

What is Research?

Etymology

- The word research is derived from the Middle French "recherche", which means "to go about seeking", the term itself being derived from the Old French term "recherchier" a compound word from "re-" + "cerchier", or "sercher", meaning 'search'. [3] The earliest recorded use of the term was in 1577. [3]
- 1570s, "act of searching closely," from French recherche (1530s, Modern French recherche), back-formation from Old French rechercher (see research (v.)). Meaning "scientific inquiry" is first attested 1630s. Phrase research and development is recorded from 1923.

Definitions

One definition of research is used by the **OECD**, :

- ❖ "Any creative systematic activity undertaken in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this knowledge to devise new applications." [4]

Another definition of research is given by **John W. Creswell**, who states that :

- ❖ "research is a process of steps used to collect and analyze information to increase our understanding of a topic or issue". It consists of three steps: pose a question, collect data to answer the question, and present an answer to the question. [5]
- ❖ **The Merriam-Webster Online Dictionary** defines research in more detail as: "studious inquiry or examination; especially : investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws" [3]
- ❖ "The systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions."
- ❖ Research is "creative and systematic work undertaken to increase the stock of knowledge". [1] It involves the collection, organization, and analysis of information to increase understanding of a topic or issue. A research project may be an expansion on past work in the field. Research projects can be used to develop further knowledge on a topic, or for education. To test the validity of instruments, procedures, or experiments, research may replicate elements of prior projects or the project as a whole.
- ❖ "Research is a process of systematic inquiry that entails collection of data; documentation of critical information; and analysis and interpretation of that data/information, in accordance

with suitable methodologies set by specific professional fields and academic disciplines."

- ❖ "Research is the collection and evaluation of information about a particular subject."
- ❖ According to the American sociologist **Earl Robert Babbie**, "Research is a systematic inquiry to describe, explain, predict, and control the observed phenomenon. Research involves inductive and deductive methods."

Inductive research methods are used to analyze an observed event. **Deductive** methods are used to verify the observed event. Inductive approaches are associated with qualitative research and deductive methods are more commonly associated with quantitative research.

- ❖ Research is defined as the creation of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies and understandings. This could include synthesis and analysis of previous research to the extent that it leads to new and creative outcomes.

This definition of research is consistent with a broad notion of research and experimental development (R&D) as comprising of creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of humanity, culture and society, and the use of this stock of knowledge to devise new applications

This definition of research encompasses pure and strategic basic research, applied research and experimental development. Applied research is original investigation undertaken to acquire new knowledge but directed towards a specific, practical aim or objective (including a client-driven purpose).

The primary purposes of basic research (as opposed to applied research) are documentation, discovery, interpretation, and the research and development (R&D) of methods and systems for the advancement of human knowledge. Approaches to research depend on epistemologies, which vary considerably both within and between humanities and sciences. There are several forms of research: scientific, humanities, artistic, economic, social, business, marketing, practitioner research, life, technological, etc. The scientific study of research practices is known as meta-research.

What is research Methodology?

Some definitions of methodology include:

- "the analysis of the principles of methods, rules, and postulates employed by a discipline";[10]
- "the systematic study of methods that are, can be, or have been applied within a discipline";[10]
- Research methodology is the specific procedures or techniques used to identify, select, process, and analyze information about a topic. In a research paper, the methodology section allows the reader to critically evaluate a study's overall validity and reliability. The methodology section answers two main questions: How was the data collected or generated?

How was it analyzed?

- Research methodology simply refers to the practical “how” of any given piece of research. More specifically, it’s about how a researcher systematically designs a study to ensure valid and reliable results that address the research aims and objectives.

For example, how did the researcher go about deciding:

- i. What data to collect (and what data to ignore)
- ii. Who to collect it from (in research, this is called “sampling design”)
- iii. How to collect it (this is called “data collection methods”)
- iv. How to analyse it (this is called “data analysis methods”)

Importantly, a good methodology chapter in a dissertation or thesis explains not just what methodological choices were made, but also explains why they were made.

In other words, the methodology chapter should justify the design choices, by showing that the chosen methods and techniques are the best fit for the research aims and objectives, and will provide valid and reliable results. A good research methodology provides scientifically sound findings, whereas a poor methodology doesn’t.

