

## Module 1

# Introduction to Business Research

## 1.1. RESEARCH

### 1.1.1. Meaning of Research

Research comprises of two words, "Re" and "search". While "Re" implies a repetitive or iterative process, "Search" denotes making a thorough examination of or looking over carefully in order to find something. Different researchers have defined research in various ways due to its wide scope.

But, in general, research can be defined as a scientific process where new facts, ideas, and theories are established and/or proved in different areas of knowledge. Research aims at adding to the existing stock of knowledge for the betterment of world.

**According to John Best**, "Research is a systematic activity directed towards discovery and the development of an organised body of knowledge".

**According to Waltz and Bausell**, "Research is a systematic, formal, rigorous and precise process employed to gain solutions to problems or to discover and interpret new facts and relationships".

**According to Clifford Woody**, "Research comprises defining and redefining problems, formulating hypothesis or suggested solutions, collecting, organising and evaluating data, making deductions and reaching conclusions to determine they fit the formulating hypothesis".

Research plays a vital role in management decision-making by analysing the situation systematically and finding new ways to support the operations.

**For example**, a company may conduct research to know the consumer reviews about certain products.

Research can be carried-out using various methods and techniques which are collectively called as '**research methods**'. Research methods are the tools and techniques for analysing and collecting data so that meaningful outcomes can be extracted from the

problem being studied. '**Research methodology**' can be defined as the scientific procedure to solve various problems related to research. It has a wider scope than research methods, as in addition to the methods and techniques, the researcher designs different methodologies for different research problems. Research methodology varies according to the research problem. Therefore, it is concerned with the application of research methods as per the requirement.

### 1.1.2. Objectives of Research

Research strives to achieve following five objectives:

- 1) **To Explore about Unknown:** One of the prime objectives of research is to explore the unknown object or phenomenon. While exploring, a researcher tries to understand the details of the situation or phenomenon for developing preliminary hypotheses and generalisations. Exploring allows the researchers to develop theories and explains the questions of how and why a phenomenon operates in a particular way.
- 2) **To Describe the Features:** Research seeks to describe the features of a phenomenon. It is one of the core activities of research where a researcher either observes the phenomenon and records its characteristic behaviour, or conducts standardised tests to measure the behaviour, or describes the change in attitude or opinion of the object.  
**For example**, a researcher can describe the behaviour of smokers by either observing it, or analysing their behaviour by undergoing some standard tests, such as measuring the level of resistance, per day consumption, etc.
- 3) **To Explain a Phenomenon:** Another objective of research is to provide explanation. Here, the researcher aims to explain how and why a phenomenon operates in a specific way. The researchers develop certain theories explaining the behaviour of a particular phenomenon by determining the factors that cause the change and identifying their effects on the phenomenon. Most of the scientific and educational researches have this objective for their studies.



For example, if a researcher is trying to know, "Do weekend parties for employee families improve work life balance?", then in this case, the cause is 'weekend parties' and the effect is 'work life balance'.

- 4) **To Predict Future Activities:** Research is also conducted with the aim of predicting the future activities. Prediction can be done on the basis of explanations regarding a phenomenon. Hence, having adequate prior information is essential for making forecasts. Forecasting activity can also be performed on the research based on explanation. Here, predictions are made on the basis of cause and effect relationships in a phenomenon.

A good example of this objective is the research that analysts conduct during elections to predict the winning political party based on the information that they are able to gather from the voting polls.

- 5) **To Influence Activities:** The last objective of a research study is known as controlling or influencing particular phenomenon.

Here, the research emphasises on applying the existing theories and models instead of developing new theories, for influencing various facets of environment. Most of the research conducted in social, behavioural and educational research falls under the area of influence.

### 1.1.3. Features/Criteria of a Good Research

A good research should qualify in following essential criteria:

- 1) **Clearly Defined Objectives:** The objectives of a research study should be clearly defined. If the objectives of research are well defined, then there would be clear roadmap in front of the researcher to follow. It helps the researchers to determine the type of data required to conduct the research efficiently.
- 2) **Ethically Conducted:** A researcher should abide by the ethical standards laid down to conduct a research accurately. The research data and the limiting factors should be properly scrutinised, explained, and documented to maintain a level of transparency with the readers. The data should not be altered to match the findings. The results of the research study should be properly documented and the conclusions should be based on proper evidences.

- 3) **Flexibility:** Research involves re-examining the data till correct findings are arrived. This is possible only if the research approach is flexible in nature. There should always be scope to add on significant data or change the existing data as per the requirement.

- 4) **Reliability:** Reliability refers to the repeatability of a research, tool, procedure, or instrument. The degree of reliability of a research study depends on the degree of similarity in research results. A research is called reliable when it produces similar results for different samples drawn from the same population under similar conditions and procedures.

For example, a researcher may study the effect of a course in written English on the final grades for a group of students. The results of this study will be reliable, if the same study on another group of students has similar outcomes.

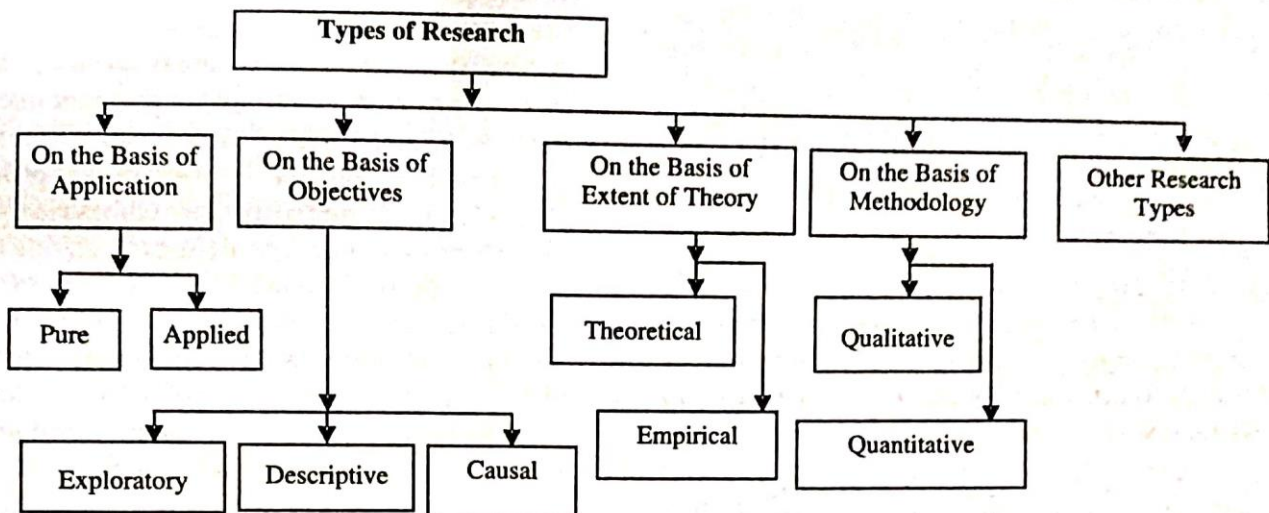
- 5) **Validity:** Validity is a measure of the applicability of the research. It refers to the suitability and efficiency of the research instrument or procedure regarding the research problem. It measures the accuracy of an instrument in measuring the problem. It is a measurement of applicability of the research. Validity is the basis of deciding whether a research conclusion, assumption, or proposition is true or false. The validity of research is maintained by defining the concepts as clearly as possible.
- 6) **Accuracy:** A research is called accurate, if the process of research, instruments, and tools are related to each other. It checks to see that the research tools are being selected appropriately. For example, if a research is carried-out on mental patients, the use of observation would be appropriate to collect data, because in case of questionnaire or interview, they may not be able to answer or may answer incorrectly.
- 7) **Credibility of Sources:** Credibility means that the research data should be taken from trustworthy sources. Although the use of secondary data in research allows the researcher to complete the research within the timeframe, but he loses the credibility, as the secondary data are usually manipulated and hence relying exclusively on it can lead to erroneous and faulty research conclusions. A researcher should try to use primary data as much as possible. If primary data is not available, then specific amount of secondary data can be used. But, conducting a research completely based on secondary data can harm the credibility of the research.



- 8) **Generalisable Results:** The degree to which the result of a research can be applied to the bigger population is called as generalisability. While carrying-out a research, the researcher selects a small sample from a target population. Hence, the sample and the research findings represent the target population. If the research results can be applied to other samples from the similar population, then the research findings can be considered as generalisable.

