

COURSE CODE: MAMCD 301 COURSE NAME: COMMUNICATION RESEARCH METHODS

CENTRE FOR DISTANCE AND ONLINE EDUCATION TEZPUR UNIVERSITY

MASTER OF ARTS MASS COMMUNICATION AND JOURNALISM

BLOCK I

TEZPUR UNIVERSI

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MMC-301: COMMUNICATION RESEARCH METHODS

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BLOCK I

COMMUNICATION RESEARCH

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COURSE INTRODUCTION

This course (MMC 302) focuses on teaching the learners about research methodology in context to communication studies. The concept of research is about scientific investigation into a phenomenon for finding answers to the research questions or hypothesis developed by a researcher. This course aims to give you an understanding about the significance of research in social sciences along with discussing different concepts related to research. This course is based on fourteen units which are further categorized into module I, II, III and IV.

The Module I is entitled as "Introduction To Communication Research" which comprises of four units including Unit 1 to Unit 4. The Unit 1, i.e. Research: meanings and concept, explains the definition of research and also characteristics of scientific research. The Unit 2 is based on the Indian perspective of communication research. Unit 3 discusses research in different disciplines under social sciences such as sociology, psychology, anthropology, political science linguistic, etc. Unit 4 explains different terms used in research such as variables, hypothesis, induction, deduction, theoretical framework, etc. The Module II is based on the topics such as types of research, research problem, research process and review of literature which are discussed in Units 5, 6, 7 and 8 respectively.

The Module III is based on discussing different methods of research including pilot studies, survey, content analysis, case study, ethnography, etc. in Unit 9. In Unit 10, it contains explaining the concept of sampling including different terms such as sample, universe, sampling frame, sampling size, probability and non-probability sampling, etc. On the other hand, Unit 11 is based on different data collection methods of primary and secondary data which include observation method, focus group discussion, etc.

The Module IV is comprised of three units, Unit 12 discusses the process of data analysis and different statistical methods, Unit 13 is based on the

aspect of writing research report and the Unit 14 deals with explaining ethical issues related to research.

MODULE I: INTRODUCTION TO COMMUNICATION RESEARCH

UNIT 1: COMMUNICATION RESEARCH MEANING AND CONCEPTS

UNIT STRUCTURE

1.1 Introduction
1.2 Objectives
1.3 Meaning of Communication Research
1.4 Definition of Research
1.5 Different Sources of Knowledge
1.6 The Characteristics of Scientific Research
1.7 Summing Up
1.8 Questions
1.9 References and Recommended Readings
1.1 INTRODUCTION

Communication research is an investigative approach and methods that falls within the realm of social science research. The broad principles and techniques involved in planning, designing and executing communication research are largely drawn from social science disciplines such as sociology, anthropology, psychology, economics and so on. The core purpose and philosophical approaches as that of exploring and understanding human communication behaviour that shapes social organisations especially those mechanisms and functions that forms world views, perceptions, and persuasions that make and move the individuals, communities, and societies at large. Studies related to influence of video games on children social interaction, the role of social media in political campaigns, interpersonal relationships, cooperation and team spirit among players, perpetuations of superstitions and such other problems carried out in communication research. Therefore learning communication research will help us in knowing how to identify research problems, formulate research questions, methods of collecting data and analysing the data and theorising them.

1.2 OBJECTIVES

After learning this unit a student should be able to

- Define communication research
- Write the difference between the scientific research methods

and knowledge as against speculative knowledge and beliefs.

• Explain the nature of scientific methodologies

1.3 MEANING OF COMMUNICATION RESEARCH

Communication Research is central to knowing what communication is and how it works in society. In simple terms research is asking questions and finding the answers. But, research essentially goes further to explore any phenomena systematically assisted by well-defined questions, to produce newer information while refining the older information. The researcher, by applying his or her critical analytical skills can further process the newer information and transform it to knowledge. We have knowledge system which largely emanates from unscientific sources most of which cannot withstand scientific scrutiny. Research's ultimate aim is to displace the irrational knowledge with scientific knowledge which can be empirically tested and verified .

Why media and communication scholars in particular need to engage in research? Today the world is tagged as information society enhanced by communication technologies and proliferation of mass media. The number and types of mass media have multiplied over the years leading to changes in audience compositions and preferences too. The national and world politics too have been undergoing change with greater momentary than ever before through interdependency and interconnectivity. It is in this context, there is increasing need for information and knowledge which is credible and trustworthy.

The meaning of "communication" is complex and varies from context to context. Any attempt to understand a phenomena, in our case the phenomena of communication must begin with defining what it is. Communication is a human skill. From the moment we arise in the morning to the time we go back to the bed at night, our days are filled with communication. In simple words, exchanging our thoughts and feelings with others to satisfy our physical, psychological or social needs is communication. Communication is an integral part of social living. Society cannot survive without communication.

Wilbur Schramm defines communication as, "it is the mechanism through which human relations exist and develop or it is the sharing of experiences on the basis of commonness". While, Raymond Williams defines communication as "institutions and forms in which ideas, information and attitudes are transmitted and received". Cultural theories look at communication as "a symbolic process whereby meaning is produced, transferred, maintained ".

Thus, communication is a complex process, ranging from sending or receiving messages to constructing meaningful world around us. A researcher who wants to study communication may take up any aspect of the process.

The media is an intermediary that enables communication across time and space. The medium is used even during communication between two people like telephone, letter, email, and text message. However, we think of mass media as those technologies which provide a link between many people like radio, television, newspapers, films and the internet. These media operate as institutions with well-defined and developed organizational structures. Research can be undertaken to study the contents, media institutions, the individuals who are part of it or the audience who consume the media content and in today's digitization and new media prosumes the infromation.

The academic pursuit which studies the process of communication and media

are called communication studies, or media studies. Communication is a diverse discipline. Though old as a traditional domain but young as a science, the discipline of communication can be organized on sociological, psychological, anthropological, literature, linguistic and cultural studies perspective. It begins with smallest sociological unit interpersonal communication and moving to the larger settings of organizational communication through journalism and mass communication and intercultural communication (Anderson 1987).

Communication can also be organized by the elements in the process of communication. They are content, medium, and settings of presentation, outcomes, and the process itself. Researchers can examine the content, its nature, or modes of production, or some may emphasize on the cultural, economic, or sociological institutions of the modes of production. Some others may be interested in the communicants, the speakers, audience, listeners, actors, and their intentions, motives, purposes and levels of satisfaction and gratification. We can also focus on the effect of the communication process on individuals or groups, the audience, the economic or political systems, and societies (Anderson 1987). In taking up inquiry on any of these aspects one may apply different approaches and methods available in social sciences as we mentioned earlier like sociology, psychology, linguistics, and others.

1.4 DEFINITION OF RESEARCH

The term research has been defined by various scholars in different terminologies giving the essential character of the activity that is scientific investigation.

A basic definition of research is given by the authors, C.R Kothari and Gaurav Garg (2014) in their book "Research methodology: Methods and Techniques" explained the concept as "the search for knowledge through objectives and systematic method of finding solution to a problem. The purpose of research is to discover answers to questions through the application of scientific procedure. The main aim of research is to find out the truth which is hidden and which has not been discovered yet".

Earlier in 1950s the Advanced Learner"s Dictionary of Current English (1952), gave the meaning of research as "a careful investigation or inquiry specially through search new facts in any branch of knowledge."

All of these definitions stress on the key terms such as: systematic, scientific, empirical, and critical investigation. C.R. Kothari (1990) quoted Clifford Woody who gave a summary of the entire process of research comprising defining and redefining problems, formulating hypothesis or suggested solutions; collecting, organizing, and evaluating data, making deductions and reaching conclusions; and at last carefully testing the conclusions to determine whether they fit the formulated hypothesis.

1.5 DIFFERNT SOURCES OF KNOWLEDGE

Scientific inquiry is the most trusted source of knowledge for the human society. The world "science" is derived from the Latin root "sire", meaning "to know" or "to learn". Therefore, for the communication scholar the scientific inquiry is aimed at understanding the nature, forms, and functions of human communication. The scientific method of studying human communication such as conversations begins with systematically observing in their interactions and explains the nature, structure and purposes. Observations over a time and of many incidents allow the scholars to find relationship between communicative acts, the explanation of relationships to generalise and develop theories of human communication.

Research therefore aims at first observing, followed by describing, and explaining any phenomena. The final stage of this process is to predict the outcome of similar phenomenon with similar characteristics. The knowledge generated out of observing the empirical world, and applying logical reasoning with critical thinking, in other words the world as can be

experienced directly or indirectly by our senses, permit us to keep on

expanding the horizons of our scientific body of knowledge by raising questions and making associations of their relationships using logical reasoning.

There are two types of logical reasoning one can apply, they are induction and deduction methods. The induction method observes a number of cases of occurrences and applies the same characteristics to all of the similar units in a group. This principle is called generalisation of the findings of selected characteristics to the whole of the group or population. The second method deduction is the reverse of the induction, here the findings of common characteristics in a group is assigned to individual unit. This technique enables us to generate knowledge that help us to understand our world, and predict future outcome and make decisions and plan activities accordingly.

In contrast to those knowledge created through systematic scientific methods, the world is full of unscientific and irrational knowledge. The following are the major sources of knowledge acquired through non-scientific methods.

Tenacity: Tenacity is believing in something by habituation or lack of interest on the part of the follower to verify the facts. We believe something to be true because for ages everyone said that something is true. If there is any contestation, then this knowledge cannot withstand tests. Most of the customs and conventions derived over tradition limit our ability to seek the truth.

Intuition: Intuition is a personal sense of something seems either right or wrong. It is merely a gut feeling or inference without any valid evidences. For instance, someone thinks a person is bad and untrustworthy because he or she is shabby and disheveled.

Authority: People considered authority on some subjects or the rulers" authenticated sources of knowledge. For instances there are different

versions of an history and state might prefer a particular kind of book. The tendency to believe the authoritarian version without questioning is common form of non-scientific knowledge.

Religion: Religious beliefs are dogmas one is supposed to believe without questioning. So much of our knowledge system including past and future is hooked on to unscientific and irrational religious beliefs.

1.6 THE CHARACTERISTICS OF SCIENTIFIC RESEARH

The scientific approach is the most advanced method of acquiring knowledge in the society today, because it is inherently verifiable and re- testable questioning. So much of our knowledge system including past and future is hooked on to unscientific and irrational religious beliefs. The scientific approach relies on empirical evidences, and minimises personal bias and prejudices. The following are the characteristics of the scientific approach.

Systematic: The scientific methods follow a procedure that is well defined and capable of being repeated for further verification and testing. The different steps that are taken cannot be done haphazardly, but must follow a logical sequence. Every step followed in arriving at a conclusion is recorded so as to enable further scrutiny and locating the errors if any at any particular point.

Objective: It means things as it is rather than as you see it. Research must try to look at evidences and experiences not from one"s own point of view but from the point of the phenomenon itself. In daily life, we spend lot of time evaluating others people"s findings and experiences to see the weaknesses and strengths, the same yardstick should be applied to look at our findings and conclusions.

Rational: Rational is opposite to emotion, that is proven by logical reasons in both discovering a phenomena and explaining its nature. Generally two modes of reasoning is followed in research: inductive and deductive. Inductive reasoning follows by observing particular phenomena and proceeds to generalized conclusions, while deductive reasoning follows observing general premise which are true for particulars.

Self-correcting: Scientific inquiry which turns back on itself over and over to match the observed phenomena with general explanations and to correct any inconsistencies, if any.

Controlled: One of important purposes of research is to find the cause and effect relationships. It is relatively easy to find what causes what in science in the laboratories, but finding causations of human behaviour is not that easy. In social life a multitude of factors affect an outcome. However, it is crucial to identify the primary causes of behaviour we want to study and change. In India the use of communication and media was considered a boon to bring in social change and development therefore it was essential to establish the linkages between the two by isolating other factors. However, unlike laboratory, it is impossible to isolate multitude of factors that affect a particular phenomenon, therefore the choice is to quantify different factors and their impact.

Valid and verifiable: The idea is that the finding of a research is correct and if retested by others would yield similar results under similar conditions.

Critical: The procedures adopted and the process followed must be free from bias and should be able to withstand critical scrutiny. Conclusions should not be made quickly and easily without putting the variables into rigorous procedures and interdependencies.

Empirical: This means the evidence collected to explain a phenomena should be based on observable facts that must be intelligible to our senses in the real life experiences and should not be speculative.

LIMITATIONS OF SCIENTIFIC APPROACH

Though scientific approach to knowledge is best form of inquiry, but it does not come without weaknesses. The following points must be kept in mind while attributing scientific qualities to findings and conclusions.

Human complexity: While dealing with human behaviour and social relations it is not possible to control all the factors as it is done in natural settings. For instance, conflict cannot and should not be generated deliberately to study the dynamics of causes and effects of it among the people of different sections. It goes against the principle of ethics and morality. Similarly human beings cannot be treated as guinea pigs to study the effects of undesirable media contents.

Human beings are complex and everyone is different in character and therefore generalising any findings would not be feasible.

Problems of measurement: The tools for measuring empirical properties of biological or physiological aspects may be easy, but when it comes to psychological and behavioural aspects the tools cannot measure accurately.

Researcher as a variable: The researcher is expected to be as objective as possible but no one can be free of one"s personal beliefs, background, identity and prejudices that will keep popping up knowingly or unknowingly influencing the research process at different stages.

1.7 SUMMING UP

This unit introduced the meaning of research and distinguished how research in general and communication research in particular is part of the larger attempt by the human endeavor to know ourselves and our surroundings. Human beings have learned to control the nature and manipulate them by learning the laws behind the operations of nature. This knowledge help us to understand our place in the world and ability to predict events and other people's behaviour. While communication is a basic human activity that interacts with things and other fellow human beings but its nature and functions are complex and many aspects are yet to be explored. Therefore, studying and researching human communication is crucial to all other studies. Communication research therefore is a systematic and scientific attempt to study various factors of the phenomena.

ASSESS YOUR PROGRESS

1. Discuss the challenges a researcher faces in conducting research in social sciences.

1.8 QUESTIONS

- 1. What is the meaning of research? And distinguish research in general and communication research.
- 2. Why humans are inquisitive and always wanted to explore the world and how they acquired scientific knowledge?
- 3. Define communication research, and give their characteristics.
- 4. Briefly state different sources of knowledge.
- 5. Explain the characteristics of scientific approach in research.