Characteristics of research:

- ★ A systematic approach must be followed for accurate data. Rules and procedures are an integral part of the process that set the objective. Researchers need to practice ethics and a code of conduct while making observations or drawing conclusions.
- ★ Research is based on logical reasoning and involves both inductive and deductive methods.
- ★ The data or knowledge that is derived is in real time from actual observations in natural settings.
- ★ There is an in-depth analysis of all data collected so that there are no anomalies associated with it.
- ★ Research creates a path for generating new questions. Existing data helps create more opportunities for research.
- ★ Research is analytical in nature. It makes use of all the available data so that there is no ambiguity in inference.
- ★ Accuracy is one of the most important aspects of research. The information that is obtained should be accurate and true to its nature. For example, laboratories provide a controlled environment to collect data. Accuracy is measured in the instruments used, the calibrations of instruments or tools, and the final result of the experiment.

What are the types of research?

Following are the types of research methods:

1. Basic research:

A basic research definition is data collected to enhance knowledge. The main motivation is knowledge expansion. It is a non-commercial research that doesn't facilitate in creating or inventing anything. For example: an experiment to determine a simple fact.

2. Applied research:

Applied research focuses on analyzing and solving real-life problems. This type refers to the study that helps solve practical problems using scientific methods. Studies play an important role in solving issues that impact the overall well-being of humans. For example: finding a specific cure for a disease.

3. Problem oriented research:

As the name suggests, problem-oriented research is conducted to understand the exact nature of a problem to find out relevant solutions. The term "problem" refers to multiple choices or issues when analyzing a situation.

For example, revenue of a car company has decreased by 12% in the last year. The following could be the probable causes: there is no optimum production, poor quality of a product, no advertising, or economic conditions.

4. Problem solving research:

This type of research is conducted by companies to understand and resolve their own problems. The problem-solving method uses applied research to find solutions to the existing problems.

5. Qualitative research:

Qualitative research is a process that is about inquiry. It helps create in-depth understanding of problems or issues in their natural settings. This is a non-statistical method.

Qualitative research is heavily dependent on the experience of the researchers and the questions used to probe the sample. The sample size is usually restricted to 6-10 people. Open-ended questions are asked in a manner that encourages answers that lead to another question or group of questions. The purpose of asking open-ended questions is to gather as much information as possible from the sample.

The following are the methods used for qualitative research:

- i. One-to-one interview

- ii. Focus groups
- iii. Ethnographic research
- iv. Content/Text Analysis
- v. Case study research

Qualitative Research Methods:

What is qualitative research?

Qualitative research is defined as a market research method that focuses on obtaining data through open-ended and conversational communication.

This method is not only about “what” people think but also “why” they think so. For example, consider a convenience store looking to improve its patronage. A systematic observation concludes that the number of men visiting this store are more. One good method to determine why women were not visiting the store is to conduct an in-depth interview of potential customers in the category.

Gather research insights

For example, on successfully interviewing female customers, visiting the nearby stores and malls, and selecting them through random sampling, it was known that the store doesn't have enough items for women and so there were fewer women visiting the store, which was understood only by personally interacting with them and understanding why they didn't visit the store, because there were more male products than female ones.

Qualitative research is based on the disciplines of social sciences like psychology, sociology, and anthropology. Therefore, the qualitative research methods allow for in-depth and further probing and questioning of respondents based on their responses, where the interviewer/researcher also tries to understand their motivation and feelings. Understanding how your audience takes decisions can help derive conclusions in market research.

Types of qualitative research methods with examples

Qualitative research methods are designed in a manner that help reveal the behavior and perception of a target audience with reference to a particular topic. There are different types of qualitative research methods like an in-depth interview, focus groups, ethnographic research, content analysis, case study research that are usually used.

The results of qualitative methods are more descriptive and the inferences can be drawn quite easily from the data that is obtained.

Qualitative research methods originated in the social and behavioral sciences. Today our world is more complicated and it is difficult to understand what people think and perceive. Online qualitative research methods make it easier to understand that as it is more communicative and descriptive.