### 1.1.4. Types of Research

Various types of research are classified as follows:



- 1) **On the Basis of Application:** Based on application, research can be classified in following two types:

- i) **Basic/Pure/Fundamental Research:** Pure research is also known as “basic research” or “fundamental research”. It is the most basic form of research. The objective of this research is to provide models and theories regarding some phenomenon. This type of research seeks to obtain knowledge about a particular subject rather than its practical usage, testing of hypotheses and theories. Basic research is carried-out to discover and gain better insight about a specific phenomenon, without considering the problem and its direct practical application.

**For example,** designing a research model for reading behaviour among teenagers has no practical application and it simply contributes to the area of knowledge. Basic research can take one of the following forms:

- a) **Discovery:** When the objective of a basic research is to discover, then it tries to find new explanations or ideas about a particular issue based on empirical evidences.

**For example,** the theory given by Charles Darwin on “the survival of the fittest”.

- b) **Invention:** Designing new methods and techniques can be the prime purpose of basic research. **For example,** inventing the concept of total quality management.

- c) **Reflection:** Here, the researchers analyse the theories, models, or techniques in some different organisational or social contexts. **For example,** applying the concept of Herzberg’s Two Factor Theory on Indian Army.

- ii) **Applied/Practical/Need-Based/Action-Based Research:** Applied research is also called as “practical research”, “need-based research” or “action-based research”. While basic research emphasises on enhancing the existing knowledge without any practical application, applied research on the other hand, applies the existing knowledge, theories, and methods to solve particular issue. Basically, it is the practical application of the concepts provided by basic research. It tries to solve the existing problems faced by businesses, society, and government. Applied research tries to provide the solutions to eradicate the various types of practical problems related to real life and social life.

**For example,** when a sociologist tries to find out the reason for crime, or the factors that lead a person to become criminal, is the area



of pure research. But, when the sociologist tries to find out how the behaviour of a criminal can be controlled, it falls in the purview of applied research.

## 2) On the Basis of Objectives: Following Researches can be conducted on the basis of objectives:

- i) **Exploratory/Formulative Research:** Exploratory research is also known as "formulative research". The basic objective of this research is to explore the unknown facts or phenomena that are not previously defined. In exploratory research, researchers seek to gain better knowledge about a situation, and formulate new concepts and theories by developing and testing hypotheses.

A hypothesis becomes difficult to be formulated when the theory is too general or too specific. Here, exploratory research is needed to obtain the knowledge that is useful in developing hypothesis, so that further investigation can be performed.

Exploratory research helps the researchers to find out the best research methods, research designs, and data collection techniques for various research objectives. **For example,** exploratory research can be used to determine the reasons behind the higher terrorism rate in a country than other nations.

- ii) **Descriptive/Statistical Research:** Descriptive research can be defined as the research that tries to explain the characteristic features of the population under study. This research is based on the concept of 'reflective thinking' that discusses about the objectives and assumptions regarding a research study.

Descriptive research is concerned with answering the questions like who, what, when, where, and how regarding a phenomenon or situation. It can be carried-out on all those areas which are quantitative in nature. The descriptions in this research are used to calculate the frequencies, averages, central tendencies, etc. Sometimes, it is better to conduct a survey before carrying out the descriptive research.

**For example,** a research can be conducted to examine the causes behind a specific kind of disease in a particular area.

- iii) **Experimental/Causal/Explanatory Research:** Experimental research, also called "causal research" or "explanatory research", is carried out to identify the causes behind any effect. It determines the effects on dependent variable due to the changes in independent variable. In experimental research, two similar groups are chosen for measuring the experimental effects.

The group which is exposed to treatment is called the 'experimental group', and the group which is kept constant is called 'control group'. After the treatment is imposed on the experimental group, the effect is measured by comparing it with control group. The treatment effects are thus identified. The outcomes of the experimental research are not always straight and direct due to the variability factors. Hence, to measure the results accurately, it is necessary to keep the control group constant while modifying experimental group.

**For example,** a primary school teacher may want to evaluate a new technique for teaching mathematics in comparison to the standard teaching method.

- 3) **On the Basis of Extent of Theory:** On the basis of extent of theory research can be classified in two types:

- i) **Theoretical Research:** Theoretical research seeks to add new knowledge by discovering new ideas and theories with the help of existing theories and explanations. But, the major emphasis is on studying rather than testing the theories and models. In other words, it is based on secondary data instead of primary data.

Besides many benefits, theoretical research has always been the subject of criticism. The reason behind various arguments is that theoretical research has no test component. Many researchers say that theories are easy to formulate without the need of evidence, which is why it should not be considered as a proper academic research. But, the basis of this argument is not true. Every research needs conceptualisation. Theoretical research strives to gain knowledge about the existing theories to improve the body of knowledge through addition of value to it. **For example,** an organisation may conduct a research on its employees and their motivation levels based on Herzberg's two-factor theory.



- 11) **Empirical Research:** Empirical research is data-oriented. This kind of research provides insights through observation or experiences. In this research, the primary data are collected, analysed and tested to prove some hypotheses. Empirical research can be conducted through both the qualitative and quantitative approaches.

**For example,** Major researches conducted on health issues usually adopt empirical research. Instead of theories, empirical research is based on observation and measurements. It attempts to develop new ideas by collecting primary data. Hence, the basic difference between theoretical and empirical research is that, in theoretical research the researcher arrives at the conclusions based on existing literature, while in empirical research the researcher takes a step further and collects the data to test the theory. **For example,** measurement of noise pollution in cities to find out the exposure to sound faced by the citizens.

- 4) **On the Basis of Methodology:** Based on methodology adopted, research can be of two types:

- i) **Qualitative Research:** Qualitative research is conducted to study and analyse the human behaviour. It is considered as a preliminary stage of quantitative research. Qualitative research is carried out when there is a need to develop new ideas and theories that can be tested and analysed afterwards using quantitative measures. It tries to evaluate and findings in a broad level.

The prime objective of qualitative research is to get an in-depth knowledge about a particular behaviour by collecting fresh and new information by using various techniques. The perceptions of respondents about their environment, the impact of environment on the behaviour of respondents, etc., can be understood with the help of qualitative research. An example of qualitative research can be, conducting a survey to know the target customers' habits and buying preferences for launching a new product.

- ii) **Quantitative Research:** Quantitative research is contrary to qualitative research. It is a scientific technique that attempts to analyse the data using statistical measures for concluding the outcomes of a research problem.

Various researches on science, social science, education, etc., are conducted with the help of quantitative research. In quantitative research is carried out in a structured way to develop and test various hypotheses using mathematical and statistical techniques. **For example,** a research can be conducted to compare the effect on crime rate due to gun buyback program.

- 5) **Other Research Types:** Alongwith the above major research types, there are some other types of research:

- i) **Evaluation Research:** Evaluation is defined in many ways as per the objective of the research study, the techniques applied, or the application of outcomes. Usually, it can be defined as the systematic measurement and judgement about a situation to provide the feedback. The evaluation is always based on some criteria. The most common criteria used for evaluating an object are benefits, efficiency, sustainability, applications, etc.

Generally, the emphasis of evaluation research is on the utilitarian benefits of an object. It strives to understand an activity or an object by assessing and examining it, based on some criteria. In other words, it is a comparative analysis, where the original objectives of study are assessed to determine their way of accomplishment, so that it can be improved. It can also take the form of summative study, where conclusions are made to infer the shortcomings of the study. **For example,** a manufacturing firm can evaluate its performance after using just-in-time method in its production system.

- ii) **Action/Participatory Research:** Action research is also called as "participatory research", where active problem-solving is done by the individuals of a team in an organisation to improve the method of solving issues. In this process, the employees of an organisation contribute collectively to bring the change through the research process. Action research is also practiced by big institutions to enhance the strategies and techniques adopted by them for their operations. Action research is an organised form of investigation which is collective and evaluative in nature. It tries to correlate the problem-solving methods with the research or analysis so that future changes in an organisation can be predicted.



For example, a research can be conducted to know the best applicable method for certain type of students.

iii) **Historical Research:** Historical research is an organised attempt to collect the data regarding historical events, analysing them, and interpreting the events. It is carried out to identify the causes, effects, and trends regarding past occurrences to improve the present and future. Many modern practices and techniques can be developed and improved with the help of historical data. Usually, the approach used for historical research is qualitative in nature, but, sometimes quantitative measures can be adopted. Historical research tries to identify the past forces that affect the present.

iv) **Ex-Post-Factor:** Ex-post factor research is a systematic effort to trace-back the causes resulting in specific effect. In this research, the actions that has caused the effects are identified, which are then imposed on some other similar set of circumstances. It is conducted after the completion of a phenomenon or occurrence.

