Journalism and Mass Communication (JMC)

JMC-08

Block -01

Introduction to Communication Research

<table>
<thead>
<tr>
<th>Unit</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit-1</td>
<td>Introduction to Research</td>
</tr>
<tr>
<td>Unit-2</td>
<td>Introduction to Communication Research</td>
</tr>
<tr>
<td>Unit-3</td>
<td>Elements of Communication Research</td>
</tr>
<tr>
<td>Unit-4</td>
<td>Research Ethics</td>
</tr>
</tbody>
</table>
Expert Committee

Professor. Mrinal Chatterjee
Professor, IIMC, Dhenkanal –Chairman

Dr. Asish Kumar Dwivedy
Asst. Professor, Humanities and Social Science (Communication Studies), SoA University, BBSR -Member

Sudhir Patnaik
Editor, Samadrusti - Member

Sujit Kumar Mohanty
Asst. Professor, JMC, Central University of Orissa, Koraput - Member

Dr. Dipak Samantarai
Director, NABM, BBSR- Member

Jyoti Prakash Mohapatra
Faculty
JMC- Convener

Course Writer

Dr. Ansuman Jena
Centurion University

Course Editor

Jyoti Prakash Mohapatra
Odisha State Open University

Material Production

Dr. Jayanta Kar Sharma
Registrar
Odisha State Open University, Sambalpur

© OSOU, 2017. Introduction to Communication Resources is made available under a Creative Commons Attribution-ShareAlike 4.0 http://creativecommons.org/licences/by-sa/4.0

Printed by : Sri Mandir Publication, Sahid Nagar, Bhubaneswar
UNIT 1 INTRODUCTION TO RESEARCH

1.0 Unit structure

1.1 Learning objectives
1.2 Introduction
1.3 Meaning and definition of research
1.4 Purpose and importance of doing research
1.5 Motivation for research
1.6 Types of research
1.7 Difference between qualitative and quantitative research approaches
1.8 Difference between inductive and deductive research approaches
1.9 Characteristic of good research
1.10 What cannot be treated as research?
1.11 Check your progress

1.1 Learning objectives

This unit aims at providing basic understanding about the meaning, definition, purpose, types and importance of doing research.

After reading this unit, you should be able to answer the following questions:

- What is research?
- Why to do research?
- What is not research?
- What are the characteristics of a good research?

1.2 Introduction

Research has become a very familiar term these days. It is all around us, often presented in ways that we would not recognize as research. Quite frequently, we encounter information that is based on some experiment or study. In fact, most of us look at research based information more seriously as compared to other. Research has become a part of our daily life mostly in two ways; as that of a researcher or as that of a consumer of research. One can indulge in research as a student, as an employee or as a consultant. Being a professional researcher, where research is part of ones
regularly assigned job responsibilities is also quite possible. Professionals in the field of advertising, marketing, journalism, political strategist are a few of the professions involving research based decision making.

**Can research be a profession?**

In fact, almost every profession at these days involves research by some way or the other. Several employees at different levels are responsible for collecting and analyzing data to help in making effective and efficient decisions. Media organizations use research to figure out what are the taste and preferences of their viewers. They also conduct surveys or focus group discussions to discover whether the advertising or promotional messages are being received as intended.

One can also become a consultant and take up paid assignments to conduct research. The central and state govts. NGOs, business houses, educational institutions and independent funding agencies including not for profit organizations are extending support (both financial and technical) to individual researchers and research organizations to carryout research for them. Research as a profession has become more lucrative than ever before. As a matter of fact, a lot of research is being consumed by politics, sports, entertainment and social sector.

Thus, research has become an integral part of every profession and as it is universally accepted that without continuous research and development no organization can survive. For being viable and sustain in the long run, research based logical decision making is the key.

1.3 **Meaning and definition of research**

Research, as usually understood, means a search or quest for knowledge. However, every search that brings out some information cannot be treated as research. Research is the process of new knowledge creation, to bridge the gap between the existing and the required knowledge or for problem solving, through a structured and sequential method of enquiry, directed towards a clear objective.
RESEARCH is:

✓ WHAT:
  ➢ The process of new knowledge creation.

✓ WHY:
  ➢ To bridge the gap between the existing and the required knowledge or for problem solving.

✓ HOW:
  ➢ Through a *structured and sequential method of enquiry, directed towards a clear objective.*

Once can also define research as a scientific and systematic search for pertinent information on a specific topic (Kothari, 2009). In fact, research is an art of scientific investigation. The Advanced Learner’s Dictionary of Current English lays down the meaning of research as “a careful investigation or inquiry specially through search for new facts in any branch of knowledge”. Redman and Mory define research as a “systematized effort to gain new knowledge”. Some people consider research as a movement, from the unknown to the known. It is a voyage of discovery. In its most basic form, research is the process of asking questions and finding answers in a scientific way. Thus, to put it more formally, research is the process of discovery with logical explanation.

Research can also be interpreted as a logical and structured method of exploration to uncover new or fresh information or to test and verify the conventional understanding or knowledge. It also analyses data to explain an existing theory or proposes a new theory to improve or solve a problem. Research also includes develop new scientific evidence.
tools, concepts and theories which would facilitate reliable and valid study for informed and pertinent decision making.

1.4 Purpose and importance of doing research

Every study or research has its own unique objective or purpose. Thus, the process of carrying out the research can directly be linked both to the purpose and the outcome. Research is commonly done to find out answers to relevant questions through the application of scientific procedures. The main aim of research is to bring out critical insights, to gain familiarity or to portray accurately the characteristics of a particular issue, phenomenon, situation, incident, person, group or organization. A research can also be undertaken to determine the frequency with which something occurs or with which it is associated with something else or to study the relationship between variables.

The objectives or purpose of doing research can very according to situation, requirements and/or context. The most common objective is to provide solution to a problem. Explaining the cause or understanding different dimensions of the problem can also be a research. Suggesting improvements, simplifying the process or enhancing productivity or efficiency of a system can also constitute the objective of a research. Analysing past data for discovering frequencies, trends, patterns, relationships or providing evidence can also be called as research.

Creation and dissemination of knowledge through research is a rigorous and continuous process. No research can provide answers to all the questions or problems. Even if it provides all correct answers to some questions; it might not be applicable or

Objectives of doing Research:

- To gain familiarity with phenomenon or to achieve new insights. (New Knowledge Creation / Exploration)
- For in-depth / detailed study about a particular individual, situation or a group.
- To determine the frequency or accuracy, effectiveness / efficiency with which something occurs.
- To test the relationship (causal / association / correlation) between variables.
Significance of doing Research:
- Helps in planning.
- Helps in decision making.
- Helps in problem solving.
- Expands the horizon of knowledge.
- Helps in policy making for Govt. / Institutions / Individuals etc.
- Helps in exploration / diagnosis / in-depth analysis.

replicable or useful everywhere and certainly not for all the time. Hence, it is very important to remember that, research gives answers to specific questions under specific conditions; accuracy, reliability and implications must change under different circumstances.

1.5 Motivation for research

Is research spontaneous? Does it occur to everyone automatically? What are the circumstances underneath which one undertakes research? These are the questions of fundamental importance as they determine the seriousness of the researcher and the implications of the research. The following are few of the possible motives for doing research:

- To quench the quest of one’s curiosity.
- To cater the need of one’s job responsibility.
- To fulfil academic requirement to get a degree.
- To gain familiarity with something of importance.
- To get the satisfaction of doing something creative or innovative.
- To have critical understanding of something for better decision making.
- To solve the unsolved problem(s) for personal, professional or social benefit.
- To understand the characteristic and the nature of relationship or dependency of more than one things.

One can get motivation to undertake research from anything and everything. However, that should not result in a bias or dilution of the scientific rigour and
1.6 Types of research

Research can take up various forms and names based on different disciplines and methods adopted. However, we can categorize research into the following types:

i. **Descriptive research:**  
   As the name suggests, descriptive research enables the researcher to describe the nature or characteristics of the object under study. In this setup, the researcher has no control over the variables. Data collection method includes surveys and fact-finding enquiries. To analyse the data, comparative and correlational methods can be adopted.

ii. **Analytical research:**  
   It involves critical evaluation and thorough analysis of the available data. It can involve data obtained from both the primary and secondary sources. With prudence of data and for big data analysis, professional data scientists and data analysts are in demand.

iii. **Fundamental or Pure or Basic research:**  
   This type of research involves natural phenomenon for the formulation and generalization of a theory. Such studies aim at finding relevant information to bridge the knowledge gap and add to the existing body of scientific knowledge for enhanced clarity and understanding.

iv. **Applied or Action research:**  
   It aims at finding or providing solution for a pressing issue or practical problem. The issue can be related to an individual, a household, an organization or the society at large. It focuses on reaching at a conclusion so that some decision or action can be taken to improve the situation at the end of this study.

v. **Quantitative research:**  
   Quantitative research is based on the measurement of quantity or amount. It is applicable to phenomena that can be expressed in terms of quantity or in numbers. This type of research involves statistical analysis and tests statistically significant differences, relationships, associations and
occurrences. There are many softwares (both free and open source) available for quantitative data analysis.