1.9 REFERENCES AND RECOMMENDED READINGS

Kothari, C.R. and Garg,G. (1990) *Research Methodology: Methods and Techniques*, Second edition, New Delhi: Wishwa Prakashan.

Anderson, A. James (1987) Communication Research: Issues and Methods, New Delhi: McGraw-Hill Book Company.

UNIT 2: COMMUNICATION RESEARCH IN INDIA

UNIT STRUCTURE

- 2.1 Introduction
- 2.2 Objectives
- 2.3 History of Communication Research in India
- 2.4 Status of Communication Research Today
- 2.5 Scope of Communication Research Today
- 2.6 Major research studies in India
- 2.7 Summing Up
- 2.8 Questions
- 2.9 References and Recommended Readings

2.1 INTRODUCTION

Communication research is relatively a new discipline though its origins are in rhetorical studies, literature, arts, language and linguistics butcontinues to wield interdisciplinary interests. Communication research as independent studies in a big way began only after the end of World War II in an attempt to make sense of the influence of mass communication in the formation of public opinion. Initially they were called effect studies because majority of the them were engaged in trying to measure the effect of information of the mass media on the individuals and groups. The practice started much later in the Indian subcontinent with emergence of modern mass media in the service of the nation building.

This unit therefore would try to briefly trace the beginning of communication research in India and their concerns, and how it gradually picked up and diversified to become an important field of research.

2.2 OBJECTIVES

After learning this unit a student should be able to

- Explain historical beginning of communication research in general and India in particular
- To describe the scope of research
- To write about important researches done in India

2.3 HISTORY OF COMMUNICATION RESEARCH IN INDIA

Mass Communication Research is relatively a late starter in India, while there was a vigorous debate in the west, "ferment in the field" over whether mass communication was an independent field of study, debates centered around its boundaries, definitions, terms and issues and concepts, it remained largely unaffected in India (Sunita Vasudev and Pradip Chacravorty (1989). The approach in India for long confined to audience studies and impact studies, an emphasis drawn from western communication studies. Public broadcaster, All India Radio had Audience Research Unit, as one of its basic structure from the time of British rule, studied audience's interests, what they termed as "feed forward", to plan and design its programmes. However, their research and findings remained an internal affair as the reports were treated as in-house findings rarely available to the public. The post independent India saw introduction of research on newspaper circulations, to find out the readers composition of newspaper to make their business more economical and profitable. Largely, the communication research in India employed survey, content analysis and case studies as methods. There was a shift in this trend with UNESCO taking a lead in highlighting imbalance in communication flow across developed and developing world. The UNESCO established in 1945 to serve as the intellectual arm of the United Nations, was entrusted with mental and philosophical aspects of peace making. UNESCO found communication as the key to attain its goal. The UNESCO push led to setting up many new institutes of mass communication research in the Asian and African countries, including India. In 1965, The Indian Institute of Mass Communication was established in New Delhi as a premier institute when the Indian government recognised the role of mass media in the national development. Following UNESCO's intervention, the Ford Foundation sponsored media studies in India. They supported the theory that there was a positive relation between mass media's expansion and economic development in a country. It was based on the belief that communication was the prime mover behind social change, a prerequisite for the developing world for national development. The ideas of communication scholars like Wilbur Schramm and Daniel Lerner influenced communication policy in India.

The emergence of mass communication research in general was based on stimulation of "scientific temper" in the nation as envisaged by the then Prime Minister Jawaharlal Nehru. Mass communication research grew along the lines of social science research in general with its philosophy of neopositivism, a principle that held human behaviours and human society can be described and studied similar to natural sciences.

The communication studies centred around finding the effects of mass media on change of attitudes and behaviours of individuals and groups. It was believed that mass media would infuse the ideas of modernisation, lifestyles, health practices and adopting new technologies. The factors that were studied consisted of motivation, mobility, need for achievement, and a sense of nation-state (Vasudevan and Chacravarty,1989). The earliest studies in India up to 1975 mostly measured the impact of radio programmes on awareness related to factors mentioned above. Vasudevan and Chakravarty (1989), say "out of nearly 200 studies conducted between 1945 and 1975, a large number of them were "audience and impact studies", measuring the extent of awareness of listening to various radio programmes. They assessed the impact of messages in various projects undertaken by agricultural universities. The SITE (Satellite Instructional Television Experiment) programme, a milestone experiment in development communication using satellite and television carried out from 1975 marked a beginning of a new phase in communication research. This set off a number of studies on television in India. However, most of studies continued to concentrate on how communication technologies bring change to society. The United States supported Technical Cooperation Mission (TCM, now USAID), The Ford Foundation and Rockfeller Foundation and the World Bank helped setting up number of technical and agricultural universities in India, such as agricultural universities, Agricultural and Information projects. It was through these units that research traditions linked to "dominant paradigm" of Diffusion of Innovation linked to Everett Rogers (1962) and media in national development linked to Wilbur Schramm (1965).

While communication research outside India was propelled by two key organisations, IAMCR (International Association of Media and Communication Research) and ICA (International Communication Association). The IAMCR established in 1957 functioned more as a European association while ICA functioned as an American association which was launched in 1970s. Today both the Association hold annual conferences that stimulate communication and media research. ICA brings out some of the important journals in communication, namely, Journal of Communication, Human Communication Research, Communication Journal of Computer Mediated Communication, Theory, and Communication, Culture and Critique.

Communication research still owes its beginning to its founding fathers in USA during 1940s Lewin, Laswell, Lazarsfeld and Holand, who started with the fundamental questions of what is communication? This basic question still continues to be relevant in different cultures and context especially in multicultural and multi-ethnic society like India.

2.4 STATUS OF COMMUNICATION RESEARCH TODAY

The post liberalisation period from 1990s changed the face of mass media in India. The satellite based private run television arrived in a big way. Television saw the extraordinary growth. Today there are more than 902 television channels, including 182 news channels, functioning along with 17,573 newspapers and 1,00,666 periodicals. The television audience in India is about 836 million (BARC, India, 2018). There are 800 million mobile phone users. Top five newspapers have a circulation of about 16.3 million daily (RNI, 2018).

In recent time many communication and media associations are being formed and still taking their shape as there are more than 236 university departments and three full-fledged Journalism and Mass Communication universities, Makhanlal Chaturvedi National University of Journalism and Communication, Bhopal, Kushabhau Thakre University of Journalism and Mass Communication , Raipur, Haridev Joshi University of Journalism and Mass Communication, Rajasthan, offering mass communication and journalism education and training. All India Communication and Media Association (AICMA) launched in recent years has been actively holding regular conferences and bringing out publications with interdisciplinary approach and has been functioning in right earnest. With UGC making research mandatory for college and university teachers there has been tremendous increase in number of research based publications and sponsored research projects.

There are number of institutions other than universities engaged in quality research in communication besides other social science disciplines, to name a few, Sarai-Centre for the Study of Developing Studies (CSDS), Madras Institute of Development Studies (MIDS), Alternative Law Forum (ALF), Centre for Internet and Society (CIS), and Centre for Development Studies (CDS).

2.5 THE SCOPE OF RESEARCH

Communication and media research can answer number of questions which are basic to applied aspects of communication as a phenomena or communication as a campaign. The pioneers of communication studies in America Harold Laswell, Lazarsfeld and others tried to examine the basic meaning of communication. Theirs and others studies brought out number of communication models and theories. Using their models we can understand different structures and functions of communication and take further steps to explore its character in contemporary contexts.

Communication and media in a developing country like India are still seen as a catalyst of change and progress. Therefore, communication for social change continues to push research in India. There are lot of pressing issues like social mobility, national integrity, communal harmony, alleviation of poverty, annihilation of caste and gender discrimination require communication as the key agent of change.

Scientific research in every discipline furthers the understanding of the subject and has the ability to dispel false notions and replace with reliable, testable and verifiable knowledge.

India when it became an independent nation and set on the course of nation building the then leaders put their trust in building scientific temperament to understand human and social problems in a new light and attempt to solve them. As a modern society, it is the scientific approach to understand communication and media that is crucial aspect of our everyday lives from ethics, to economics to space explorations to politics and culture.

2.6 MAJOR RESEARCH STUDIES IN INDIA

The early communication researches were concentrated on development communication. Some of the projects consisted of transferring the development communication experience to India. One of such was a UNESCO project was transfer of Radio and Rural Forums from Canada to India in the 1950s. The UNESCO –All India Radio Forum Project"s objective was to explore the efficacy of linkages between listening and discussion based process for community action. This project led to the public broadcaster All India Radio adopting rural forums and using radio in rural development. In 1965 with the support of UNESCO and the Ford Foundation, the IIMC was set up in New Delhi. Apart from initiating the IIMC project, as Chair of the Ford Foundation"s Wilbur Schramm"s Committee influenced Indian government"s plans to strengthen the role played by the communication in national development.

In 1984, India established the AVRC (Audio-Visual Research Centres) and EMRC (Electronic Media Research Centres) that operated under University Grants Commission (UGC) to produce educational programmes that were broadcast as Countrywide Classrooms. In 2014 there were 22 EMRCs (renamed as Educational Multimedia Research Centres that succeeded AVRCs and former EMRCs).

SITE (1975-76)

Satellite Instructional Television Experiment (SITE) was one of the largest experiments done on broadcasting in the world that connected 24000 villages in 20 villages in six Indian states. The experiment aimed at bringing socio-economic and educational changes among rural villages. This experiment resulted in number of communication and media research in India. Every aspect of the experiment such as production, distribution, reception and impact was researched using socio-anthropological approaches. Some of the studies evaluated the impact of the SITE on children's education, teacher', s training, adult education, health, hygiene, agricultural innovation and adult education. The studies were later published as research articles and books spread over long time.

SITE also strongly influenced interdisciplinary research in India combining sociology, anthropology, psychology, economics, education, social-psychology and others. One of the outcomes of the experiment was production of a research of repute, Vinod Agrawal who worked with ISRO (Indian Space Research Organisation).

An offshoot of the development communication initiative of the SITE was Kheda Communication Project (1975- 1990). It was continuation of SITE in some sense with similar objectives, but using both broadcasting and participatory rural development approach. It was also a beginning an experiment called community television. Thus both SITE and Kheda communication experiments were landmark in the history of communication and media research in India.

Some commendable media research work that used critical media and communication research approach to be mentioned are "Pirate Modernity: Delhi"s Media Urbanism", carried out by the Sarai-Centre for Study of Developing Studies (CSDS) in 2009. Another study that records critical media history is by MIDS affiliated scholar, A.R Ventatachalapathy's work "The Province of the Book: Scholars, Scribes, as Scribblers in Colonial Tamil Nadu", just to mention a few (Pradip Ninan Thomas, 2016).

2.7 SUMMING UP

This unit dealt with a brief background to the beginning of research in general and communication and media in particular. It mentioned how concerns about communication for development underlined media and communication research for long time in India supported by UNESCO and other US foundations. Social science research in India was also inspired by the need to develop scientific temperament and displace ignorance with scientific verifiable knowledge in the path to national progress and development by the newly independent state. Part of the initiative to use media in development was the SITE and Kheda communication projects that kicked off a huge number of assessment studies.

The Post liberalisation period saw a new phase of mass media communication scenario in India like everywhere else in the rest of the world. The number of training institutes offering media training multiplied and also stimulated a culture of research as the UGC mandated research raider in the appointment of college and university teachers.

ASSESS YOUR PROGRESS

1. What types of issues preoccupied the communication

and media research in India? Discuss.

2.8 QUESTIONS

- 1. What inspired the early phase of social science research in India?
- 2. What is the role of UNESCO and Ford Foundation in stimulating research in India?
- 3. Briefly explain the SITE as the pioneering effort in television experiment.
- 4. What do you think are the scope of communication research according to you?

2.9 REFERENCES AND RECOMMENDED READINGS

Simonson, P and Park D.W (Eds.) (2016), *The International History of Communication Study*, Routledge: New York.

Thomas, P.N. (2016), "Observations on Journalism and Communication Education in India", in Simonson and Park (eds.), work cited above.

Agrawal, B.C and Sinha K. Arvind (Eds.) (1986), *SITE to INSAT: Challenges of Production and Research for Women and Children*, Concept Publications, New Delhi. Vasudev, S. and Chacravarty, P. (1989), "The Epistemology of Indian Communication Research", *Media, Culture and Society*, Vol 11. 415-433.

UNIT 3: COMMUNICATION RESEARCH AND SOCIAL SCIENCES

UNIT STRUCTURE

- 3.1 Introduction
- 3.2 Objectives
- 3.3 Social Science Research Methods
- 3.4 Sociology
- 3.5 Anthropology
- 3.6 Psychology
- 3.7 Political Science
- 3.8 Linguistics
- 3.9 Summing Up
- 3.10 Questions
- 3.11 References and Recommended Readings

3.1 INTRODUCTION

The Journal of Communication in 1983 brought out a special issue on the theme "Ferment in the Field" to problematize whether Communication studies is an independent discipline. For long time it was considered a branch of social science discipline that used subject matter and methodologies prevalent is social studies. While the roots of communication studies were found in the rhetorical studies, literature, arts, language and linguistics. Therefore at best it was treated an interdisciplinary subject rather than considering it a discipline. Though theories and researches proliferated and mass media became a crucial institution in the modern societies there were lot of sceptics who refused to acknowledge it a separate field of study. This unit therefore, examines the theoretical and methodological umbilical cord media and communication studies shares with social science and humanities subjects and how gradually the field has evolved as a separate field of inquiry keeping its interdisciplinary roots intact.

This unit, therefore would try to briefly trace the basic tenets of core disciplines that shares common ground with communication and media studies.

3.2 OBJECTIVES

After learning this unit you will be able to

- Explain the core tenets of important social science discipline
- Describe the key concepts and thinkers in the social science discipline that have commonalities with media and communication research
- Write the similarities and differences in approach and methods between social sciences and communication research.

3.3 SOCIAL SCIENCE RESEARCH METHODS

Among social science research areas mass communication research is a late comer. The communication and media field borrows its methods from social science fields such as sociology, psychology, linguistics, anthropology and others. Communication and media too had developed its own research tools such as content analysis which is specific method that systematically examines media and communication contents.

We have some idea of research of natural sciences done in labs where they study characteristics of different materials. They use precision tools to measure their properties and able to predict their behaviour. That is why we are living in a world filled with advanced technology. We are able to connect to different parts of the world using mobile technology, humans can travel to space, transplant human hearts, store entire library reading materials in gadgets as small as mobile SIM.

