of records produced or received by a public, semi-public, institutional or business entity in the transactions of its affairs and preserved by it or its successors”. The archival records also include personal and private recorded documents.

A researcher can access an abundance of archival data from various sources for their study. So that Archival research limits the reaction inclinations of subjects because the scientist is absent while the information is recorded. This will help the researcher to gain these materials very easily and less expensive than other research methods. It helps the researcher to confirm that the outcomes and theories are a by-product of experiment, it reflects the real world. It can also confirm that it does not exist only in artificial or simple laboratory settings. That is why we can say, this approach can assist researchers in making ground-breaking thoughts for hypotheses and experiments.

Archivists satisfying their professional qualities projected through their research inquiries as well as the historical framework. The primary differentiation among historical and archival methods doesn't dwell in the verifiable affectability or limit of the researcher, but the method. The archival approach is not the same as the historical methodology since its hypothesis and philosophy are not an inseparable unit or an inseparable knot of strings. They comprise a reasonable framework in which the former is theory and other is methodology.

Sociological researchers go through past work in their general area of interest and incorporate this "literature review" in the introduction of their research. While writing a literature review, the researcher's main purpose is to convey the relevant information learned from a set of articles or books. It shows the theoretical framework that the researcher is working with. Archival research involves examining texts and documents as evidence of all aspects of a human being. It is possible to do sociological research without directly involving humans at all. In archive research, all information is collected from texts and documents. Sociologists may use different recorded documents according to the research topic of their study.


1- Access to archives
Access to archival documents are limited and restricted to entry. So the researcher should ensure the availability of appropriate archival documents before entering the archival research. Simply, prearrangement for entering the archive is necessary to complete the research successfully. In terms of the Museum, the curator has the responsibility to keep all the materials. Some of the universities provide entry only to Faculty, students, and alumni. If any library denies entry to the library/archive, the researcher can choose another library for some materials or may use interlibrary loans.

The researcher can also use a letter from a research guide to enter the archive. You can easily access archival areas with the permission of a curator, in small archives. But in a large archive, researchers may need to follow some formal procedure.

Initially, the researcher was required to gain permission in the archive. The archived materials are arranged in chronological or specific groups. Few archive collections may be denied to access a certain group of users. It requires special permission from the authority.

2- **Uniqueness of archival materials**

“Archival material is typically unique, irreplaceable one of a kind items that cannot be obtained elsewhere”. Sometimes copies of a particular book available in a particular library. So it demands special protocol to access these irreplaceable materials.

3- **Noncirculating materials**

Due to the uniqueness of the archive, it cannot be possible to circulate. They can’t be looked at or acquired through interlibrary credits. Researchers need to physically access it from the archive, especially for more relevant archival documents. “A careful inquiry of any document may take days, weeks, or even months. The researcher is also required to consider the time and expense for accessing it. He/she can only access this material when the archive is open. These structural limitations will generally keep the utilization of recorded materials to local scholars and those who have adequate time and money.

Your decision to seek an archival research method ought to incorporate a practical evaluation of the money related and spatio-temporal limitations under which your foreseen work will be conducted.

4- **Property rights**

Beneficiaries of recorded materials always reclaim private property rights over materials stored in files. Researchers who are approved by the beneficiary are
provided material for research purposes. These donors bring some restrictions, such as copying, a publication of materials to use recorded materials. Letters, published/unpublished articles, and other intellectual materials protected by copyright law.

Copying of work, as a rule, is related to the person who wrote. It is not to the person who sent it. So the actual point here is that access and dissemination of data in archives are often subject to restrictive controls.

4.2. B.A.3- Conclusion
A collection of documents created or collected by an individual or organization is kept in one place for a long time/just days ago and such documents are used by a researcher for his study. The researcher can gather clear knowledge about the socio-cultural conditions of the past from the records collected in the archives. Archives are significant because they give proof of activities and disclose to us more about people and social institutions. They enhance our sense of identity and understanding of society. Sociologist researchers can use archive methods for comprehension of tradition and interpret materials in such a way as to ensure the integrity of data. A researcher can use original data that the information you need just isn’t available elsewhere. Today, many archival documents are available digitally. So researchers can collect information from this kind of archive from anywhere in the world.

4.2. C- Oral History
4.2. C.A.1- introduction
Oral history is one of the cores used methods in qualitative research. In this method, oral history, the researcher asks people to talk about their overall life experiences and memories or to discuss specific experiences and events in a narrative form. This method of qualitative interview demanding well-prepared questions and recording the respondent responses with either audio or video equipment. Oral history gives more importance to the participant’s perspectives. If you trace out the history of ‘oral history’ methods, it has a relation with anthropological traditions. It is used to access the experiential knowledge of respondents directly from the field. Many cultural anthropologists used this method to understand real and past cultural aspects, including the different social organizations, of the people.

4.2. C.A.2- Oral history
Oral history is one of core used methods in qualitative research. Oral history is an effective method to acquire in-depth knowledge from the research participants. So the researcher’s physical presence is necessary. Use of preserved documents or data about past
events as an important methodological tool. This method gained familiarity during the 19th century. The Chicago school of sociology, a department under the University of Chicago, used oral history for documentation and analysis of urban social life in the 1920s. After that, oral history was adopted widely for understanding or studying various topics, especially urban issues, social consequences of poverty, issues in industrial sectors, health issues and Wellness, problems in the education sector, etc. Some of the popular works done by anthropologists are based on oral history. Anthropologist Oscar Lewis, who documented information collected from Mexican families, Neil Rafeek of Scotland social Justice successfully used oral history for the search purpose.

Researchers frequently interview participants in a significant period. Sometimes it considers only one research participant and covers an extensive part of a respondent's life, especially discovering individual experiences in the larger social context. Participants reveal their stories to the researcher in a narrative manner. So the respondent is a “co-creator in the knowledge formation process”. This approach helps to generate new theories. Recently, feminist researchers used oral history in social research. These investigators used this method to enquire about experiences and perspectives of marginalized resection of women in society. It caused the discovery of women's subjugated knowledge.

Oral history is an effective method to acquire in-depth knowledge from research participants. So this method demands the physical presence of the researcher while collecting information. The major purpose of oral history is to acquire first-hand knowledge from people who live in different social, cultural, historical, and political periods and events. It also gives adequate representation to marginalized sections of the society. We could see traditional interrelations between oral history with other qualitative interview methods in social research, such as open-ended interviews, life story interviews as well as semi-structured interviews. But this method also incorporates other modes of information, especially from written documents or observations. But the researcher needs to establish a standardized form of interviews and appropriate consideration to the ethical issues while interacting with interviewees. Today, Oral history is one of the multidisciplinary methods for research according to the research topic and interest of the researcher.

4.2. C.A.3- conclusion

Oral history is used by different disciplines with various perspectives on the subject. Historians use ‘oral history’ as a document and preserve it as historical documents. Anthropologists use it with the purpose of understanding a different culture. But in sociology,
oral history is used with the intention of connecting individual experience with socio, cultural, historical, and structural phenomena or social world.

Levy, p point out that oral history is a unique method and involves different dimensions of the respondents, such as it covers personal experience, memories of events, attitudes, values, beliefs as well as opinions and perspectives. Oral history has been used as a way of passing down memories of the past for centuries and of sharing memories across cultures.

4.2. D- Interview Method

The interview, when coupled with an adequate schedule of pretested worth; is a potent and dispensable research tool. Yielding data that no other research tool can yield. It is adaptable, capable of being used with all kinds of respondents in many kinds of research, and unequally suited to expatiating in depth. Thus we have seen that the various sources of data and the different tools for data collection mentioned above enables the carrying out of the research in social sciences.

4.2. D.A.1- Structured and unstructured interviews:

There are mainly two types of personal interviews. They are I) Structured and 2) Unstructured interviews. Structured interviews involve the use of a set of predetermined questions and of highly standardized techniques of recording. The reason for standardization is to ensure that all respondents reply to the same questions, i.e., any given question has the same meaning for all respondents. Structured interviews mostly involve the use of fixed, alternative questions. The alternative questions or closed questions are those in which the response of the subjects are limited to fixed, predesigned alternatives. These alternatives may consist of a series of replies out of which the respondent picks anyone or more which is most relevant or closest to his positions. Structured interviews may also involve the use of open ended questions, but the questions and their order are already predetermined. The interviewer is however free to repeat the question if the replay is not to the point. Generally, the interviewer has no freedom to change except to get clarification of the subject’s responses and these questions must be non-directive or non-suggestive.

Unstructured interviews, as opposed to the structured ones, are characterized by a far too greater flexibility of approach to questioning the respondents. Compared to the structured interviews, unstructured one involve relatively much less standardization of relevant techniques and operations. Consequently, the investigator is never certain as to what the respondents will give out as information.
Interviewers of this type of interview do not follow a system of list of predetermined questions. Respondents are encouraged to relate freely and frankly their concrete experience with little or no direction from the interviewer. The respondents are allowed the freedom to talk on whatever events seem significant to them, to provide their own definitions of the social situation, report their own focus of attention and reveal their attitudes and opinions as they see it.