Ex-post factor research is a scientific analysis of independent and dependent variables. Since, the phenomenon has already occurred, therefore, the researcher has no direct control over the independent variables causing the effects. Thus, the conclusions regarding the variables and their relations are made without direct involvement. **For example,** forensic research department may attempt to find the causes for certain crime.

### 1.1.5. Significance of Research

Following points describe the significance of research:

1) **Recognises the Potential Opportunities and Threats:** For any strategy to be successful, the organisation needs to have a very good understanding of the environment in which it operates. Research is a tool with which management is able to scan its environment and identify various opportunities and problems existing in the environment. By scanning and researching extensively, management can understand the environmental situations efficiently. This helps to formulate strategies in accordance with the situations to overcome the prevailing problems and exploit the opportunities to the fullest.

2) **Assessment of Problems and Opportunities:** Researching the problems and opportunities help the managers to estimate and analyse them. It

allows the managers to identify the existing problems and the factors responsible for the problems. Research facilitates the managers in identifying, exploring, refining and quantifying the opportunities existing in the environment. Alongwith these, it helps in setting the priorities in case of multiple opportunities.

3) **Selection of Best Alternative Action:** Research assists the managers in selecting the best among the alternative courses of action. The various alternatives are evaluated using specific evaluation criteria set by the researcher. Researchers forecast the necessary future activities to be taken with properly analysing the scenario which in turn helps in planning. Research can also suggest the strategies that managers should use in planning properly and preventing it from failing.

4) **Evaluating the Course of Action:** Research can be used to see if the planned course of action has been implemented in way it was intended to. It allows the managers to estimate the extent to which a given activity or project is executed as per the direction. It helps to identify the potential factors that can affect the execution. Research is also carried-out to evaluate and control the strategies implemented for executing the project.

5) **Analysing the Competition:** The organisations need to study the market and the level of prevailing competition in it. To fulfil this objective, organisations conduct research to collect the information regarding the purchasing trends, competitor's strategy, market share of competitor firms, etc. This allows managers to formulate strategies that can help them in achieving their targets.

### 1.1.6. Motives in Doing Research/Motivation in Research

Sometimes consumers are not aware of the factors that influence their buying behaviour such as sociological factors, cultural factors and so on. In such a case, motivational research is conducted to identify those factors. Generally, these unconscious intentions (or causes beyond consciousness) are frequently linked with and confused by conscious motives, cultural prejudices, economic factors, and fashion trends. Motivational research helps the marketers to analyse these hidden factors influencing consumer buying behaviour and allow them to clearly understand their target audience and suggests the ways to influence them.

The importance of motivational research can be realised as it helps the marketers to determine the most powerful hidden factor that influences the



consumer buying behaviour. Motivational research analyses the consumer behaviour towards the product and services that are related to self-esteem, to personal adornment, to power, to fears, to death or to social taboos. For example, the reason why women spend more money on their clothing and accessories at the age of 50 to 55. It may be because of the loss of youth's beauty or because of the fear of losing their husbands' attention. This is also an age when they are free from parental responsibility.

### Methods of Motivation Research

- 1) **Experience and Knowledge Technique:** In this method, marketing executives forms close association with the consumers in order to gain knowledge and experience on the basis of which consumer's behaviour is determined. With the help of this method, marketers are able to know the real buying motives of their products and the reasons behind this motive.
- 2) **Traditional or Questionnaire Technique:** In this method, marketers prepare a questionnaire with the help of psychologists. The prepared questionnaires are delivered to the selected customers for completion and return to the firm. The firm analyses the consumer's response to those questionnaires and determines the buying motives and behaviour of the consumers. However, because of its limitations, this method is not used frequently.
- 3) **Depth Interview Technique:** The depth interview technique is one of the most significantly used motivational research methods. In this method, the researcher tries to analyse the subconscious minds of the consumers and requires both patience and time. The researcher does not ask any direct questions to the consumers, instead, they talk in a light environment so that consumers intensively express their views. Those researchers who are skilled and knowledgeable were able to go in-depth and uncover the information hidden in the conscious mind of the consumers.
- 4) **Projective Technique:** In this method, the researcher provides various stimuli such as cartoons, pictures, stories, and so on to the respondents and asked them to give their comments. The stimuli employed for this purpose are capable of eliciting a wide range of responses from the respondent. Market researchers can use a variety of Projective Techniques to examine the 'why' component of consumer buying behaviour. Some of them are as follows:

- i) **Thematic Appreciation Test (T.A.T.):** Under this technique, the market researchers give respondents the set of pictures of people involved in some unstructured doubtful scene of activity. The respondents are then asked to narrate the story of the picture. The analyst who is skilled in the test then analyses the answers of the respondents.
- ii) **Sentence Completion Test (S.C.T.):** The sentence completion test is used by market researchers in order to identify the emotional responses of the consumers towards the marketing situations and products. However, the reliability of the test is much more dependent on the interpreter's skills and knowledge.
- iii) **Word Association Test (W.A.T.):** In this method, a word is used instead of the phrase of a sentence. After seeing the word, the respondents are immediately asked to say the first word that comes to their mind. It requires a word with similar or opposite meaning and thus the whole series of individual words gone through. The test may be conducted in oral or written form.
- iv) **Paired Pictures Test (P.P.T.):** Under paired pictures test, the market researcher provides two pictures to the respondents and allow them to saw the story of their choice. For example, one picture shows a man driving a car of a popular brand and the other picture shows a similar dressed man driving a car of another brand. The respondents were then asked to narrate the story of these two different pictures. The difference in responses helps the researcher in analysing the different attitudes of the consumers about the set of pictures.

## 1.2. BUSINESS RESEARCH

### 1.2.1. Concept of Business Research

Research conducted for describing the business problem(s) of a particular business, is called **Business research**.

For example, in order to start a particular business it is very crucial for the entrepreneur or the owner to have information about the type of customers and nature of competition in the market. It helps in designing business plan for the organisation. All these information can be availed only through the business research. It plays a key role in deriving consumer demand for the existing business.



gain better information and improve the new and existing products, services and processes. Some of the major areas where industrial research is carried-out are:

- i) Finding ways to improve the quality of products and services,
  - ii) Developing new products and services to gain market share,
  - iii) Devising new ways to use the available resources,
  - iv) Decisions regarding minimising the cost,
  - v) Ways to reduce hazards at workplace,
  - vi) Standardisation of processes, and
  - vii) Developing strategies for improving the relations with customers and public.
- 6) **Production Research:** The production function in an organisation is dynamic in nature and needs continuous improvement in process, product design, cost etc. But these changes and improvements lead to some complexities, which can be resolved by production research. Production research is conducted in following areas:
- i) Finding new and better production methods,
  - ii) Ways to standardise and control the production, and
  - iii) Finding strategies and methods for troubleshooting.

### 1.3. RESEARCH PROCESS

#### 1.3.1. Introduction

Research includes a series of steps which begins with defining a problem and ends with the solution. It is not a static and linear activity, but generates new areas for further researches. Generally, the research ends with bringing out new problems or new areas to explore, with or without the solution and conclusion. Due to this characteristic of research, it is called a cyclic process.

The entire process of research aims at representing information effectively so that it can be used in future research studies. Following every step in systematic manner requires significant amount of time and money.