Science therefore is precise, measurable, testable, verifiable and predicable. Now when we say social science the characteristics of science does apply however the above mentioned terms will have different implications. We cannot predict human behaviour precisely but in general terms with understanding of various factors, social scientists can say given the so and so conditions the behaviour pattern will be such and such.

The use of science in social sciences therefore refers to the principles of examining facts with certain degree of objectivity, neutrality and general applicability in other words the scope of theorising the views. Science therefore discards speculations, presumptions, common sensual notions and philosophical discourses. Social sciences have a body of concepts, research methods after social scientists identify meaningful connections between different factors that has enabled us to understand social relations, interpersonal communications, formation of public opinions and so on.

While the central concern of the social sciences was human interaction and feelings and emotions are involved are primarily subjective rather than objective. The methods of social science would be certainly different from natural sciences, at the same time the findings must be objective in order to qualify as a science. Sociology for instance tries to find the meanings of human action. The meanings are complex as individuals put their feelings, values, prejudices, and goals into their actions. The social scientists have to deal with this highly subjective nature of scientific facts.

Therefore, to observe and interpret the subjective meanings social scientists are required to faithfully record the subjective meanings and motivations of social actors.

Sociologist Max Weber called this approach, "Value neutrality", that is sociologist must neutrality record subjective data without being affected by his or her own interests and opinions. This is difficult to do as social scientists too are members of the society they are studying influenced by individual beliefs and values. At times we need answers for societal changes that come about due to various reasons such as big manmade or natural disasters, introduction of new technologies, that may cause sudden societal impacts that require understanding where the need for social scientists to study them. There was such sudden change in the social behaviour after the Second World War with introduction of television to almost every home in the US. There were sudden changes into their lives, homes, leisure and social interactions. Mass communication and interpersonal communication were bound to interact in interesting and complex ways on audience. That"s where mass communication research came to be crucial in the society. Mass Communication research borrowed concepts and methods from social and behavioural sciences. Let us look at some of the foundational disciplines that mass communication draws its concepts and methods.

3.4 SOCIOLOGY

Sociology as a subject studies human beings in social groups, where the focus shifts from individual behaviour to social processes, how social organisations are formed and maintained and how the social organisations influence individuals" lives, interactions. Essentially sociology is concerned with collective behaviour, society as whole rather than individuals as units who make up the whole, while psychology concerns with individual behaviour.

In terms of sociological research methods they use both quantitative and qualitative methods. Sociological theory throws light to understand the "mass" in mass communication. Key sociological thinkers like Karl Marx, Emile Durkheim, and Max Weber were interested in how modern society was changing with coming in of industrialisation, urbanisation and complex and hierarchy based division of labour. Based on Durkheim"s functionalist sociological approach, media scholars do functionalist analysis of roles media institutions play in maintaining social order in complex society like ours today. On the other hand conflict theories like

Marx are concerned about media^{**}s role in unequal distribution of power in the societies.

Methodologically, survey method is important contribution of sociology to mass communication research. Studies related to how and what of public opinion by mass media are conducted by survey research. In addition to survey method, disguised or unobtrusive participatory observation, focus groups, and case studies are drawn from sociology to media studies.

3.5 ANTHROPOLOGY

Anthropology studies the variations in human living, how they are organised as societies and what are their beliefs, how the leadership roles are assigned and carried out and how the differences in age, sex are classified and social roles and positions allotted, what type of marriage and family exists are all the concerns of this field. Different ways of life in different communities who may not have come into contact with others explains common human socio-cultural foundations.

Cultural anthropologists start on the premises that all human beings are genetically similar, the differences in colour and bodily features are only superficial differences. Cultural anthropologists therefore try to explain enormous differences in cultural practices across the world.

Anthropologists base their explanations of human social organisations on the concept of culture. Culture is understood as the normative social binding that provides guidelines for all aspects of social institutions such as family, education, religion and other socio-economic and political forms. However there are many types of culture for instance we have Indian culture, within that there are several linguistic and ethnic cultures, each with its distinct features in terms of values, habits, and traditions.

Cultural Anthropologists use the term, cultural relativism to understand specific cultural practices from practitioner point of view rather than with
their own yardsticks and to compare one with another and put them in hierarchical categories of superiorities. On the contrary, ethnocentrism is opposite of Cultural Relativism, it is the belief that one's own culture is superior and all the other cultures to be compared with it.

Another anthropological observation is studying social roles in different cultures. Social roles like mother, father, brother, sister, son, daughter, teacher, priests, men, women or outcast are assigned responsibilities, expectations, and codes differently in different cultures.

Some of the research methodologies that derive from anthropology are observation, especially participant observation, in-depth interview, and ethnography. Participant observation is learning about a social group, its cultures and subcultures through engaging in the group as a member. They make systematic notes about their experiences and observations. They pay attention to belief systems, important social rituals, material cultures, art and everyday lives and social roles.

When it comes to ethnography, the important approach is to look at elements and units in the context of its whole. The principle of holism believes that all parts of the cultural system depend on each other. This approach believes that cultural system have internal consistency while individual aspects may appear irrational from outside. Ethnographers often rely on one informant who is willing to spend time and interpret for her/him meanings of their beliefs and practices.

In-depth interviews are with such informants are part of the qualitative approaches used in anthropology. This method is an open ended conversation that tries to explore and individual's and group's worldviews. The information gathered out of observation and depth interview are used as a holistic description of the way of life. Ethnography therefore refers to both the method and the descriptive report produced out of the study.

The anthropological methods applied in mass communication research have become common. D.M. White's study of newsroom practices in 1950s using ethnography helped develop an important character "gatekeeping" in the newsroom. Media researchers using ethnographical methods largely base their work drawing from Clifford Geertz works.

3.6 PSYCOLOGY

The subject matter of psychology is human behaviour, which is discipline that arrived relatively late. Human behaviour has its roots in mind and therefore studying mental structures and functions for long hinged on unscientific realm of magic and spirits. It was establishment of labs to experiment nature of behaviour that set the stage for scientific study of human behaviour or psychology. Various schools of scientific studies of psychology came up with unique approaches such as Behaviourism, Functionalism, Gestalt School, Humanism, Psychoanalysis and so on. Sigmund Freud for instance is well known for his observation of patients in clinical settings for treating observed problems rather than as a research method to study. Freud came out with an elaborate theory of human behaviour or maladaptive behaviours that came to be called as psychoanalysis. Freud based his theory of human personality on unconscious structures that were the root cause of external observable behaviour. He explained that maladaptive behaviours were expression of repressed urges and wishes that emanated from instinctual psychological nature.

Behaviourists on the other hand were positivist in orientation. They argued that to be scientific study one must come out with testable hypotheses and prove them with measurable behaviours. Thus they designed mechanism to collect experimental data under laboratory conditions on behaviours such as attention, aptitude, intelligence, different kinds of skills, anxieties, motivation, learning, cognitive skills, and so on. B. F. Skinner is one famous behaviourist psychologist and so Ivan Pavlov who came out with classical conditioning theory using dog"s salivation as conditioned behaviour. They applied the logic of behaviour response is proportional to sensual stimulus.

The Experimental design in mass communication studies are largely drawn from psychological research methods. The distinction between independent variable and dependent variable as the factors of cause and effect in human behaviour is applied to many of mass media influences and their effects.

3.7 POLITICAL SCIENCE

Political science is the study of practices of exercise of power and authority in different social and political settings. The discipline deals with different forms of governments like democracy, monarchy, dictatorships, or any other forms of political structures in human history. The study of political structures and functions help us understand how these structures have come about, evolved and maintained in different socio-cultural and communication contexts. In modern political formations such as democracy, elections, legislatures, and other state institutions media and communication have come to stay as a significant player whether to function as a watchdog of people in power or to provide a mediating platform in a representative democracy. Modern day governance necessitates the existence of mass media because it is through mass media the people become active participants in the democratic processes. It is because of this reason mass media is also referred to as "watch dog". They are to ensure governance by rule of law and prevent misuse of power. Of late, the mass media themselves become corporate houses and began to have strong nexus with political class, because of which they have earned an infamous tag "lap dog". The role of technology mediated communication and media also becomes inevitable in the changing world politics where there are international organisations, nations, and international relations that are highly contested and competitive.

In addition to understanding the political structures as institutional forms of operations of power, political scientists have described the everyday form of power games that takes place within the members of the social groups, representatives of pressure groups, and members within social institutions like family, village, township, religions, and so on. Political philosophers like Karl Marx, Michel Foucault and others speak of power relations that exist in everyday life and languages. Therefore, political aspects can be observed and studied in almost all aspects of human society like art, culture, language, cinema, moralities, gender and others.

Political science thus deals with how power and authority, rules, laws, permeates into every aspect of socio-cultural life of an individual or groups.

3.8 LINGUISTICS

Linguistics is the study of the structure and evolution of human language. The Linguistic discipline focuses on variations of language structure, language learning and teaching, the cognitive process of using symbolic language in communication system and their effects on social and cultural forms. Among many living beings that occupy our planet we find it is the human beings who have evolved a sophisticated communication systems involving symbolic interaction which we call as language. There are numerous spoken and written languages in the world. If we refer to language as a practice of meaning making system with alphabets, words, sentences, and grammar there are similar other such systems like musical language, visual language, dress language, traffic language and many more.

Linguistics therefore study the complex system of meaning making process human being have established over the centuries. Linguistics also studies how we make utterances, the commonalities of vowels and consonants, the phonology and so on. The study also involves understanding physical characteristics like vocal cords, lips, tongues and hearing in making sounds across different language system and across different cultures. The methods that study the internal structure of words and sentences are called morphology and syntax studies. Besides studying the sound systems of languages and word and sentence structure, linguists also study the meaning behind words and combinations of words which is called semantics.

The world today becoming increasing multidisciplinary and interdisciplinary applies to linguistics very much because it relates in many ways other disciplines like psychology, anthropology, neuroscience, law, philosophy, computer science, communication, and education.

The approach in media and communication to study linguistic systems that focuses on how meanings are generated and passed on is called semiotics. The semiotic theories of Swiss Linguistic Ferdinand Saussure and the American philosopher Charles S Peirce is extensively used in communication studies especially from cultural perspectives of understanding media productions.

Advanced theoretical proposals such as structuralism and post structuralism speaks of how language structures have relations with society"s social and political structures and in order to understand how dominance in the socio-political sphere operates in our culture advanced linguistic theories put forward by Michel Foucault, Jacques Lacan, Roland Barthes and others are studied in media and communication field.

3.9 SUMMING UP

This unit made a brief sketch of important social science subjects and their concepts and methodologies that will provide a window to mass communication researchers to grasp the point of departure in their own discipline. The sociology and anthropology subjects are two foundational subjects for any research in the area of social science including media and

communication. While sociology started as a science to adopt objective and systematic investigation into human problems and organisations, anthropology provides insights into the values of field work, ethnography and cultural systems. The political science discipline helps media and communication scholars to examine the presence of politics and power in everyday communication and social interaction besides looking at how communication is used in political systems. Psychology allows us media scholars to understand the workings of human mind in terms of perception and cognition and reception of media productions and social interactions. Linguistics has opened up new avenues of mass communication study by examining how symbolic world is spun around to create or rather construct a world of symbolic reality.

ASSESS YOUR PROGRESS

1. What are the major sociological concepts and theories that communication studies draws of its inquiry?

3.10 QUESTIONS

- 1. How do we learn the importance of field work and ethnography from anthropology?
- 2. Mentions some key areas of research in media and communication inspired by political science?
- 3. What are the psychological concepts that help us understand the workings of communication by individuals and groups?
- 4. What the theoretical schools of thought that have emerged from linguistics?

3.11 REFERENCES AND RECPMMENDED READINGS

Priest, S.H. (2010), *Doing Media Research: An Introduction*, Sage: New Delhi.

UNIT 4: ELEMENTS OF RESEARCH

UNIT STRUCTURE

4.1 Introduction
4.2 Objectives
4.3 Variables
4.4 Types of Variables
4.5 Hypothesis
4.5.1 Purpose of Hypotheses
4.5.2 Characteristics of Good Hypotheses
4.6 Deduction Method
4.7 Induction Method
4.8 Theoretical Framework
4.9 Summing Up
4.10 Questions
4.11 References and Recommended Readings

4.1 INTRODUCTION

This Unit presents some practical and useful concepts and applications that one can use in the field first by preparing the research design and second for carrying out research by understanding and applying these terminologies or their features both in quantitative and qualitative approaches. In fact most of the concepts given in this unit form the basic understanding for undertaking any (social) scientific study. It is also imperative on the part of the researcher to have a precise knowledge of these concepts rather than having a vague or rough idea that would be a misleading to say the least to hugely distorting the research study.

Therefore, understanding concepts such as variables, hypothesis, induction and deduction are like learning the alphabets of research. They are fundamental to start with and move forward to understand more complex theoretical concepts at a later stage.

4.2 OBJECTIVES

After learning this unit a student should be able to

- Explain the meaning of what is a variable, different types of variables and how to identify and construct variables in a research
- Write the meaning of the term hypothesis and describe different types of hypotheses
- Explain the meaning of deduction and induction as a logical methods and apply them in your design and interpretations
- Describe meaning and importance of theoretical framework in a research and use it in your research studies

4.3 VARIABLES

Variables are any social phenomena, factor, or character that we want to study. The literal meaning of the term variable is anything that varies at different points in time and context that needs explanations for the reason and causes of varying. For example, in communication two persons come across an advertisement of a product, say a biscuit pocket, out of which one of them buys and other does not. The buying decision here becomes a variable, it varies from yes to buying, no to buying or perhaps buy at a later time. When we undertake to study the buying habits of people, in that study the buying or purchase habit becomes a variable. The buying habit being the outcome of advertisement, the advertisement also becomes a variable in terms of whether the ad motivates a person to buy, or not to buy. Though a person"s decision to buy or not to buy may not necessarily depend on the persuasive message in the advertisement alone there would certainly be other reasons behind it such as the affordability to buy, the ingredients in the product, the buyers requirement for the product and so on. In fact such type of reasons for purchasing behaviour can be multiple sometime beyond the observer"s comprehension. That does not mean we will not be able to find the advertisement"s role in influencing a person"s decision. In any research be it in science or social science the technique to study the influencing factor of an advertisement as a variable or any other variable is to keep all other variables, say in our case the affordability, need and so on *constant* among different persons studied, and only keep the advertisement as the variable to see whether it influences purchase behaviour.