The flexibility of the unstructured interview property utilized helps to bring out the effective value laden aspects of the subject’s responses and to determine the personal significance of his attitudes such interviews permit a free flowing account of the personal and social contexts of beliefs and feelings. This type of interview achieves its purpose to the extent the subject’s responses are spontaneous rather than forced. In a non-structured interview, the interviewer is allowed much greater freedom to ask questions.

If the interviewer feels that any supplementary question should change the sequence of question and it needs to offer explanations and clarifications, the non-structured interviews give much freedom. The interviewer has much greater freedom to record the responses according to his own frame of judging.

Significance, relevance and convenience. He is free to include some aspects and ignore others. If such a freedom is granted, the interviewer has both advantages as well as disadvantages.

Such flexibility frequently results in lack of comparability of one interview with another. Further, analysis of the unstructured responses is much more difficult and time consuming than that of the structured responses secured during the structured interviews. Such interviews usually demand deep knowledge and skill on the part of the interviewer. The interviewer is expected to possess not only the general skill demanded by any sympathetic listener, but also the specific ability to adopt temporarily the beliefs and attitudes of each of his informants. The collection of material by such means is inevitably slow and a small sample can be normally expected to be covered. Because of the unrestricted range of subjects on which the respondents may desire to discuss it is very difficult to articulate the recorded responses of different interviews into a single scheme.

One of the major advantages of unstructured interview is that in so far as such interviews facilitate a free and uninhibited response from the respondents, the informant is much more articulate and his accounts in the hands of a skilled researcher may prove very fruitful source of insights and hypotheses, in exploratory studies such interviews are very useful. Such interviews also have the advantages of learning a favourable impact on the
informant who will have acquired the element of skill in self-analysis and will be in full sympathy with the subject matters as also with the substance of the interview record.

The major merit of structured interviews is the uniformity which facilitates bringing the different records into a single conceptual scheme affording a safe for generalization. Being more economical structured interviews afford a larger coverage in terms of respondents. Lastly, it demands lesser skills of the interviewer.

4.2. D.A.2- Interview schedule

Personal interview is perhaps the most ubiquitous method of obtaining data from people. The interview is a face to face interpersonal role situation in which one person, the interviewer, asks a person being interviewed to the respondent. Questions designed to obtain answers pertinent to the research problem. There are two broad types If interview, structured and unstructured or Standardized and unstandardized. In the standardized interview, the questions, their sequence, and their work are fixed. An interviewer may be allowed some liberty in asking reasons but relatively little. Standardized Interviews uses interview schedules that have been carefully prepared to obtain information pertinent to the research problem.

Interviews and application of interview schedules are ordinarily direct. This is both a strength and weakness. It is a strength because a great deal of the information needed in social scientific research can be gotten from respondents by direct questions. Though questions may have to be carefully handled, respondents can and usually will, give much information directly.

Interviewing itself is an art, but the planning and writing of an interview schedule is even more so. Three kinds of information are included in most schedules: face sheet (identification) information, census type information, and problem information. The careful researcher should learn to identify with letters, numbers or other symbols, every schedule and every scale. In addition, identifying information for each individual must be systematically recorded.

Two types of schedule items are commonly used in data collection. They are fixed alternatives (closed) and open end (or open). A third type of item, having fixed alternatives is also used, viz scale items. Fixed alternative items offer the respondent a choice among two or more alternatives. These items are also called closed or poll questions. Fixed alternative questions are probably the communist from the interview item.

Open end items are an extremely important development of the techniques of interviewing. Open end questions are those that supply a frame of reference for respondent’s
answers, but put a minimum of restraint on the answers and their expression. While their content is dictated by the research problem, they impose no other restraints on the content and manner of respondent answers. Open end questions have important advantages, but they disadvantages too. If properly written and used, however these disadvantages can be minimized. Open end questions are flexible, they have possibilities of depth, they enable the interviewer to clear up misunderstanding, they enable the interviewer to ascertain a respondent’s lack of knowledge, to detect ambiguity, to encourage co-operation and achieve rapport, and to make better estimates of respondent’s true intentions, beliefs and attitudes. Their use also has another advantage, the responses to open end questions can suggest possibilities of relations and hypotheses.

Third type of schedule item is the scale item. A scale a set of verbal items to each which an individual responds by expressing degree of agreement or disagreement or some other mode of response.

Scale items have fixed alternatives and place the responding individual at some point on the scale. The use of scale items in interview schedules is a development of great promise, since the benefits of scales are combined with those of interviews.

4.2. E- Case study method

In social research, an approach emphasizing the study of social units as totalities, in contrast to the type of approach where aspects of social units are studied more or less in isolation from another, is called case study.

The case study investigator can do what the statistician cannot do, namely concentrate on an intensive, detailed, free flowing analysis of the configuration of the limited number of traits that he thinks are important (S.Stoufer Social Research in Test ideas).

This case study method of research is especially useful when the objective is to study a single unit in considerable depth or a small number of units in a comparative design. The investigator sets out to learn as much as possible about the behaviour of the unit.

It has the advantage of permitting in depth exploration of social behaviour, however, the feelings and conclusions are based on a relatively small number of social units (gangs, families and so on) which limits the possibility of generalizing from one’s conclusions. But if we build up a large number of comparable case studies, all of which yield somewhat similar findings, the findings tend to support generalizations applicable to the entire category.

4.2. E.A.1- Definition

For Pauline V. Young it is a comprehensive study of a social unit be that unit a person, a group, a school institution a district or a community”. (1966-247)
According to Elmer case study is the analysis of an abstracted phase of experience, usually performed in the interest of describing some quality in the experiential whole (109).

James A. Black and Dean J. Champion write that case studies are usually characterised as through examinations of specific social settings or particular aspects of social settings. Including in varying details psychological descriptions of persons in those settings” (1976-90)

Wilkinson T.S. and P.L. Bhandarkar describe it as a method of studying the complex of factors that are operative with in a social unit as an integrated totality” (1977-284)

Claire Seltiz et al write that the case study approach is the intensive study of selected instances of the phenomenon in which one is interested. The focus may be on individuals, on situations on groups, on communities (p.60)

According to William J. Goode and PK. Hatt the case study is not a specific technique. It is a way of organizing social data so as to preserve the unitary character of the social object being studied. Expressed somewhat differently it is an approach includes the development of the unit, which may be person, a family or other social group, a set of social relationship or processes... or even an entire culture” (1952-331)

There is a similar definition by John C. Mckinney, The case study is a way of ordering social data with the view toward preserving the unitary character of whatever is being studied. It merely selects and treats some socially defined object or act as a whole. This whole constituted the case unit and the case unit may involve any level or base of abstraction. The case may be a person, an episode in a person’s life, a group a concrete set of relationships a specific process, or a culture (any aspect of the empirical world reacted to as a unit)”, (1967-240-41).

Lastly, Biesanz and Bieasanz define the term in a lucid manner in the following words. The case - study is a form of qualitative analysis involving the very careful and complete observation of person, a situation or an institution” (cf. Bajpal 1976-75)

Case study is a holistic approach. Perhaps it is the only method in social research involving the holistic approach. Whatever be the unit selected it is studied in its entirety. The method involves a thorough investigation and intensive analysis of the unit with view to preserving its unitary character. Unlike the quantitative methods, the case study method aims at maintaining the wholeness of the case. This wholeness of the case. This wholeness of the case can be preserved according to Goode and Hatt, through the collection of vast and detailed data of sociological, economic, political, psychodynamic, biological and other kinds pertaining to the unit. It is also necessary to lay an equal emphasis on the process or
development of the case unit for it is both temporarily and spatially bound and has a particular historical development.

However, the unitary character or the wholeness ascribed to the case unit is only a constructed wholeness. There are no concrete limits to any object or act. The limits imposed reflect the perspective and theoretical interest of the observer. The limits defining an individual may be dissolved when one is observing from the perspective of the group. In turn, the limits defining the group may be dissolved when one is conceptualizing in terms of social order..... Whatever unit has been abstracted out may be examined and described in its uniqueness” (Mckinney 241)

4.2. E.A.2- What is a case?

The term case has different connotations in different disciplines and professions. For example, in medicine it means an ailing person who has approached students, the scholarship difficulties, educational institutions with peculiar problems constitute the cases. In social work the term case refers to a person with an intra psychic interested in resolving his problem with the help of a professional social worker. In these disciplines and professions each case is dealt with by the practitioner, and the process is therapeutic.