The following are the qualitative research methods that are frequently used. Also, read about qualitative research examples:

i) One-on-one interview:

Conducting in-depth interviews is one of the most common qualitative research methods. It is a personal interview that is carried out with one respondent at a time. This is purely a conversational method and invites opportunities to get details in depth from the respondent.

One of the advantages of this method provides a great opportunity to gather precise data about what people believe and what their motivations are. If the researcher is well experienced asking the right questions can help him/her collect meaningful data. If they should need more information the researchers should ask such follow up questions that will help them collect more information.

These interviews can be performed face-to-face or on phone and usually can last between half an hour to two hours or even more. When the in-depth interview is conducted face to face it gives a better opportunity to read the body language of the respondents and match the responses.

ii) Focus groups:

A focus group is also one of the commonly used qualitative research methods, used in data collection. A focus group usually includes a limited number of respondents (6-10) from within your target market.

The main aim of the focus group is to find answers to the “why” “what” and “how” questions. One advantage of focus groups is, you don’t necessarily need to interact with the group in person. Nowadays focus groups can be sent an online survey on various devices and responses can be collected at the click of a button.

Focus groups are an expensive method as compared to the other online qualitative research methods. Typically they are used to explain complex processes. This method is very useful when it comes to market research on new products and testing new concepts.

iii) Ethnographic research:

Ethnographic research is the most in-depth observational method that studies people in their naturally occurring environment.

This method requires the researchers to adapt to the target audiences’ environments which could be anywhere from an organization to a city or any remote location. Here geographical constraints can be an issue while collecting data.

This research design aims to understand the cultures, challenges, motivations, and settings that occur. Instead of relying on interviews and discussions, you experience the natural settings first hand.

This type of research method can last from a few days to a few years, as it involves in-depth

observation and collecting data on those grounds. It's a challenging and a time-consuming method and solely depends on the expertise of the researcher to be able to analyze, observe and infer the data.

iv) Case study research:

The case study method has evolved over the past few years and developed into a valuable qual research method. As the name suggests it is used for explaining an organization or an entity.

This type of research method is used within a number of areas like education, social sciences and similar. This method may look difficult to operate, however, it is one of the simplest ways of conducting research as it involves a deep dive and thorough understanding of the data collection methods and inferring the data.

v) Record keeping:

This method makes use of the already existing reliable documents and similar sources of information as the data source. This data can be used in new research. This is similar to going to a library. There one can go over books and other reference material to collect relevant data that can likely be used in the research.

vi) Process of observation:

Qualitative Observation is a process of research that uses subjective methodologies to gather systematic information or data. Since, the focus on qualitative observation is the research process of using subjective methodologies to gather information or data. Qualitative observation is primarily used to equate quality differences.

Qualitative observation deals with the 5 major sensory organs and their functioning – sight, smell, touch, taste, and hearing. This doesn't involve measurements or numbers but instead characteristics.

6. Quantitative research:

Qualitative research is a structured way of collecting data and analyzing it to draw conclusions. Unlike qualitative methods, this method uses a computational and statistical process to collect and analyze data. Quantitative data is all about numbers.

Quantitative research involves a larger population – more people means more data. With more data to analyze, you can obtain more accurate results. This method uses close-ended questions because the researchers are typically looking to gather statistical data.

Online surveys, questionnaires, and polls are preferable data collection tools used in quantitative research. There are various methods of deploying surveys or questionnaires.

Online surveys allow survey creators to reach large amounts of people or smaller focus groups for different types of research that meet different goals. Survey respondents can receive surveys on mobile phones, in emails, or can simply use the internet to access surveys.

Methods

▪ Primary quantitative research methods:

There are four different types of quantitative research methods:

Primary quantitative research is the most widely used method of conducting market research. The distinct feature of primary research is that the researcher focuses on collecting data directly rather than depending on data collected from previously done research. Primary quantitative research design can be broken down into three further distinctive tracks, as well as the process flow. They are:

A. Techniques and Types of Studies

There are multiple types of primary quantitative research. They can be distinguished into the four following distinctive methods, which are:

i) Survey Research:

Survey Research is the most fundamental tool for all quantitative outcome research methodologies and studies. Surveys used to ask questions to a sample of respondents, using various types such as online polls, online surveys, paper questionnaires, web-intercept surveys, etc. Every small and big organization intends to understand what their customers think about their products and services, how well are new features faring in the market and other such details.