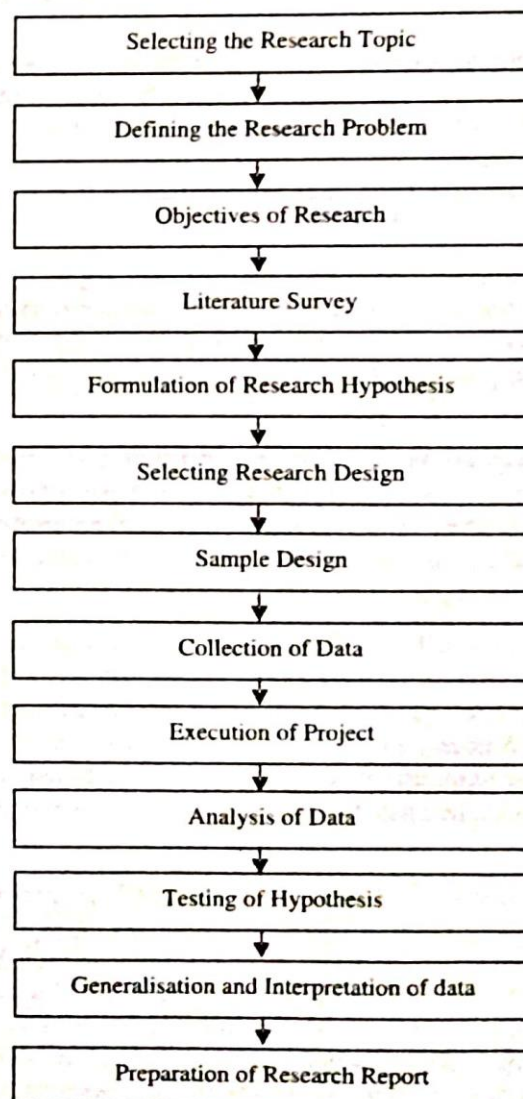
Various closely associated activities are included in the process of research that does not follow an exact sequence or order rather these activities are constantly overlapping. One cannot distinctively identify the stages, nor do they occur exclusively. The researcher proceeds to next step after anticipating the further requirements.

#### 1.3.2. Steps Involved in Research Process

Discovering and analysing a range of significant and reliable information about a particular issue or problem with systematic planning is known as research process. This process involves several steps for complete analysis of the research problem. These steps are required for identifying and analysing important information about a research topic. The steps of research process are described below.

##### 1.3.2.1. Management Problem/Selecting the Research Topic

In order to carry out the research in an orderly and coherent way, a sequence of actions or steps is needed to be followed. The foremost work in this direction is selecting a topic for the research. While selecting the topic for research, the foremost task is to narrow down the potential ones among the available issues in that particular area of research.





While selecting research topic, the researcher should keep in mind that the research problem should be neither too broad nor too narrow. The research topic should be selected in a way that can be clearly defined and understood. Since, it is not a methodical step hence, selecting a research topic requires knowledge and significant time.

An efficient research study begins with a research topic. Research topic should be defined in such a way that the further stages can be carried-out effectively. As soon as the research topic and related questions are formulated, researchers proceed further to select research design and collect data.

Hence, this step should be performed carefully, as it one of the most important foundations for making decisions.

### Factors to be Considered in Selecting Research Topic

Various factors that influence the selection of research topics are as follows:

- 1) **Values and Beliefs of Researcher:** Values and beliefs can strongly affect the selection of research topic. For example, the researchers of social sciences have a strong belief in justice and equality. Hence, they will genuinely select topics of social science.
- 2) **Bridging the Gaps:** A research topic can be selected to bridge the gap between the existing literatures and depth of that particular area of knowledge. The common interest of research is to cover this objective only.
- 3) **Solution of Prevailing Problems:** A research topic can be selected to solve prevailing problems in a particular field. For example, healthcare researchers continuously research for inventing the medication of Cancer and Aids.
- 4) **Availability of Resources:** The availability of resources is also a major factor that affects the selection of research topics. If the researcher has sufficient time and money to spend on investigation, then he may select a broad topic, while the may happen if the time and money is limited.
- 5) **Interest of Researcher:** Researchers prefer to select those research topics that are of his interest. If the topic is of his interest then he is motivated to carefully conduct the research, while if the topic is dull, then he may get motivated towards the research activities. Hence, usually researchers select the research topic of their interest.

### 1.3.2.2. Defining Research Problem

The next step of research process after selecting the research topic is defining research problem. The research problem should be defined clearly and precisely. The research problem which is clearly defined solves half of the problem. Defining the research problem precisely for some researches is not possible. For example, defining research problem for poor sales is a difficult task, as it needs exploratory research to explore the area further.

A well-defined research problem is crucial for fulfilling the requirements of a research study. In this step, all the aspects of related to the research problem are identified after which a problem statement is formulated. Many crucial decisions are based on the problem statement. If the problem statement is defined precisely, then it helps the researchers to select the research design and data collection methods easily. Research problem should be defined in such a way so that all the time, money and effort put forward for the research does not go wasted. This is the most critical step in all the research process as improper definition of the research problem can cause the failure of entire research study.

### Steps in Problem Definition

The process of defining research problem seeks to formulate a structure within which the research is to be carried-out with the help of pre-determined objectives. The researcher should allocate sufficient time and effort to define the research problem. At times, researchers try to complete this stage as soon as possible which becomes problematic for further stages. Hence, this step should be carried-out systematically and carefully.

The research problem should be defined with the help of following steps:

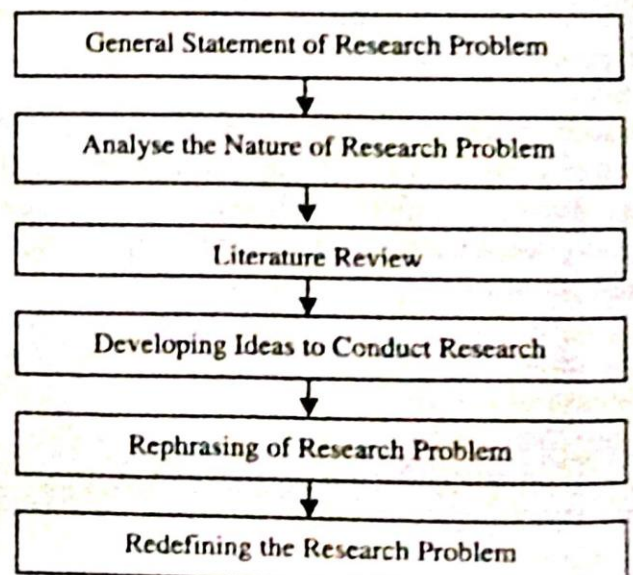


Figure 1.1: Steps in Problem Definition



- 1) **General Statement of Research Problem:** The first step of defining research problem is stating the problem in a general way.

While defining the research problem, it should be kept in mind that the defined problem should either address an operational issue, a discovery, or an exploration of existing knowledge. The research problem should be always stated on the basis of a specific logic.

- 2) **Analyse the Nature of Research Problem:** As soon as the research problem is stated in general terms, the next step is to analyse the nature of the research problem. To understand the nature of research problem, the researchers need to understand various related to it. Researchers need to identify and analyse the causes responsible for that problem.

- 3) **Literature Review:** The next important step in defining the research problem is surveying the literature available related to the problem. The research problem may not be effectively defined unless all the available literature is studied or examined thoroughly. It helps in increasing the knowledge of the researcher which results in exploring new dimensions of the research field.

- 4) **Developing Ideas to Conduct Research:** After reviewing the available literature, the next step is to develop ideas for conducting the research. In this step, researchers discuss the research problem with individuals who have adequate knowledge and experience in the area of knowledge. This discussion provides valuable suggestions concerning the research problem which helps in better understanding of problem. Also a number of important information is gathered through discussion, which helps in designing new ideas.

- 5) **Rephrasing of Research Problem:** In this step, the research problem is rephrased to form a specific proposition. As soon as the nature and origin of research problem is completely understood, the factors underlying the research problem is clearly defined, the available literature is analysed, and problem is discussed with the experts, the research problem is rephrased into logical or effective terms. Rephrasing enables the researcher to convert the research problem in specific terms which makes the research operationally practical. Research hypothesis may also be generated with the help of this rephrased research problem.

- 6) **Redefining the Research Problem:** Usually, after completing all the above steps the researcher redefines the research problem. The process of redefining the research problem is kept feasible and logical in order to maintain the flow of the research. This, step helps in formulating hypothesis accurately.

### 1.3.2.3. Objectives of Research

After defining the research problem, the next stage is to set the research objectives. Research objectives defined in clear terms help the researchers to proceed in certain direction. It prevents the researchers from further distractions and enables them an issue to focus on.

Research objectives construct the foundation for the research work. It is an essential ingredient of a research, as the entire effort and resources are applied to accomplish the research objectives. It helps the researchers to provide answers for the specific research questions.

Thus, determining research objectives is the critical part of the research process as it supports the completion of the whole research. While defining research objectives the researchers should always remember that these should be comprehensive as well as attainable.

The objectives of the research are helpful in clarifying the type and level of information required for completing the research. This information requirement is further described by the nature of the research as well as by design used in the research. These objectives are the focal point of the any research as answering questions related to these objectives, would result in the completion of the procedure.