vi. Qualitative research:
This type of research aims at discovering the underlying phenomenon (motives and desires) behind something. Studies of human behaviour are of qualitative in nature. It can give us answers to the questions like; how individuals act or react to a specific stimulus? What motivates them to do certain things? What results in the formation of positive or negative attitude? In depth interviews, word association tests, sentence completion tests, story completion tests and other projective techniques are of the widely accepted qualitative research techniques. However, designing and applying qualitative research technique in practice is relatively a difficult job.

vii. Conceptual research:
Conceptual research is related to some abstract idea(s) or theory. It is generally used by philosophers and thinkers to develop new concepts or to reinterpret existing ones. It only talks about the possible relationship or interdependence between variables. However, this may not provide sufficient description or evidence of the same. It provides concepts or abstract ideas, those are to be tested and validated later.

viii. Empirical research:
Empirical research relies on experience or observation through experiment. At times, such experiments can support or contradict the existing system, theory or belief. It is a data driven research. It aims at coming up with conclusive evidence that can be verified by observation or experiment. Empirical research provides evidence that certain variables affect other variables in some way. Because of this, empirical studies are the most powerful support possible to understand a phenomenon or relationship.

ix. Longitudinal research:
Based on the time required to accomplish the research or the time considered to observe the nature of change of the phenomenon under study; longitudinal
research can be termed as one-time research limited to a single or specific time period.

x. **Time series research:**
Time series research investigates the occurrence of change observed for a phenomenon over multiple time periods. Trend analysis and time series analysis are some examples of this type of research. It enables the researcher to figure out how the variable under observation has evolved over time. It also helps to predict the future based on the past data.

xi. **Case study research:**
A case study research is a very special or unique type of research. The findings of this research are very difficult to be generalized. However, it is apt as it provides in depth and holistic understanding of the subject under study.

xii. **Historical research:**
It aims at studying the events, ideas or occurrences including the philosophy of persons and groups at any remote point of time. It can include records, documents, scriptures or remains to study the phenomenon existed in past. It is important as it tells us the origin or genesis as well as the growth and development of something.

xiii. **Laboratory or Clinical or Diagnostic research:**
It entails a specific setup for controlled experimentation or observation. It aims at tracing out the root cause of something. It might involve critical data mining or sound observation technique to unveil the truth. The success of this research depends on the process and the apparatus used.

xiv. **Causal research:**
Causal research aims at finding out the effect of one or more variables on other variable(s), with reasonable level of certainty. In general, these are also referred as cause and effect studies. Such studies reveal the relative change in one or more variables due to unit change in other related variable(s). It can describe the nature of change as well as the magnitude of change. This study includes more than one variable.
1.7 Difference between qualitative and quantitative research approaches

Quantitative and qualitative are two fundamentally different approaches of doing research. The former involves the generation of data in quantitative form which can be subjected to rigorous quantitative analysis in a formal and rigid fashion. Whereas the later is concerned with subjective assessment of attitudes, opinions and behaviour. It is a purely dependent on the researcher’s insights and impressions. It produces data or results in a non-quantitative form (not subjected to rigorous quantitative analysis).

The differences between both the approaches are presented below.

<table>
<thead>
<tr>
<th>Qualitative approach</th>
<th>Quantitative approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is subjective in nature.</td>
<td>It is objective in nature.</td>
</tr>
<tr>
<td>It involves the assessment of phenomenon that cannot be directly measured or quantified like value, attitude, perception and satisfaction etc.</td>
<td>It involves collection, analysis of data through quantification (expressed in numbers) like the measurement of scale, range, frequency and percentage etc.</td>
</tr>
<tr>
<td>It is simple and easy from research design point of view.</td>
<td>It adopts a specific structure, method and logical sequence.</td>
</tr>
<tr>
<td>Analysis and interpretation of data is difficult. However, it can bring critical insights which is otherwise unattainable.</td>
<td>Analysis and interpretation of data is relatively easy as it uses predefined statistical tools and techniques.</td>
</tr>
<tr>
<td>It is difficult to generalize.</td>
<td>It is easy to generalize, if done properly.</td>
</tr>
</tbody>
</table>

Many researchers also combine both the qualitative and quantitative approaches giving rise to a hybrid approach for their research. A hybrid approach is more time consuming and requires even more resources to complete the study. However, it might bring further clarity and enhance the accuracy of the study.
1.8 Difference between inductive and deductive research approaches

Inductive research moves from particular situations to make or infer broad general ideas or theories. Deductive research moves from general ideas or theories to specific or particular situations; the particular is deduced from the general theories.

<table>
<thead>
<tr>
<th>Inductive approach</th>
<th>Deductive approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Based on the principles of induction which means, reasoning from detailed facts to general principles.</td>
<td>➢ Based on the principles of deduction which means, reasoning from the general to the particular, or from cause to effect.</td>
</tr>
<tr>
<td>➢ It aims at generation of a theory.</td>
<td>➢ It aims at testing a theory.</td>
</tr>
<tr>
<td>➢ It usually encompasses qualitative research approach.</td>
<td>➢ It usually encompasses quantitative research approach.</td>
</tr>
<tr>
<td>➢ It starts with an open set of mind or with questioning the obvious.</td>
<td>➢ It starts with hypothesis that can be tested and verified to reach at a conclusion.</td>
</tr>
</tbody>
</table>

1.9 Characteristic of good research

There is no specific or predefined method or technique available to evaluate a study to be good or bad. However, one can employ certain measures at each stage of the research to determine the appropriateness, reliability and validity of the study. Some parameters are presented below:

➢ The objective or the purpose of the research is clearly defined.
➢ The research process should be discussed in detail and with clarity.
➢ Appropriate research design should be followed keeping the objectives in mind.
➢ High ethical standard should be adopted at each stage of the research.
➢ Data analysis must be adequate to reveal the truth.
➢ Analysis, findings and conclusions should complement the research objectives.
➢ The study must be reliable, valid and generalizable.
According to the good research model:

- Scope and limitations are clearly defined.
- Suggestions are adequate for decision making.
- It must reflect the true picture or reality.

1.10 **What cannot be treated as research?**

Research is surrounded by a lot of myth and misunderstandings. Just anything and everything doesn’t qualify to be called as research. Some of the popular misconceptions are presented below.

- Research is not mere information gathering.
- Accidental invention or discovery is not research.
- Presenting facts and figures are not research.
- Comparing data sets is not research.
Correlating data sets is not research.

1.11 Check your progress

- What do you mean by research?
- Mention one problem / issue / situation / topic on which you want to do research?
- What has motivated you to take up the above topic?
- How would this research benefit, for whom would it be beneficial and how?
- How are you going to ensure that your research can be treated as a good research?
UNIT-2: INTRODUCTION TO COMMUNICATION RESEARCH

2.0 Unit structure

2.1 Learning objectives
2.2 Introduction
2.3 Research methods
2.4 Research methodology
2.5 Difference between research methods and research methodology
2.6 Research stages
2.7 Research processes
2.8 Meaning of communication research
2.9 Types of communication research
2.10 Check your progress

2.1 Learning objectives

This unit aims at providing basic understanding about the importance of communication research. After reading this unit, you should be able to answer the following questions:

- What is communication research?
- What are the different types of communication research?
- Difference between research methods and research methodology?
- What are the different stages and processes to be followed to de research?

2.2 Introduction

The trends and practices in the field of communication and media keeps changing. With technological advancements and its fusion with the traditional media has revolutionized the communication was conceived, perceived and consumed. This encompasses tremendous responsibility for communication researchers to upskill themselves with the modern technologies and be a part of the contemporary communication research.

To discover emerging trends and other enormous challenges posed by the changing dynamics in the field of media and communication, researchers should adopt
unconventional research approaches without compromising the quality and integrity of research.

This unit transcribes various research methods and processes; those can be adopted by communication researchers. The unit also discusses different stages of research from ideation to completion.

2.3 Research methods

Research methods are the specific tool or technique used to collect data to achieve the objectives of a study. It commonly refers to a structured or systematic way of doing something. There are several tested and verified data collection methods available for communication researchers. These will be discussed in the subsequent blocks of this study material. It is important to remember that different researchers can adopt different methods or data collection tools or techniques to fulfil the same research objectives. However, it should be appropriate and substantiated with logical relevance or explanation.

Research method pertains to all those means, which a researcher employs to undertake research process, to solve the given problem. The techniques and procedure, that are applied while studying research problem are known as the research method. It encompasses both qualitative and quantitative method of performing research operations; such as survey, case study, interview, questionnaire, observation, etc.

2.4 Research methodology

Research methodology is the study of methods. Research methods are a part of research methodology. Methodology is the branch of philosophy that analyses the principles and procedures of inquiry in a discipline. It is the science of learning the way research should be performed systematically. It refers to the rigorous analysis of the methods applied in the stream of research, to ensure that the conclusions drawn are valid, reliable and credible too.

The researcher takes an overview of various steps that are chosen by him in understanding the problem at hand, along with the logic behind the methods employed by the researcher during study. It also clarifies the reason for using a
method or technique, and not others, so that the results obtained can be assessed either by the researcher himself or any other party.