By conducting survey research, an organization can ask multiple survey questions, collect data from a pool of customers, and analyze this collected data to produce numerical results. It is the first step towards collecting data for any research.

This type of research can be conducted with a specific target audience group and also can be conducted across multiple groups along with comparative analysis. A prerequisite for this type of research is that the sample of respondents must have randomly selected members. This way, a researcher can easily maintain the accuracy of the obtained results as a huge variety of respondents will be addressed using random selection. Traditionally, survey research was conducted face-to-face or via phone calls but with the progress made by online mediums such as email or social media, survey research has spread to online mediums as well.

Traditionally, survey research was conducted face-to-face or via phone calls but with the progress made by online mediums such as email or social media, survey research has spread to online mediums as well.

There are two types of surveys, either of which can be chosen based on the time in-hand and the kind of data required:

ii) Cross-sectional surveys:

Cross-sectional surveys are observational surveys conducted in situations where the researcher intends to collect data from a sample of the target population at a given point in time. Researchers

can evaluate various variables at a particular time. Data gathered using this type of survey is from people who depict similarity in all variables except the variables which are considered for research. Throughout the survey, this one variable will stay constant.

Cross-sectional surveys are popular with retail, SMEs, healthcare industries. Information is garnered without modifying any parameters in the variable ecosystem.

Using a cross-sectional survey research method, multiple samples can be analyzed and compared.

Multiple variables can be evaluated using this type of survey research.

The only disadvantage of cross-sectional surveys is that the cause-effect relationship of variables cannot be established as it usually evaluates variables at a particular time and not across a continuous time frame.

Longitudinal surveys: Longitudinal surveys are also observational surveys but, unlike cross-sectional surveys, longitudinal surveys are conducted across various time durations to observe a change in respondent behavior and thought-processes. This time can be days, months, years, or even decades. For instance, a researcher planning to analyze the change in buying habits of teenagers over 5 years will conduct longitudinal surveys.

In cross-sectional surveys, the same variables were evaluated at a given point in time, and in longitudinal surveys, different variables can be analyzed at different intervals of time.

Longitudinal surveys are extensively used in the field of medicine and applied sciences. Apart from these two fields, they are also used to observe a change in the market trend, analyze customer satisfaction, or gain feedback on products/services.

In situations where the sequence of events is highly essential, longitudinal surveys are used.

Researchers say that when there are research subjects that need to be thoroughly inspected before concluding, they rely on longitudinal surveys.

iii) Correlational research:

A comparison between two entities is invariable. Correlation research is conducted to establish a relationship between two closely-knit entities and how one impacts the other and what are the changes that are eventually observed. This research method is carried out to give value to naturally occurring relationships, and a minimum of two different groups are required to conduct this quantitative research method successfully. Without assuming various aspects, a relationship between two groups or entities must be established.

Researchers use this quantitative research design to correlate two or more variables using mathematical analysis methods. Patterns, relationships, and trends between variables are concluded as they exist in their original set up. The impact of one of these variables on the other is observed along with how it changes the relationship between the two variables. Researchers tend to manipulate one of the variables to attain the desired results.

Ideally, it is advised not to make conclusions merely based on correlational research. This is because it is not mandatory that if two variables are in sync that they are interrelated.

Example of Correlational Research Questions:

The relationship between stress and depression.

The equation between fame and money.

The relation between activities in a third-grade class and its students.

iv) Causal-comparative research:

This research method mainly depends on the factor of comparison. Also called quasi-experimental research, this quantitative research method is used by researchers to conclude the cause-effect equation between two or more variables, where one variable is dependent on the other independent variable. The independent variable is established but not manipulated, and its impact on the dependent variable is observed. These variables or groups must be formed as they exist in the natural set up. As the dependent and independent variables will always exist in a group, it is advised that the conclusions are carefully established by keeping all the factors in mind.

Causal-comparative research is not restricted to the statistical analysis of two variables but extends to analyzing how various variables or groups change under the influence of the same changes. This research is conducted irrespective of the type of relation that exists between two or more variables. Statistical analysis is used to distinctly present the outcome obtained using this quantitative research method.