But in social research the term case has a different connotation. It refers to a unit of study. The unit may be person an episode in a person's life, a group of persons such as a family or gang, a class of persons such as the habitual offenders or professional demonstrators, a concrete set of relationships like the labour management relations, a specific process like rehabilitation of the displaced persons or reformation of dacoits, an ecological unit such as a neighbourhood or community, an institution, or even “a selected for study chiefly because the selected case may be a deviant case, a negative case a typical case, or an extreme case. Each case is a complex whole and unique. A case is non comparable and yields non additive and non-quantitative data. Such a case is selected for study because the usual quantitative methods fail to take into account the unique features of the case that are extremely important.

4.2. E.A.3- Functions of case study

The function of case study is to describe the case in terms of the particulars that are observable. This means the intensive examination of specific factors implicated in the case (Mckinney 241)

Case study helps to secure a wealth of detail about the unit of study which may provide clues and ideas for further research (Simon. 1968 -276)
By the case study we ascertain as completely as we can the number and variety of traits, qualities, habits, or what not, combined in a particular instance” (Glldings).

Case study depends on our perception and gives us a clear insight into life. It act behaviour directly and not by an indirect and abstract approach (Charles H. Coofey).

Case method is sometimes useful to support a belief, a tradition or a point of view weenie advance a new interpretation (Elmer).

The above listing of the function raises a question whether case study helps to formulate hypotheses testing and generalisation. The answer is partly yes. To the extent the case study provides a wealth of data and clues and ideas for further research one may be in a position to formulate hypotheses. But hypotheses testing and the consequent generalisations applicable to the universe are not possible through case studies for case study is the quantitative. Further, although the case studies are conducted in such a way as to provide detailed information about social units they are limited in scope meaningful generalizations to be made to larger social aggregates (Black &Chempion, 92)

4.2. E.A.4- Procedure, tools and techniques of data collection

Case study is a very flexible procedure varying from case to case. The specific method, however, depends upon the common-sense and imagination of the researcher. He makes up his procedure as he goes along. He does not work within any set categories or classification with a view to obtaining the maximum benefit of the case study, Hence, total objectivity, a critical and evaluative approach, sincerely and industry are required of the researcher intending to employ the case study method.

The case unit may be described by an indefinite number of facts. These facts may be obtained from many diverse sources such as documents, life histories, interviewing the individuals, from participant observation, etc. Expressed in other words, the data collection techniques and tools employed in case study include interviewing, interview, schedule questionnaire, documents, life history records etc.

Whether life history is case study?

Most of the definitions of the term case study treat a person both as an individual and a member of a group as a unit of study, Hence a large number of life case histories are labelled as the case studies. A relevant reference to this effect is available in Puline V. Young’s book entitled Scientific Social Surveys and Research. It is usually forgotten that the wholeness of the unit goes not consist only in the history or the development of the unit.

It is true that almost always, the case study approach includes the development of the unit studied, but besides the development of the unit the case study should also be concerned
with its present for preserving the unitary character of the case. In fact, as Black and Champion have put it, the case study extends to virtually any dimension of the unit being studied. But besides the development of the unit the case study should also be concerned with its present for preserving the unitary character of the case. In fact, as Black and Champion have put it, the case study extends to virtually any dimension of the unit being studied. In other words, what should be a part of the case study is usually treated as the whole.

**Whether to study one or few cases?**

Again there are a good number of studies covering a sizable number of cases when a number of cases are studied they are certainly not the deviant cases, negative cases, extreme cases or typical cases. For example, Dr. William Healy, who is considered to be a pioneer in case study method, studied the juvenile delinquents for he found that each delinquent was different from the other, such a study should necessarily be a quantitative study. But because in those days the methodology of social sciences was not developed Dr. Healy adopted the case study method. In his study certainly the unitary character of the cases was not preserved. Today if he were to study the same problem he would treat all juvenile delinquents as constituting the population of the. Study and would draw an adequate sample and interview them; he may also collect data from the supplementary sources. In other words, when our concern is for number, for repetitive data it is not a case study.

Further Dr. T.S. Wilkinson and P.L. Bhandarkar in their book Methodology and Techniques of social research write that during the last few decades, “case study techniques have shown a steady trend toward formulization, that is, case studies can now be conducted in a manner that the data are amenable to qualification and statistical treatment”. This is really an unfortunate trend according to me. For the social researcher cannot afford to convey every method into a quantitative method. There are serious limitations and weaknesses of the quantitative method, the standard error, representative sample, and problems of response, etc. to mention only a few. Furthermore, for sound theory building we need to lay stress on both the quantitative and qualitative methods may be more useful in applying the covering law model of scientific explanation and establishing the deviant or negative where a logicodeductive system with a covering law is employed. Although the logicodeductive model is seldom utilised in sociology, this procedure, where applicable, could further sociological investigation. Here the case approach (qualitative) is indispensable, for one deviant case suffices to falsify the model (1968-260).
Case study and social case work

Social case work is one of the three basic methods of professional social work. It seeks to help the individuals having intrapsychic, interpersonal or socio-emotional problems. It is defined by Helen Harris Perlman as a process used by certain human welfare agencies to help individuals to cope more effectively with their problems in social functioning” (1957; 2).

The nucleus of the case work event is that a person with a problem comes to a place where a professional representative helps him by a given process. The person with the problem constitutes the case, when he starts receiving the professional help, he is called a client. The helping process is a progressive transaction between the social case worker and the person, ‘It consists of three parts study, diagnosis, and treatment. These are not logico sequential steps. Instead they are woven in and out, one process paralleling, another.

The process of study in case work is an investigation of the client’s problem in order to understand it to render effective service. The investigation is a psycho social process. The data are collected not only from the client himself but also from other persons who have had a significant role vis-a-vis that of the client as well as other sources. The case worker tries to deepen a balance between the client as primary informant and another reliable source, enlisting the client’s participation in such an investigation. The means of exploration are interviews with the client and his close acquaintances, contacts with selected aspects of the clients, economic, cultural and social milieu, such as his home, his occupational, educational religious and recreational associations and with medical or social agencies and insatiate institutions. Records and documents also have a place in this investigation. Thus the case worker tries to get enough factual material to facilitate understanding the problem of the client (case).

Diagnosis is a design for action. Hence the case study enables to prepare the plan of treatment. And the diagnostic process is largely devoted to gathering and evaluating data. In other words, the case study in social case work, though detailed enough, is basically theraupeutic. The investigation of the problem but to help the client (case) to solve that problem. And the problem is not a research problem, Even then a question may be asked whether the case study in social case work is an apiece research. The answer is in the negative At the cost of repetition it may be said that the problem is investigated to resolve it; the investigation helps to design a course of treatment. However, it may be added that the case work records are utilised by the social work researchers; they are a valuable source of data for them. There was a time when social work research was conducted only on the basis of the available case records.
4.2. F. Content analysis

4.2. F.A.1- Introduction

Content analysis is used in the social sciences as a means of studying communication its underlying meanings, its dynamic processes, and the people who are engaged in talking, writing or conveying meaning to one another. Although not a research method sui generis content analysis is roughly distinguishable from other methods by two characteristics.

1- Its data is content to ethnographic reports, for by it or census enumerations one the verbal or other symbols which make up the content of communications (letters, books, sermons, conversions televises programs therapeutic sessions, paintings and the like).

2- Its procedures differ in emphasis from those of the historian or literary critic, and repeatable to minimize any jagueners or bias resulting from the judgement investigator. Thus, each content analysis employs an explicit, organized plan for assembling the data, classifying or quantifying them to measure the concepts under study, examining their patterns and interrelationships and interpreting the findings.

Within these broad limits the techniques of content analysis are drive one and the objectives range from mapping propaganda campaigns for e.g. to explaining international conflict and integration, from abstracting the ideas and beliefs expressed in folklore for movies of a given period to tracing the epochal alternations in human values over many centuries, from clarifying the interaction between patient and therapist to assessing the psychological states of great man, is the past.

It is one particular form of archival data which has been studied extensively is the content of messages. Since communication plays such a central part in all social behaviour, it is not surprising that the content of communication is any from that has been subject to much scrutiny, and a whole body of research techniques has resulted.

Content analysis refers to “any techniques for making inferences by objectively and systematically identifying specified characteristics of messages”. It is the study of “Who says what, to whom how and with what effect... (and) why?, it is a means of objectifying the sometimes casual and superficial judgement of communication content which are frequently made, and supplements the subjective examination (casual or detailed) of a given message.

According to Brelson Content analysis is a research technique for the objective, systematic and quantitative description of the manifest content of communication”

Content analysis seeks to systematize unclassified details. Such as newspaper information simple rules for identification and treatment should be worked out for the
The early use of content analysis were in studies of the nature and effects of propaganda, and this type of analysis later spread to studies of new media, education, and them communication is general, content analysis is usually thought of in connection with the mass communication media, but it is by no means limited to these it may be used with virtually any kind of written materials and pictoreat and should materials as well’. As the name and definition imply content analysis refers to both the collection and analysis of data:

Generally there are three main emphases of content analysis.