In media and communication research variables can be identified in different 5 Ws and H of their functions, namely what, when, why, where, who and how aspects. What contents audience are interested in, can become a variable. For instance in a newspaper there are different types of stories, ranging from politics, business, sports, education, international, celebrities, and so on, when a researcher studies what type of contents sells more the type of content becomes a variable. In another study, who reads what content becomes a variable. In a study when do most people watch television, when becomes the variable. Thus variable are the factors that affect behaviour patterns one is interested to study. A study may investigate why do people watch a particular channel more than others focuses on the why aspect as the variable.

A variable is a measurable or potentially measurable component of an object that may fluctuate in quantity or quality or that may be different in quantity or quality from one individual to another, or one object to another. For instance individual"s weight or height will be different from another, so we can call the weight or height as variable. Age, intelligence, education, income, gender, social backgrounds can all be designed as variables in a study if that is the character one wishes to observe. These characters or properties in objects take on different values, therefore, as the name suggests variable is a property, attribute or character that varies. In a research a character of property therefore is defined as a variable in operational terms so as to enable the researcher to measure their changes according to conditions introduced by researcher so as to precisely measure the variations and find out relations between two or more variables.

Variable thus can be defined as "Any class of communication behaviours that can take on different values that may be a phenomenon or event that can be measured or manipulated"; or as "a variable is a concept which can take more than one value; it is any distinguishable and distinguishing property which is of interest to the researcher".

In a study typically based on empirical observation a research investigates relationship between two variables and may prove or disprove the strength of the relationship between two given variables. For exam-ple, we may take age as a variable and linguistic development as another variable. If it is found that age is a definite factor for a child to develop different stages of verbal skill, or linguistic skills. Knowledge based on the findings help us to prepare learning materials based on their capabilities as per their age groups. In another example, if study playing violent video games (X) as a variable that may associate with aggressive behaviour (Y) as another variable. We assert there is a strong relation between two when there is a significant amount of measurable aggressive behaviour (Y) that either increases or decreases in proportion to playing violent video games (X), then we can say there is a relation between the two variables. In the example above if the variable B is an outcome of variable X, then we can say Y is dependent variable while X is independent variable. Dependent variable is also called as outcome variable while independent variable that causes an effect as input variable.

4.4 TYPES OF VARIABLES

Independent variable: A variable that is presumed *to cause* or determine a dependent variable, it also called as *input* variable. The independent variable is manipulated to see whether presence or absence of it has an

effect on the dependent variable. The doses of independent variable are increased or decreased, for example exposure to media hours can be increased or decreased to see some effect.

Dependent variable: A variable that is assumed to depend on or is caused by another variable. It is also called as *outcome* variable or *effect* caused by input variable or independent variable.

Intervening variables: They refer to abstract processes that are not directly observable but that link the independent and dependent variables. e.g. In language learning and teaching, they are usually inside the subjects' heads, including various language learning processes which the researcher cannot observe.

Extraneous variables: They are those factors in the research environment which may have an effect on the dependent variable(s), for example aggressive behaviour may increase or decrease depending on the hours spent playing violent video games, in which the parental influence, neighbourhood, childhood traumatic experiences, biological predisposition may all play the role of extraneous variable that the researcher should be aware of and eliminate their influence while studying.

Attribute: Characteristics or qualities that describe an object. e.g. if sex is a variable, male and female , or transgender are attributes.

Discrete variable: A variable that are distinct from other related variables or its attributes. e.g. Sex is a discrete variable as they are distinct as male, female, or transgender.

Continuous variable: Continuous variables do not have distinct points of separation from its related variables or attributes. e.g. Income, age, height or weight will be continuous on a scale that are categorised on some logical divisions.

Controlled variables: In a study these variable may unwantedly influence the outcome variables such as intervening or extraneous variables are controlled to minimise or eliminate their influence. One of important purposes of research is find the cause and effect relationships. It is relatively easy to find what causes what in science in the laboratories, but

finding causations of human behaviour is relatively complex. In social life a multitude of factors affect an outcome. However, it is important to identify the main causes of behaviour we want to study. In India the use of communication and media was considered a boon to bring in social change and development therefore it was essential to establish the linkages between the two by isolating other factors. However, unlike laboratory, it is impossible to isolate multitude of factors that affect a particular factors, therefore the choice is to quantify different factors and their impact.

Confounding variables: They have similar characteristics with potentially confounding to independent variable and may affect the outcome variable. Therefore, the researcher should identify the confounding variables and control or eliminate their influence.

4.5 HYPOTHESIS

Hypothesis is a statement that tells about possible or presumed relations between two or more variables. Hypothesis therefore works as a starting point to carry out a research to examine the presumed relations between variable is strong enough to mutually dependent or interdependent on one another. For instance, we may presume high income groups will have higher educational qualification or vice-a-versa. In a research the hypothesis will have to be tested whether the statement is true or not.

Thus hypothesis can be defined as a generalization presented in tentative and conjectural terms. It is assertion about pre-existing conditions that are subject to verification and proof. It is also simply put is a declarative statement. Conjectural statement predicting specified type of relationship between two or more classes of communication behaviour, under explicitly defined conditions.

Accordingly, we can draw the characteristics of a hypothesis from the above definition:

- It is a generalization
- Declarative statement
- Tentative statement
- Conjectural statement
- Statement of assertion about pre-existing conditions

In simple term hypothesis is a presumed fact, the validity of which will be tested by the research and eventually proven right or wrong by collecting sufficient data and applying statistical procedure, to determine whether any significant relationship exists between the variables stated in the hypothesis. A study may have one hypothesis or more than one hypotheses that must be tested and establish their validity. A hypothesis may sometimes state there is no relationship between two variables which is called, *null hypothesis*.

Hypothesis serves an important function by focussing on one or two elements that are measurable and feasible to study. It identifies in clear terms what the researcher believes as the cause and effect of given communicative phenomena. Thus, when we say a hypothesis is a statement of relationship between two phenomena or variables, we relate them in a cause and effect order. The independent variable (IV) is said to be the cause of some other phenomena, the dependent variable (DV). Thus, the independent variable is the cause and the dependent variable is the effect, the hypothesis states some type of relationship between IV and DV.

An example of hypothesis, "As political participation increases, the influence of television agendas decreases". The variables in this hypothesis are political participation and the influence of television agendas. An inverse relationship is stated so that as one increases the other decreases (Anderson, J.1987).

4.5.1 Purpose of Hypotheses

Hypotheses are formulated before the study is actually carried out, as they will provide direction for collection, analysis and interpretation of data.

- It provides direction for any research activity by tentatively identifying anticipated outcome. In other words research proceeds from what we already know about a phenomenon to move on to new notions and new relationships. We test the already known facts for its coherence, completeness and usefulness by putting them to rigorous tests.
- 2. It provides bridge between theory and practice by making the theory more and more predictable and scientific.
- 3. It serves as a framework for drawing conclusions.
- 4. It provides powerful tools, for advancement of knowledge as they allow the researcher move from assumed knowledge to proven knowledge system by systematically applying different tools and techniques.
- 5. It enables scientific thinking process by making speculative knowledge into tested and proven knowledge, making the entire process as a guideline for him/her and other scientific community.

4.5.2 Characteristics of Good Hypotheses

- 1. Hypothesis is declarative statement that identifies predictable relationship between two more variables. The relationship may be positive or negative.
- 2. Hypotheses are always stated in advance before the commencement of actual research such as collecting data, designing tools, operationalizing measurable concepts and so on.
- 3. A good hypothesis must be consistent with existing body of research or theories.

- 4. The concepts in a hypothesis must be stated in precise and clear terms to avoid ambiguities and erroneous findings.
- 5. The hypotheses should be operational, that is there should be measurable tools and techniques for accurately observing their nature and dynamics. For example in the example cited above political participation is a variable in a hypothesis, that may have variations such as high participation, moderate participation and low participation that is empirically distinguishable. The measurement device that is used to collect data on political participation becomes empirical definition of participation. This definition is called operational definition (Anderson J, 1987).

4.6 DEDUCTION METHOD

Over many centuries human beings tried to understand the world, human nature, the knowledge, the truth, the nature, and god. Initially, people attributed forces of nature to God with supernatural powers. But slowly people began to control explain the forces of nature. They began to observe some cause and effects of different phenomena. They were able to predict cyclones, tsunami, floods, lightning, seasons, and so on. This reliance on empirical evidence represented important direction of scientific inquiry. Though, it came under server sanctions from religious dogmas. The first systematic approach to reasoning is credited to Aristotle who advocated deductive method, which is based on general assumptions to the specific application. Several centuries later Francis Bacon advocated direct observation of phenomena and arriving at logical conclusions or generalisation through many individual observations. This process of moving from observing specific cases and arriving at generalisations is called induction method. Thus the deductive method of Aristotle and inductive method of Francis Bacon gave raise to systematic study of many natural and social phenomena.

Deductive method is observing large number of occurrence that has similar characteristics and character is applied to a particular phenomenon. In other words it is a method from general to particular. A famous example given in this method is -

- a) All men are mortal.
- b) Peter is a man.
- c) Peter is mortal.

Using this logic of deduction many inferences are drawn from known general occurrences to understand a particular cases. Most medical cases are diagnosed and treated based on the principle of deduction. Our understanding of what is normal is arrived at by observing many cases and reaching a specific point are distinctions between normal or below normal or above normal. Human intelligence, body temperature, blood pressure, mental health symptoms are all arrived at on the basis of deductive methods.

4.7 INDUCTION METHOD

The logical process of arriving at conclusion based on induction is the process of reasoning from a particular to general, as against deduction which is logical reasoning based on general to particular. It must be noted that science and research is based on logical reasoning by studying some phenomena and transferring that knowledge to newer phenomena. Therefore the rules of logic of induction and deduction are fundamental to studying a sample and generalising its observations to the population or the universe.

The famous Psychoanalyst, Sigmund Freud came out with very influential theory called Psychoanalytic theory that enabled us to understand mental problems such as neurosis and psychosis which otherwise was attributed to possession by spirits and needed exorcists to treat them. The method Freud arrived at his theory was by studying few cases of mental abnormalities and he generalised the causes and nature of the mental disorders paving the way for their scientific treatment.

Therefore, more than deduction method, induction method paved the way for systematic and scientific study of many social and humanistic issues. The method given by Francis Bacon advocated direct observation of empirical phenomena and collect evidences of many individual observations to arrive at their general principles. This inductive process of moving from specific observations to generalisations freed logic from the limitations of deductive process. Bacon observed that deductive methods placed obstacles in the way of finding newer truths. The inductive method enabled drawing hypotheses and testing them by collecting data and putting them through logical analysis. The method of studying using samples is approaches of inductive methods.

A most common present day study of opinion polls and exit polls conducted during elections across the world is by using sampling technique that enables them to predict the opinion of the entire population. Today many of the state run policies and programmes are introduced and implemented by using the sampling techniques.

Thus, now inductive and deductive method is now recognised as scientific approach to study any phenomena. John Dewey (1938) suggested the following steps in identifying the elements of a deductive inductive process.

- identifying and definition of the problem.
- formulation of hypothesis, an idea prescribing probable solutions to the problem in an action research, or an intelligent hunch.
- collection, organisation and analysis of data formulations of conclusions

• verification, rejection or modification of hypothesis by the test of its consequences in a specific situation.

4.8 THEORETICAL FRAMEWORK

Social Scientific Research is continuous process and it is a collective endeavour for a public purpose therefore, science and knowledge is a cumulative body of work achieved by the human society over thousands of years. In other words, scientific inquiry is not an isolated engagement instead a collective participation in discovering newer facts and newer perspectives based on the existing knowledge. Scientific inquiry is not a finished product but a continuous process where one starts from the point another has ended. It is in these light existing theories and a concept in the area of research is to be formed as the base of a newer inquiry. Therefore, theoretical framework helps not only the researcher but also the scientific community to pick up starting points from where others have brought it up to. It summarises what is known in the past work and suggests ways for the future observations, based on theoretical formulations that surround the problem under study.

Theory is a part of the vocabulary of the discipline concerned that serves as an explanation for the interrelationship among facts, concepts, or propositions. Kerlinger (1986) defines theory "is a set of interrelated constructs (concepts adapted for a scientific purpose), definitions and propositions that present a systematic view of phenomena by specifying relations among variables, with the purpose of explaining the predicting the phenomena".

Based on the definition given above we can draw the major characteristics of theory such as:

It is a proposition, statement that aims to explain some phenomena.

It brings out salient features of some phenomena.

It brings out the interrelated concepts and relationships.

It is logical and systematic view.

It specifies relationships between and among different variables.

The purpose is to explain and predict a phenomenon.

Thus a theory is a systematic abstraction that is able to describe, understand, explain, predict phenomena so as to enable us to control its use it for the benefit of a larger interest of the society. In media and communication discipline there are number of theories and concepts that would provide us the foundation on which to build up our problem statements, hypotheses or research questions and eventually interpretations.

A researcher constructs a theoretical framework by existing theories, concepts, understanding, and research findings to provide foundations for the present research project. A theoretical framework is like a frame for a house that stands on its base, the foundations. Therefore, a theoretical framework provides a rationale for predictions about relationship among variables in a study. It also works like a frame of reference forming a base for observations, definitions of concepts, operationalization of variables, research design, interpretations and generalisations. Most importantly the theoretical framework helps the researcher to systematically and logically defined relationship among variables.

In other words it is like a road map for identifying problems and developing research questions within the defined scope of the variables. It gives meaning to the problems and study by clearly stated concepts locating them in the existing field of knowledge and identifying their relationships. The theories and framework chosen must be appropriate and fits within the cultural, spatial and temporal contexts of the location of the study.

The theoretical framework therefore not only will justify the rationale of the study but also points out to the scope of further study. It would

distinguish from previous study and how the newer study integrates the existing theories not mere reinstatement of already existing concepts.

4.9 SUMMING UP

This unit tried to explain some basic concepts and procedures that forms part of social science research in general communication research in particular. Important concepts such as variables, hypothesis, induction, deduction and theoretical framework are explained here in as much simple and clear terms as possible not only to understand these concepts but also to enable the readers to prepare and plan research designs picking media and communication research problems that concerns them in their surroundings. Variables are to be built within any research design because they are terms used to refer to communication phenomena in research study so that we can understand how their values change in different contexts and how they can be measured in relation to other variables they are assumed to influence or influenced. Those are technically called as independent and dependent variables. Different types of variables have been defined with examples in the text. Hypothesis is another concept one must necessarily know in research. They are conjectural statements that declare the type of relationship one variable shares with another. Finally the Unit discussed the meaning and the necessity of using theoretical framework in communication researches.