### Factors Considered for Determining Research Objectives

Following factors should be determined for effective research objectives:

- 1) **Research Question:** Research question focuses on certain aspects of the research which provide useful information for conducting research. These aspects together define the research objective. For example, what government policies can be designed for improved employment? In this question every aspect is clear and specific which cannot be present in broad objective.
- 2) **Research Hypotheses:** Research hypotheses are the assumptions made and tested to analyse the variables and interrelations among them. These



statements are more focused than the research objectives. These hypotheses help the researchers to answer the research questions by examining empirically. Hence, research objectives should be stated in a way that can allow the researchers to formulate hypotheses clearly.

- 3) **Boundary of the Study:** The next important factor which should be finalised before determining objectives is to decide boundary of the study. In best case, researchers should consider the entire target population, as the boundary. But, this can prove to be infeasible and unmanageable. Hence, a proper definition and selection of boundary is very essential for defining the objective clearly.

#### 1.3.2.4. Literature Survey

The next step in the process of research is to analyse the available literature related to the research area. Available literatures allow the researcher to analyse the previously researches that have been published by different researchers in that field. The prime purpose of literature survey is to provide the researchers an idea about the area of knowledge and highlights the issues that needs be researched. Hence, surveying the literature is one of the most important steps in the research process.

Often literature survey provides data accumulated during a certain time-period. It generally has a specific organisational pattern, but it can also contain just the summaries of sources. While summary includes reviewing important information from different sources, the synthesis or combination of information is the reshuffling or rearranging of information. This helps the researchers in developing new interpretations from the old information.

This literature review may also be useful in developing intellectual knowledge of the research area along with significant arguments or discussions. Literature survey guides the researchers to evaluate the sources, and recommends them to collect data from relevant literatures only.

#### Purpose of Literature Survey

Literatures are surveyed to accomplish following purposes:

- 1) **To Provide Credibility:** The main purpose of literature review is to provide credibility to the research. Citing the references of related research studies help the researchers to prove that the research conclusions are reliable and valid. It enhances the credibility of the research study and the researcher as well.

- 2) **To Provide Knowledge about the Topic:** It helps in understanding the research problem and provides methodology used by the earlier researchers in similar research studies. It also explores the critical aspects of the study that allows the researcher to conduct research effectively.
- 3) **To Provide Opportunity for Constructive Criticism of Previous Research:** Literature survey facilitates the overview of previous related researches which help the researchers to understand the way the earlier researches have been conducted. It outlines the gaps in existing theories that help the researchers to understand and bridge them.
- 4) **To Show that Research is adding to Existing Body of Knowledge:** Literature review highlights the new knowledge that is going to be added in exiting pool of theories and concepts.
- 5) **To Help Avoid Repetition:** It ensures that the same research work is not repeated again. By analysing previous researches helps the researchers to understand the issues that have already been addressed, which enables the researchers to carry-out new and unique research works.

#### 1.3.2.5. Formulating the Research Hypothesis

When literature is thoroughly surveyed, the researchers move to the next step, i.e., formulation of hypothesis. To formulate research hypothesis, the prime task is to identify the potential variables of the study, after which relationship statement is formulated on the basis of an expected relation between the variables. This statement is more focused compared to the research objectives.

For example, in case of research problem related to effect of violent content of TV on behaviour of children, the hypothesis may be formed as "Violent content of the TV is responsible for the aggressive behaviour of the children".

Here violent content of the TV is independent variable and behaviour of children is dependent variable, and a positive relationship is predicted by the researcher.

The dependent and independent variables along with target population are also described with the help of hypothesis to make the research subject clearer. The collected data is analysed and tested to prove the hypothesis and establish a relation between variables.



## Characteristics of a Good Hypothesis

A good research hypothesis should have following characteristics:

- 1) **Clarity:** Hypothesis should be clear enough to direct the research in right direction. An ambiguous hypothesis would interrupt the flow of research and cause the loss of time, money and effort. A vague hypothesis would lead to unreliability of data analysis.
- 2) **Testable:** The researcher should be careful while developing the hypothesis as it is essential for the hypothesis to be testable. If the hypothesis is not testable then it cannot be analysed. A testable hypothesis is one from which inferences can be made, and these can be accepted or rejected after testing.
- 3) **Relationship:** A hypothesis must contain a relation between dependent and independent variable. It enables the researchers to draw conclusions.
- 4) **Specific Scope:** Hypothesis should have a specific and limited scope. The specific hypotheses are more testable. Hence, researchers should pay due attention while formulating hypothesis.
- 5) **Simple:** A hypothesis should be stated in simple terms so that it is easy to understand and easily testable. But the quality and significance should not be compromised for making the hypothesis a simple one.
- 6) **Consistent:** Hypothesis should be consistent to the established knowledge. It should not be irrelevant and distracted. A good hypothesis correlates with the already available facts and information.
- 7) **Explainable:** The hypothesis statement should be developed in such a manner that the facts and relationship described can be explained. Hence, the hypothesis should be related to the research problem being studied and should be able to explain the relationship between the variables. The hypothesis should be analysed with the help of empirical evidences.
- 8) **Requires Less Time:** While formulating hypothesis it is necessary that the hypothesis takes less time to test and analyse. The more complex the hypothesis, more time it would take to test and collect data.
- 9) **Logical:** In case of two or more hypothesis in a research problem, they should not be contradicting to each other.

## 1.3.2.6. Developing the Research Proposals

When a dissertation (or thesis) is represented in a short and precise form, it is known as a research proposal. For conducting a particular research, a researcher needs to be approved from an approving or sponsoring authority. Alongwith permissions to conduct the research, such authorities also provide financial support to the researchers. A researcher gains such permissions by submitting his research proposal. Preparing a research proposal (or synopsis) of any thesis is considered as the most difficult task to perform.

Research proposal is the blueprint of research study, which depicts the main aspects of the research in the form of a research design. A researcher deliberately prepares a research proposal so as to represent the aims and objectives of his research study to the authorities. Its main objective is to prove the committee that the researcher has performed a useful research study, which will significantly update present banks of educational knowledge.

Research proposal is a written description of the fundamental plan for any research project. It explains the reason that why specific issues have to be resolved and what suitable research design should be chosen in order to examine them. It explains the why, what, where, when and at what cost is the researcher going to undertake a research project. When a researcher performs a qualitative research, the research proposal is of flexible nature as the techniques involved in the research tend to develop and evolve. On the other hand, when a researcher performs a quantitative research study, the research proposal is comparatively inflexible as the data used for conducting the research is usually fixed and permanent.

## Structure/Elements of a Research Proposal

The key elements of research proposal are as follows:

- 1) **Problem Statement:** Problem statement is the first step towards preparing a research proposal, which describes the considered problem or issue. It consists of four main factors, which are as follows:
  - i) Involved company, divisions and principals;
  - ii) Involved symptoms;
  - iii) Possible reasons of involved symptoms;
  - iv) Anticipated and expected usages of the provided research information.

Under a research proposal, it is essential to provide the problem statement as it confirms the mutual agreement of the manager and the researcher upon the research problem.



- 2) **Research Objective:** Research objective is another important element of research proposal which states the main purpose of conducting the research study.

These purposes may involve testing a hypothesis, exploring answers to a problem, resolving issues, etc. The research objective represents the achievable goals of the research study and should arise naturally from the problem statement.

- 3) **Research Design:** It represents the technical half of the research proposal and signifies the steps or tasks involved in the research action. These tasks include size determination, data sources, sample selection, instrument design, reasons for rejecting alternate approaches, data collection methods and procedures, etc.
- 4) **Work Schedule:** Work schedule includes the time frame of all key processes involved in the research study. It is the time table of research processes such as literature review, pilot study, preparation of questionnaire, data collection, data generation, report preparation, etc. In some cases, alongwith the important tasks, work schedule also explains the researcher's credentials like budget, project management details, executive summary, etc.
- 5) **Researchers' Credentials:** The credentials of the researcher include his academic qualification, positions held, experiences, fields of expertise, published papers, consultations offered, memberships, medals/ honours awarded, etc. This indicates the competency level and technical skills of the researcher (and team members, if research is conducted by a group) for successfully undertaking and carrying out the research study.
- 6) **Budget:** Budget is an important factor for conducting research study and is also a key element of research proposal (whether internal or external). This is because every research has a budget, which is the maximum estimated cost for conducting the research.
- 7) **Literature Review:** Literature review is an important element of research proposal and should focus upon recent research studies, organisational data, computerised databanks, etc. A quick and proper literature review in general research areas extracts the basic information about the research topic that shows the right path for conducting the research. Literature review also notifies the information gaps and

shortcomings of the current research. When a researcher performs literature review, he attaches bibliography at the end of the research report.