Example of Causal-Comparative Research Questions:

- The impact of drugs on a teenager.
- The effect of good education on a freshman.
- The effect of substantial food provision in the villages of Africa.

V) Experimental research:

Also known as true experimentation, this research method is reliant on a theory. Experimental research, as the name suggests, is usually based on one or more theories. This theory has not been proven in the past and is merely a supposition. In experimental research, an analysis is done around proving or disproving the statement. This research method is used in natural sciences. Traditional research methods are more effective than modern techniques.

There can be multiple theories in experimental research. A theory is a statement that can be verified or refuted.

After establishing the statement, efforts are made to understand whether it is valid or invalid. This type of quantitative research method is mainly used in natural or social sciences as there are various

statements which need to be proved right or wrong.

Traditional research methods are more effective than modern techniques.

Systematic teaching schedules help children who find it hard to cope up with the course.

It is a boon to have responsible nursing staff for ailing parents.

▪ **Secondary quantitative research methods**

Secondary quantitative research or desk research is a research method that involves using already existing data or secondary data. Existing data is summarized and collated to increase the overall effectiveness of research.

This research method involves the collection of quantitative data from existing data sources like the internet, government resources, libraries, research reports, etc. Secondary quantitative research helps to validate the data that is collected from primary quantitative research as well as aid in strengthening or proving or disproving previously collected data.

Following are five popularly used **secondary quantitative research** methods:

i) Data available on the internet:

With the high penetration of internet and mobile devices, it has become increasingly easy to conduct quantitative research using the internet. Information about most research topics is available online, and this aids in boosting the validity of primary quantitative data as well as proving the relevance of previously collected data.

ii) Government and non-government sources:

Secondary quantitative research can also be conducted with the help of government and non-government sources that deal with market research reports. This data is highly reliable and in-depth and hence, can be used to increase the validity of quantitative research design.

iii) Public libraries:

Now a sparingly used method of conducting quantitative research, it is still a reliable source of information though. Public libraries have copies of important research that were conducted earlier. They are a storehouse of valuable information and documents from which information can be extracted.

iv) Educational institutions:

Educational institutions conduct in-depth research on multiple topics, and hence, the reports that they publish are an important source of validation in quantitative research.

V) Commercial information sources:

Local newspapers, journals, magazines, radio, and TV stations are a great source to obtain data for secondary quantitative research. These commercial information sources have in-depth, first-hand information on economic developments, political agenda, market research, demographic segmentation, and similar subjects.

What Is the Purpose of Research?

There are three purposes of research:

i) Exploratory:

As the name suggests, exploratory research is conducted to explore a group of questions. The answers and analytics may not offer a final conclusion to the perceived problem. It is conducted to handle new problem areas which haven't been explored before. This exploratory process lays the foundation for more conclusive research and data collection.

ii) Descriptive:

Descriptive research focuses on expanding knowledge on current issues through a process of data collection. Descriptive studies are used to describe the behavior of a sample population. In a descriptive study, only one variable is required to conduct the study. The three main purposes of descriptive research are describing, explaining, and validating the findings. For example, a study conducted to know if top-level management leaders in the 21st century possess the moral right to receive a huge sum of money from the company profit.

iii) Explanatory:

Explanatory research or causal research is conducted to understand the impact of certain changes in existing standard procedures. Conducting experiments is the most popular form of casual research. For example, a study conducted to understand the effect of rebranding on customer loyalty.

What is a research problem?

- ★ A research problem is a statement about an area of concern, a condition to be improved, a difficulty to be eliminated, or a troubling question that exists in scholarly literature, in theory, or in practice that points to the need for meaningful understanding and deliberate investigation. In some social science disciplines the research problem is typically posed in the form of a question. A research problem does not state how to do something, offer a vague or broad proposition, or present a value question.
- ★ A research problem is a specific issue, difficulty, contradiction, or gap in knowledge that you will aim to address in your research. You might look for practical problems aimed at contributing to change, or theoretical problems aimed at expanding knowledge.

It's a clear and definite statement or expression about your chosen area of concern, a difficulty to

eliminate, a condition to improve, or a troubling problem that exists in theory, literature, and practice. A research problem indicates a need for its meaningful investigation. It doesn't state how to do something and a researcher shouldn't present a value question or offer a broad research proposal.