ASSESS YOUR PROGRESS

1. Try to construct independent and dependent variables, if you were to study the effects of fake news and public opinion in your town.

- 1. What is a variable in social science research? Give some examples of variables in communication and media research.
- 2. Define different types of variables and give suitable examples.
- 3. What is the meaning of hypothesis? Explain hypotheses by writing one or two from your day-to-day lives.
- 4. How logical reasoning is important in scientific research and relate them to the concepts of induction and deduction?
- 5. What is a theoretical framework and why is it important?

4.11 REFERENCES AND RECOMMENDED READINGS

Anderson, J. A (1987) Communication Research: Issues and Methods, New York: McGrow-Hill Book Company.

Hansen, A., Cottle, S., Negrine, R., and Newbold, C. (1998), Mass Communicatio Research Methods, Houndmills: Palgrave.

Kerlinger, F. N (1987), Foundations of Behavioural Research (3rd Edition), New York: Holt, Rinehart and Winston, Inc.

Kothari, C.R., (1990), Research Methodology: Methods and Techniques (2nd edition), New Delhi: Wishwa Prakashan.

MODULE II: RESEARCH DESIGN

UNIT 5: TYPES OF RESERACH

UNIT STRUCTURE

5.1 Introduction
5.2Objectives
5.3 Types of research
5.4 Comparison of the research types
5.5Summing Up
5.6 Questions
5.7References and
Recommended Readings

5.1 INTRODUCTION

"The research design is the conceptual structure within which research is conducted, it constitutes the blueprint for the collection, measurement and analysis of data" (Kothari & Garg, 2014). In order words, research design is the advance planning of conducting the different stages of research including defining a research problem, determining the methods for collecting data, selection of population to be studied and the methods of data analysis. The structure of research design varies based on the different types of research implemented for a particular study. On the other hand, based on the nature and purposes of the study, there are different types of research which determine the approaches of conducting the investigation in research for collecting and analysing the data. The basic purpose of these approaches is to discover truth through scientific study of a phenomenon. This scientific investigation in a particular research type focuses on finding the answers of the research questions which are formulated on the basis of the aim and objectives of the study. This unit emphasises on discussing the nature of different research types including its differences in finding new insights of a research problem.

5.2 OBJECTIVES

This unit is based on the following objectives-

- To understand the different types of research
- To find out the differences of the research types

5.3 TYPES OF RESEARCH

5.3.1 Dimensions of Research Types

Different types of research can be classified on the basis of four dimensions which are discussed below-

- i. Purpose of the research
- ii. Uses of the research
- iii. Required time to accomplish the research
- iv. Techniques of data collection
- i. **Purpose of the Research:** The purpose of the research defines the reasons of conducting the study justifying why the researcher wants to study a phenomenon. For instance, the purpose of the study may be to explore a new topic or to describe characteristics of a phenomenon.
- **ii. Uses of the Research:** This second dimension of research implies the implication of outcomes of the research in different fields. A researcher may use findings of a research for generating new ideas, principles, etc. in order to generalise a phenomenon or to formulate a theory. On the other hand, a researcher may also conduct a research in order to find a solution to a problem.
- iii. Time dimension: Based on treatment of time in research, there are two types of research including longitudinal research and cross sectional research based on whether the research is conducted over a period of time or at one point of time respectively.
- **iv. Techniques of data collection:** Types of research depend on the nature of techniques used for collecting data. For instance,

techniques such as focus group discussions, interviews, case studies, etc. are used in order to understand a phenomenon which is related to quality or kind. On the other hand, some phenomenon are studied in terms of quantity, for example, techniques like census, experiments, content analysis, etc. are used to collect data which can be analysed in term of numbers.

This categorisation of research types can be further explained in the following table:

Sl. No	Dimensions of Research	Types of Research
1	Purpose of the research	A. Exploratory Research
		B. Descriptive Research
2	Uses of the research	C. Fundamental Research
		D. Applied Research
3	Time dimension	E. Longitudinal Research
		F. Cross-Sectional
		Research
4	Techniques of data	G. Quantitative Research
	collection	H. Qualitative Research

5.3.2 Types of Research

A. Exploratory Research: Exploratory research is useful when a researcher has a limited amount of knowledge about a research problem. As the term exploratory implies, this type of researches are to unearth unknown phenomena exploring a new topic or issue in order to generate new knowledge about it. Basically, exploratory research is undertaken when few or no previous studies exist. The nature of this investigation is flexible in selecting methodology and also in developing research techniques.

- **B.** Descriptive Research: The main characteristic of descriptive research is that it describes characteristics of a population or a phenomenon as it exists at present. In order words, the researcher has to present the phenomenon the way it is happening as the researcher has no control over the situation or the social setting undertaken in the study. Descriptive research is mainly associated with observational studies , for instance , study of consumer behaviour in relation to their frequency of online shopping, their preferences, etc. For studying consumer behaviour , the researcher has no control over the variables that determine their frequency of shopping as well as their preferences for any product or service. The basic task in such study is to report the pattern or to describe the situation in which the phenomenon is happening.
- **C. Fundamental Research:** Fundamental research is also called Pure research are those researches that are interested in expanding the understanding and knowledge of any phenomenon. The basic purpose of fundamental research is to make generalisation about a phenomenon and also to formulate theories. In order words, the end product of pure research consists of theories and explanations of concepts, practices, systems, process, and so on. For instance, the communication models like Newcomb"s Gate keeping model or theories like Spiral of Silence or Dependency theories are outcome of primarily of fundamental research.
- **D. Applied Research:** Unlike fundamental research, applied research or action research does not focus on making generalisation or formulating theories, it basically aims at finding a solution to an immediate problem. In order words, applied research is conducted to address some immediate concerns of a society or an industrial/business organisation in order to find solutions to specific problems or to make decisions about a particular course of action or policy. Some of the common researches such as readership surveys, communication campaigns, evaluation studies, expost-facto studies, policy research, and market research are applied research.

- **E. Longitudinal Research:** Longitudinal research is defined as the kind of research which is conducted over a period of time in order to observe the effect of time on the phenomenon under study. A researcher may consider time interval in collecting primary data from the field in order to analyse the changes in the situation under observation. For example, study of changing perception and practice of Sattriya dance or viewing behaviours of television over a period of time.
- **F. Cross-Sectional Research:** Cross-Sectional research is different from the Longitudinal Research as it is confined to a single time period. In Cross-Sectional research the researcher cannot observe the changes in the researched situation over different period of time. This type of research is appropriate specially when time or resources for more extended research is limited. One example of Cross-Sectional research is survey of new media skills among the school going students.
- **G. Quantitative Research:** Quantitative research in simple terms attempts to measure different aspects of human behaviour including those related to communication and media by assigning numerical values. In our day-to-day life we see lots of numerical descriptions to understand and interpret human society, for example the population figures, family income, age, physical features like height and weight, sex ratio, percentage of people using particular media and many more. Thus quantitative understanding is unavoidable in any scientific explanations of things and people, however, the qualitative approach differs not by avoiding numerical values but by differing in emphasis on quantification. Quantitative research is crucial also to test hypotheses, find correlations, and critical differences and classifications.
- **H. Qualitative Research:** Qualitative research studies a phenomenon in terms of quality or kind instead of numbers unlike Quantitative Research. It may on the one hand stand in contrast to quantitative methods, on the other hand, both methods complement each other in eliciting better understanding of any phenomena. The primary difference, therefore is the philosophy of treating human beings, not merely as figures and facts but

as human agents capable of independently thinking and acting. The emphasis of qualitative methods therefore is on meanings of signs and symbols used in social interactions in specific socio-political cultural and historical contexts.

However, the above mentioned types are not the complete list of research types, there are some other types of research which are based either on the purpose or on the environment in which the phenomenon is studied. For example, Historical Research is a type of research which utilizes historical data like documents, archaeological remains, archival, records, etc. in order to establish facts and draw conclusions about past events. Another research type is Experimental Research which is based on scientific testing and laboratory experiments. The experimental research design works by driving two groups; one as controlled group and the other as experimental group. The experimental group is exposed to variables which need to test while the controlled group is kept away from the specified variables and at the end the effects are observed to see whether there is any significant difference between two groups or not. Many studies on children are conducted using experimental method, including the effect of viewing violent television shows and many such issues.

5.4 COMPARISON OF THE RESEARCH TYPES

5.4.1 Exploratory Research Vs Descriptive Research

- a) Exploratory Research mainly focuses on formulating a research problem which is newly searched for or lack of research on that issue or phenomenon. On the other hand Descriptive Research aims at describing characteristics of a phenomenon under study.
- b) In Exploratory Research, the research design is flexible enough that it provides opportunities for the researchers to select any methodology based on its suitability to explore various aspects of the research problem.

But in Descriptive Research, the research design is comparatively rigid as the researcher has no control over the phenomenon how it is happening at the present.

- c) For the investigation process in Exploratory Research, the research design is unstructured while on the other hand in case of Descriptive Research it is structured.
- **d)** Unlike Descriptive Research, Exploratory Research can provide the foundation for Descriptive Research through formulating a new research problem and also developing ideas for future research.

5.4.2 Fundamental Research Vs Applied Research

- a) The basic objective of Fundamental Research is to derive generalisation about a phenomenon and also to formulate theories. On the other hand, the basic objective of Applied Research is to solve an immediate problem faced by a society or an organisation in order to take decision or formulate policies.
- b) Fundamental Research is inductive in nature and Applied Research is deductive in nature. Inductive research means the research approach which deals with generation of new theory and on the other hand, deductive research deals with testing theories or hypothesis in order to derive results from general to particular.
- c) Fundamental Research aims at expansion of knowledge through exploring new ideas or phenomenon while on the other hand Applied Research aims at immediate application of the findings for upliftment of the society or the organisation through solving the problem at hand.
- **d**) Applied Research has a practical approach and Fundamental Research has a practical approach in studying a phenomenon.

5.4.3 Longitudinal Research Vs Cross-Sectional Research

- a) The difference between Longitudinal Research and Cross-Sectional Research is based on the time period required for conducting the research. Longitudinal Research is conducted at different points of time, on the other hand Cross-Sectional Research is conducted at a particular point of time.
- b) Unlike Cross -Sectional Research, in Longitudinal Research the researcher can observe the changes in the phenomenon over different periods of time.
- c) In Cross-Sectional studies, the cause and effect relationship of the variables of the study cannot be observed as it is based on a particular point of time.

On the other hand, in Longitudinal Research, through observing the changes over different points of time it can establish the causal relationship of variables used in the study.

d) In Longitudinal Research the population selected for the study is same throughout the different period of time, on the other hand, Cross-Sectional study is conducted with different groups of population.

5.4.4 Quantitative Research Vs Qualitative Research

a) The basic difference between Quantitative Research and Qualitative Research is based on the methods used for collecting data. In Qualitative research , methods such as case study, focus group discussion, ethnography , etc. are used which collect data in quality or kind.

On the other hand, in Quantitative Research, methods such survey, content analysis, experiments, etc. are used to collect data which are numerical in nature.

b) In Quantitative Research, data are analysed using different statistical measurements such as, mean, medium, mode, etc. and also in terms of percentage, frequencies, etc. presented through different graphs and tables.

On the other hand, qualitative data are analysed in textual forms in order to discover the different characteristics of the phenomenon under study such as patterns of changes in the variables, existing causal relationship of the variables, etc.

- c) The approach of Qualitative Research is objective in nature and on the other hand, Qualitative Research is subjective in nature. In other words, in Quantitative Research, the analysis of the variables are free from values or judgements of the researchers and in Qualitative Research, the interpretations of the research problem may vary based on the values or judgements of the researchers.
- d) In Qualitative Research, the derived conclusion is not based on a single reality rather it gives a holistic idea of the research problem which may differ in some other contexts of the study. On the other hand, in Quantitative Research the reality is absolute irrespective of the nature of context in which the research is conducted.

ASSESS YOUR PROGRESS

- 1. Distinguish the different research types on the basis of following dimensions
 - a) Purpose of the research
 - b) Uses of the research
 - c) Required time to accomplish the research
 - d) Techniques of data collection
- 2. What is Deductive and Inductive Research?

5.5 SUMMING UP

This unit discusses the concept of research design which is defined as a blueprint of conducting the research for collection, measurement and analysis of data in the different stages of research process. The research design is based on the types of research which the researcher adopts in order to study a particular research problem. For instance, research design for a qualitative research is different from the research design of a quantitative research. In order words, the process of framing the research design depends on the approach of collecting and analysing data, what are the techniques used to collect data, what is the purpose of the research, etc. This unit also discusses the types of research which are based on the different dimensions of the study such as purpose of the research, uses of the research, required time to accomplish the research and uses of techniques for data collection, etc.

5.6 QUESTIONS

- 1. Discuss the different types of research with examples.
- 2. Define the concept of Research Design.
- 3. Write a comparison of the research types based on different dimensions of research approaches.

5.7 REFERENCES AND RECOMMENDED READINGS

- 1. Kothari, C.R. and Garg, G. (2014). *Research Methodology, Methods and techniques*. New Age International (P) Limited, New Delhi.
- 2. Wimmer, R. D &Domminick, J.R. (2014). *Mass Media Research An Introduction*. Cengage, USA.

UNIT 6: RESEARCH PROBLEM

UNIT STRUCTURE

6.1 Introduction
6.2 Objectives
6.3 Conceptualisation and definition of research problem
6.4Research question
6.5Problem statement
6.6Hypothesis formulation
6.7Summing Up
6.8 Questions
6.9 References and
Recommended Readings

6.1 INTRODUCTION

Identification of a research problem is the first step in a scientific inquiry which requires a systematic investigation into a phenomenon. It is significant for a researcher to understand an issue which needs to be studied. In order words, a research problem is about exploring a phenomenon in order to advance new knowledge as well as to enhance the existing knowledge system. While identifying a research problem, the researcher should understand the rationale of selecting research problem for a study. Before selecting a research problem, a researcher can ask the following questions in order understand its suitability -

- ✤ Is the topic important enough to be researched?
- ✤ Is there any novelty in the research?
- ✤ Is the topic interesting to be researched upon?
- ✤ Would I get sufficient literature on the topic?
- ✤ Is there any practical application of my research?
- ✤ Is the topic feasible enough?
- Will I be able to complete the research work in the stipulated time frame?

