

Research problem formulation: Concept and Process

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ABSTRACT: This paper emphasises the significance of a clearly stated, research-worthy problem statement as the foundation of any successful study. The purpose of this work is to provide a practical advice on the construction of a properly stated and plausible statement of a study-worthy problem as the initial point for all research in order to aid rookie researchers in understanding the importance of problem-based research. This essay also examines how the issue interacts with the other essential components of academic research, such as the topic, objectives, research questions, methods, findings, and conclusions. An explanation of each term in the phrase's component parts, followed by a discussion of what is and is not a research-worthy topic, serves as a scaffold for expressing a "research-worthy challenge." A guide to finding issues that could promote academic research is offered. The theoretical foundation is placed into practice by examining some problem statements and proposing a template for crafting an effective statement.

I. Introduction:

What is your research question? This is very often one of the first queries made by statisticians when researchers come up with an interesting idea. In fact, the findings of a study may only acquire relevance if they provide an accurate and unbiased answer to a specific question and it has been suggested that up to one-third of the time spent in the whole process from the conception of an idea to the publication of the manuscript could be invested in finding the right primary study question. Furthermore, selecting a good research question can be a time-consuming and challenging task: in one retrospective study. 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. The purpose of research problem is to:

- Introduce the reader to the importance of topic being studied.
- Places the problem into a particular.
- Provides the framework for reporting the results.

Basic Characteristics of a Research Problem:

- Reflecting on important issues.
- Basing a non-hypothetical evidence.
- Being relevant.
- Being manageable.

Formulation of Research Problem has following steps:

A. Specify your Research Objective: Pinpoint the major focus of your research. The first step to writing your research objectives is to pinpoint the major focus of your research project.

Break down your research focus into research objectives. Write your research objectives in the

B. Review its content: It is 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? Identify the environment variables that may potentially affect your research.

C. Explore its nature: What is the nature of the 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.

D. Determine variable relationship: In psychological research, we're referring to a connection between two or more factors that we can measure or systematically vary. It is very good to generate maximum variable relation you can find.

E. Alternative approaches: There are different consequences that each course of action or approach can bring, and that's why you need to anticipate them.

Basic Steps in Formulating a Research Problem:

1. Identify the broad study area : The broad problem area refers to the entire situation where one sees a possible need for research and problem solving. Such issues might pertain to: Problems currently existing in an organizational setting that need to be solved.

2. Dissect the broad study area into subareas: Divide the broad study area into subareas.

3. Mark up your Interest: The first step in the research process is choosing an area of interest. Psychological research can be quite varied and therefore, it can be difficult to narrow down your interests to find a specific topic to focus your research on. Selecting a research topic can be daunting at first, but it is a great opportunity to explore your personal interests and get motivated about your research project. The process of selecting a topic may differ slightly depending on your enrolled degree, but the following general steps should help guide your decision-making process.

4. Study Research Questions: The more you study the research problem it will be just as relevant and fruitful to solve the problem indeed.

5. Set out Objectives: Research objectives serve as the direction for the entire research effort, including data collection, analysis, and conclusions. Research objectives also direct you through the research process by assisting you in hone in on the subject of your study and important variables. The first and most important step of research is formulation of research

problems. It is like the foundation of a building to be constructed. Someone must be aware of the issue for it to be solved.

Therefore, before beginning a research project, it is essential for the researcher to identify and formulate a topic. This is also perhaps one of the most challenging parts of any research project. A study's "issue" is usually presented in the first few sentences, giving the reader a justification for why the study is significant and worth reading. The principles and exercises for defining, articulating, and placing a research problem in both quantitative and qualitative research are covered in this module. This section is known as the "statement of the problem" segment. By the end of this module, readers should be able to: (1) Separate a research problem from other components of the research process; (2) Recognize one's own area of interest; (3) Select the most appropriate subject for study; (4) Describe the importance of a research problem in a study; (5) Identify criteria for determining whether a problem can and should be researched; and (6) Describe how to conduct a research study. Step seven is to create a compelling problem statement. Step eight involves the writing of research questions and hypotheses.

Objectives of the study:

The paper serves the following purposes.

1. To examine the concept of Research Methodology.
2. To study the connection between Research Methodology and its applications.

Research Methodology: The paper is conceptual in nature. Through highlighting the connection between Research Methodology and its applications an effort is being made to analyse the idea and necessity of it. Secondary sources have been studied in the form of various publications, journals, books, reports, research articles, magazines, newspapers, and websites, among other things, in order to arrive at a suitable conclusion.

Conclusion: Even for seasoned researchers, creating a strong research question can be exciting and difficult. While it is obvious that teamwork, accurate interpretation of the literature, and clinical experience are necessary for the development of novel ideas, the formulation of a

clinical problem typically necessitates adherence to the PICOT framework and FINER criteria. To convert a clinical conundrum into a question that can be studied. Working in the appropriate setting with the necessary assistance from knowledgeable researchers will undoubtedly have an impact on knowledge creation. By doing this, a lot of time will be saved in the search of the primary study question, and undoubtedly, there will be more chances to become a successful researcher.

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