2.5 Difference between research methods and research methodology

Research methods and research methodologies are often misunderstood as the same. However, they are fundamentally different from each other. Some of these differences are presented below.

<table>
<thead>
<tr>
<th>Research Methods</th>
<th>Research Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ It is defined as the procedure or technique applied by the researcher to undertake research.</td>
<td>➢ It is a system of methods, used scientifically for solving the research problem.</td>
</tr>
<tr>
<td>➢ It covers various investigation techniques.</td>
<td>➢ It entails the approach aligned towards the attainment of purpose of research.</td>
</tr>
<tr>
<td>➢ It is the application of the tools or techniques employed in data collection.</td>
<td>➢ It implies to the logical reasoning or the way research is to be conducted.</td>
</tr>
<tr>
<td>➢ It is concerned with carrying out experiment, test, surveys and interviews, etc.</td>
<td>➢ It is concerned with learning various techniques which can be employed in the due course of experiment, test or survey.</td>
</tr>
<tr>
<td>➢ It intends to discover the solution to the problem at hand.</td>
<td>➢ It aspires to apply appropriate procedures to ascertain solutions.</td>
</tr>
</tbody>
</table>

2.6 Research stages

We have already defined research to be a structured and systematic way of investigation with clear objectives. Hence, it is important to know about the different stages or phases along with the processes and specific activities to be taken at each stage. The entire process of research can be divided into three distinct stages or phases and they are:

i. Pre-execution stage
It is the preliminary stage of the research. In this stage the idea, issue or the problem is yet to be identified upon which research is to be carried out. It is the initiation, foundation or the conception stage where it all starts from a scratch. This stage ends, as there is sufficient clarity on the research problem being addressed, research objectives, need and scope of the research. Both the following stages and the quality of the research outcome is dependent on the way it is conceived or conceptualized at the first stage.

ii. Execution stage

This stage is confined to the research design or the selection of research method and the implementation of the same to collect relevant data so as to answer the research questions and fulfil the research objective.

iii. Post execution stage

This is the final stage of doing research. It includes, data analysis and drawing inferences. It also includes preparation of the research report (documentation and communication). As it appears, this concludes one study giving rise to new questions to be asked and the conception of another research may be at a later stage.

2.7 Research processes

Research process consists of a series of very closely related activities. At times, these steps overlap rather than following a strictly prescribed sequence. One step determines the next step to be undertaken. Due to such close relevance and dependence among the steps, it is very important and critical to determine the entire process in the preliminary sate of the study. It also enables the researcher as a guide or road map. Without this, serious difficulties may hinder the completion and the quality of the study. These steps are neither mutually exclusive nor separate and distinct.

The following diagram illustrates the sequence of activities to approach a research or study. The steps and sequences can be altered as conceived by the researcher. These stages are more suggestive than being rigid.
### The Research Sequence

1. Identify the problem and justify the need of research
2. Literature review (review of last findings/theories/concepts/situations)
3. Define the research objective(s), hypothesis and scope of the research
4. Identify data needs and data sources
5. Appropriate research design and finalization of data collection method
6. Define the population and sample characteristics
7. Determine the sample size and the sampling technique
8. Development of the research instrument for data collection
9. Data collection
10. Data analysis and interpretation
11. Findings, suggestions and conclusion
12. Report writing and presentation

### 2.7.1 Problem identification and formulation

Anything and everything can be a research problem provided, it has certain merits or benefits for somebody. The source of the problem could be from the personal experience of the researcher or based on certain issues pertaining to any household, locality, organization, community or the society at large. The formulation of a general topic into a specific research problem thus, constitutes the first step in a scientific enquiry. The subsequent steps involved in formulating the research problem are understanding the problem thoroughly and rephrasing the same into meaningful terms from an analytical point of view.

The best way to understand the problem is to discuss it with the one’s facing it or with those having expertise in the matter. This task of formulating or defining a research problem is a step of greatest importance in the entire research process. The
problem to be investigated must be defined unambiguously. Proper care must be taken to verify the objectivity and validity of the background facts concerning the problem for discriminating relevant data from the irrelevant ones.

2.7.2 Literature review

Once the problem is formulated, the researcher should undertake extensive literature survey pertaining to the problem. For this purpose, the researcher must rely on authentic data sources like academic journals, conference proceedings, government reports, books etc. In this process, it should be remembered that one source will lead to another. The earlier studies, if any, with similarity to the present study should be carefully studied.

**Importance of Literature Review**

- It helps the researcher to acquire in depth knowledge and in depth understanding on the concepts, fundamentals and theories in the chosen field of study.
- It helps in identifying the issues on which research has already been done and enables for a critical analysis on the previous studies.
- It empowers the researcher to approach the problem in a systematic, logical and scientific way.
- It enables to choose the appropriate theoretical / conceptual framework for the study.
- It leads to identify the research gaps in the field of study.
- It enables to identify the different variables and the relationships among them; which leads to the formulation of hypothesis.
**Literature review checklist.**

- Are the sources credible and authentic?
- How much has been written on the selected topic?
- How recent or relevant is the material?
- What are the critical events and significant findings?
- Who has done the most work on the topic?
- Where has research on the topic been published?
- What aspects of the topic received the most attention?
- What questions about the topic have been answered?
- What aspects of the topic have been ignored?
- Are there reasons to replicate or repeat, studies that have been conclusive?
- What are the other topics or aspects related to the present topic?
- What knowledge gap this study would bridge?

### 2.7.3 Formulation of research objectives and hypothesis

After extensive literature review or after finding the knowledge gap a researcher should state in clear terms the objectives of the study and the working hypothesis or hypotheses. A working hypothesis is a logical assumption made to test its feasibility in the given context of the research problem. In most types of research, the development of working hypothesis plays an important role.

Hypothesis should be very specific and limited to the piece of research in hand because it has to be tested. The role of the hypothesis is to guide the researcher by delimiting the area of research and to keep him on the right track. It sharpens the thinking and focuses attention on the more important facets of the problem. It also indicates the type and quality of data required along with the method of data analysis to be used.

It is not compulsory to have hypothesis in every type of research. For example, exploratory researches do not need to prove hypotheses. Thus, hypotheses arise because of a deductive reasoning about the subject, examination of the available data and materials including related studies and the opinion of the counsel of experts and interested parties. But in principle the hypotheses help in clarifying the research objectives in specific terms.
2.7.4 Research design

Research design refers to the blueprint or the conceptual structure within which research would be conducted. The preparation of such a design facilitates research to be as efficient as possible yielding maximal information. In other words, the function of research design is to provide the collection of relevant evidence with minimal expenditure of effort, time and money. But how all these can be achieved depends mainly on the research purpose.

Types of research design

There are three basic research designs adopted by researchers in various fields. They are:

i. Exploratory research design

Such research design aims to generate basic knowledge and clarify relevant issues to uncover variables associated with a problem. It also uncovers information needs, and/or define alternatives for addressing research objectives. It is very flexible and open-ended.

ii. Descriptive Research (who, what, where, how)

This design provides further insight into the research problem by describing the variables of interest. It can be used for profiling, defining, segmentation, estimating, predicting and examining associative relationships.

iii. Causal Research (If-then)

Designed to provide information on potential cause-and-effect relationships. Most practical in determining to find out the associations or impact of one variable on another.

The preparation of the research design, appropriate for a research problem, involves usually the consideration of the following:

- The sources and the means of data collection
- The availability and skills of the researcher and others associated
- The time, budget and other resources available for research
➢ The explanation of the entire process and approach to be followed in order to fulfil the research objectives or to find logical solutions to the identified research problem.

### 2.7.5 Data collection

Every researcher requires relevant data to substantiate and propagate the claims made. For this the researcher needs to know the type and the kind of data required. The researcher also has to figure out the possible sources and the methods of data collection. There could be two sources of data:

i. **Primary data source**

The primary data source involves the target respondents and their opinion or experience or attitude towards the subject under study. In order to collect data from the primary source the researcher has to come up with a specific strategy and a specific tool. The method or technique of data collection from the primary source has to corroborate with the tool employed for data collection.

<table>
<thead>
<tr>
<th><strong>Primary data source</strong></th>
<th><strong>Merits</strong></th>
<th><strong>Limitations</strong></th>
</tr>
</thead>
</table>
|                         | ➢ Provides detailed and required information  
➢ Accurate and specific  
➢ More reliable         | ➢ Requires expertise or sufficient knowledge to execute.  
➢ Expensive             
➢ Time consuming        |

ii. **Secondary data source**

The secondary data sources are often referred as ‘published data’. Data from these sources are obtained from published sources like reports, books, journals, proceedings etc. Then these are processed and subsequently analysed. However, proper care should be taken to ensure authenticity, reliability, suitability (appropriateness) and adequacy of the data.
| Secondary data source |
|------------------------|-----------------------------|
| **Merits**             | **Limitations**             |
| ➢ Readily available and less expensive | ➢ Locating appropriate source and getting access becomes difficult at times |
| ➢ Faster and easier to collect | ➢ Data may not be in the desired format, size or quantity |
| ➢ Enhances understanding and contextual familiarity | ➢ The purpose or context of the previous study might be different. |
| ➢ Provides a base for further research |

### 2.7.6 Data analysis and conclusion

After data collection, the researcher turns to the task of analysing them. The analysis of data requires several closely related operations such as establishment of categories, the application of these categories to raw data through coding, filtration, tabulation and then drawing statistical inferences. Thus, researcher should classify the raw data into some purposeful and usable categories through groups and tables for further analysis.