6.2 OBJECTIVES

A thorough study of this unit shall enable you to

- Explain the concept of research problem.
- Understand the concepts of research question and hypothesis formulation

6.3 CONCEPTUALISATION AND DEFINITION OF RESEARCH PROBLEM

A research problem can be defined as " a research problem is one which requires a researcher to find out the best solution for the given problem, i.e. to find out by which course of action the objective can be attained optimally in the context of a given environment" (Kothari&Garg 2014). In order words, a research problem can be based on a particular issue or a phenomenon related to any aspect of the population which is considered for a study. This issue can vary from population to population under study based on its different dimensions. For instance, a research problem can be formulated on the basis of any socio-economic or political problem faced by a group of population which can be studied through scientific inquiry in order to find out solutions for the same. In selecting such a research problem there must be some well-defined objectives that the study attempts to attain through the process of collecting and analysing data. These objectives should not be vague in nature in formulating the research problem.

A study can be conducted on two different types of research problems such as a research problem which emphasizes on exploring the state of nature of a particular phenomenon and on the other hand a research problem which aims at establishing a causal-effect relationship between variables. In order to formulate both the types of research problems, the researcher need to follow the steps mentioned below-

i. Statement of the problem: It involves the process of stating the details of the research problem. In order words, the researcher needs

to describe the problem or the issue which is addressed in the study. Statement of the problem provides the context of the research problem under study.

- **ii. Surveying the available literature :** Before defining the research problem, the researcher needs to survey the existing literature in order to find out the findings of previous studies. Through surveying the previous studies the research aims to identify the gaps between the existing literature and the scope of extending knowledge. It builds the foundation of the study and provide guidance to the researcher how to add new dimensions into the existing knowledge about a particular issue or research problem.
- **iii. Finding the rational for the study:** After the extensive literature review, the researcher needs to establish the logical arguments why the particular issue needs to be studied. In order words, in formulating the research problem, the researcher has to find the reasons of selecting a research problem justifying its scope of contributing to the existing knowledge.
- **iv.** Formulation of the research problem : This final stage requires to rephrase the research problem into a proposition which is feasible to execute. This process includes defining the research problem in terms of some operational or analytical terms that will give a lens to study the phenomenon under study. This formulation of the research problem needs to identify the appropriate theoretical or conceptual framework which gives an idea to analyse the phenomenon using such theories or concepts.

In formulating a research problem, the researcher should consider feasibility of the study. The researcher should understand the practical use of the study determining its significance for betterment of human beings. On the other hand , the researcher should also analyse the limitations of a research problem in terms of time, budget, size of population, geographical and demographical profile of the population, etc.
Statement of the problem is the description of the research problem that the study is intended to address. `Statement of problem is required in the introductory stage of the research study which outlines a very broad and general research area as specific and focused issue that the study is going to address through formulating research questions or formulating hypothesis about a possible outcome of the study. Statement of problem gives an idea about the knowledge gap that exists in the available literature and also projects the purpose and need of the study to fill this gap. In other words, it gives a clear idea about the issue or the topic of the research and also provides the context to formulate the research questions. Based on the statement of the problem, the researcher frames the research questions to find the answers to the problem addressed in the study.

The significance of statement of problem in a research is that it justifies why a particular issue or topic needs to be studied with proper scientific inquiry. It offers convincing support of need for the research study being proposed through establishing the rationale for the proposed research. It also gives the vision to the researcher about what the study is going to contribute to the existing knowledge system. A statement of problem should be relevant in the sense that it should be a researchable problem which is innovative in nature as well as affordable in terms of money and time.

However, a statement of problem does not explain the methods of the scientific investigation and also does not predict any solution to the cited problem. It just simply identifies the importance of a issue for a study and only after the statement of the problem, other steps like selection of population, research methods, research techniques, data analysis techniques are decided.

6.5 RESEARCH QUESTION

Research questions are important in order to achieve the aim and objectives of the study. Formulation of research questions provides the primary focus for the researcher based on which the study intends to find answers through the process of scientific inquiry. A research question can be developed after surveying the available literature of previous studies on the broad research area under study.

The basic objective of formulating research questions for a study is to guide the different stages of research process including developing the research design, deciding what kind of data will be collected, etc. The concept of research question can be defined as " a formally stated question intended to provide indications about something, it is not limited to investigating relationship between variables" (Wimmer & Dominick, 2014). This definition implies that the research questions rationalise the investigation through identifying the gap in existing knowledge and guide the researcher to find answers for advancing new knowledge or revalidate the existing knowledge. In order words, research question addresses the ambiguity that comes within the domain of a topic under study which the researcher aims to resolve through the findings of the study.

Hulley S, Cummings S, et al. (2013)discussed the FINER model to explain the different characteristics of good research questions. FINER stands for feasibility, interesting, novel, ethical and relevant which are discussed below. -

- **i Feasible:** The research questions addressed in the study should be researchable one, which implies that there should be available resources in terms of literature on the topic under consideration and also the study should be feasible to conduct within the convenient time period as well as the socio-cultural and financial resources.
- **i. Interesting:** The research questions should be interesting for the researcher to investigate.

- **ii.** Novel: The study should be original in nature. It means that if the findings of a study are already established by previous studies and there is nothing new in the current study, the researcher needs to rephrase the questions which will address the knowledge gap and thereby will add new knowledge.
- **iv. Ethical:** Ethics in research questions again addresses the originality of the study which implies that the researcher should not just imitate previous studies without offering novelty into the study. However, research questions should be focused and specific eliminating all ambiguities in the study.
- v. **Relevance:** Relevance of research questions indicates the applicability of the findings of the study and its possibility to advance scientific knowledge as well as guide further research.

Weakness in formulating the research questions may affect the research design. Therefore, appropriate resources for developing the research questions is important as it may affect the quality of the study as well as expected results of the research. In order words good quality of research questions is the foundation for a good research.

6.5 HYPOTHESIS FORMULATION

In case of the research problem which aims to establish causal-effect relationship between variables of the study, the researcher first formulates a hypothesis about a probable causal-effect relationship between the variables. It is a presumption on which a particular study is conducted. Hypothesis helps in formulating research problem. Kothari & Garg (2014), defines a hypothesis as " a predictive statement that relates an independent variable to a dependent variable". In order words, a hypothesis is a formal statement about the possible answer to a research question. The basic difference between a hypothesis and a research question is that "the research questions pose only general area of investigation, whereas the hypotheses are testable

statements about the relationship between the variables" (Wimmer & Dominick, 2014). In order words, research questions are not for testing the statistical significance of the findings unlike hypothesis of a study. However, hypothesis is different from research question as unlike research questions it can predict the outcome of the research.

Let us now understand the importance of a hypothesis.

- Provides direction to the research
- ✤ Defines what is relevant and what is irrelevant
- Helps us understand the situations relating to the research problem
- Guide researchers in the thinking process

We should keep in our mind that without hypothesis, research would be like a random and aimless endeavour. It places clear and specific goals before us. These clear and specific goals provide the investigator with a basis for selecting samples and research procedures to meet these goals. Wimmer & Dominick (2014) discussed the different criteria for good hypotheses, which are mentioned below-

- Compatible with current knowledge: The researcher should formulate a research hypothesis which should be compatible with the existing literature on a particular topic.
- Logically consistent: The hypothesis should be logical in the sense that whatever the causal relationship the hypothesis intends to establish between the variables, it should be reliable in terms of statistical testing and validity.
- Succinct: Formulation of hypothesis should avoid vagueness in the statement, rather it should be concise and specific.
- Testable: A testable hypothesis implies the practical applicability or rationality of the statement which can be tested with some statistical measurements such as T-test, F-test, etc.

Hypothesis testing deals with two types of statements- Null hypothesis and Alternative hypothesis. A null hypothesis is the statement which asserts that there is no causal relationship between the variables which is symbolically presented as H₀. On the other hand , an alternative hypothesis is the prediction which states that there is a causal relationship between the variables of the phenomenon under study. A researcher rarely intends to prove the Null hypothesis and if it is rejected through statistical test, the alternative hypothesis is accepted as the ultimate result of the study.

ASSESS YOUR PROGRESS

- 1. Formulate a research problem based on any socio-political and economic issue you have observed in your society.
- 2. What is difference between a research question and a hypothesis in a research?
- 3. What is Null hypothesis and Alternative hypothesis?

6.6 SUMMING UP

Identifying and formulating a research problem is the very first step of research. In order to formulate a research problem, the researcher needs to understand the available literature on a particular issue and also has to find out the knowledge deficiency/gap or knowledge sufficiency in it. Once the problem is recognised, the researcher has to establish the rationale of the problem through describing the incoherence in the statement of the problem. In the statement of the problem, the researcher defines the topic or an issue in order to justify why a particular phenomenon requires scientific inquiry. Statement of the problem is significant as it explains the

knowledge gap in a researchable phenomenon. It just gives a clear idea about the researcher's aim of the study.

This unit also discusses the concepts of research questions and hypothesis formulation in a research. A research question is different from hypothesis as unlike the later, a research question does not predict an outcome of the study. In order words, a research question is a formal statement that the researcher intends to find out a solution to the problem through his study. On the other hand, a hypothesis is a statement of prediction that the researcher expects to establish through statistically testing the causal relationship between the variables of the study.

6.7 QUESTIONS

- 1. What is research problem? What are the steps of formulating a research problem?
- 2. Why is the importance of statement of problem in research?
- 3. Define the concept of research question? What are the characteristics of a good research question?
- 4. Discuss the concept of hypothesis in research.

6.8 REFERENCES AND RECOMMENDED READINGS

- 1. Kothari, C.R. and Garg, G. (2014). *Research Methodology, Methods and techniques.* New Age International (P) Limited, New Delhi.
- 2. Wimmer, R. D &Domminick, J.R. (2014). *Mass Media Research An Introduction*. Cengage, USA.

UNIT 7: RESEARCH PROCESS

UNIT STRUCTURE

- 7.1 Introduction
- 7.2 Objectives
- 7.3 Various steps in research process
 - 7.3.1 Formulation of Research Problem
 - 7.3.2 Framing Review of Literature
 - 7.3.3 Formulation of Hypothesis or Research Question
 - 7.3.4 Formulation of Research Design
 - 7.3.5 Tools for Data Collection
 - 7.3.6 Analysis of data
 - 7.3.7 Interpretation and Conclusion
- 7.4 Writing Research Proposal
- 7.5 Summing Up
- 7.6 Probable Questions
- 7.7 References and Recommended Readings

7.1 INTRODUCTION

This unit gives a comprehensive knowledge on different stages of research process and also how to write research proposal. We shall understand how to narrow down the area of study, formulate research problem, frame review of literature, formulate hypothesis or research question, formulate research design, what are the various tools of data collection, how to analyse and interpret the collected data. The unit further elaborates the important components of research proposal and how to write a research proposal for dissertation and/or thesis.

7.2 OBJECTIVES

A thorough study of this unit shall enable you to -

- Understand the various steps involved in research process.
- Know the key importance of each step in research process.
- Write research proposal.

7.3VARIOUS STEPS IN RESEARCH PROCESS

In order to know the various steps involved in research process, let us first understand what is meant by Research Process. The Research Process consists of series of systematic actions necessary to be undertaken by the researcher to start his or her research and scientifically carry out the steps to reach a valid conclusion.

Now let us understand the various steps in Research Process with the help of a chart.



Source: Research methodology: Methods and Techniques (Kothari & Garg, 2014)

Now we shall know each step elaborately.

i) Formulation of Research Problem

The first step in any systematic and scientific research is narrowing a broad area or topic into a specific Research Problem. The researcher must decide an area or topic of interest to research on and narrow down the topic so that it can be studied in the available time period. While the researcher thinks of an area or topic and tries to narrow it down, he or she comes across Research Problems. These are questions which comprises curiosity of the researcher to understand the external environment and also the existing gaps in the present scholarship pertinent to the topic.

Research Problem helps the researcher in understanding an issue which could be researched upon. The problem defines the goal of the researcher in clear terms. We should know that without a problem, research cannot proceed because there will be no clarity on what has to be researched upon. In social sciences, many researchers face this problem, i.e., the problem of not being able to identify a definite problem.

Now let us understand how researchers come up with the idea of a research problem.

- Day to day experiences of life in social setting give new insights on what could be researched upon
- Engagement with the society helps to generate ideas based on the things which are happening around
- Existing body of knowledge in a particular field
- Refine or extend earlier research
- Less explored or unexplored area

Selection of a suitable Research Problem is one of the most difficult phases of any research. This is difficult because finalizing a research problem itself becomes very problematic at times. Every problem, which comes to his or her mind, may not be suitable Research Problem. One might take a long time in gaining clarity and deciding is or her Research Problem. Selecting a suitable Research Problem is also very important because feasibility of the research area has to be taken into consideration at an early stage of research. Therefore, one should not make a quick decision rather sufficient time has to be taken to frame the appropriate Research Problem. We can say that in a way the identification of a Research Problem should be considered a discovery in itself.

Now let us understand the criteria of a Research Problem. The followings are some of the questions that should be borne in mind before selecting a Research Problem –

- Is the topic essential enough to be researched upon?
- Does the topic interest the researcher?
- Would there be sufficient literature on the area/topic of research?
- Is there any practical application of the research?
- Will the researcher be able to finish the work within the stipulated time frame and limited budget?

Once a researcher has identified the Research Problem, he or she then needs to formulate and state the problem in precise terms. This is important because it will give the researcher a sense of direction as the research delves into further investigation. Thus broadly speaking there are mainly three steps involved in the process of formulation of Research Problem -

- i) identification of the problem
- ii) understanding the problem
- ii) refining the problem analytically

CHECK YOUR PROGRESS – A

1) How important is formulation of Research Problem in research?

ii) Framing Review of Literature

Once the Research Problem is identified, the researcher must start with extensive literature review pertinent to the undertaken research topic. Review of existing concepts and theories and also the findings of the previous researches provide the researcher with the framework to situate his or her study and become aware of the existing scholarship in the academia. Academic journals, books, conference proceedings, official reports, official websites, etc. pertinent to the present research must be tapped by the researcher. It is to be borne in mind that one source will lead to another. Review of Literature is discussed in detail in Unit 8.