### 1.3.2.7. Research Design Formulation/ Selecting Research Design

Next step in the research process is developing the research design. Research design allows the researchers to answer to the research questions in an accurate, economical, and objective manner.

Any research design performs two major functions:

- 1) Preparing a structured plan outlining various methods and techniques required in conducting the research.
- 2) Making sure that these methods and techniques are suitable for the research. It also ensures that these techniques will help in finding objective, precise, and suitable answers to the research questions. According to Kerlinger, this function is called "control of variance".

With the help of research design, a researcher is able to decide the necessary tasks to perform at each step of the research. This plan helps in effective utilisation of time and resources. Therefore, research design can also be referred as the blueprint of the research.

Research design is prepared to regulate and control every step of the research, which is the most vital issue of any study. Hence, it is considered as one of the most crucial stages in the entire research process.

### 1.3.2.8. Sample Design

As soon as the design of research is selected, the next task is to select the sample design. Sample design sets a platform for effective data collection and analysis. A sample design is responsible for the effective selection of research samples. Selecting sample design affects many aspects related to the research work. Hence, selection of suitable sample design should be carefully performed.

Designing of sample includes many important decisions such as deciding the sample frames, selecting suitable sampling technique, determining sample size, etc. Sampling design should be performed in such a way that the quality of research is maintained in an economic way. Sample design permits the study of a representative part of the target population, which results in reduction of unnecessary utilisation of money, time, and effort. This representative part or sample provides useful information which represents the larger target population.



### 1.3.2.9. Planning and Collecting Data for Research

After finalising the sample in the previous step, the required data is collected from the sample of population. Actually this step is an intermediary stage between theoretical and practical aspects of a research. In the beginning of the research process, a basic idea about a research problem is developed with the help of available knowledge. After the research problem is formulated, data collection is performed systematically. Without having accurate data about the research problem, it is not possible to complete a study as it works as a source of information helpful in getting the solution. The methods used for data collection depend on the type and nature of the research. The few common methods are surveys, interviews, observation, case studies, etc.

Before collecting the data it is necessary for the researcher to select the research area, define the research problem/question, and select samples. Data collection is done prior to the phase of data analysis and reporting. The data collected is analysed and used for either supporting or replacing the philosophies presented by earlier related researches. Data collection plays a crucial role in combining the theories with their practical applications.

### 1.3.2.10. Execution of Project

It is the next step in the research process after the collection of data. In this step, the real execution of the research takes place. It is also known as the implementation stage of the research process. This step is responsible for the systematic execution of the research in reasonable time. The correctness and reliability of the collected data depends upon the efficiency and feasible execution of the research process. To ensure smooth execution of research project, structured questionnaires can be used, where the questions and answers should be machine-coded. Various types of interviews can also be selected for data collection, but the interviewers should be trained and skilled enough. In this step, the researcher ensures that the research is executed as per the pre-set standards. Research process should be executed in an ethical manner. There should be no restriction on publishing of collected data. Other important aspects of the execution step are interpreting data accurately, and designing suitable formats for presenting the findings to particular audiences.

### 1.3.2.11. Data Analysis

After collecting data and successfully executing the fieldwork, the collected data are analysed. Data analysis is very essential to draw out the required

information from the raw data by making it organised and meaningful. Organising and analysing the data facilitates the researchers to understand the feature of sample. There are many techniques available to analyse the data. Sometimes during data analysis, researchers manipulate the data to get desired conclusions or outcomes. Therefore, it is very important for the researchers to pay attention to the data analysis process and the procedure through which outcomes are calculated.

Though data collection provides a lot of raw data, but these data are unorganised in nature. By analysing the data, data are organised in such a manner that it provides meaningful answers. For example, responses of a survey may be compared to know the number of individuals attending the survey as well as the approaches used by respondents to answer certain questions. Analysed data can be visualised with the help of graphs, charts, tables, etc. the graphical representation of data allows the researchers to rearrange and reorganise the data so as to minimise the effort put by the readers in searching the significant information. By showing the analysed data graphically, presentation becomes easy to understand.

### 1.3.2.12. Testing of Hypothesis

The next step after analysing the data is to test the previously formulated hypothesis. In this step, researchers perform certain statistical calculations to accept or reject the hypothesis. Based on the collected data, a suitable hypothesis about a probability distribution is chosen. This stage comes under the purview of statistics as the analysis is performed with the help of statistical techniques.

The prime motive behind testing a hypothesis is to check its accuracy. By testing a hypothesis researchers can check whether it represents the population at large or not, as the hypotheses are formulated on the basis of sample. A hypothesis is said to be accurate if it shows the true differences and does not contain random sampling error. The true difference is measured by testing the hypothesis.

### 1.3.2.13. Generalisation and Interpretation of Data

As the collected data is analysed through different statistical techniques and methods, the final results should be given value and meaning. The meaning and valuation of the results depend upon the process of interpreting results. On the basis of interpretations, various conclusions and generalisations are made.



Researchers can generalise the research results if they conduct the testing a number of times, and the outcomes are found similar every time. But, if there is no hypothesis, then the outcomes are explained on the basis of some theories or concepts. This explanation often triggers new issues for further researches.

**Generalisation** means applying the findings and conclusions of the research to the actual world. Outcomes from the research can be interpreted in two possible ways:

- 1) Drawing inference from the outcomes to develop theories or concepts. In this case, the results are concluded on the basis of a general statement.
- 2) Examining the data empirically and applying it to the larger population. In this case, the general statement is applied to the bigger area.

The process for developing the general statement is same for both the cases, but the nature of statement differs according to the nature of research problem, i.e., theoretical or empirical.

After analysing the data, researchers try to interpret the findings on the basis of theoretical and practical objectives of research.

**Data interpretation** is a step of research process where the measurements and statistical observations of the study are scrutinised to develop evidences for responding to a research problem.

#### 1.3.2.14. Preparation of Research Report

The final step of any research process is the preparation of research report. After collecting, analysing, and interpreting the data, the next task is to compile all the steps and present those phases in a written-form. It includes detailed description of research design, sample design, tools for data collection, and statistical techniques for the analysis of the collected data. Since, research report is very useful for current as well as further researchers, hence proper care must be taken while preparing the report.

Report writing needs skills and knowledge so that appropriate data can be appropriately represented. The report writing skills may be developed through practice, but a researcher should always follow the basic principles of report writing. Some of the important skills needed are clarity, coherence, objectivity, etc. a research report is efficient if it is able to communicate and present the research data. Usually, management as well as the audience is not interested in the details of statistical calculations and

its procedures, hence, the researcher should try not to overload the report with such specifics. Therefore, much care is required for the effective preparation of research report to make it useful for the management and audience.

## 1.4. ETHICS IN RESEARCH

### 1.4.1. Introduction

Research ethics deals with the responsibility of the researchers to show honesty and respect to the different persons who are going to be influenced by their research studies or their reports of the studies. Normally, researchers are expected to follow a set of ethical guidelines that guide them to take right decisions and take appropriate actions.

Ethics can be seen as guiding norms or behavioural standards that direct ethical decisions related to our behaviour and our relationships with others. The ultimate objective of ethics in research is to ensure that no person is harmed or adversely affected due to research activities or due to research results.

Normally, all these objectives are accomplished. But the unethical practices are ever present and mainly relates to the violation of non-disclosure agreements, breaking participant confidentiality, avoiding legal liability, misrepresenting results, deceiving people, invoicing irregularities, etc.

The acceptance of ethics in the form of an issue by organisations was highlighted by one of the surveys, in which 80 per cent of the organisations acknowledged the devotion to ethical code of conduct. There is no particular approach to ethics.

It is quite difficult to ask researchers to observe every piece of formulated ethical guidelines because of the obvious reason of research constraint. Ethical research simply demands honesty from researcher, project manager, and research sponsor.