1- It may provide information about the characteristics of the originaters culture or about originator himself including for example intriguing cases of unknown or disputed authorship.

2- The interest may be in the message itself, ‘such as the relative effectiveness of alternative messages or a comparison of messages from a simple source at different times or under different circumstances.

3- A content analysis study may tell something about the effects of the message as the target audience. The researcher’s main decisions in such a study have to do with the selection or sampling of the messages, the determination of the categories to be used in analysis. (Simple words, sentences paragraphs, theme etc), and the units used for enumeration (such as frequency or intensity of various kinds of units of analysis).

Other illustrations of the kinds of research problems which have been studies though content analysis are:

1- Attempts at identifying the source of messages by analysis of sentence length and frequency of various Classes of nouns.

2- Studies of the content of messages by counts of words and symbols, by amount of space devoted to various. Topics, by presence of different types of bias, and by comparison of the frequency of occupations portrayed on T.V. With the frequency of those occupations existing in society.

3- Study of frequency of items in a message as an indicator of the author’s personality truth etc.

Obviously content analysis does not exist of anyone particular method of data collection, but in typically a counting or measuring of certain carefully selected items.
4- Studies of the differential content of advertising message a related to the audience toward which the magazines were ashamed

It was pointed out that content analysis is both a method of data collection and of data analysis which has attracted considerable attention is the use of computers, especially where word counts or word meanings are central to the theory under investigation (e.g., attack, security, nuclear defense, etc.) or prepared. The text to be analysed is then fed into the computer which is sequences. The co required specifications, expressions of attitudes, and many other variables.

4.2. F.A.2- Historical background

The use of content analysis is the social science today, its methods and its problems of interpretation has been affected both by related developments in other fields and by historical demands for certain practical application 20th century, students of journalism began to sport comparing newspaper content with the content of other media. In literary criticism such devices as type rhyme or ratio of adjectives to literary periods or to settle disputes about authorship or ethology of an author’s work. Meanwhile, educators were constructing formulas for readability of printed materials, utilizing proportions of easy and hard word length of sentences, and the like.

During 1930 the first full analysis along these line was published (New York). The topic happened to be the amount of space devoted to foreign news in American morning newspaper. The value of this technique three years later, was enhanced and confirmed in Hamell Harts analysis of trends in the space devoted to various subjects in American periodicals and books. The next important step was the adfink in 1973 by Herald Lasswell to recorded psycho analysis for the systematic study of recorded psycho analysis interviews subjects covered in these interviews were systematically classified and as a result much of the same system of categories could be used in a variety of other contexts. With the outbreak of war in Europe, Lasswell undertook the direction of an officially sponsored World Attention Survey based on content analysis of foreign newspapers. Apart from certain immediate functions, this technique was found to provide an intellectual weapon of the same consequences. For e.g., the content analysis indicated that Germany was closing the path for a sudden change in diplomatic orientation. This surmise came out to be true subsequently.

Late, Leities and Pool used a similar technique to study changes in the leities and pool used a similar in the commitur policy and throughout the war, students of Lasswell and Laites undertook a similar unites states foreign language press on behalf of the US department justice. Over the propaganda, the speeches of politicians, the content of radio programmed,
films, popular magazines, etc. Have been subjected to content analysis indicated that Germany was used an initial interviewing programme in the hawthorn electrical studies and also included in the preparatory technique for the studies and also included in the preparatory technique for the focussed interviews undertaken by Marten and Kandell. R.K. White content analysed the public speeches of Hitler and Roosevelt with a View to identifying the propaganda techniques and describing the appeals of political leaders to this followers. While systematically ascertained the values to which the two leads appealed in this public speeches. In the main, the identifies three values on which the compared the two leaders, i.e. Sheneth values, moral values and economic values.

4.2. F.A.3- Purpose of content Analysis

A survey of the field by Berelson brings to height that specific purpose for which documents or communication content have been analysed. These are:

I. Purpose of ascertaining the characteristics of content
  ➢ To describe trend in communication content
  ➢ To trace the development of scholarship.
  ➢ To disclose international differences in the communication of content.
  ➢ To compare media or levels of communication
  ➢ To audit communication content against objectives
  ➢ To construct and apply communication standards
  ➢ To aid technical research operations
  ➢ To expose propaganda techniques
  ➢ To measure readability of communication materials
  ➢ To discover stylistic features.

II. Purpose of ascertaining the cause of content.
  1. To identify intentions and other characteristics of the communications.
  2. To detect the existence of propaganda
  3. To determine the psychological state of persons and ground
  4. To secure political and military intelligence.

III. Purpose of ascertaining effects of content.
  1. To reflect attitudes, interests, values of populations
  2. To reveal focus of attentions
  3. To describe attitudinal and behavioural to communications.
It should be remembered that any simple study may have one or more of three purposes.

The research producers involved in the content analysis of books, magazines, newspapers, radio programmes, films etc. consist of utilizing a system of categorization on which basis the communication or documentary content is analysed quantitatively and this in turn is granted to test hypotheses the investigator sets before himself. This content analyses may be magazine to test hypotheses about the treatment of minority groups in magazine articles or in films etc. or to enquire into propaganda techniques. Communication through the media of radio, films, public speeches etc. may also be subjected to content analysis. The important point about analysis is that content of communication analysed by means of systematic predetermined categories based on themes, value intents and styles etc. which often yield quantitative results. A simple instance would be to hypotheses that a certain newspaper has change hands, say a couple of years ago. Rather them leaving this an impression of the reader, content analysis would test the impression systematically and see if it conforms to reality.

4.2. F.A.4- PRECAUTIONS

Due largely to the work of Lesswell and associated the techniques of content analysis has registered a tremendous improvement. The analysis of content proceeds under certain controls that render it

Systematic and objective in comparison with the conventional impressionistic review of communication systematic and content.

1. The categories of analysis used to classify the content and clearly and explicitly defined so that other individuals can apply them to the same content to verify the conclusions.

2. The analyst is not free to select and report merely what strikes him as interesting but must methodologically classify all the relevant material in his sample (which again is selected as a representative of the universe).

3. A quantitative procedure is used in order to provide a measure of the dominance and emphasis in the material of the various ideas found and to permit comparison with other samples of material.

4.2. F.A.5- Advantages

Several advantages accrue to the student of communication who decides to use material that already exists rather than to elite new ones.
1- Time, about and expense can be saved when the researcher can go directly to the heart of analysis.

2- When massive data are required beyond the scope of a single new study, existing content material frequently affords. Wide ranges of potentiality relevant variables and of refinement in the measurement of each variable.

3- Most important, “the available data afford the only means of studying certain kinds of communication problems. The analysis of historical situations or long terms trends, important study of social change depends upon the prior existence of relevant materials. Similarly study of cross cultural communications from remote places may require materials that cannot be elicited by the researcher directly. Communications contents in technical fields that are beyond his competence of the researcher may have been originally assembled in usable form by an expert such as psychiatrist, social worker, or an ethnographer. Sometimes letters of diaries existing materials may provide insights into intimate feelings or personal relationships.

4.2. F.A.6- Disadvantages.
Against such impressive assets must be set certain basic problems to be overcome his utilization of data not originally assembled for the present purpose.

1- The materials are often in complete, The content analyst must attempt to discover any absence of letters from a file of correspondence or of speeches from a set, which may means that the data lack representativeness,

2- The data may lack reliability or validity. An isolated record of a historical event, for e.g.: cannot be checked through comparison of different accounts or through direct observation or question or questioning they by the researcher, Clues to validity can often be obtained, however, by comparing two sets of data believed to reflect the same concept.

3- Data from differing socio temporal contests may not be directly comparable, as Source of information may themselves change over time or from one country to another, or the same categories may take as different meanings. This difficulty requires careful documentation and the search for linguistic equivalences.

4- Finally, the data that comes to the researcher in a form he does not fully understand may not fit definitions of the concepts under serfing. Until the researcher who handles data he himself has collected, he is often unfamiliar with the circumstances under which the communication originally took place yet the content of a diary may depend
4.2. F.A.7- USE OF MEASUREMENT

The content analysis makes use of his data to measure his concepts, rather than to describe them in discursive language. His data consists of certain concrete communications of certain concrete communication of certain corresponding definitions of particular types of orientation actions, or characteristics of particular type’s data. Measurement is defined as the classification of cases (persons, groups) in terms of a given property, according to the same rules for selecting and combining appropriate communications data as indicants.

4.2. G. Life history
4.2. G.A.1- Introduction

The life history method is quite prominently used in disciplines like history, anthropology, sociology, and psychology, and has likewise become most related to feminist research. It is requesting respondents and researchers, as it tries to go into profundity and recover experiences of the past. This method required detailed and broad information for statistical analysis and interpretation. However, style is more organized and this approach is more intensively used for research purposes.