The purpose of a problem statement is to:

- Introduce the reader to the importance of the topic being studied. The reader is oriented to the significance of the study and the research questions or hypotheses to follow.
- Places the problem into a particular context that defines the parameters of what is to be investigated.
- Provides the framework for reporting the results and indicates what is probably necessary to conduct the study and explain how the findings will present this information.

How to identify a research problem?

After choosing a specific topic for your academic paper, you need to state it as a clear research problem that identifies all the issues that you'll address. It's not always simple for students to formulate it. In some fields, they may end up spending a lot of time thinking, exploring, and studying before getting a clear idea of what research questions to answer.

Some topics are too broad to give a researchable issue. For example, if you decide to study certain social issues, like child poverty, remember that they don't provide any researchable question. These are very broad to address and take a lot of time and resources to become unfeasible so that your study will lack enough focus and depth.

So What!

In the social sciences, the research problem establishes the means by which you must answer the "So What?" question. The "So What?" question refers to a research problem surviving the relevancy test [the quality of a measurement procedure that provides repeatability and accuracy]. Note that answering the "So What" question requires a commitment on your part to not only show that you have researched the material, but that you have thought about its significance.

To survive the "So What" question, problem statements should possess the following attributes:

- Clarity and precision [a well-written statement does not make sweeping generalizations and irresponsible statements],
- Identification of what would be studied, while avoiding the use of value-laden words and terms,
- Identification of an overarching question and key factors or variables,
- Identification of key concepts and terms,
- Articulation of the study's boundaries or parameters,

- Some generalizability in regards to applicability and bringing results into general use,
- Conveyance of the study's importance, benefits, and justification [regardless of the type of research, it is important to address the “so what” question by demonstrating that the research is not trivial],

Does not have unnecessary jargon; and,

Conveyance of more than the mere gathering of descriptive data providing only a snapshot of the issue or phenomenon under investigation.

I. Types and Content

There are four general conceptualizations of a research problem in the social sciences:

Casual Research Problem -- this type of problem relates to the determination of right and wrong in questions of conduct or conscience by analyzing moral dilemmas through the application of general rules and the careful distinction of special cases.

Difference Research Problem -- typically asks the question, “Is there a difference between two or more groups or treatments?” This type of problem statement is used when the researcher compares or contrasts two or more phenomena.

Descriptive Research Problem -- typically asks the question, “what is...?” with the underlying purpose to describe a situation, state, or existence of a specific phenomenon.

Relational Research Problem -- suggests a relationship of some sort between two or more variables to be investigated. The underlying purpose is to investigate qualities/characteristics that are connected in some way.

A problem statement in the social sciences should contain:

- A lead-in that helps ensure the reader will maintain interest over the study
- A declaration of originality [e.g., mentioning a knowledge void, which would be supported by the literature review]
- An indication of the central focus of the study, and
- An explanation of the study's significance or the benefits to be derived from an investigating the problem.

II. Sources of Problems for Investigation:

Identifying a problem to study can be challenging, not because there is a lack of issues that could be investigated, but due to pursuing a goal of formulating a socially relevant and researchable problem statement that is unique and does not simply duplicate the work of others. To facilitate how you

might select a problem from which to build a research study, consider these three broad sources of inspiration:

Deductions from Theory:

This relates to deductions made from social philosophy or generalizations embodied in life in society that the researcher is familiar with. These deductions from human behavior are then fitted within an empirical frame of reference through research. From a theory, the research can formulate a research problem or hypothesis stating the expected findings in certain empirical situations. The research asks the question: "What relationship between variables will be observed if theory aptly summarizes the state of affairs?" One can then design and carry out a systematic investigation to assess whether empirical data confirm or reject the hypothesis and hence the theory.

Interdisciplinary Perspectives:

Identifying a problem that forms the basis for a research study can come from academic movements and scholarship originating in disciplines outside of your primary area of study. A review of pertinent literature should include examining research from related disciplines, which can expose you to new avenues of exploration and analysis. An interdisciplinary approach to selecting a research problem offers an opportunity to construct a more comprehensive understanding of a very complex issue than any single discipline might provide.