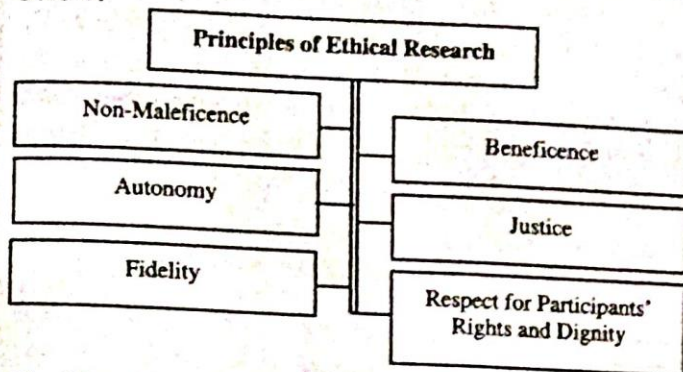
This makes ethics an important area of business research. Ethics is helpful in determining whether a particular action is right or wrong. As such, it is obligatory on the part of researchers that they strictly follow ethical practices. In this respect, volunteer involvement is the key to ethical research.

It is a matter of fact that research cannot continue without public support from which data has been drawn. As such, the requirement of ethics is very much needed.



### 1.4.2. Principles of Ethical Research

The different principles of research ethics are stated below:



- 1) **Non-Maleficence/Do No Harm:** One of the important principles of ethical research is that people or animals part of the research process should not be harmed.

It is very important to be aware of different adverse events that may happen during the research work as these events may be possibly intentional or unintentional, and therefore, cause harm. If there is any chance of happening unpleasant events due to research activities, it is required to have securest scientific surroundings for the researchers.

- 2) **Beneficence:** Besides being harmless, the research must also be beneficial for the society. Sometimes this criterion may put the researcher in tight spot because a thing may be beneficial for a group, but may not be beneficial for another group. The principle of beneficence is complexly related to the concept of competence.

Individuals trained by professional institutions and recognised colleges are expected to be more competent than others. This implies that qualification or competence of researcher is of utmost importance. The principle of beneficence expects the researcher to conduct social and behavioural research that is effective and important in promoting the cause of social welfare.

- 3) **Autonomy:** The principle of autonomy states that it is the individual's choice whether or not to be part of a research process. No one can be forced to be part of the research, either overtly or covertly.

The underlying theme of the principle of autonomy connotes the right of an individual to voluntarily participate in the research process. During earlier periods, in order to conduct the medical and psychological research, prisoners were used without their consent.

The nature of the research project in which the participants have to participate must be informed to them in order to facilitate an informed decision related to their participation.

Therefore, the principle of informed consent becomes quite vital. Informed consent requires that participants are duly explained about the nature of the project and the risks, benefits and outcomes expected from the project, before they agree to participate in it.

Presently, participants are made aware of the nature of the research they will be part of and what procedure they will be required to follow.

This allows them to make informed choices keeping in mind their health and socio-economic profile. Thus, research ethics requires delivery of full and clear information about the project to the participants.

However, the principle of autonomy may distort the results of study. This is because people who participated in research may differ from those who do not participate (volunteer effect).

- 4) **Justice:** The assumption that all the individuals are equal lays the foundation for the principle of justice.

Therefore, no discrimination should prevail among different individuals on the basis of their race, gender, disability status, income level or any other trait which can be utilised in the research.

- 5) **Fidelity:** Faithfulness and adherence to the agreements and promises between the participants and the researchers are depicted in the principle of fidelity.

As such, any act of deception or violation of confidentiality will be treated as unethical practice infringing the rights of the participant.

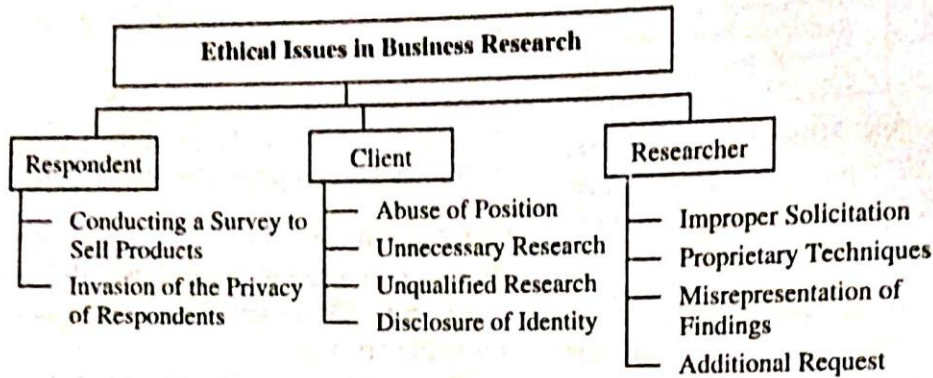
- 6) **Respect for Participants' Rights and Dignity:** All the participants have human and legal rights. These rights should not be violated by any research project during the recruitment of the participants.

The maintenance of dignity and self-respect of the participants is of utmost importance. At times, researchers may fail to realise that they are violating client's rights. Such instances should be reported and minimised.



### 1.4.3. Ethical Issues in Business Research

Ethics are moral principles or values generally governing the conduct of an individual or group. Ethical questions range from practical, narrowly defined issues, such as a researcher's obligation to be honest with its customers, to broader social and philosophical questions, such as a company's responsibility to preserve the environment and protect employee rights. Unethical practices by some suppliers include abusing respondents, selling unnecessary research, and violating client include requesting bids when a supplier has been predetermined, requesting bids gain to free advice methodology, marketing false promises, and issuing unauthorised requests for proposals. Marketing research field services have used professional respondents, which is unethical.



In market research there are following stakeholders, and the ethical issues relating to these stakeholders are as follows:

- 1) **Respondent:** These are one of the major stakeholders because without their involvement the research is not possible. Therefore, market researchers should protect the respondents from unethical research practices.

The following will show the respondent-researcher relationship.

- i) **Conducting a Survey to Sell Products:** Respondents have been deliberately deceived by researchers. Some unethical marketers have been known to tell respondents that they were conducting a survey which actually lead-in to a sales presentation, or to get information that could be used for sales leads or mailing lists. This is called sugging in trade language. It is illegal as well as unethical. These practices violate the respondents trust and erode their willingness to support surveys.
- ii) **Invasion of the Privacy of Respondents:** The privacy of the respondent is a legal right and hence it must be protected. It means that respondents, who are promised with the anonymity or confidentiality, should be given the same. Respondents should also not be contacted at times which are inconvenient for them. Another concern is also the buying and selling of mailing lists through deceptive means also forms a part of these unethical practices.

- 2) **Client:** The complexity that is surrounding the research-client relationship deserves special attention from an ethical standpoint.

- i) **Abuse of Position:** Since the researcher possesses the research expertise, the researcher has a responsibility not to take unfair advantage of his position.

The researcher should make every effort to follow correct research procedures, adopt a suitable approach and research design. In short, the researcher must conduct quality research while respecting the clients' resources of time and money.

- ii) **Unnecessary Research:** The researcher has the ethical duty not to perform unnecessary research. For example, primary research is not required if secondary data provide the necessary information.
- iii) **Unqualified Research:** The researcher sometimes may not possess technical expertise that is required for the research. Thus, it is his duty to let the client know these limitations and refuse the project.
- iv) **Disclosure of Identity:** The client has the right to expect that its identity will be protected before, during, and after the completion of the project. The researcher is ethically bound not to reveal the client's identity to competitors, respondents, etc., without the consent of the client involved.

- 3) **Researcher:** The researcher or the research firm has the right to be treated ethically as well.



Ethical treatment by clients involves several issues.

- i) **Improper Solicitation:** When a research firm submits a proposal to a prospective client, it should be confident that the client is seriously considering employing it to conduct the research projects. The client should not make an attempt to misuse the first proposal by turning it over to another firm for execution. The research proposal is the property of the research firm.
- ii) **Proprietary Techniques:** The researcher has the right to expect that the proprietary techniques will not be revealed by the client to other research firms. The client should also refrain from using these techniques in future without prior permission by the researcher who has developed the technique.
- iii) **Misrepresentation of Findings:** The client should not distort the research findings to their own benefit at the expense of the researcher's reputation. The client should reveal the truth and nothing else.
- iv) **Additional Request:** The client assigning the project to a particular researcher may request him to provide some additional information at the original project cost. This extra information involves additional expenditure of the researcher.

#### 1.4.4. Ethical Behaviour of Research

Ethical issues have acquired added importance in business research in the present era. There are a variety of ethical issues that business research has to face.

Ethics can be seen as a field of inquiry that portrays the kind of behaviours most appropriate for given conditions, as per the code of standards laid down by the society.