Coding operation is usually done at this stage through which the categories of data are transformed into symbols that may be tabulated and counted.

Filtration is the process of segregating the required and the relevant data from others. Editing is the procedure that improves the quality of the data for coding. With coding, the stage is ready for tabulation.

Tabulation is a part of the technical procedure wherein the classified data are put in the form of tables. Computers not only save time but also make it possible to study large number of variables affecting a problem simultaneously.

Data analysis is generally based on the computation of percentages, coefficients, etc., by applying various well defined statistical formulae. In the process of analysis, relationships or differences supporting or conflicting with original or new hypotheses should be subjected to tests of significance to determine, with what validity data can
be said to indicate any conclusion. In brief, the researcher can analyse the collected data with the help of various statistical measures.

After analysing the data as stated above, the researcher should go for testing the hypotheses, if any formulated earlier. Various tests, such as Chi square test, t-test, F-test, have been developed by statisticians for the purpose. The hypotheses may be tested using one or more of such tests, depending upon the nature and objective of the inquiry. Hypothesis testing will result in either accepting the hypothesis or in rejecting it.

If a hypothesis is tested and yields the same result several times then, it might lead to arrive at a conclusion or for generalisation or for theory building. As a matter of fact, the real value of research lies in the ability to arrive at certain generalisations. If the researcher had no hypothesis to start with, then the explanations might be based on some theory postulated by an earlier researcher. It is known as interpretation. The process of interpretation may quite often trigger off new questions which in turn may lead to further researches.

2.7.7 Documentation and communication

After the completion of all the previous steps and when the researcher is ready to share the findings of the study; there comes the requirement of reporting and documentation. Finally, the researcher should prepare the report of what has been done and unveiled so far. Documentation is also a method to preserve the record of the study so that others can use it for problem solving or decision making. As the researcher has referred the works of previous researchers similarly, others might refer this research work for their study or investigation.

A report must follow uniform structure and format. A report should be written in a concise and objective style in simple language avoiding vague expressions such as ‘it seems,’ ‘there may be’ etc. Charts and illustrations in the main report should be used only if they present the information more clearly and forcibly.

Writing of report must be done with great care keeping in view the following contents:

i. The preliminary pages
In the preliminary pages, the report should carry the cover page (title, name of the researcher and details of the funding agency, if any) and followed by acknowledgements, declaration and foreword letters. Then there should be a table of contents followed by a list of tables and list of graphs or charts, if any, given in the report. A list of abbreviations used in the report can also form a separate section.

An executive summary or a brief synopsis can also be added to present the entire study in a crisp and concise manner.

ii. The main text

The main text of the report can be presented in a logical sequence and divided into distinctive chapters or should have the following parts or sections:

a. Introduction:
   This section should contain a clear statement of the objective of the research and an explanation of the methodology adopted in accomplishing the research. The scope of the study along with practical implications should as well be stated in this part.

b. Review of literature
   This section should contain detailed discussion of the past research or studies carried out in that domain or in related field of study. The importance of this chapter is to discuss what has been done and what can be done in the field of study. It also enhances the understanding of the researcher and helps in bringing out the ‘research gap’. A research gap is also known as the knowledge gap or the difference between the existing knowledge (or present understanding) and the required knowledge (for better or renewed understanding). This section can also draw theoretical relevance by including theories and research models in the same domain of knowledge.

c. Research Methodology
   A section can fully be devoted to describing the methodology and the method adopted of fulfilling the objectives of the study. This is important
as it would include the logical explanation for every aspect of the entire study.

d. Findings and Recommendations:
The essence of this section is to present the findings and recommendations in non-technical language. The findings are the outcome of the study and must be based on the data obtained in the due course of the study. If the findings are extensive, they should be summarised. The recommendations must be made in accordance to the findings and should be realistic and achievable given the context of the study.

e. Conclusion:
Towards the end of the main text, researcher should again put down the results of the study clearly and precisely. In fact, it is the final summing up of the entire process or activities undertaken.

iii. The end matter
At the end of the report, appendices should be enlisted in respect of all technical data. Bibliography or references, i.e., list of books, journals, reports, etc., consulted, should also be given in the end. Index should also be given specially in a published research report.

2.8 Meaning of communication research
Communication research refers to the effort to discover trends and bring out useful information in the field of mass media and communication. It is an especially demanding field of study. Political scientist and communication theorist Harold Lasswell has defined communication research as, “who says what, in which channel, to whom and with what effect?”. The answer to this question is the focal point of communication research.

Scholars and scientists have divided up the world of communication into different domains. These domains carry such familiar names as interpersonal, intercultural, organizational and mediated communication. Communication itself is not different in one domain or the other but the focal points of interest and sometimes the methods of study are different.
Communication research is often misunderstood as media research. However, these two are substantially different from each other. On the other hand, mass media comprises various forms of communication, addressing and reaching a large audience and includes radio, television, newspapers, magazines, books, recordings, billboards and the Internet.

2.9 Types of communication research

2.9.1 Research in the field of Mass Communication
Mass communication has emerged as a popular medium prior to World War II. It was mainly used for propaganda, revolutionary social movements and the presumed decline of culture represented by the popular media. It supported a strong, objective press that would contain the excesses of government and promoted a message-based analysis. In the tradition of mass communication, the mediascape (media landscape) was described by industrially produced messages that were delivered to large and heterogeneous audiences.

The term mass communication became linked to the scientific study of media messages in the late 1930s by the social scientists funded by the Rockefeller Foundation. The Rockefeller Foundation, at that time was the premier source of social science funding. By the end of World War II, mass communication was firmly established in the United States as a scientific rather than critical enterprise.

2.9.2 Research in the field of Media Studies
Media studies as a discipline was popular in the Great Britain (now the United Kingdom). Media studies “involves the close analysis of the images, sounds and text that we experience through the media”. It glaring a fresh perspective to have a closer understanding both from the insider and the outsider perspective.

The insider perspective emphasizes on the effectiveness of the message (instead of effects), audience behaviour and return on investment. It views media as an industry or an enterprise; recognizing the role and importance of languages used, writers, actors, producers, narrative forms, technologies, distribution channels and competitions etc. It colludes the resources, processes and efforts put in to create the message for the audience. It also includes what the audience reads, sees and hears.
The outsider position focuses on the media effects (instead of effectiveness). It includes critical rhetorical theories, cultural studies and aftermaths of communication. A set of demographic and psychographic factors like race, ethnicity, social class, age, gender, bias, sexuality, aggression, belief are key to the analytical or empirical investigation in this domain.

### 2.9.3 Research related to Mediated Communication

Mediated communication often intermittently referred as media communication began to appear in the early 1980s when it became apparent that mass communication was losing its gravity, grip and largely failing to interest the rejuvenated media users and consumers. Thus personalized (one-to-one) communication was presumed to be the alternate form that can take the media and communication industry to new heights. The convergence of the old media, new media, emerging media along with the static and interactive media has given birth to mediated communication. It has become the face of contemporary communication. Mediated communication has become imperative and added different layers to the traditional methods and medium of communication. Mediated communication has enlarged the mediascape beyond the boundaries of mass communication or media studies, although it includes both. But, clearly, not all instances of mediated communication are equally interesting. Thus, it requires a closer and wider look or investigation to make the medium more effective and the process more efficient.

### 2.10 Check your progress

- Explain why the research process starts with identifying a research problem.
- Describe the importance of communication research.
- Explain the characteristics of each stage or phase of research process.
- Discuss the difference between research method and research methodology.
- Illustrate how communication research is different than media research?
UNIT-3 : ELEMENTS OF COMMUNICATION RESEARCH

3.0 Unit structure

3.1 Learning objectives
3.2 Introduction
3.3 Importance of research in mass media
3.4 Elements of communication research
3.5 Quantitative media research
3.6 Check your progress

3.1 Learning objectives

This unit discusses the parlances of the elements of communication research and the methods of quantitative media research.

After reading this unit, you should be able to answer the following questions:

- What are the importance of mass media research?
- What are the components or elements of communication research?
- What are the different methods or approaches to undertake quantitative media research?

3.2 Introduction

Technological advancements have revolutionized the entire field of communication. The impact is evident across all the media. The method of information production (exhibition), distribution (sharing) and consumption (use) has undergone through tremendous change. As technology is evolving day by day; the entire media and communication industry is adopting it. This adoption is based on the change in the taste, preference and behaviour of the target audience. In such a dynamic environment, research becomes the imperative to sustain, survive and grow.

Every functional area in mass media use or conduct research. A research in this domain related to all the functional areas. An investigation in this field can reveal what time of news article or programme is fetching more readership or viewership,
which media is more popular, how much time is being spent on what kind of news, why a news piece is more popular, how the news preference varies based on different demographic, psychographic and behavioural aspects of the audience.