Life history permits the specialist to know subjects personally and to notice the little propensities, fears, loves, gestures, ceremonies, and traditions. Although utilization of non-standard procedures declined all through the 1940s and 1950s, it is presently expanding again and adding to a more extensive, all-encompassing way to deal with research issues.

4.2. G.A.2- Origin

The utilization of life history as a strategy for social research has a long tradition, extending back to Thomas and Znanicki’s profoundly compelling book ‘The Polish Peasant in Europe and America’, which gave an entire volume to the existing history of Polish immigrants, and the assortment of life histories by the powerful Chicago School of the 1920s. The ascent of quantitative sociology in the United States made the technique go into a haste increase during the 1940s which was just switched as a component of the overall sprouting of qualitative strategies for research during the 1970s. Plummer (2001) gives an incredible diagram of the beginning phases of life history research and spots the strategy with regards to the expansive range of subjective exploration methods, specifically those that utilization individual reports as an essential source.

The utilization of life history ought to go to a great extent to Daniel Bertaux, a French sociologist who set up a global working gathering on life history in the last part of the 1970s
which immediately formed into the 'Account and Society' Research Committee of the International Sociological Association (ISA).

4.2. G.A.3- Life history

Life history approach in qualitative research accentuates the significance of introducing the individual’s abstract assessment of his experience and of giving data about his social experience. It is the record of a day to day existence, finished or progressing. This methodology consolidates both written and oral evidence. The data accumulated offers essential proof of social relation and process. Bertaux and Kohli (1984) propose a differentiation among interpretive and 'logical' ways to deal with life history. The first concepts mainly focus on importance in individual lives, and the second looks for precise depictions of life trajectories and to reveal the process of shaping human behaviour and relations. Plummer (2001) notes three principle kinds of 'life stories': the naturalistic (accounts of a day to day existence told in a given culture); the researched (explicitly assembled for research purposes); and the reflexive–recursive (biographies built-in reluctance, being the result of postmodernity's 'emergency of portrayal').

The existence life history approach has underlined the significance of listening in to the voices of the subject being contemplated, particularly subjects who have a place with marginal sections. Life history approach plans to infiltrate further than some other methodologies by permitting the subjects to recount their accounts and present their perspectives. The existence history method is grounded in a practical personal way to deal with information in which a definitive trial of truth is insight. As a rule, it tends to be said that the life history approach investigates the subject’s experience and the implications he/she attributes to the experience. In any case, these experiences move and change from setting to setting, and the standard truth here is the getting a valid on impartially of these lived experiences.

Life history approach can be considered as the realist and the constructionist method. The pragmatist approach has been keen on the historical process, for example, social versatility, ages, and the experiences of social groups. The constructionist approach will generally focus on the introductions of new thoughts, personalities, and narrative designs. A person's life history turns into an entry point into understanding the social and economic structures which shape the person's life. It is likewise requesting on respondents and researchers, as it tries to go into profundity and recuperates experiences across significant stretches. It can likewise reveal compelling feelings. The meetings are regularly time-serious, some research may take a few day meetings.
The way into a fruitful life history is the believing relationship created through rapport. Every researcher has an unmistakable character that impacts the subject in some way if the response is a positive one, coaxing by the researcher will do minimal great and if it may be negative, the researcher needs another subject ought to be thought. The researcher directing a daily existence history ought to be particularly mindful of the requirements of the subject during the initial scarcely any weeks and continue gradually. A relationship should get strong before approaching to sample and talk about a casual atmosphere helpful for a meeting might be made such as by not interfering with the subject while talking, focusing on what she/he says, etc. The researcher needs to clarify the nature of the research, motives, intention, and objectives characterized. Desires for the ultimate result likewise ought to be talked about regarding published previous papers or a book. Most witnesses are not ordinarily the results of an inquiry, yet arise through possibility gatherings or reference.

Life history approach utilized open-ended questions with little mandates from the researcher and giving long clarification of the respondents. Informants can be from a small sample. Gathering information identified with life history doesn't limit to just a single source or sample. Utilizing this technique for information collection gives profundity and detailed data. It gives a detailed depiction of explicit acts, events, relations, and conditions specifically live. So the researcher can comprehend the social change in a better way. This is one preferred position of utilizing life history to consider a social change. Capacity to decipher their own lives and themselves is the past, the present, and the progressions they perceived. Life history is to provide thick depictions of perceptible changes in behaviour and circumstances. It provides an opportunity to comprehend the social change that happens in the respondent’s life at a specific period. Assists with sorting out changes in social character, in singular lives, and the public arena. Without the viewpoint of time, it is hard to perceive what numerous little changes add up to.

4.2. G.A.4- Limitations of Life history

This methodology which is subjective in nature requires the researcher to gather information comparable to the existing history of an individual inside or out and in detail, so generally takes quite a while. There are numerous issues engaged with the utilization of the life history approach, for example, dependability, legitimacy, and interpretation of collected data, etc. The main issue of unwavering reliability is predominantly related to inner consistency and all other potential wellsprings of related proof. This strategy essentially relies on the researcher’s efficiency and abilities. The problem of validity emerges when a conversation on the “truth-quality” of the information focuses on the presence of numerous
realities. To get the right direction and to have the option to address the research question, there is a requirement for the researcher to be focused on the right data and to be cautious about the sources too. However, there is an issue that may arise in the inspecting strategy that is as far as sample size and the technique for choosing the sample. It was due to the small sample size. Understanding and interpretation of data gathered is another type of issue ordinarily emerging in the life history approach. Records are not duplicates of some unique reality yet an interpretation of information as words and sentences recorded.

Different restrictions can emerge through language barriers, age, and gender if the researcher doesn't communicate in the subject's language smoothly. Since the subject's/respondent life functions may have occurred in an alternate time setting from that of the investigator, misconception can happen. Gender contrasts likewise can influence the degree of data between subject and researcher.

4.2. G.A.5- Conclusion

In spite of the fact that everybody has a story to tell, not every person makes decent subjects for a day to day life history. Life history approach underlines the experience of the person that is the manner by which the individual adapts to society. Qualitative research can likewise be delegated interpretative research. Qualitative research can deliberately choose sources that will most fitting answer the exploration question. Fundamental standards to manage the determination of a member incorporate the components of time, ability and relationship.

4.2. H. - Genealogy

4.2. H. A.1- Introduction

Genealogy is one of the significant strategies for the investigation of family relationships. In the early 21st century, genealogy was set up as a part of anthropology. The term Genealogy is derived from the Greek word “genea” which implies generation, race, or family, and logos, which means knowledge or science. It is the study of families and the following of their ancestries and history. Genealogists utilize oral traditions, historical records, hereditary examination, and different records to get data about a family and to show connection of its individuals. The relationship exhibits in the method of composed or narrative structure. For the most part genealogical methods play a significant function among illiterate individuals, by which lineage is regularly followed back to a few ages just as countless.

Genealogies history ensure the precision of data. The genuine utility of genealogies for ethnographic inquiry started to be perceived since W H R Rivers published the result of
his investigation during the Torres Straits expedition of 1898-1899. He was keen on hereditary as well as socially recognized family relationships and gave a lot of consideration to kinship terminology. However, his technique established the framework for later improvements in social demography and the development of measurable models. Now it is one of the vital strategies in anthropological research, especially in family kinship study.

4.2. H.A.2- Definitions

- According to Barnes (1961), “Genealogy is an account of one's descent from an ancestor by enumeration of the intermediate person”
- Barron (1961) has defined “Genealogy as the study of family origins and history and the compilations of the pedigrees and list of ancestors”
- Fortes (1959) defined “Genealogy as the character by which any particular person presents himself as the descendant of a specified ancestor”

4.2. H.A.3- Types of Genealogies

1- Objective Genealogy: which means to state as precisely as conceivable the true sociological connections existing "out there". This information is obtained by checking, comparing, and joining the statements of informants to eliminate the mistakes as well as to produce historically precise data.

2- Subjective Genealogy: This mirrors the circumstance as seen by specific people or gatherings on specific occasions. These should be connected somewhat with the ages, genders, economic well-being, and goals of individuals concerned.

3- Jural Genealogy: This genealogy is those which express an idealized or regularizing relationship between people or groups.

4- Behavioural Genealogy: Behavioural Genealogy is communicating the manner in which things work out practically.

4.2. H.A.4- Genealogical method- An Analysis

Genealogy is a scientific apparatus utilized for contemplating kinship and descent group, family units and their parting, marriages, kinfolk’s terms, a legacy of property, and transmission of the status. It has likewise been utilized for understanding migration, intergenerational portability, marriage separation, changes in the names of individuals, and so forth it has the probability of being utilized for an assortment of different boundaries concentrated overages.

Experienced ethnographers encourage field workers to begin their hands-on work with genealogical techniques for it yields generous data on families as well as support for building up compatibility with individuals. Even though the genealogical strategy has
customarily investigated the kinship system, it has scope for utilization in the field of development.