Interviewing Practitioners:

The identification of research problems about particular topics can arise from formal or informal discussions with practitioners who provide insight into new directions for future research and how to make research findings increasingly relevant to practice. Discussions with experts in the field, such as, teachers, social workers, health care providers, etc., offers the chance to identify practical, "real world" problems that may be understudied or ignored within academic circles. This approach also provides some practical knowledge which may help in the process of designing and conducting your study.

Personal Experience:

Your everyday experiences can give rise to worthwhile problems for investigation. Think critically about your own experiences and/or frustrations with an issue facing society, your community, or in your neighborhood. This can be derived, for example, from deliberate observations of certain relationships for which there is no clear explanation or witnessing an event that appears harmful to a person or group or that is out of the ordinary.

Relevant Literature:

The selection of a research problem can often be derived from an extensive and thorough review of pertinent research associated with your overall area of interest. This may reveal where gaps remain in our understanding of a topic. Research may be conducted to: 1) fill such gaps in knowledge; 2) evaluate if the methodologies employed in prior studies can be adapted to solve other problems; or,

3) determine if a similar study could be conducted in a different subject area or applied to different study sample [i.e., different groups of people]. Also, authors frequently conclude their studies by noting implications for further research; this can also be a valuable source of problems to investigate.

III. What Makes a Good Research Statement?

A good problem statement begins by introducing the broad area in which your research is centered and then gradually leads the reader to the more narrow questions you are posing. The statement need not be lengthy but a good research problem should incorporate the following features:

Compelling topic:

Simple curiosity is not a good enough reason to pursue a research study. The problem that you choose to explore must be important to you and to a larger community you share. The problem chosen must be one that motivates you to address it.

Supports multiple perspectives:

The problem must be phrased in a way that avoids dichotomies and instead supports the generation and exploration of multiple perspectives. A general rule of thumb is that a good research problem is one that would generate a variety of viewpoints from a composite audience made up of reasonable people.

Researchable:

It seems a bit obvious, but you don't want to find yourself in the midst of investigating a complex research project and realize that you don't have much to draw on for your research. Choose research problems that can be supported by the resources available to you. Not sure? Seek out help from a librarian!

NOTE: Do not confuse a research problem with a research topic. A topic is something to read and obtain information about whereas a problem is something to solve or framed as a question that must be answered.

IV. Mistakes to Avoid

Beware of circular reasoning. Don't state that the research problem as simply the absence of the thing you are suggesting. For example, if you propose, "The problem in this community is that it has no hospital."

This only leads to a research problem where:

- The need is for a hospital
- The objective is to create a hospital

- The method is to plan for building a hospital, and
- The evaluation is to measure if there is a hospital or not.

This is an example of a research problem that fails the "so what?" test because it does not reveal the relevance of why you are investigating the problem of having no hospital in the community [e.g., there's a hospital in the community ten miles away] and because the research problem does not elucidate the significance of why one should study the fact that no hospital exists in the community [e.g., that hospital in the community ten miles away has no emergency room].

What is a statement of a research problem?

An adequate statement of your research problem plays an important role in the success of your academic paper and study. It's possible to generate a number of researchable issues from the same subject because there are many issues that may arise out of it. Your study should pursue only one in detail.

Basic characteristics of research problem:

For your research problem to be effective, make sure that it has these basic characteristics:

- Reflecting on important issues or needs;
- Basing on factual evidence (it's non-hypothetical);
- Being manageable and relevant;
- Suggesting a testable and meaningful hypothesis (avoiding useless answers).

Formulating your research problem with ease:

Formulating your research problem enables you to make a purpose of your study clear to yourself and target readers. Focus your paper on providing relevant data to address it. A problem statement is an effective and essential tool to keep you on track with research and evaluate it. How can you formulate a powerful research problem? Consider 5 ways to formulate the research problem:

- Specify your research objectives;
- Review its context or environment;
- Explore its nature;
- Determine variable relationships;
- Anticipate the possible consequences of alternative approaches.

Specific research objectives:

A clear statement that defines all objectives can help you conduct and develop effective and

meaningful research. They should be manageable to bring you success. A few goals will help you keep your study relevant. This statement also helps professors evaluate the questions your research project answers and different methods that you use to address them.