3.3 Importance of research in mass media

Media is a very sensitive domain, as it connects a clear majority of the population and actively engages them in the delivery of the message. Therefore, media research helps in making decisions with respect to the composition, expression and analysis of news, views and information.

Objectivity and accuracy are critically important in news reporting. A good story is often the outcome of a good research or investigation. In fact, it has become doctrine for professionals in this field. Media research is also used in conducting surveys, public opinion polls, advertising and public relations campaigns which helps in providing perspective to a story. A story should always be well researched before being brought to the public domain. However, the pressure to continuously and successfully engage the audience is making it critical. To achieve this critical objective, media practitioners need to understand their target audience. Because, ultimately the news or information is meant for the consumption of the target audience. Describing the behaviour of the target audience entails describing outcomes, processes or ways in which one aspect relates to other. Understanding of these would increase the efficiency and effectiveness of the media practitioners. This would also help them to plan and execute programmes in a better way. And, all these would ultimately contribute in increasing to the accuracy, popularity, readership / viewership and profit of the organization.

If a researcher can describe communication events and identify their causes, then it can be used in predicting the behaviour of the target audience. If behaviour can be predicted then it can certainly be used to predict the future. In turn, this knowledge can be used in making better decisions. Going beyond describing, determining causes and predicting, explaining behaviour means understanding why a behaviour occurs. For example, if researchers could determine how and why health campaigns work, more effective campaigns would ultimately result in a healthier society that spends less money on health care. But finding such an explanation is difficult and often
requires a series of sophisticated research projects. Working from a well-developed and validated theoretical basis is another way to develop explanations for communication behaviour. New knowledge in one area will affect how questions are asked and answered in another.

The importance of mass media research can be divided into the following categories.

- Verification (of old facts)
- Extension (of knowledge and understanding)
- Generalization (extrapolation or popularization or universalization)
- Application (in decision making, theory building or problem solving)

### 3.3.1 Verification (of old facts)

Information or knowledge requires periodic verification, confirmation and upgradation. Thus, it is important to verify and confirm the conclusions made by previous researchers as established facts. It is equally important to find out if there is any change or deviation in the previous predictions. It helps in strengthening the already established system of knowledge. Otherwise, in the light of the outcome, the system of established corpus of knowledge calls for revision or even rejection.

### 3.3.2 Extension (of knowledge and understanding)

If we find any gap in the existing knowledge and the precious knowledge then this calls for a study to extend or update the present understanding. A gap in knowledge implies the inadequacy of the theory as well as the failure of a conceptual scheme to explain and account for certain aspects of the phenomenon under study or observation. This also helps in reconciling these inconsistencies or bridging the identified gaps. The gap is bridged up in the light of the new empirical observations. Thus, knowledge gets expanded. As a result, the new system of knowledge not only accumulates more units under its conceptual scheme, but also appreciates greater depth of understanding and improves predictions.
3.3.3 Generalization (extrapolation or popularization or universalization)

Generalization implies that the findings of controlled investigation can be applicable for the entire population or for most of the population. In media research, the propositions derived based on observations and through manipulation of things, concepts or symbols may vary in their levels of generality. This entails wider application, extrapolation or universalization of the outcome of the study. The higher the degree of generalization; the wider is the application and greater the importance of the study.

3.3.4 Application (in decision making, theory building or problem solving)

It has already been discussed that research makes in better and informed decision making or problem solving. It seeks to explain the unexplained phenomena, clarifying the doubtful one and correcting the misconceived facts relating to it.

Research is not limited only to decision making situations. It is also widely used in theoretical areas to attempt to describe the media, to analyse media effects on consumers, to understand audience behaviour etc. Every day there are references in the media to audience surveys, public opinion polls, growth projections, advertising or public relations campaigns. For constructing theoretical models, the researcher should articulate the existing knowledge into propositions to explain a phenomenon more meaningfully under given conditions. This might lead to further research making it a continuum for the quest of knowledge.

3.4 Evolution and growth of media and communication research

Research in mass media is used to verify or refute opinions or intuitions for decision makers. Although common sense is sometimes accurate, media decision makers need pertinent information to evaluate problems, especially when they make decisions that involve large sums of money. The past 60 years have witnessed the evolution of a
decision making approach that combines research and intuition to produce a higher probability of success.

In the initial days of media and communication studies, there was no interest to know the size of the audience or in the types of people who make up the audience. Since then, mass media operators have come to rely on research results for nearly every major decision they make. The increased demand for information has created a need for more researchers; both public and private. In addition, within the research field are many specializations. Research directors plan and supervise studies and act as liaisons to management; methodological specialists provide statistical support; research analysts design and interpret studies; and computer specialists provide hardware and software support in data analysis.

At least four major events or social forces have encouraged the growth of mass media research. The first was World War I, which prompted a need to understand the nature of propaganda. Researchers working from a stimulus-response point of view attempted to uncover the effects of the media on people (Lasswell, 1927). The media at that time were thought to exert a powerful influence over their audiences and several assumptions were made about what the media could and could not do. One theory of mass media, later named the hypodermic needle model of communication, suggested that mass communicators need only “shoot” messages at an audience and those messages would produce preplanned and almost universal effects. The belief then was that all people behave in similar ways when they encounter media messages. We know now that individual differences among people rule out this overly simplistic view. It was these theories that guided the thinking of those who saw the media as powerful.

A second contributor to the development of mass media research was the realization by advertisers in the 1950s and 1960s that research data are useful in developing ways to persuade potential customers to buy products and services. Consequently, advertisers encouraged studies of message effectiveness, audience demographics and size, placement of advertising to achieve the highest level of exposure (efficiency), frequency of advertising necessary to persuade potential customers and selection of the medium that offered the best chance of reaching the target audience.
A third contributing social force was the increasing interest of citizens in the effects of the media on the public, especially on children. The direct result was an interest in research related to violence and sexual content in television programs and in commercials aired during children’s programs. Researchers have expanded their focus to include the positive (prosocial) as well as the negative (antisocial) effects of television. Investigating violence on television is still an important endeavour and new research is published every year.

Increased competition among the media for advertising revenue was a fourth contributor to the growth of research. Most media managers are now sophisticated and relay on data to support the decisions they make. Even program producers seek relevant research data. In addition, the mass media now focus on audience fragmentation, which means that the mass of people are divided into small groups or segments or niches. Researchers collect information about these smaller groups of people. It might include information about consumers’ changing values and tastes, shifts in demographic patterns and developing trends in lifestyles. Audience fragmentation increases the need for trend studies (fads, new behaviour patterns), image studies (people’s perceptions of the media and their environment) and segmentation studies (explanations of behaviour by types or groups of people). Large research organizations, consultants and media owners and operators conduct research that was previously considered the sole property of the marketing, psychology and sociology disciplines. With the advent of increased competition and audience fragmentation media managers more frequently use marketing strategies to discover their position in the market. When this position is identified, the medium is packaged as an “image” rather than a product.

The communication and information packaging strategy involves determining what the members of the audience think, how they use language, how they spend their spare time and so on. Information on these ideas and behaviours can be used in the merchandising effort to make the medium seem to be part of the audience. Positioning thus involves taking information from the audience and interpreting the data to use in marketing the medium.
Much of the media research before the early 1960s originated in psychology and sociology departments at colleges and universities. Researchers with backgrounds in the media were rare because the mass media disciple was young. But the situation has improved significantly. Media departments in colleges and universities grew rapidly in the 1960s and media researchers entered the scene. Today mass media researchers dominate the mass media research field and now the trend is to encourage multidisciplinary studies in which media researchers invite participation from sociologists, psychologists and political scientists. Because of the pervasiveness of the media, researchers from all areas of science are now actively involved in attempting to answer media-related questions.

Modern mass media research includes a variety of psychographic and sociological investigations, such as physiological and emotional responses to television programs, commercials or music played on radio stations. In addition, computer modelling and other sophisticated computer analyses are now commonplace in media research to determine such things as the potential success of television programs (network or syndicated). Once considered unconventional by some, mass media research is now a legitimate and esteemed field.

### 3.5 Elements of communication research

According to Winner and Dominic, there are four basic elements of communication research and they are as follows:

#### 3.5.1 Concept and construct

A concept is an abstract idea found by generalizing and summarizing related observations over a period. Concepts are important in the field of communication research as they simplify the research process by combining different characteristics, objects or people into more general categories.

A construct on the other hand, is an abstract idea that usually is broken down into dimensions represented by lower level concepts. A construct can be a combination of several concepts. A construct cannot be observed directly. A construct is designed for a purpose or in the context of a study.
3.5.2 Variable

A variable is an element, feature or factor that is liable to vary or change. It can also be a characteristic, number or quantity that increases or decreases over time or takes different values in different situations.

Variables can be classified into two categories namely independent and dependant variables. An independent variable can take different values and can cause corresponding changes in other variables. Whereas a dependent variable can take different values only in response to an independent variable. The dependent variable is also called the response variable. It is the output of a process or statistical analysis. Typically, the dependent variable is the result one wants to achieve.