CHECK YOUR PROGRESS – B

2) State the importance of Review of Literature?

iii) Formulation of Hypothesis or Research Question

After identifying the research problem and reviewing the existing literature in the particular research topic, a researcher must state the research problem as a workable hypothesis or research question. There can always be more than one hypothesis or research question pertinent to the research topic. A hypothesis is a formal statement or presumption regarding the relationship between variables and is tested scientifically. A research question is a formally stated question intended to provide indications about something; it is not limited to investigating relationships between variables. While the research question poses only general area of investigation, hypothesis is testable statements about relationships between variables.

Singer and Singer (1981) explain how a topic can be narrowed down by researcher and elaborate the differences between research question and hypothesis. Researching upon on whether television content enhances or inhibits a child"s capacity for symbolic behaviour, Singer and Singer posed three basic research questions –

1. Does television content enrich a child"s imaginative capacities by offering content and ideas for make-believe play?

2. Does television lead to distortions of reality for children?

3. Can intervention and mediation by an adult while a child views a program, or immediately afterward, evoke changes in make-believe play or stimulate make-believe play?

According to Singer and Singer the data collected from the aforementioned research questions could provide data sets to create hypothesis for another research. The hypotheses like the followings can be framed –

1. The amount of time a child spends in make-believe play is directly related to the amount of time spent viewing make-believe play on television.

2. A child"s level of distortion of reality is directly related to the amount and types of television programs the child views.

3. Parental discussions with children about make-believe play before, during, and after a child watches television programs involving makebelieve play increase the child"s time involved in make-believe play.

CHECK YOUR PROGRESS – C

3) What is the importance of hypothesis in research process?

4) Explain the difference between research question and hypothesis.

iv) Formulation of Research Design

The research design is the plan or blueprint of the different steps that the researcher will undertake during the research process. It puts in all the details and decisions about what, when, where and how are the means of inquiry going to take place. In other words it answers questions related to – what is the study about, why is the study is being made, what type of data is required, where can the required data be found, what period of time the study include, what will be the sample design, what techniques of data collection are to be used, how to analyse the data, and in what style the report will be prepared.

Research design in communication research is broadly based on approaches available and different methods, tools and techniques appropriate to the research topic. We shall look at some of the approaches and methods followed in social science researches, particularly in the field of communication studies. Mainly there are three types of research designs namely, quantitative, qualitative and mixed methods. These approaches are not discrete, and quantitative and qualitative approaches should not be considered as dichotomies; instead they often represent different ends on a continuum (Newman & Benz, 1998). Mixed methods is situated in the middle of this continuum as it incorporates elements from both quantitative and qualitative approaches.

a. Quantitative Research

This approach attempts to measure different aspects of human behaviour including those related to communication and media by assigning numerical values and testing hypothesis by examining the relationship among variables. In our day-to-day life we see lots of numerical descriptions to understand and interpret human society, for example the population figures, family income, age, physical feature like weight, sex ration, time devoted to TV viewing, newspaper reading, social media

usage, etc. thus quantitative understanding is unavoidable in any scientific explanations of things and people.

b. Qualitative Research

This approach encompasses exploring and understanding the meaning individuals or groups ascribe to any socio-politico-economic or cultural phenomenon. The research process involves data collection from participant's setting, data analysis inductively and the researcher making interpretations of the meaning of the data.

It may on one hand stand opposite to quantitative research, on the other hand, both methods complement each other in eliciting better understanding of any phenomenon. The primary difference therefore is the philosophy of treating human beings. While quantitative research codes human behaviours into figures and facts, qualitative prioritize human agency who are capable of independent thinking. Qualitative methods therefore emphasizes on meanings of signs and symbols used in social interactions in specific sociopolitical, cultural and historical contexts.

c. Mixed Methods Research

This approach associates both quantitative and qualitative research. It is more than simply collecting and analysing both kinds of data; it also involves the use of both approaches in tandem so that the overall strength of a study is greater than either quantitative or qualitative research (Creswell & Plano Clark, 2007).

v) Tools for Data Collection

Data in research parlance means the information that a researcher will gather for his or her research keeping in mind the research problem. Every research is unique and requires particular data sets. Data can be collected in a variety of ways and from variety of sources. The process of data collection must therefore be clearly understood by the researcher beforehand so that he or she can collect the required data in a more systematic manner. Data can be primary data and/or secondary data. Primary data are collected by researchers for the first time directly from the sources whereas secondary data are those data which have already been collected by earlier researchers and documented. Secondary data normally comes from recorded, documented, library and archival sources.

Now what are data collection tools? These are instruments or techniques used by the researcher to collect information required for conducting the research. Data collection tools or techniques allow us to systematically collect information required for the research. In the collection of data we have to be systematic. If data are collected haphazardly, it will be difficult to answer our research questions in a conclusive way. Therefore, the data collection tools have to be appropriately designed so that they address the research problem and enhance the findings of the research. Besides, this would make the research substantial.

The followings are the different data collection techniques that could be used while conducting research –

- Questionnaires
- Using available information
- Telephonic interaction
- Internet
- Observations
- Interviews
- Administering questionnaires
- Focus Group Discussion

CHECK YOUR PROGRESS – E

5) What are the various tools of data collection?

vi) Analysis of data

The next stage involves analysis of the collected data in order to find out if it can appropriately address the research problem. The researcher must organize the collected data systematically so that they can be analysed on the basis of well-defined coding system. The researcher must also examine the data to check whether it is reliable and valid. Verification of every data and every involved process is of vital importance as any mistake in the data collection, or any wrong manipulation or any mistake in data analysis will alter the result of the research. The truth which the research ought to find out will remain in darkness due to faulty procedures. Thus verification is needed to obtain the accurate result pertaining to research.

vii) Interpretation and Conclusion

Conclusion contains the interpretation of the researcher on his or her research topic. The conclusion must examine the original purpose of the research in the light of the assembled or accumulated data. A conclusion is not merely a summary of points or a re-statement or research ideas but a synthesis of key points and an inference drawn from analysing the collected data by the researcher. It is the justified explanation of the researcher containing the researcher's data based scientifically drawn inferences.

7.4 WRITING A RESEARCH PROPOSAL

In this section we shall learn what is meant by Research Proposal and how to write a proposal for the proposed research. Before conducting any research activity a Research Proposal has to be prepared by the researcher indicating the details of his or her study as systematically as possible. Research Proposal can be defined as a concise and coherent outline of the proposed research describing each step to be undertaken in the research process. This needs to be approved by the supervisor and/or other concerned research committee. The procedures of research are well defined by the field of study, so a Research Proposal has to be written in a systematic manner maintaining the universally accepted rules and standards of the discipline.

Let us learn the basics and the most important features in a Research Proposal

- Extensive literature review
- Justification for the need to research upon the proposed problem
- Rationale for the proposed research
- Theoretical framework
- Limitations and constraints of the problem being studied
- Detailed methodology consistent with standards of the professional or academic field
- Anticipated outcome(s) after the completion of the proposed research and the social utility.

The purpose of the proposal is to help you to focus and define your research plans. These plans are not binding, in that they may well change substantially as one progress in the research.

The Research Proposal is expected to:

- Present the researcher's clarity of thought pertinent to the proposed research
- Show that the researcher is working on something worthwhile
- Establish link with other research works
- Link the proposed research with theories relating to the topic and/or area
- Establish methodological approach
- Show that the researcher have thought about the ethical issues

Now let us understand the structure of a proposal. The following outline covers the primary components of a Research Proposal –

1. Title

Title of a Research Proposal delineates the main idea(s) of the study. It must be reflective, unambiguous, lucid, elaborate, self-explanatory and easy to understand. There cannot be any question mark or exclamatory mark within the title. Idioms are not to be used. It can be written alpha- numerically with colon, semi-colon, and can consist ten to fifteen (preferably not more) words.

2. Introduction

An introduction is the initial passage in a Research Proposal (or any scholarly writing) which provides the reader with the framework or background information of the proposed study. It should be woven intricately so that all the concepts logically connect with each other. The introduction must be able to establish the Research Problem and situate the research within the larger context of scholarly discourse. A good introduction must –

- Establish the research problem
- Identify the purpose of study
- State pertinent research questions or hypotheses
- Review existing literature and identify the gap
- Outline the theoretical perspectives providing framework to the research

a. Statement of research problem: Indicate what the researcher intends to study. One should also mention the rationale as well as the scope of the study to be undertaken. Limitations and constraints of the research should be indicated in this section.

b. Purpose of study: The passage containing purpose statement intends to establish central direction for the proposed study clarifying why a researcher wants to study a particular topic and what he or she wants to

accomplish after the completion of the study. It conveys the overall idea or aim and objectives of the proposed research.

c. Research Questions/Hypotheses: In a qualitative study, the researcher should state qualitative research questions and not hypotheses (this is required in quantitative study). The research questions can have two forms – a central question and associated sub-questions. The central question or broad question asks for an exploration of a particular concept or phenomenon and is followed by sub-questions that narrow the focus of the study. It is advised to begin the research questions with words like "what" or "how" rather than "why". Exploratory verbs like "explore", "discover",

"seek to understand", "describe", etc. are to be used while writing research questions rather than words like "influence", "cause", "affect", etc. (as these words suggests more of quantitative research). In a quantitative study, the researcher should state hypotheses or quantitative research questions. While the hypotheses predict the expected relationships among independent and dependent variables, the quantitative research questions enquire about the relationship among variables.

d. Review of Literature: The researcher extensively review the existing body of knowledge pertaining to the Research Problem and its co-relational edifice.

e. Theoretical perspective: An appropriate theoretical framework makes the research more substantial. The researcher must connect his or her Research Problem to specific theories already existing in academia pertaining to the field of study being pursued.

3. Research Design:

The researcher must clearly state the research design that includes the research methodology, research methods as well as data analysis procedures. Research design can have either quantitative, qualitative or mixed method approach. If the researcher wants to pursue for qualitative approach he or she must elaborate the research methodology which can be

either ethnography or narrative research or case studies or grounded theory or phenomenological research. Research method in qualitative approach includes open-ended interviews, observation, audio-visual data; data analysis includes text and image analysis, themes and patterns interpretations, etc.

If the researcher wants to pursue for quantitative approach he or she must delineate the research methodology which can be survey and /or experimental research. Mixed methods approach can have either sequential mixed methods or concurrent mixed methods or transformative mixed methods.

4. Anticipated ethical issues in the study

While conceptualizing the research proposal the researcher must also anticipate the ethical issues that may arise during various phases of research process. Code of ethics must be maintained in issues like personal disclosure, authenticity and credibility of the research, etc. (Isreal& Hay, 2006).

Diener and Crandall (1978) categorized ethical principles into four main areas-

- a. whether there is possible harm to participants;
- b. whether there is a lack of informed consent;
- c. whether there is an invasion of privacy;
- d. whether deception is involved.

Ethical principles must guide the researcher in all stages of research process like formulation of research problem, formulation of research questions or hypotheses, data collection, data analysis and interpretation. A researcher must formulate such research problems and questions which could address the present societal issues and be beneficial for society at large. He or she must be sensitive while collecting data from the chosen samples. Confidentiality and anonymity of the respondents must be maintained by the researcher if the respondents do not want to disclose their identity. In case of open ended interviews a researcher must ask the interviewee how he or she wants the statements to be interpreted. The researcher must not interpret such interviews at his or her own term and must take the consent of the interviewee. Researchers must also store analyzed data for a reasonable period of time (e.g. Sieber, 1998, recommends 5-10 years). So while writing the research proposal a researcher must also clearly mention the anticipated ethical issues in the study (if any).

5. Expected outcomes/Preliminary pilot findings

The researcher may briefly mention about expected outcomes of the proposed research which he or she has analysed through preliminary pilot study on the research topic.

6. Appendixes

The researcher must include all the graphs, images, official records, laboratory records, etc. if used while writing the research proposal.

7. References

Finally the researcher must write all the references he or she has made while writing the research proposal. It is important to appropriately cite references in order to acknowledge the sources of information and give due credit to authors whose scholarship has been sought to draft the proposal. Citation of appropriate sources shows that the researcher has done sufficient background work and is aware of the context into which the present research fits. There are particular styles of referencing like MLA, APA, Chicago, etc are before writing the references, the researcher must inquire about the preferred style of referring from pertinent authority.

CHECK YOUR PROGRESS – F

7) Briefly outline the important components of research proposal.

7.5 SUMMING UP

This unit gave you a comprehensive understanding of the various steps involved in research process. You have learnt how to narrow down the area of study and formulate a specific research problem that can be addressed within the stipulated time. Further, you have learnt about formulation of research questions and hypotheses and their importance in research. The various tools used in data collection have also been discussed. You have also learnt about the important components of research proposal and how to write a proposal. This will help you in writing a research proposal for your dissertation and /or thesis and guide you while conducting research.

7.6 PROBABLE QUESTIONS

1. Discuss about the various steps involved in research process.

2. State the importance of research question(s) and hypotheses in research process.

3. What are the different types of research designs being used in social sciences?

3. Write a research proposal for conducting research on any topic of your interest.

7.7 REFERENCES AND RECOMMENDED READINGS

Berg, B.L. (2001). *Qualitative research methods for the social sciences* (4th ed.). Boston: Allyn& Bacon.

Bryman, A. (2006). Mixed methods: A four-volume set. London: Sage.

Corbin, J.M., & Strauss, J.M. (2007). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W. (1999). Mixed method research: Introduction and application. In G.J. Cizek (Ed.). *Handbook of educational policy* (pp. 455-472). San Diego, CA: Academic Press.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage.

Creswell, J. W., & Plano Clark, V.L. (2007). *Designing and conducting mixed methods research*. Thousand Oaks, CA: Sage.

Diener, E., & Crandall, R. (1978). *Ethics in Social and Behavioral Research*. University of Chicago Press: Chicago.

Hsia, H.J. (1988). *Mass communication research methods: A step-by-step approach*. Hillsdale, NJ: Lawrence Erlbaum.

Isreal, M., & Hay, I. (2006). *Research ethics for social scientists: Between ethical conduct and regulatory compliance*. London: Sage.

Newman, I., & Benz, C. R. (1998). *Qualitative-quantitative research methodology: Exploring the interactive continuum*. Carbondale and Edwardsville: Southern Illinois University Press.

Singer, D.G., & Singer, J. L. (1981). Television and the developing imagination of the child. *Journal of Broadcasting*, 25, 373-387.