It is philosophy – deontology or teleology which governs the conduct of a person in an ethically sensitive situation. Organisations have laid down comprehensive ethical codes for both buyers and sellers of research in the research industry.

There are various ways in which the society may dictate acceptable and unacceptable behaviours. In order to deal with certain practices, which are not illegal, but are considered wrong in the context of industrial behaviour, necessary code of conduct are formulated by trade associations or professional organisations.

This is quite evident in the marketing particularly in the case of marketing research. Different types of codes of ethics are formulated by the Qualitative Research Consultants Association ([www.qrca.org](http://www.qrca.org)), the Council of American Survey Research organisations ([www.casro.org](http://www.casro.org)), the Marketing Research Association ([www.mra-net.org](http://www.mra-net.org)).

The American Marketing Association ([www.marketingpower.com](http://www.marketingpower.com)), and the Canadian-based Professional Market Research Society ([www.pmr-s-aprm.com](http://www.pmr-s-aprm.com)). Throughout the world, greater attempts are made by the marketing research organisations to attain the higher ethical conduct among the marketing research practitioners.

#### Codes of Ethics

Many organisations formulate ethical codes. The codes of these organisations, more or less, concern following areas:

- 1) Prohibition of selling (Sugging) and fund-raising (Frugging) under the impression of a research;
- 2) Ensuring fair treatment of clients and suppliers; and
- 3) Ensuring research integrity by checking misrepresentation of facts and deletion of relevant data.

##### 1.4.4.1. Sugging and Frugging

Sugging can be defined as "selling under the cover of a survey". Generally, sugging takes place when during the research study, the researcher obtains the cooperation of the respondent and with the help of that the researcher tries to sell goods or services to the respondent. There are many customers who are willing to share their attitude and opinions regarding some specific products or services when legitimate request is made to them. This goodwill created is utilised by Suggers (and Fruggers) by misleading the trusting customers. But after some time, the customers come to know that their approval of responding some specific questions has led them to face a sales presentation.

There is no such intention in sugging and frugging to collect and analyse data for definite purpose. Here, the only intention is to sell or make money through a fake survey. Consequently, it becomes difficult for the researchers to find true and cooperative respondents.

Frugging is quite similar to sugging and signifies "fund-raising" under the impression of conducting a survey. As no direct sale of a product or service is involved in frugging, it is not illegal in nature. However, it is



#### **1.4.4.2. Research Integrity**

There can be instances in which research is not objectively conducted.

Information is kept secret, falsified or changed to protect the interest of certain individuals. Vital marketing decisions are made with the help of marketing research information. These decisions have a tremendous impact on company's strategy, jobs, organisation, budgets, etc. When there are so many things at stake, it is obvious that the researcher may lose objectivity in the research process. The loss of objectivity or integrity in research is generally reflected in actions like information concealment, data falsification, modification of research results, or misinterpretation of research findings in a way that makes them consistent with previous findings.

The encouragement to violation of research integrity may come from either the buyer or the supplier. The seller of research may withhold the information or change the material content of the report in order to present report according to wishes of the buyer. There is no requirement of separating the research integrity breach with the individuals who manage the research project. It has been found that interviewers conducting interviews may adopt short-cut ways in order to complete their survey in time. There is evidence to the fact that this is a bigger problem than was earlier thought. As such maintenance of research integrity is of utmost importance in research industry.



### 1.4.5. Subjectivity in Research

The fact that the outcomes of the research are dependent on the researcher indicates the subjectivity in research.

There can be variations in the conclusions of similar interview by different researchers. Whereas, when commitment score is accompanied by survey respondent, it lends objectivity to research. This is because the number obtained through commitment score will remain the same irrespective of the researcher.

Everything is governed by the subjectivity which includes research topic, hypothesis formulation, methodology selection, and data interpretation. When it comes to qualitative methodology, the researcher is expected to showcase the values or objectivity he has brought to his research and the impact of these on the research project. Other researchers are motivated to express their sentiments about the values used by the researcher.



How does the subjectivity affect the objectivity is one of the most important issues. Two alternative pieces of explanation have been given. Many qualitative researchers try to balance subjectivity and objectivity. Subjectivity is believed to be removed by the objectivity as the latter makes the researcher a passive recorder of information, not allowed to interfere. On the other hand, the chances of objectively knowing a social psychological world are negated by the subjectivity of the researcher.

The world under study is defined by the values of the investigator. No one will have any discussion on the world. In fact, the value will be the one which will govern the things being observed and discussed. There can be a world beyond these values and it is quite tough to know it as it is our value which will form the insight of this world.

In qualitative methodology, subjectivism is generally regarded as an essential ingredient for research. However, this is not true. Like quantitative methodology, qualitative methodology has also objective dimension. Objectivism states that the subjectivity of researcher can make him/her see and portray the world as it truly exists. There is no denying that subjectivity can prejudice researcher's understanding and thereby prevent him/her from understanding psychological reality of the world. But, this is not necessary. In essence, recognition of subjectivity as a factor in understanding the reality, helps the researcher in determining whether subjectivity promotes or hampers his/her understanding.

#### 1.4.6. Objectivity in Research

The goal of scientific investigation is objectivity in findings. Objectivity can be regarded as a state of mind, wherein personal prejudices, likings and partialities do not influence the collection, analysis and interpretation of data. As such, scientific investigations should be impartial towards variables like race, religion, colour, gender or personal differences.

Objectivity presumes a state of reality that is independent and can be understood. However, the idea of objectivity may be undecided, if the reality sought is not independent or cannot be understood or merely is the creation of the researcher.

In order to understand people's psychology objectively, it is necessary that the researcher must organise his subjectivity first. Concepts hypothetical in nature need to be distinctly defined so that they

can be recognised unmistakably. The correct methodology need to be applied in order to gather full and meaningful evidence that can be effectively utilised in testing the power of hypothetical concepts. It is necessary that the evidence is evaluated through systematic processes and then be compared to hypothetical concepts.

This is how a researcher may accept to believe that the concepts adopted by him represent the real nature of the psychology of individuals. A number of variables affect the objectivity of the researcher like insufficient behavioural data, vague hypothetical concepts and illogical analyses. This leads to imposition of theoretical constructs on data.

#### Ways to Deal with Objectivity Issues in Research

Following are some of the ways for dealing with objectivity issues in research:

- 1) **Evaluate Sources of Bias:** Reliable and credible resources will be required by the researchers for any research paper. In order to ensure objective writing, it is very important to examine each source carefully. Carefully reading publications and scholarly articles is one of the best ways for avoiding bias. Secondly, one can look for websites having domain extensions such as ".edu.", ".gov.", or ".org.". It is not necessary that every website, book or journal contains reliable information. In fact, there can be some hidden agendas in some sources. This is the reason why each source should be evaluated first.
- 2) **Balance Position with the Opposing View(s):** A good research paper is characterised by a balance which it seeks to maintain in every argument or side. Objective writing refers to combining both the sides of the arguments and describing thoroughly those different standpoints in the researcher paper. The researcher may negate contrasting opinions with the help of documentary evidence that may show that an unbiased argument has greater strength. Apart from this, reliable details and evidences can be incorporated which support the assertions and thesis report.
- 3) **Use Objective Language:** Presenting the information fairly and reliably for helping others to arrive at a logical conclusion reflects the objective writing in report. Subjective languages should be avoided in order to improve objectivity and integrity of the words. For example, any language which has the impression of value judgement such as awesome, sarcastically or wonderful, should not be used. Overly sensitive



phrasing 'should not be included alongwith overstating adverbs or adjectives. **For example,** words such as "really" or "very" should be avoided. At the same time, any language that portrays a particular section of people in negative light should be re-written.

- 4) **Avoid First-person and Second-person Pronouns:** A researcher can implement the objective writing by not using first person and second person pronouns when he or she is favouring one side of an issue in comparison to another. If there are some ideas, thoughts or conclusions that are not cited, then they will be treated as the own words of the researcher. One should use third person pronouns in the report if possible if the researcher is not conducting a primary research and detailing it. Else some kind of biased opinion can be reflected by the use of personal comments, like "I think" or "my opinion is" in place of logical argument having some supportive arguments or proofs.
- 5) **Express Thoughts Explicitly:** By the expression of thoughts openly, it is possible to accomplish objective writing. Stronger the arguments and supporting proofs, greater will be the preciseness of the researcher with the information. **For example,** rather than writing "most of the population", one can write "90% of the population". By having precise writing, the objectivity and credibility can be improved.