Genealogical technique is to provide data about a particular ancestry. The finished genealogical accounts ought to be changed over into graphs or diagrams. This is generally known as Pedigree, it is a graphical representation of kinship relations between people in singular generations. It represents the foundation of genealogical strategy and gives essential data about the event of picked trait and phenotype. Graphs synopses and modify the data contained in narratives, the diagram isn't a fundamental factor. A chart containing genealogical accounts is considered the social realities without any problem. In genealogical studies, the term lineage means ancestry or a family tree. "A lineage is a comprehensive unilateral kinship group descended from an identified ancestor or founder, who usually lived not more than five or six generations back". It considers him or her as an individual, not a mythological or legendary figure.

In light of the investigation of heredity, genealogical studies move ahead of time. All things considered, before, in western social orders, the point of convergence of lineage was on the kinship and descent of rulers and aristocrats, regularly contending or exhibiting the lawfulness of cases to wealth and power. Aside from that, Depending on context, genealogists emphasize a specific group, for example, a clan; a specific family name, for example, in a one-name study; a little community, for example, a solitary town or rural community.

Genealogical research is a logical report. By and by there are fundamental issues inserted with. It is an intricate cycle that utilizes historical records and at times hereditary examination to show a family relationship. Reliable conclusions depend on the nature of sources, in a perfect world unique records, and the data inside those sources, ideally essential or direct data, and the proof that can be drawn, straightforwardly or by implication, from that data.

In numerous events, genealogists should dexterously collect aberrant or conditional proof to manufacture a case for identity and family relationships. All proof and ends, along with the documentation that upholds them, is then collected to make a strong parentage or family history. Historical, social, and family foundation is important to accomplishing right distinguishing proof of people and relationships. The source reference is also very significant when conducting genealogical research.
4.2. H.A.5- Conclusion

Genealogical research is a precise report with indispensable judiciousness. But these methods have certain difficulties. It utilizes historical records to analyse hereditary to show kinship. It is chiefly the ethnological studies which are useful in giving data on customs, ceremonies, celebrations, family relationships of various ethnic gatherings. In investigating the historical backdrop of any ethnic or caste groups particularly their beginning, spots of relocation, family ancestry, and so forth, it is steady in a collection of ways. Genealogists start their studies by gathering family records and stories. This makes an establishment for narrative exploration, which includes analysing and assessing authentic records for proof about predecessors and different family members, their connection ties, and the functions that happened in their lives. To monitor gathered material, family group sheets and pedigree charts are utilized. Once transcribed, these would now be able to be created by genealogical software. E.g. Ancestral Quest, Brother’s keeper, Genopro, Legacy family tree, etc.

4.3. GROUNDED THEORY, TRIANGULATION AND MIXED METHOD: CONTEXT AND SCOPE

4.3. A- Grounded Theory

4.3. A.1- Introduction

Sociologists Barney G. Glazer, Anselm L. and Strauss (1967)'s one of the important books, "The Discovery of Grounded Theory", introduced the concept of grounded theory. They presented grounded theory as an orderly, inductive, iterative, and relative technique for information examination with the end goal of sociological theory development. Grounded Theory is a research strategy wherein theory and models are inductively removed from the investigation of logical information. The strategy is valuable in developing context-based, measure situated portrayals, and description of the phenomenon. Grounded theory is established on the reason that the creation of theory at different levels is vital for a profound comprehension of social phenomena. Using this method is a very acceptable approach, especially when a researcher has to search for a lot of structured or semi-organized qualitative information.

Grounded theory can be utilized as a useful apparatus for gathering and investigating qualitative information. Strauss and Corbin (1990) recognize three degrees of analysis.

a) To present the information without understanding and deliberation, the members recount their own story

b) Need to make rich and trustworthy descriptive analysis with use of field notes, interview records, etc.
c) Building a theory by utilizing significant levels of interpretation and abstraction

4.3. A.2- Context and Scope

Constant comparison and theoretical sampling

Two investigative processes add to raising classifications to conceptual categories - "constant comparison and theoretical sampling". The analyst needs to face the conceptual classifications with more information to characterize them cautiously, portray their properties, explain their causes, and exhibit the conditions under which they work and reveal their consequences. The constant comparative is key to the information investigation in creating grounded theory. The objective is to create and explain a category by examining all the information it covers and varieties from it.

Researchers take a restricted arrangement of codes that were created in the initial stage and apply them to a lot of information. Theoretical sampling is the process of information assortment for creating a theory whereby the expert mutually gathers, codes, and analyses. The researcher needs to decide important matters such as what information to gather and where to discover etc. This process of information gathering is constrained by the rising theory, regardless of whether meaningful or formal. Theoretical sampling essential function is to furnish the researcher with the occasion to find properties of the center variable under examination by gathering new information to check, fill out, and broaden conceptual categories.

"Strauss and Corbin (1990) to further illustrate specific coding techniques – a process of classifying and categorizing text data segments into a set of codes (concepts), categories (constructs), and relationships". They describe three coding techniques for analysing text data; open coding, axial coding, and selective coding.

❖ Open coding: Open coding is a process pointed toward distinguishing ideas or key thoughts that are covered up inside textual data. Which are related to the phenomenon of interest. To distinguish discrete functions, occurrences, thoughts, activities, discernments, and connections of relevance that are coded as concepts as well as the part of investigation naming and ordering through close assessment of the information. During open coding, the information is separated into discrete. Each part, firmly analysed and looked at for likenesses and contrasts, and questions are posed about the phenomenon as reflected in the information. The researcher contrasts the motivation behind setting up the fundamental consistency and its shifting conditions. Functions, events, objects, and activities/interactions that are discovered to be adroitly
comparable in nature or related in importance are assembled under more abstract concepts. Every concept is connected to explicit bits of the content (coding unit) for later approval. The coding unit may change with the ideas being removed. When a fundamental arrangement of ideas are distinguished, these ideas would then be able to be utilized to code the rest of the information, while at the same time searching for new ideas and refining old concepts. So it is important to distinguish the unmistakable attributes of every idea, for example, its size, shading, or level.

This coding procedure is called "open" because the researcher is available to and effectively looking for new ideas significant to the phenomenon of interest. Classifications are expected to diminish the measure of ideas the researcher must work with and help to understand the social phenomenon. Classification should be possible in stages, by consolidating ideas into subcategories, and afterward subcategories into higher-order categories.

❖ **Axial coding:** Axial coding includes re-constructing the information (extracted through open coding) in new ways by building up connections among categories and their subcategories. The classifications and subcategories are found up into causal connections or theories that can likely clarify the phenomenon of intrigue. Researchers may utilize a coding scheme to comprehend which classifications speak to conditions, activities/interaction, and consequences. Researchers can begin clarifying why a phenomenon happens, under what conditions, and with what outcomes.

Axial codes regularly represent categories that depict open codes. Comparison empowers the distinguishing proof of varieties in the pattern to be found in the data. During axial coding, the examiner starts to fit the bits of the data 'puzzle' together, which were broken during open coding.

❖ **Selective coding:** Selective coding- recognizing a major category or a key variable and deliberately and logically relating this focal category to different categories. The key category can develop from an existing category or can be a higher-order category that subsumes recently coded categories. The objective of selective coding is to coordinate and refine the categories into a theory. The researcher extracts information from numerous cases into concepts and that can be utilized to explain in an overall perspective of what is happening.
Coders must watch out for different categories that may arise out of the new data, it may be related to the phenomena, which may prompt lead to additional refinement of the underlying theory. Grounded theory is produced, it must be refined for inside consistency and rationale.

4.3. A.3- Conclusion

The grounded theory approach includes coding the topics and ideas to a chosen unit. The ideas are consolidated into related classifications; joins between categories are recognized and confirmed against the information, and selective coding endeavours to incorporate the classifications into a theory. Grounded theory utilizes the developing theoretical categories to shape the information collection while doing the fieldwork. The grounded theory fitted well with the interpretive and reliable with empirical data.

4.3. B- Triangulation

4.3. B.A.1- Introduction

Triangulation is characterized as the utilization of various strategies primarily qualitative and quantitative techniques in studying a similar phenomenon to expand study reliability. It alludes to the blend of at least two theories, information sources, techniques, or researchers in a single investigation of a solitary marvel to combine on a solitary development. It has become an acknowledged practice to utilize some type of 'triangulation' or the mix of various techniques in the investigation of the same phenomenon in social research. In sociologies, the utilization of 'triangulation' can be followed back to Campbell and Fiskel (1959).

This was later developed by Web and explained by Denzin, Norman beyond its traditional relationship with research techniques and plans. Some social researchers have proposed that approval in the social sciences may be accomplished by the assortment of confirming discoveries from similar respondents and on a similar subject, yet utilizing various strategies.