UNIT 8: REVIEW OF LITERATURE

UNIT STRUCTURE

- 8.1 Introduction
- 8.2 Objectives
- 8.3 Importance of Literature Review
- 8.4 Types of Literature Review
- 8.5 Sources of Literature
- 8.6. Framing Literature Review
 - 8.6.1 Structuring Literature Review
 - 8.6.2 Developing Literature Review
 - 8.6.3 Organizing Literature Review
 - 8.6.4 Writing Literature Review
- 8.7 Summing Up
- 8.8 Probable Questions
- 8.9 References Recommended Readings

8.1 INTRODUCTION

This unit gives a comprehensive knowledge on review of literature. In this unit we shall understand the concept of review of literature and proceed further to gauge the importance of literature review in different phases of research process. The unit also describes the different types or approaches of literature reviews a researcher can adopt while conducting research. The unit further enumerates the various sources of finding literatures pertaining to research topic. The unit also elaborates the steps in framing review of literature which includes structuring, developing, organizing and writing the final review.

8.2 OBJECTIVES

A thorough study of this unit shall enable you to -

- Define literature review and elaborate its importance
- Understand the different types or approaches of literature review
- Know the various sources of finding literature
- Write review of literature

8.3 IMPORTANCE OF LITERATURE REVIEW

Once the researcher identifies a topic of interest, he or she must begin search for relevant existing literature on the chosen topic. Literature Review can be defined as the systematic synthesis of prior studies relevant to a particular research topic to critically analyse the existing scholarship and situate the present research problem in order to address newer research insights.

Reviewing the existing literature gives an idea of the results of other studies which are closely related to the one being presently undertaken by the researcher. It is important to summarize and synthesize the existing pertinent literatures as it helps in conceptualizing and contextualizing the research topic. It relates the present study to the larger, ongoing dialogue in the existing literature, addressing the research gaps and extending prior scholarship to answer newer research questions (Cooper, 1984; Marshall & Rossman, 2006).

Literature Review provides the researcher with a framework for demonstrating the relevance of the undertaken research as well as affirms the researcher's credibility as someone who is capable and academically leveraged to comprehend and critically interpret the works of other scholars pertinent to the research area. The review is oriented towards narrowing the field of study so as to provide the researcher with an addressable and practical research problem that can be researched upon within a stipulated time and budget.

Literature review is scholarly in the sense that it includes the current knowledge including the substantive findings, as well as theoretical and methodological contributions to a particular research topic. The importance of reviewing the existing literature is to identify the followings –

- What knowledge exists already about the area or problem of present study?
- Are there any research gaps in the particular area of study?
- What concepts and theories are congruent with this area or research problem?
- What are or could be the redundant concepts and theories?
- What are the different perspectives through which this area has so far been studied?
- What research methods have so far been employed in studying this area?
- Are there any inconsistencies in findings relating to this area?
- Are there any probable unanswered research questions in this area?
- Is there any scope for refining or revising the present research questions to be studied by the researcher?

Although the review of literature is viewed as a distinct phase, it is often an ongoing component in the research process. There can be three phases in the research process when a researcher might review the existing literature and the purpose of review in each phase differs from the other:

• An early phase of research process when the researcher is novice in the chosen research topic or area and wants to explore the existing studies in order to contextualize his or her own research problem.

- Mid phase of research process when the researcher should know the current literatures being published so as to keep a track on the ongoing discourses in the academia.
- Thesis writing phase when the researcher finally relates or establishes his or her empirical findings with the theories and their implications existing in the academia.

CHECK YOUR PROGRESS – A

1) State the importance of literature review in research process?

8.4 TYPES OF LITERATURE REVIEW

The literature reviews are designed to provide a concrete overview and coherent synthesis of pertinent sources explored by the researcher. There are a number of approaches in the review process which he or she might adopt depending upon the type of research problem to be addressed. Now let us understand the different types of Literature Reviews:

a. Systematic Review

This review approach identifies and frames a concrete overview of existing evidences relevant to a specific research question. It uses pre-specified and standardized methods to identify and critically appraise relevant researches pertinent to the research topic, and to collect and analyse data from the studies that are included in the review. It focuses on specific empirical question, often posed in a cause-and-effect form, like - "To what extent does X contribute to Y?". This review method should not be exhaustive but more situated in a desirable perspective. This approach is more of a gate- keeping, policing and productive rather than merely mirroring the existing scholarship (Lather, 1973).

b. Argumentative Review

In this approach the researcher selectively examines the existing literature so as to support or refute an assumption or philosophical problem that has already been established in the academia. It helps in establishing a contrarian viewpoint if the researcher wants to critically address any perceived bias in the existing scholarship.

The outline of argumentative review looks like -

The study builds on and contributes to work in Although studies in have examined there has not been an As such, this study provides an additional insight into The analytic focus on enables another contribution. This study analyses Although numerous studies () have identifies little analytic attention has been paid to I address this issue by demonstrating

(Source: Kamler & Thompson, 2006, p.57)

c. Methodological Review

An important aspect of literature review is not only to focus on the findings or outcomes of the existing literature but also to understand how the researchers reach to such findings, i.e. the method of data collection and analysis. A methodological review provides holistic understanding at different levels including theoretical framework, data collection tools, data analysis techniques, ethical considerations, etc. This approach highlights the strengths and weaknesses of methodological tools used in conducting researchers on a particular area. It helps in exploring how methods can constrain or open up opportunities for understanding research problems. This review can lead to formulation of new methods, modifications of existing data collection and analysis techniques pertinent to specific research area.

d. Theoretical Review

This approach examines the evolution of existing body of theories that has been established in regard to a particular issue or phenomenon, and the way those theories are understood or applied in different research contexts. It helps to understand the validity and relationship among the existing theories and gauge the degree to which the existing theories have been investigated so that newer hypotheses or research questions can be framed. It often helps to address a lack or an inadequacy of appropriate theories to explain an emerging research problem.

e. Integrative Review

It is the most common form of literature review in social sciences. In this approach, the researcher "summarizes past empirical or theoretical literature to provide a more comprehensive understanding of a particular phenomenon" (Broome, 1993). Thus the researcher summarizes or synthesizes the broader themes existing in the literature so as to review existing concepts, theories, evidences, methodology, and generate newer frameworks and perspectives. It includes all the existing studies addressing related research questions or identical hypotheses. It meets the standards of primary research in regard to clarity of thought and replication of research methodology.

CHECK YOUR PROGRESS – B

2) What are the different types of literature review?

8.5 SOURCES OF LITERATURE

Now let us understand the different sources of literatures.

Journals, books, newspapers, governmental publications, theses, conference proceedings, documentaries, indexes, databases, catalogues, Encyclopedias, dictionaries, bibliographies, citations, etc. are some of the sources of literature reviews. Computer databases of the literature are available in libraries which provide access to hundreds and thousands of journals, conference papers, theses, etc. A researcher can use research tip while searching for literatures available online as well as those available in academic libraries. It helps to locate recent journals and other academic documents pertinent research topic.

Social Sciences Citation Index (SSCI) is one of the most useful sources of literature for social sciences which indexes over 1,700 major social sciences journals covering all the disciplines of social sciences. Scopus, which describe itself as "the largest abstract and citation database of research literature and quality web sources" is also useful. Google Scholar is also useful for searching references for literature review. Nowadays, academic publishers like Cambridge University Press (Cambridge Journals Online) and Sage (HighWire) offer articles of their journals through their own websites. ProQuest (available at http://proquest.com), is another example of academic libraries which enables researchers to search for different databases. The INGENTA website offers full-text versions from different publishers through subscription.

Once a researcher is able to identify useful literatures pertinent to his or her research topic, the researcher must begin designing a literature map. It is a visual picture of groupings of the collected literatures on the particular topic, which situates the present research within the larger body of ongoing researches while illustrating how the present research will contribute to the academia.

CHECK YOUR PROGRESS – C

3) What are the different sources of literature?

8.6 FRAMING LITERATURE REVIEW

Now let us learn how a researcher can frame a substantive review of literature through proper structuring, developing, organizing and finally writing the review.

8.6.1 Structuring the Literature Review

The structure of a literature review should include the followings:

i) A coherent overview of the topic to be researched upon.

ii) Categorization of the findings of the researches done so far on that topic into themes and/or categories (some of these prior scholarships might support a particular point, some might refute and some can provide alternative approaches).

iii) An elaborate explanation of how the undertaken research varies from the research works already existing in academia on that particular topic and/or area.

iv) A lucid conclusion delineating the arguments and opinions which contributed to the understanding and development of the undertaken research.

Each existing work in the academia pertinent to the topic being researched upon should be critically evaluated on basis of -

i) Source – Focus on the evidences that the authors of the prior studies used to support their arguments. These evidences can be case studies, narratives, ethnographic documentation, statistical tools, experiments, or any other valid sources.

ii) Methodology – Critically examine the appropriateness of the techniques used by the authors to identify, collect and analyse data required for addressing their research problems.

iii) Validity – Understand whether the arguments in prior studies are biased or objective. Find out whether the data sets are analysed even handily or there exist certain biasness to prove certain point of view.

iv) Relevance – Seek whether the prior scholarships pertaining to the research area have any significant contribution or practical implications in the consortium of knowledge.

8.6.2 Developing the Literature Review

While developing the literature reviews always try to answer the following points -

- How many sources are to be reviewed?
- What are the types of sources to be reviewed?
- What will be the approach (summarize/critique) while elaborating the review?
- How knowledge and perspectives regarding the research area/topic have changed over time?
- How the authors have composed their literature review sections?
- What are the themes on which the authors have categorized their reviews?
- What are the references used by the authors?
- How to narrow down the topic so that it can be studied in limited time frame?

8.6.3 Organizing the Literature Review

The researcher can organize the literature review in any suitable method appropriate for his or her research. It can be arranged chronologically, methodologically, conceptually or in terms of publications. Let us now understand the ways in details.

i) Chronological review – The literature review can be arranged in chronological method if the researcher can identify the gradual trends or order of development through the findings already existing in academia. For example, a literature review focusing on technological developments, historical movements, media ownership patterns, etc. can be arranged chronologically.

ii) **Methodological review** – In this approach the researcher focus on the methods applied by previous researchers to address the particular issue. For an example, in a research on the role of new media in American presidential election, one of the methodological approaches would be to study the differences in representation of American presidents on web- portals of America, Britain or France. Or the literature review might focus on the impact of Internet on fundraising for any particular political party. A methodological organization of the literature review is guided by the objective and the research problem of the present research.

ii) **Conceptual or Thematic review** – In this case the literature review is organized around a particular topic or issue, rather than a mere chronological progression of the topic. However, progression along time may still be a significant factor in conceptual or thematic review. For an example, a review of the Internet"s impact on American presidential elections could focus on the online political satires, memes, etc. It will be organized chronologically reflecting technological developments in media. The only difference here between a chronological and a thematic approach is what is emphasized the most: the role of the Internet in presidential election. An authentic thematic review tends to break away from

chronological order. A review organized in this manner would shift between time periods within each section according to the points made.

8.6.4 Writing the Literature Review

Once the researcher has structured, developed and organized the available literatures, he or she must write down the review of literatures. Let us keep some points in mind before writing the literature review.

i) Use valid sources: Interpretation of available sources pertinent to the research topic must be backed up with evidences or citations that validate the researcher's argument.

ii) **Be selective:** The researcher must choose the most important points from the existing literatures that he or she has so far reviewed. These mentioned points should be directly relatable to the research problem. Any related points which provide additional information but are not key to understand the research problem must be included in a list of further readings.

iii) Use quotes sparingly: It is advisable to the researcher to not use extensive quotes as a substitute for his or her own interpretation of the literature. Short quotes to emphasize a point can be used if it becomes difficult to paraphrase the author. Sometimes the researcher also needs to quote and explain certain terminology that has been coined by the author.

iv) **Construct intertextual coherence:** The researcher must summarize and synthesize the existing sources within each thematic paragraph as well as throughout the review of literature. He or she must also recapitulate important features of the study, synthesize it, rephrase the study"s significance and relate it to his or her own research.

v) Voice your argument: While the review of literature presents other"s ideas, the researcher must also voice his or her own argument clearly. It is important to weave references of other sources into his or her opinion pertinent to the research.

vi) **Be cautious while paraphrasing:** It is important to keep in mind that while paraphrasing an author"s work, the researcher must represent the author"s opinion accurately in his or her own words. Even while paraphrasing an author"s work it is important to cite the author.

Researchers often make certain mistakes while reviewing literatures of social sciences. Let us now go through some of those commonly made mistakes -

1. Failure in directly connecting sources in literature to the present research problem.

2. Failure in identifying the most relevant sources to be used in literature review.

3. Uncritically and unquestioningly accepting the findings and interpretations of previous researches as valid.

4. Including only such researches that validate the researcher's assumption, and not considering contrary findings or alternative interpretations present in the academia.

5. Relying solely on secondary analytical sources rather than including relevant primary studies.

CHECK YOUR PROGRESS – D

4) What are the different steps in framing review of literature?

8.7 SUMMING UP

In this Unit you have come to know about review of literature which is one of the most important stages in research process. You have learnt the importance of review of literature. Along with knowing the different sources of literatures, you have also understood the probable types of literature review. As you have come to know about the structuring, developing, organizing and writing review of literature, it will help you in framing the review of literature for your research paper, dissertation and/or thesis.

8.8 PROBABLE QUESTIONS

1. Define review of literature.

2. State the importance of review of literature in different phases of research process.

2. Elaborate the different types of literature review with suitable examples.

3. Discuss the different sources of review of literature.

4. Describe the steps for framing the review of literature for your dissertation.

8.9 REFERENCES AND RECOMMENDED REFERENCES

Broome, M.E. (1993). *Integrative literature reviews for the developments of concepts*. In: B.L. Rodgers & K. A. Knafl (Eds.). Concept Development in Nursing (2nd ed.) pp. 231-50. Philiadelphia, PA: W.B. Saunders Co.

Cooper, H. (1984). *The integrative research review: A systematic approach*. Beverly Hills, CA: Sage.

Hart, C. (1999). *Doing a literature review: Releasing the social science research imagination*. London: Sage Publications.

Kamler, B., & Thomson, P. (2006). *Helping doctoral students write: Pedagogies for doctoral supervision*. London: Routledge.

Lather, P. (1973). *To Be of Use: The Work of Reviewing*. Review of Educational Research, 69 (1), 2-7.

Marshall, C., & Rossman, G.B. (2006). *Designing qualitative research* (4th ed.). Thousand Oaks, CA: Sage.

Ridley, D. (2012). *The Literature Review: A Step-by-Step Guide for Students*. London: Sage Publications.



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