Review the context of your research problem:

It's necessary to work hard to define and test all kinds of environmental variables to make your project successful. Why do you need to do that? This step can help you define if the important findings of your study will deliver enough data to be worth considering. Identify specific environmental variables that may potentially affect your research and start formulating effective methods to control all of them.

Why explore the nature of your research problem?

Research problems may range from simple to complex, and everything depends on a range of variables and their relationships. Some of them can be directly relevant to specific research questions, while others are completely unimportant for your project.

Why should you understand their nature? This knowledge enables you to develop effective solutions. To get a deep understanding of all dimensions, think about focus groups and other relevant details to provide the necessary insight into a particular question.

Determine variable relationships:

Scientific, social, and other studies often focus on creating a certain sequence of repeating behaviors over time. What does your project entail? Completing the entire process involves:

- Identifying the variables that affect possible solutions to your research problem;
- Deciding on the degree to which you can use and control all of them for study purposes;
- Determining functional relationships between existing variables;
- Choose the most critical variables for a solution of your research problem.

During the formulation stage, it's necessary to consider and generate as many potential approaches and variable relationships as you can.

What are the consequences of alternative approaches?

There are different consequences that each course of action or approach can bring, and that's why you need to anticipate them. Why communicate possible outcomes? It's a primary goal of any research process.

Structuring your research problem:

Look at scientific papers to notice their research questions because they are crucial for determining the quality of answers, methods, and findings. Quantitative designs use deductive reasoning to state

a testable hypothesis. Qualitative methods use inductive reasoning to make a strong statement of your future thesis.

Tips for defining your research problem:

You need to formulate it during the initial stage of a scientific process or study. For instance, literature reviews, research, and studies of previous experiments are likely to provide you with vague areas of interest. Look at the area that brings interesting results. Make sure that it has a potential for exploring. Think about reviewing a successful experiment and try to disagree with its results, methodology, and tests, define the entire process, and retest its hypothesis.

The importance of revising:

Get useful feedback from teachers, students, and other people to successfully revise your research question. A final decision is always up to you. Feel free to decide which advice is helpful. Take the following details into account to simplify this process:

- Agreement among readers that a research problem is very broad;
- Suggestions that you have a certain misunderstanding of the chosen matter;
- Advice for narrowing your subject down or thinking of a better way to focus it;
- Specifics about your misunderstanding;
- A consensus that your research question is very narrow and interesting ideas to make it more general;
- Comments about its clarity and phrasing.

After revising your initial research problem, its possible solutions, and above-mentioned details, you're ready to write a formal version.

Do you have a good research problem?

Do a simple self-test to determine whether it's good enough for your scientific project and make sure that:

- Your question allows for a number of potential answers;
- It's testable, flexible, and open-ended;
- You have the evidence necessary to address it;
- It's possible to break it into resolvable parts;
- It's precise and clear;
- You don't use any vague terms that require definitions;

- It's suitable for the length of your paper;
- You can explain why your solutions matter;
- You made premises explicit.

What should a formal version be like?

Any research starts with a problem that you derive from the topic that attracts your attention after general reading, classroom discussions, etc. Most instructors prefer to set general topics. To formulate a powerful research problem and impress them, it should be:

- Interesting;
- Relevant;
- Specific and focused;
- Researchable.

Your question should have enough bearing on a given topic and stay within the limits set by your professors in advance. Pick an interesting subject to stimulate your motivation. It shouldn't be very vague or broad. If your research question is broad, you can make it more specific by specific aspects, time periods, or events. There shouldn't be more than a few possible answers.

Get a clear insight into available materials. Visit local and academic libraries to find relevant and updated databases, books, magazines, journals, and other sources of information. Your research problem may seem doable at the very beginning. Do your preliminary sources to test it and find enough data.

Expert assistance: benefits of hiring professional writers:

The above-stated methods and tips can help you formulate a great research problem for any project. If you face different challenges, such as a lack of time or skills, don't hesitate to get thesis writing help. Expert writers can help you with all academic tasks. They have the skills, experience, and knowledge necessary to guarantee your success and high grades after submitting the top-quality assignments that you order.