By using various observers, theories, techniques or methods, and exact materials, researchers can beat the shortcoming or inherent inclinations and the issues that originate from a single strategy, observer, or theories used in studies. There are fundamentally three sorts of biasness: firstly, the estimation predisposition is brought about by how information is gathered; secondly, sampling biases may occur due to include all population not come under study; thirdly, procedural inclination happens when members are put under some sort of pressure to give data.
4.2. B.A.2- Definition

- Cohen and Manion (1986) define triangulation as an “attempt to map out, or explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint”
- Creswell & Miller delineate triangulation as “a validity procedure where researchers look for convergence among multiple and different sources of information to form themes or categories in a study”.

4.2. B.A.2- Types of Triangulation

Denzin, Norman (1970) distinguished four forms of ‘triangulation’:

❖ **Data triangulation**: Data triangulation can be considered as data source triangulation. It utilizes various information sources, qualitative and quantitative, in a similar study for reliability purposes. There are three sorts of data triangulation; specifically, time, space, and individual. These kinds of information triangulation come as the consequence of the possibility that the power of information can fluctuate depending on the time information was gathered, for instance, the pre-and post-utilization of a questionnaire, individuals engaged with the information assortment process, and the setting from which the information was gathered.

❖ **Investigator triangulation**: Investigator triangulation can be characterized as the utilization of multiple observers in the research stages in a similar study. It includes the utilization of numerous observers, interviewers, or information investigators in a similar study for validation purposes. This type of triangulation is especially significant in the interpretation of material, for instance, the different types of textual or verbal analysis.

❖ **Theory triangulation**: Theory triangulation includes utilizing more than one theoretical system in the interpretation of the information. Theoretical Triangulation is the utilization of more than one theory hypothesis when examining a phenomenon. In theoretical triangulation, the viewpoints or speculations utilized in the examination might be connected or have restricting perspectives. Utilizing various theories help researchers to see issues within reach of different points of view.

❖ **Methodological triangulation**: Methodological triangulation is characterized as the utilization of multiple techniques in examining a similar phenomenon under study. This kind of triangulation may happen at the degree of research design and data collection. For instance, it could be argued that techniques which give qualitative and quantitative information are methodologically different. Anyway, these two
techniques have comparatively similar objectives and Scope. The researcher used participant observation and questioning methods such as why they did something, the viewpoint of an informant, etc, for collecting data. Methodological triangulation is the kind of triangulation that has been generally utilized in social science.

4.3. B.A.4- Context and scope
Reason for triangulation

The utilization of triangulation in social science is begun from work through their concept of 'multiple operationism' towards validating the research results. The utilization of mixed techniques in studying a similar phenomenon keeps on being pushed by different researchers to expand and develop the comprehension of the research enquiries.

We utilize the two primary reasons for 'triangulation' as distinguished by Shih; it is used for confirmatory and completeness purposes. There are more advantages to utilizing 'triangulation' for confirmatory purposes. Researchers use 'triangulation' for validating quantitative research instruments when the research problem under scrutiny has minimal hypothetical underpinnings.

In quantitative methodology, 'triangulation' for confirmatory design is typically applied to affirm if instruments were suitable for measuring a concept. Notwithstanding that, as a confirmatory methodology, 'triangulation' can overcome issues identified with a "single method, observer and theory biasness and subsequently can be applied to affirm the research results and conclusions.

For completeness purposes, researchers use 'triangulation' to expand their in-depth comprehension of the phenomenon under scrutiny by consolidating different methods and theories. Triangulation helps the researcher to investigate unexplored issues or studying complex research phenomena in society.

The 'triangle' can only be used if it has information obtained from different sources, from different researchers, from different theories, or different strategies. In any case, when information is accessible, there are various reasons why 'triangulation' can and ought to be utilized. For example, if there should be an occurrence of taking care of complex questions, poor quality data, and lacking information so on. Some of the scholars argue that 'triangulation' is only for expanding the more extensive and profound comprehension of the studying phenomenon and others point out that triangulation is used to increase study accuracy and validity.

'Triangulation' furnishes researchers with a few significant opportunities. First, it provides researchers to be more confident about their research results. It also functions like
the creation of creative methods and better approaches for catching issues of ordinary information collection techniques. So this may assist with revealing the different dimensions of the phenomenon.

4.3. B.A.5- Challenges

Firstly, if the research isn't centered theoretically or conceptually, it won't create a valid result. Again it ought not to be utilized to authenticate a prevailing, by and by a favoured method. Every method ought to be spoken to in an important way. A method may have a significant position according to the studying area, but the researcher should need to provide appropriate justifications. Otherwise, the intention of your study may be subverted. Triangulation techniques cannot apply all research. Different limitations such as time, expenses may forestall its effective use. It demands an innovative and resourceful approach from researchers for insightful interpretation of collected data. So the researcher can define and interpret problems in the real social context.

It is essential to overcome the problems that arise when using the triangular method to get the correct result of the research. So, qualitative and quantitative techniques ought to be seen as a complementary method as opposed to substitutable. Qualitative strategies may be utilized to comprehend the importance of the numbers created by quantitative techniques. Utilizing the quantitative method, give ways to exact and testable articulation to subjective ideas.

4.3. B.A.6- Conclusion

Triangulation is practicable and an appropriate method to receive the rewards of both qualitative and quantitative methods. The utilization of triangulation will rely upon the researcher’s philosophical position. If the philosophical position of the researcher is a qualitative one, then the methods within it should be used throughout the research and quantitative methods should be used as a complementary method. Triangulation can build the validity of logical information by improving both consistency and generalizability by joining both quantitative and qualitative methods in a similar report.

'Triangulation' limits the insufficiencies of single-source research. The use of two sources diminishes the effect of biases and provides more precise or comprehensive information shared by informant/participant with another person (Researcher). Using several methods helps the researcher to refute other arguments.

4.3. C- Mixed method

4.3. C.A.1- Introduction
Mixed methods research is utilized as a straightforward shorthand to represent research that coordinates quantitative and qualitative research inside a single project. Mixed method research implies receiving a research procedure utilizing more than one kind of research method. The method might be a blend of qualitative and quantitative methods, a blend of quantitative methods or a blend of qualitative methods. Receiving a mixed-method system may establish a procedure in its privilege or it might be subsumed inside another research methodology. Mixed method research additionally means working with various kinds of information. It might likewise include utilizing various investigators— in some cases different research groups working in various research. Hence mixed method research is frequently alluded to as multi-strategy research. Today, mixed methods research procedures are by and large increasingly utilized. Tashakkori and Teddlie (1998) defined mixed methods as the combination of “qualitative and quantitative approaches in the methodology of a study”

Mixed methods research is the kind of research, where a researcher or group of researchers consolidates components of qualitative and quantitative research techniques. The researchers use approaches like utilization of qualitative and quantitative perspective, data collection, investigation methods, and analysis, etc. in the research process. Mixed-method is not only viewed as a methodology. It tries to combine different viewpoints into a research process.

4.3. C.A.2-Advantage
- Mixed method research allows balancing the weaknesses of both quantitative and qualitative research.
- Mixed method research gives more proof to considering a research issue than either quantitative or qualitative research alone.
- Mixed method research helps answer questions that can't be replied to by quantitative or subjective methodologies alone
- Mixed method research empowers the utilization of various perspectives or standards, as opposed to the average relationship of specific ideal models with quantitative research and others for qualitative research.

There are times when qualitative research might be ideal because the researcher intends to investigate an issue, honour the responses of informants, map the intricacy of the circumstance, and pass on different points of view of members.
4.3. C.A.3- Types of mixed method design

Mixed methods, Proposal developers use a variety of typologies according to the research problem. Cresswell, J W, and Cresswell, J David, in their book, *Research Design; Qualitative, Quantitative, and Mixed Methods*, point out three core mixed-method research designs. Those are the following;

- **Convergent mixed method design:** The convergent mixed method design is presumably the most recognizable of the significant and complex mixed-method strategy. Researchers new to blended methods normally first think about this methodology since they feel that mixed-methods just combine quantitative and qualitative data. In this single-stage approach, a researcher collects quantitative and qualitative data and analyses them independently, then compares and confirms or disproves the findings. The key suspicion of this methodology is that both qualitative and quantitative data give various kinds of data—regularly detailed perspectives on informants subjectively and scores on instruments quantitatively—and together they yield results that ought to be the equivalent.

- **Explanatory sequential mixed method design:** This design offers a solid quantitative background or from fields generally new to qualitative methodologies. It includes a two-stage data collection project in which the researcher gathers quantitative information in the primary stage, investigates the outcomes, and afterward utilizes the outcomes to plan (or expand on to) the second, qualitative phase. Quantitative results generally advise researchers to deliberately select participants for the qualitative phase and what questions to ask participants. The general objective of this design is to give more explanation of the quantitative results using qualitative data. Hence it is critical to integrate or to associate the quantitative outcomes with the qualitative data collection.