For example, the placement of an advertisement (beginning, middle and end) in a TV news bulletin will affect the recall of its content for the viewer. In this case, the independent variable is the positioning of the advertisement and the dependent variable is the viewers recall.

3.5.3 Measurement

Measurements is the method or the process of quantification (expression in numerical values). By the act of measurement, a researcher assigns numerals to objects, events or properties according to certain rules. Numerals have no implicit quantitative meaning. In mass media research, the researchers usually measure indicators of the properties of individuals or objects.

3.5.4 Scale

A scale represents a composite measure of the variable. It is based on more than one item. Rating scales are common in mass media research. Scales such as Likert scale and semantic differential scales and staple scale etc. are commonly used in media research. The details of different scales of measurement and scaling technique are discussed in later parts of this booklet.
3.6 Quantitative media research

Quantitative research is the systematic and empirical investigation of observable phenomena via statistical, mathematical or computational techniques. It covers a broad range of techniques that are focused on getting numerical data for statistical analysis. Quantitative data is any data that is in numerical form such as frequency, percentages, etc.

Researchers use measurement and observation to represent communication phenomena as amounts, frequencies, degrees, values, or intensity. After phenomena are quantified, researchers compare or relate them using descriptive or inferential statistics. By using traditional quantitative approaches and statistical techniques, researchers bring greater precision to the study of communication phenomena.

Communication researchers also use experimentation to capture quantitative information on a variety of issues. For an example, a study can be undertaken to identify the habits of newspaper readers or television viewers. Adopting a quantitative approach, the researcher might be interested to find out the average time spent on watching television per day, then number of TV programmes the viewers watch, what are the most preferred time slots in a day etc. These are just few examples of ways in which communication researchers can use quantitative methods.

3.6.1 Deductive Reasoning

Quantitative research relies primarily on deductive reasoning (Hawes, 1975). This means that the researcher selects a theory or theories, as the basis of the propositions that are tested in the study. In general, the researcher hopes that the research process supports or verifies, what the theory proposes to be true. If the data and results do not support hypotheses derived from the theory, then the researcher looks for an alternative explanation. Perhaps the theory, as it was developed, is deficient or incomplete. Therefore, the results must be faulty because they are a direct result of testing the theory. Or the methods or procedures followed could be faulty. In this case, the researcher develops a new research design for testing the theoretical propositions and collects new data.
3.6.2 A Model for Conceptualizing Quantitative Research

The deductive research approaches discussed in Unit-1 and the different stages of research the basic steps and can be applied to most quantitative research projects. The model for conceptualizing quantitative research is shown in the following figure.

![Model for Conceptualizing Quantitative Research](image)

Starting at the top left of the model, the first component is the research purpose. Because the researcher is familiar with the research literature and has developed some questions about communication issues, she or he begins with an overall purpose or objective. The purpose of the study alone does not drive the model. The researchers use literature as a basis for their research. Research questions and research hypotheses are central to the quantitative research process. No quantitative study can be done without one or a combination of these. This third component dominates the quantitative research methods process. The fourth component of the quantitative research model is the selection of the research methods for the project. Generally, quantitative researchers ask questions about differences and relationships. The final component of the quantitative research model is connected only to the methods component and that the connection is reciprocal. This last component is an examination of the validity and reliability of the data collected through the method selected. Usually the researcher has to make methodological choices and then assess those choices for their impact on validity (how truthful the data is) and reliability (how consistent the data is).
These issues must be addressed before the research is undertaken and any data collected, for there is little opportunity to adjust the research method after the project is started. One of the assumptions of quantitative methods is that all participants are treated similarly; procedures or process should not change as you discover errors or lapses in your planning.

After the researcher has addressed each of these five components, he or she moves through the quantitative research process in a linear fashion. Once the methods are designed, the researcher selects participants, collects, analyzes data and then writes the research report. As demonstrated in Unit-2. Findings from the current study are used to extend or challenge the current state of theory. New questions are formulated and the research process begins again.

3.6.3 Creating the foundation for quantitative research

After identifying the research problem and turning that topic into a preliminary question or questions, as described earlier, the researcher must further specify the concepts identified in their question. These conceptual definitions are based on theoretical information or past research studies. Generally, researchers build on the work of others and use existing concepts and definitions unless they are inadequate or inappropriate.

A concept, or the thing one wants to study, represents several individual. It is an abstract way of thinking that helps us group together those things that are similar to one another and at the same time, distinguish them from other things. A concept can be an object, an event, a relationship or a process. Examples of concepts include a faulty argument, an effective public speaker, a conflict between spouses, leadership, underrepresentation of minorities on prime-time television shows and so on. Even though they are intended to represent a class of things that have common characteristics, a concept does not have a fixed or precise meaning or definition. With respect to the research literature, concepts are generally introduced early in the literature review with a general description.
In some cases, a set of concepts can be connected to form a conceptual scheme. For example, a researcher could identify ways in which consequence is demonstrated in prime-time television dramas (for example, characters admit guilt and take responsibility, deny responsibility, assign responsibility to others, and so on). Individually, each concept describes a unique process. But as a group, the concepts still retain common characteristics. Together, they form a conceptual scheme that specifies and clarifies the relationships among them (Kibler, 1970).

The theoretical definition of a concept is a construct. Concepts can become constructs only when they are linked to other concepts. The linking between and among concepts is part of the theoretical definition. To be used in a research study, however, a construct must also be assigned an observable property, or a way for a researcher to observe or measure it. Obviously, a construct could be observed or measured in many ways. Thus, researchers use the term variable to identify the theoretical construct as it is presented in research questions and hypotheses and the term operationalization to denote how the variable is observed and measured.

It is important to note that both the concepts and constructs are arbitrary creations of researchers (Kibler, 1970). As a result, in reading many research reports about the same topic, you are likely to find considerable variation in how scholars describe concepts and constructs. Generally, researchers describe the theoretical foundation of a study in the literature review. This is where concepts and constructs are introduced. Then, in the hypotheses and research questions, constructs are further defined as variables. Operationalization of each variable are presented in the methods section of written research reports.

Variables are the elements of interest to researchers. Finding new descriptions, explanations, or predictions for variables is the primary motivator for conducting scholarly research. To better understand how variables are used in the research process, we need to consider hypotheses and research questions. The details about hypothesis is discussed in the subsequent chapters.
3.7 Check your progress

- How research in mass media influences the decision making of the media professionals?
- Discuss about various elements of communication research.
- Elaborate the quantitative research model.
- Give examples of quantitative media research.
UNIT-4 RESEARCH ETHICS

4.0 Unit structure

4.1 Learning objectives
4.2 Introduction
4.3 Definition of ethics
4.4 Reasons to be ethical
4.5 Research process and ethics
4.6 Ethical responsibilities of a researcher
4.7 Ethical issues in media research
4.8 Ethics and online research
4.9 Check your progress

4.1 Learning objectives

The learning objectives of this chapter includes defining ethics, reasons to be ethical, research process and ethics, the ethical responsibilities of a researcher and several ethical issues in media research. After completing this unit, you would be able to understand the following:

- Define some basic elements in media ethics.
- Outline the major systems of ethical reasoning.
- Explain the main issues involved in ethical decision making.
- Discuss the role of commercialism in media ethics.
- Describe the major ethical issues in journalism, PR, advertising, and entertainment.

4.2 Introduction

No matter how important, unique or novel the research objective; it is important that it should be carried out honestly. The outcomes of a biased, rigged or unscientific research is basically useless. Being original and being scientific is not enough if the researcher is not honest and fails to acknowledge the contribution of others work. It is called plagiarism, a serious violation of research acumen and integrity.
Media research involves participation of many individuals; privacy, secrecy and protection of their interest should be of primal importance. People should be treated with respect, which has many implications for how exactly one deals with them before, during and after the research. Even if you are not using human participants in your research, there is still the question of honesty in the way one collects, analyses and interprets data. Ethical considerations prohibit the researcher from false reasoning. There are two aspects of ethical issues in research:

- The individual values of the researcher relating to honesty, frankness and personal integrity.
- The researcher’s treatment of other people involved in the research, relating to informed consent, confidentiality, anonymity and courtesy.

Ethical principles are straightforward and easy to understand. However, their application is confusing and difficult in many situations.

### 4.3 Definition of ethics

Ethics involves what is right, impartial, fair, just and responsible. Ethical practice is as important in media as it is in any other walk of life. Ethics based journalism with objectivity, accountability, fairness and truth as the key elements and are vital for responsible media practice.

The concepts of ethics are very subjective and relative; therefore, it would be relevant to look at the theories which can be considered to determine correct media behaviour.

Basically, three efficient theories that are consistently employed to determine media behaviour are:

- Consequentialism
- Utilitarianism
- Deontology

#### 4.3.1 Consequentialism

This theory suggests that the ethical value of an action should be determined on its consequences. Consequentiality theories concentrate only on the outcome of an action
without considering about the means, i.e. how the consequences came about. Hence, all actions should be considered as of their possible outcomes before being executed. The consequences of an action can be judged from two perspectives: Ethical Egoism and Ethical Altruism. Ethical Egoism does not reflect a cohesive social model as such actions can harm others while Ethical Altruism holds those actions that benefit others and can be considered good.

4.3.2 Utilitarianism

Utilitarianism theory is applicable to the media as it considers the betterment of society at large. It considers ethical as that which is designed to create the greatest good for the maximum numbers. Mahatma Gandhi’s concept of Sarvodaya talks about the welfare of all and reflects the utilitarian theory. However, Gandhi’s Sarvodaya was not a utilitarian because he realized that the utilitarian objective of satisfying many people was not a sufficiently ethical model. Gandhi was of an opinion that asked why the well-being of the minority should be of any less value than that of the majority or why the welfare of certain people should be sacrificed. There are many arguments against consequentialism and the utilitarian theories of ethics.

The utilitarian approach encourages responsible and thoughtful behavior. Although it is possible to make mistakes in judgment, it is advisable to invest time in considering all the possible outcomes of a certain action, to determine whether the overall good is greater than the negative consequences.

4.3.3 Deontology

Deontology concentrates on a person’s duty to determine appropriate action. Kant is believed to be the most famous follower of this theory. He believed it was the pretention behind an action that rendered it ethical or unethical. Kant felt that there was only one virtue which was good without qualification i.e. goodwill. Actions
inspired by goodwill are done out of respect for moral law and duty. Kant’s
categorical perspective, “will to act well out of duty” has three important guidelines:

- An agent should be motivated by the principle, which he would be happy to see as a universal maxim.
- Always treat people as an end in themselves and not just a means.
- Act as if you were the law maker in the kingdom of ‘End’. (Kant, 1785)

4.4 Reasons to be ethical

It is expected from media professionals that they do their job honestly and objectively along with the protection of the sources and loyalty with the employer. These factors create dilemma at times. Hence, it is important to understand all aspects of ethical issues.

Morality is to be pursued for its own sake, as an end rather than as means, is a lofty principle, which has the support of great practitioner of morality like Gandhi, however it may not motivate or encourage all, mainly the ‘practical’ people, because following moral values may entail personal sacrifices. For example, it may be enticing and individually beneficial for the influential to take bribes. Moreover, they may be so powerful that they can simply cover their tracks and not be exposed. It is not good for the society if they behave so, although from their own point of view why should they be ethical? It is pretty enticing to be a ‘free rider’. The detailed but briefly placed answer to was that in considering why I should be ethical, I should take a long term view of myself, of what I should be, and seek the answer to the question of what I should do in that light.

Developing a practice of taking bribes, for instance, will damage my very being and deprive me of mental peace. In short, ‘every rational being has a reason to cultivate virtues, regardless of his desires. This is how ‘virtue ethics developed. Furthermore, this is the reason why all religions have emphasized the need to develop a strong moral character. It did not confine the possibility of being righteous to a person in seclusion. It urged people to be good citizens too, enlightening a strong civic sense, participating enthusiastically in public or political affairs, and influencing decision through active deliberations. It is believed that it is by becoming a proactive part of
the society and polity for achieving common good that one realizes one’s moral potential. The modern significance of this teaching for people, mainly in countries like India, can barely be exaggerated.

Ethics is not meant only for individuals acting in isolation. On many aspects of vital importance, such as fighting social evils like dowry, corruption, and environmental worsening, we may have to act in concert. It desires coming out of our individual shells, coordinating with compatible people, spreading awareness, and initiating group action.

There are also important global issues requiring co-operation and co-ordination between countries. With increasing globalization, there is also an increase in the global responsibility in tackling mass poverty, illiteracy and ill-health, in averting environmental crisis, in implementing human rights, and in achieving durable peace. Countries not sensitive and responsible enough in this regard, have not only to be brought around but also assisted and supported by the global community. All this requires developing proper institutions and individuals’ loyalty and support to them, without which neither individuals nor institutions can be effective. To conceive of Community is not to choose between a thoroughly instrumental vision within which everyone’s sole concern is ‘What’s in it for me?’ and a thoroughly constitutive vision within which everyone’s constant preoccupation is ‘doing what’s best for the group’. There is a middle ground between these two visions, and it is likely to provide a more solid foundation for a healthy society than either a strictly influential or a firmly constitutive formation.

4.5 Research process and ethics

Ethical considerations in research are critical. Ethics are the norms or standards for conduct that distinguish between right and wrong. They help to determine the difference between acceptable and unacceptable behaviours. Ethical standards prevent against the fabrication or falsifying of data and therefore, promote the pursuit of knowledge in truth sense. Ethical behaviour is also critical for research because it encourages an environment of trust, accountability and mutual respect among researchers. Researchers must also adhere to ethical standards for the public to support and believe in the outcome of the research. The public or the society wants to
be assured that researchers followed the appropriate guidelines for issues such as human rights, animal welfare, compliance with the law, conflicts of interest, safety, health standards and so on. The handling of ethical issues such as honesty, objectivity, respect for intellectual property, social responsibility, confidentiality, non-discrimination etc. greatly impacts the integrity of the researcher and the research project.

Hence, being ethically responsible at every stage adds tremendous value to the research as a process and to the researcher as an individual. Being unethical is not an option.

4.6 Ethical responsibilities of a researcher

Ethical responsibilities are seldom assigned. However, these are to be assumed and adhered to suo motto. Some of these ethical responsibilities of a researcher are discussed below.

4.6.1 Honesty

Honesty is essential, not only to enable clear and straightforward communication, but also to engender a level of trust and credibility in the outcomes of the research. This applies to all researchers, no matter what subject or discipline they represent.

4.6.2 Confidentiality

The objective behind being ethically responsible is to cause no harm or offence during the process of knowledge creation and dissemination. Therefore, the researcher should assess the appropriateness of the chosen research methods and their possible outcomes even before the execution. This involves recognizing and avoiding making any revelations or claims that could harm the reputation, dignity or privacy of others. Sensitive information should be dealt by assuring confidentiality and anonymity.
4.6.3 Plagiarism

With the advancement of technology, availability and access to others research work has increased. Such abundance has given rise to professional or academic dishonesty like plagiarism. It means copying someone’s research work (concepts, idea, data or report) and claiming it to be own and original without acknowledging the original source. This is a serious offence. It might lead to serious legal offences like the violation of one’s Intellectual Property Rights (IRP).

4.6.4 Acknowledging others

One can simply avoid plagiarism by acknowledging the original contributors. A researcher can acknowledge the intellectual contribution of other researchers through proper citation in the main text and in the bibliography or reference section at the end of the manuscript. Acknowledgement for funding and other kind of support can be done at the beginning.

4.6.5 Use of appropriate language

Use of language is crucial. It sets the tone of the study. Inappropriate use of language can lead to biasness, disrespect, stereotyping, prejudice discrimination and intolerance. Therefore, the use of natural and jargon free is preferable.

4.6.6 Data collection

Appropriateness of the data collection technique, ensures the collection of the required and relevant data. If data is to be collected from the secondary source then the researcher must ensure legitimate access. If it involves primary source then method of identification of the respondents (sampling technique) is as important as the method of data collection. The respondents must be made aware about the purpose of the research, why and how their opinion is required and how their identity and the information is to be treated. The respondent must give their consent to be a part of the study then their response should be collected. The respondents must be
given adequate time to respond. It has to be the discretion of the respondent what and how much they want to reveal. The researcher should not push the respondents for collecting data.

4.6.7 Representation of data

The researcher should not be under any influence or pressure to manipulate data for the desired outcome. Data must be truly represented and it must be free from the bias, prejudice of the researcher. There should not be any deliberate falsification. The researcher should not try to mould or misrepresent or misinterpret data.

4.7 Ethical issues in media research

Other than the issues mentioned in section 4.6, there are certain typical ethical issues related to the field of media research are discussed in this section.

4.7.1 Press Accountability

Accountability means being responsible for something or someone. The press plays a vital role in disseminating information to the public. When media professionals are carried away by the sentiments of the market, they try to sensationalize the information to attract maximum viewership and higher rating to maximize profit. Too much focus on commercialization leads to sensationalization, professional dilution and ethical misnomer. So, who is responsible or accountable for all these?

Press accountability is defined as a process by which press organizations may be expected or obliged to render an account to their constituents. A constituent is a person, group or organization whose goodwill is essential for any media organization. Moreover, a media organization can have many constituents including audience members, advertisers, news sources, peers in other organizations and regulatory authorities (Pritccard, 2000).

4.7.1.1 Accountability to employers

Though media professionals are subjected to public response they are also accountable to the organization they represent. For the employer, the media house
might be a profit center however for the this should not be the case for the media professionals. A classic example could be a reporter or an editor failing to publish a justifiable news item that might be potentially unfavourable to the interests of an important advertiser, investor or someone in power. This would lead to a serious conflict of interest.

4.7.1.2 Accountability to subjects

Media professionals should also be responsible towards the things and beings depicted in their stories. While reporting about sensitive issues about any individual or organization; media professionals must take adequate care not to indulge in character assassination or avoid media trial. If the matter is sub judice then there should not be any effort to disclose any critical information. If the subject is related to national integration or security or if the subject is sensitive enough to spread violence then utmost care should be taken not to compromise the public interest as well as the interest of the subject.