- **Exploratory sequential mixed method design:** Exploratory sequential mixed design is a design where the researcher initially starts by investigating with qualitative data and analysis, at that point constructs an element to be tested, e.g., new survey instrument, a new variable, experimental methods, etc., and tests this element in a quantitative third stage.

Like the explanatory sequential approach, the second component develops as a result of the primary database. The goal of this design is to investigate with a sample first so a later quantitative stage can be custom-made to address the issues of the people being studied. The
quantitative element will include building up a relevantly contextual measurement instrument and afterward testing it with a sample. Different occasions it might include growing new factors not accessible in the literature or sensitive to a particular populace being examined or planning a website or an Internet application moulded to the requirements of the investigators being studied.

Researchers should have an idea about where this method, mixed-method, is appropriate to understand the problem?

1- Because one data source may be insufficient

We realize that qualitative information gives a definite comprehension of an issue while quantitative information gives a more broad comprehension of an issue. This qualitative comprehension emerges out of considering individual points of view in deep analysis though, in quantitative research, comprehension emerges from analysing an enormous number of individuals and evaluating reactions by considering a few variables. Qualitative research and quantitative research give various pictures or viewpoints, but each has its limitations.

There is some reason by which one information source might be insufficient. One kind of proof may not tell the total story, or the researcher may not need trust in the ability of one sort of proof to address the issue. The outcomes from the quantitative and qualitative data might be contradictory, which couldn't be known by gathering just one sort of information. Further, the proof collected from an organization may contrast from other proof.

2- To explain initial results

In some cases, the outcome of an investigation may give a deficient comprehension of a research issue and there is a requirement for additional clarification. For in this situation, a mixed-method study is utilized with the subsequent information base assisting with clarifying the principal database. Quantitative outcomes cannot general clarifications for the connections among variables, however, the more detailed comprehension of what the statistical tests or impact estimates mean is inadequate. Qualitative information and results can help assemble that understanding.

3- Generalize exploratory findings

In some research, the examiners may not have the foggiest idea about the inquiries that should be posed, the variables that should be estimated, and the theories that may direct the study. These questions may arise because of thinking about distant populations or new topics in research. It is ideal to investigate qualitatively to realize what questions, variables, theories, etc. should be concentrated and afterward catch up with a quantitative report, to sum
up, and test what was found out from the research. The researcher starts with a qualitative stage to investigate and afterward follows up with a quantitative stage to test whether the qualitative outcomes to generalize.

4- Enhance a study with a second method

In certain circumstances, a second research method can be added to the study to give an upgraded comprehension of some period of the research. For example, a researcher can strengthen quantitative design by including qualitative data or by adding quantitative information to a qualitative plan (e.g., grounded hypothesis or contextual analysis). In both cases, the second method is incorporated into a preliminary research method.

5-To best employ a theoretical stance

A circumstance may exist in which a theoretical point of view gives structure to the need to accumulate both quantitative and subjective information in a mixed-method study. The information to be gathered may be accumulated simultaneously or in a systematic way in different periods. The researcher can look at the research problem through a theoretical perspective or provides an opportunity to change the theoretical perspective.

6-A need exists to understand a research objective through multiple research phases

The researchers may need to interface a few investigations to arrive at a general goal, it may take several years. At the same time, the researcher needs to connect several studies to achieve the research objectives. These studies may include projects that assemble both quantitative and qualitative information at the same time or accumulate data successively. We can think of them as multiphase or multi-project methods. These undertakings regularly include groups of researchers working over numerous periods of the research.

4.3. C.A.4- Context and Scope

Why researchers use Mixed-method

Mixed methods research is something other than staying open-ended questions toward the finish of a quantitative study. Mixed method researchers utilize mixed strategies for both logical and synergistic reasons. That is, they utilize the two methods since it bodes well with their research questions, and because they will find the solutions they need by joining both methodologies.

Mixed methods likewise permit you to utilize both inductive and deductive thinking. Qualitative research follows inductive rationale, moving from information to experimental speculations or theories. In a mixed-method study, a researcher could utilize the outcomes from a qualitative component to inform an ensuing quantitative segment. The quantitative research would utilize deductive rationale, utilizing the theories obtained from qualitative to make and test a theory. Thus, mixed-method strategies utilize the qualities of both research...
methods, utilizing every strategy to comprehend various parts of a similar phenomenon. Quantitative permits the researcher to test new thoughts. Simply, qualitative research permits the researcher to make novel thoughts.

Research project utilized a sequential design since we needed to utilize our quantitative information to shape what qualitative questions we posed to our informants. Mixed methods are frequently utilized along this way, to start thoughts with one method to concentrate with another. For example, researchers can organize/conduct a focus group or interview method with participants in the mixed-method project. In light of their reactions, the researcher can formulate a quantitative report.

One other purpose behind mixed strategy research is confirming information from both quantitative and qualitative sources. Your qualitative and quantitative outcomes should support one another. For instance, if interviews with participants indicated a connection between two ideas, that relationship ought to likewise be available in the qualitative information you gathered. Contrasts among quantitative and qualitative information require clarification.

4.3. C.A.5- Challenges

We should concede that the mixed method isn't the answer for each researcher or each research question. Its utilization doesn't lessen the benefit of directing a study that is only either quantitative or qualitative. Require having a certain skill, time, and resources for broad information collection and analysis, and maybe, in particular, informing and convincing others regarding the need to utilize a mixed-method design.

- The question of skill

Unequivocally suggest that specialists firstly surge experience in both quantitative research and qualitative research independently before undertaking a mixed-method study. At least, researchers ought to be familiar with both quantitative and qualitative data collection and analysis methods.

Mixed-method researchers ought to be comfortable with common techniques for gathering quantitative information, for example, utilizing measuring techniques and attitudinal scales, semi structured interviews utilizing open-ended questions, and qualitative observations. Researchers need attention to the rationale of hypothesis testing and the capacity to utilize and interpret statistical examinations, including common descriptive and inferential methods available in statistical software packages.

Apart from that, the researcher should have qualitative research skills and need to identify key themes of the phenomenon in their study. Researchers need fundamental abilities
in investigating qualitative text data, including coding text and creating topics and providing interpretation dependent on these codes, and ought to be familiar with qualitative data analysis software.

- **The question of time and resource**
  A researcher has essential quantitative and qualitative research abilities, but they ought to inquire whether a mixed-method approach is achievable, given time and assets. These are the significant questions the researcher needs to consider in the initial phase of the research. Mixed method learning may require broad time, resources, and effort on the part of the researcher. These costs may incorporate, for instance, printing costs for quantitative instruments, recording and record costs for qualitative interviews, and the expense of quantitative and qualitative software programmes.

  Mixed-method researchers ought to think about working in groups. Working with a group can be a challenge. It can expand the expenses related to the research. Moreover, people with the essential aptitudes should be found, and group leaders need to make and keep up fruitful cooperation among colleagues.

- **The question of convincing others**
  Mixed-method research is generally new as far as methodology is accessible to researchers. In that capacity, others may not be convinced of or comprehend the worth of blended techniques. Some may consider it to be a novel approach. Others may feel that they don't have the opportunity to become familiar with another way to deal with research, and some may protest a mixed-method on philosophical grounds in regards to the blending of various philosophical positions.

  One strategy to help convince others regarding the utility of mixed method is to find excellent mixed-methods concentrated in the writing on a theme or in a content area and reveal these research outcomes. Mixed method studies are difficult to place in the literature because it is only recently that researchers have begun to use mixed-method in their studies.

- **Sampling issues**
  Definite discussions about the sampling issues associated with mixed-method research and explicit plans are beyond the extent of record. Satisfactory discussions are accessible somewhere else. In mixed-method, some of the challenges emerging regarding sampling are; sufficient sample size for analysis, utilizing tantamount samples and utilizing a reliable unit of analysis over the information bases, etc. If they decide to choose a mixed-method, researchers need to identify the reasonable sample size for both methods of study and deciphering results from both phases.
• Analytical and interpretive issue

Issues emerge during data analysis and interpretation when utilizing specific plans. At the point when the investigators combine the information during a simultaneous plan, the results may be contradictory. A technique of settling contrasts should be thought of, for example, collecting more information or returning to the databases. Interpreting based on the combined result is a challenging task. Apart from that, the researcher/team should be careful about the accuracy and reliability of data sets and philosophies related to qualitative or quantitative methods.

4.3. C.A.6- Conclusion

In mixed-method studies, researchers deliberately incorporate or join the quantitative and subjective data as opposed to keeping them isolated. The fundamental idea is that integration leads to strengthening the qualities of the quantitative and qualitative data and limiting their weaknesses. This thinking about integration separates current perspectives on composite methods from more familiar ones, in which researchers collect two types of information and combine them very systematically. Mixed method research is more practical, it means that the researcher is allowed to utilize all methods conceivable to address a research issue. Mixed method research is a relevant approach to a wide variety of disciplines, especially social science research, health science, etc.

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