4.7.1.3 Accountability to source

Non-disclosure or protection of the identity of the source is crucial. By sharing information, the source is entrusting the media professional and expects protection against consequences; unless until expressed otherwise. Disclosure of the identity of the source can have serious reparations. Hence, the media professionals are also accountable to the source. However, under special circumstances related to criminal offence, national security or integrity or legal matters the identity of the source can be revealed.

4.7.2 Objectivity

Objectivity talks about judgment based on observable phenomena and uninfluenced by emotions or personal prejudices. It is related to the depiction of the truth or reality without any dilution or deliberate falsification. It is meant to prevent manipulation or misrepresentation. According to Boyer, objectivity consists of six elements:

- Balance and even-handedness in presenting different sides of an issue
• Accuracy and realism of reporting
• Presentation of all main relevant points
• Separation of facts from opinion, but treating opinion as relevant
• Minimizing the influence of the writer’s own attitude, opinion or involvement
• Avoiding slant, rancour or devious purpose (Boyer, 1981)

4.8 Ethics and online research

The use and influence of the internet is becoming ubiquitous even in a specialized field like research these days. Internet based or online research includes ethical issues such as participant’s knowledge and consent, data privacy, security, confidentiality and intellectual property rights and the overall professional standards or norms followed by the researcher. Internet based studies mostly utilize the Internet to collect information through an online survey using an online tool or questionnaire. At times responses or information is collected without the consent of the participant. They were tracked or stalked or spied upon; which is unethical.

4.9 Check your progress

• Define ethics.
• Why and how ethics are important for media professionals?
• Discuss about the ethical responsibilities of a researcher.
• How a researcher can be ethically responsible at every stage of research?
• Have you ever faced any ethical dilemma or indulged in unethical practice?
  Explain about the legitimacy of your action or decision in that situation.

LET US SUM UP

Accuracy -- a term used in survey research to refer to the match between the target population and the sample.
Beliefs -- ideas, doctrines, tenets, etc. that are accepted as true on grounds which are not immediately susceptible to rigorous proof.
Bias -- a loss of balance and accuracy in the use of research methods. It can appear in research via the sampling frame, random sampling, or non-response. It can also occur
at other stages in research, such as while interviewing, in the design of questions, or in the way data are analyzed and presented. Bias means that the research findings will not be representative of, or generalizable to, a wider population.

Case Study -- the collection and presentation of detailed information about a participant or small group, frequently including data derived from the subjects themselves.

Causal Relationship -- the relationship established that shows that an independent variable, and nothing else, causes a change in a dependent variable. It also establishes how much of a change is shown in the dependent variable.

Causality -- the relation between cause and effect.

Claim -- a statement, similar to a hypothesis, which is made in response to the research question and that is affirmed with evidence based on research.

Classification -- ordering of related phenomena into categories, groups, or systems according to characteristics or attributes.

Construct -- refers to any of the following: something that exists theoretically but is not directly observable; a concept developed [constructed] for describing relations among phenomena or for other research purposes; or, a theoretical definition in which concepts are defined in terms of other concepts. For example, intelligence cannot be directly observed or measured; it is a construct.

Control Group -- the group in an experimental design that receives either no treatment or a different treatment from the experimental group. This group can thus be compared to the experimental group.

Controlled Experiment -- an experimental design with two or more randomly selected groups [an experimental group and control group] in which the researcher controls or introduces the independent variable and measures the dependent variable at least two times [pre- and post-test measurements].

Credibility -- a researcher's ability to demonstrate that the object of a study is accurately identified and described based on the way in which the study was conducted.

Data -- factual information [as measurements or statistics] used as a basis for reasoning, discussion, or calculation.
Data Mining -- the process of analyzing data from different perspectives and summarizing it into useful information, often to discover patterns and/or systematic relationships among variables.

Data Quality -- this is the degree to which the collected data [results of measurement or observation] meet the standards of quality to be considered valid [trustworthy] and reliable [dependable].

Deductive -- a form of reasoning in which conclusions are formulated about particulars from general or universal premises.

Dependability -- being able to account for changes in the design of the study and the changing conditions surrounding what was studied.

Dependent Variable -- a variable that varies due, at least in part, to the impact of the independent variable. In other words, its value “depends” on the value of the independent variable. For example, in the variables “gender” and “academic major,” academic major is the dependent variable, meaning that your major cannot determine whether you are male or female, but your gender might indirectly lead you to favor one major over another.

Deviation -- the distance between the mean and a particular data point in a given distribution.

Discrete Variable -- a variable that is measured solely in whole units, such as, gender and number of siblings.

Distribution -- the range of values of a particular variable.

Empirical Research -- the process of developing systematized knowledge gained from observations that are formulated to support insights and generalizations about the phenomena being researched.

Epistemology -- concerns knowledge construction; asks what constitutes knowledge and how knowledge is validated.

Ethnography -- method to study groups and/or cultures over a period of time. The goal of this type of research is to comprehend the particular group/culture through immersion into the culture or group. Research is completed through various methods but, since the researcher is immersed within the group for an extended period of time, more detailed information is usually collected during the research.
Field Studies -- academic or other investigative studies undertaken in a natural setting, rather than in laboratories, classrooms, or other structured environments.

Focus Groups -- small, roundtable discussion groups charged with examining specific topics or problems, including possible options or solutions. Focus groups usually consist of 4-12 participants, guided by moderators to keep the discussion flowing and to collect and report the results.

Framework -- the structure and support that may be used as both the launching point and the on-going guidelines for investigating a research problem.

Generalizability -- the extent to which research findings and conclusions conducted on a specific study to groups or situations can be applied to the population at large.

Grounded Theory -- practice of developing other theories that emerge from observing a group. Theories are grounded in the group's observable experiences, but researchers add their own insight into why those experiences exist.

Group Behavior -- behaviors of a group as a whole, as well as the behavior of an individual as influenced by his or her membership in a group.

Hypothesis -- a tentative explanation based on theory to predict a causal relationship between variables.

Independent Variable -- the conditions of an experiment that are systematically manipulated by the researcher. A variable that is not impacted by the dependent variable, and that itself impacts the dependent variable. In the earlier example of "gender" and "academic major," (see Dependent Variable) gender is the independent variable.

Inductive -- a form of reasoning in which a generalized conclusion is formulated from particular instances.

Probability -- the chance that a phenomenon will occur randomly. As a statistical measure, it is shown as p [the "p" factor].

Questionnaire -- structured sets of questions on specified subjects that are used to gather information, attitudes, or opinions.

Reliability -- the degree to which a measure yields consistent results. If the measuring instrument [e.g., survey] is reliable, then administering it to similar groups would yield similar results. Reliability is a prerequisite for validity. An unreliable indicator
cannot produce trustworthy results. Sample -- the population researched in a particular study. Usually, attempts are made to select a "sample population" that is considered representative of groups of people to whom results will be generalized or transferred. In studies that use inferential statistics to analyze results or which are designed to be generalizable, sample size is critical, generally the larger the number in the sample, the higher the likelihood of a representative distribution of the population.

Research -- the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.

Research methods -- the process used to collect information and data for the purpose of a research or study.

Research methodology -- the systematic, theoretical analysis of the methods applied to a field of study. It comprises the theoretical analysis of the body of methods and principles associated with a branch of knowledge.

Theory -- a general explanation about a specific behavior or set of events that is based on known principles and serves to organize related events in a meaningful way. A theory is not as specific as a hypothesis.

Unit of Analysis -- the basic observable entity or phenomenon being analyzed by a study and for which data are collected in the form of variables.

Validity -- the degree to which a study accurately reflects or assesses the specific concept that the researcher is attempting to measure. A method can be reliable, consistently measuring the same thing, but not valid.

Variable -- any characteristic or trait that can vary from one person to another [race, gender, academic major] or for one person over time [age, political beliefs].

FURTHER READINGS

- A Handbook of Media and Communication Research: Qualitative and Quantitative Methodologies By Klaus Bruhn Jensen, Routledge, 2002.
- Mass Communication Theories: Explaining Origins, Processes, and Effects
  By Melvin L. Defleur, Routledge, 2010
  By Elinor Scarbrough; Eric Tanenbaum, Oxford University Press, 1998.
- Social Science: Philosophical and Methodological Foundations
- Measurement, Design, and Analysis: An Integrated Approach
- Mass Communication Law and Ethics: A Casebook
- Historical Methods in Mass Communication

**MODEL QUESTIONS**

- What do you mean by research? Explain its significance in modern times.
- Briefly describe the different steps involved in a research process.
- Distinguish between research methods and research methodology.
- Describe the different types of research, clearly pointing out the difference between an experiment and a survey.
- Differentiate qualitative research from quantitative research.
- Mention the difference between inductive and deductive reasoning.
- What are the characteristics of a good research?
- Explain how communication research is different from media research.
- What are the different types of communication research?
- What are the different elements of communication research?
- Discuss about quantitative media research methods.
- Define ethics? How are these important?
- Why media professionals are to be ethical? What are the ethical responsibilities of a researcher?