

Research & Innovation Week 2: Research Formulation

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What is a Research Problem?

"Any question that you want to answer or any assumption

- or statement that you want to challenge or investigate or
- examine can become a research problem.
- 1. Questions to answer:
- a. Is there any relationship between decentralization
- and productivity levels?
- b. What are the effects of TV programs on children
- behavior?

2. Assumptions

- a. The average result of the male students in this class is
- higher than that of the female students.
- b. A total of 60 per cent of females score in top 10
- percentile of the class.
- 3. Statement / Challenge to investigate
- a. Exploring phenomenon, customer satisfaction with
- products, service or program.
- b. Improving productivity, quality of service or program

The importance of formulating a research problem

- "Formulation of a research problem is the first and most important step of
- the research process.
- "It is like the identification of a destination before undertaking a journey.
- "In the absence of a clear research problem, a clear and economical plan is
- impossible.
- "Therefore a research problem is like the foundation of a building.
- "The type and design of the building is dependent upon the foundation
- "If the foundation is well designed and strong you can expect the building to
- be also.
- "According to Kerlinger:
- If one wants to solve a problem, one must generally know what the problem is. It can
- be said that a large part of the problem lies in knowing what one is trying to do
- **•** (1986:17).

Sources of Research Problem

- "People
- "Problem
- "Program
- "Phenomenon

Aspects of a Research problem

Aspect of a study	About	Study of	
Study population	People	Individuals, organization, groups, communities	They provide you with the required information or you collect information from or about them
	Problem	Issues, situations, associations, needs, population, composition, profiles, etc.	Information you need to collect to find answers to your research questions
	Program	Content, structure, outcome, attributes, satisfaction, consumers, service providers, etc.	
	Phenomenon	cause-and-effect relationships, the study of phenomenon itself, etc.	

Considerations in Selecting a Research Problem

"Interest: you must select a topic that interests you most. If you select a topic which does not greatly interest you, it could become extremely difficult to sustain the required motivation, and hence its completion as well as the amount of time taken could be affected.

"Magnitude: you should have sufficient knowledge about the research process to be able to visualize the work involved in completing the proposed topic.

"Measurement of concepts: if you are using a concept in your study make sure you are clear about its indicators and their measurements. Do not use concepts in your research problem that you are not sure how to measure.

"Level of expertise: make sure you have an adequate level of expertise for the task you are proposing. Allow for the fact that you will learn during the study and may receive help from your research supervisors and others, but remember you need to do most of the work yourself.

Considerations.....(Cont.)

"Relevance: select a topic that is of relevance to you as a professional. Ensure that your study adds to the existing body of knowledge, bridges current gaps or is useful in policy formulation. This will help you to sustain interest in the study.

"Availability of data: if your topic requires collection of information from

secondary sources (office records, client records, census or other alreadypublished reports, etc.) before finalizing your topic, make sure that these

data are available and in the format you want.

"Ethical issues: in a situation where your topic deals with sensitive issues, it is important to determine how ethical issues can affect the study population, and how ethical problems can be over-come should be thoroughly examined at the problem-formulation stage.

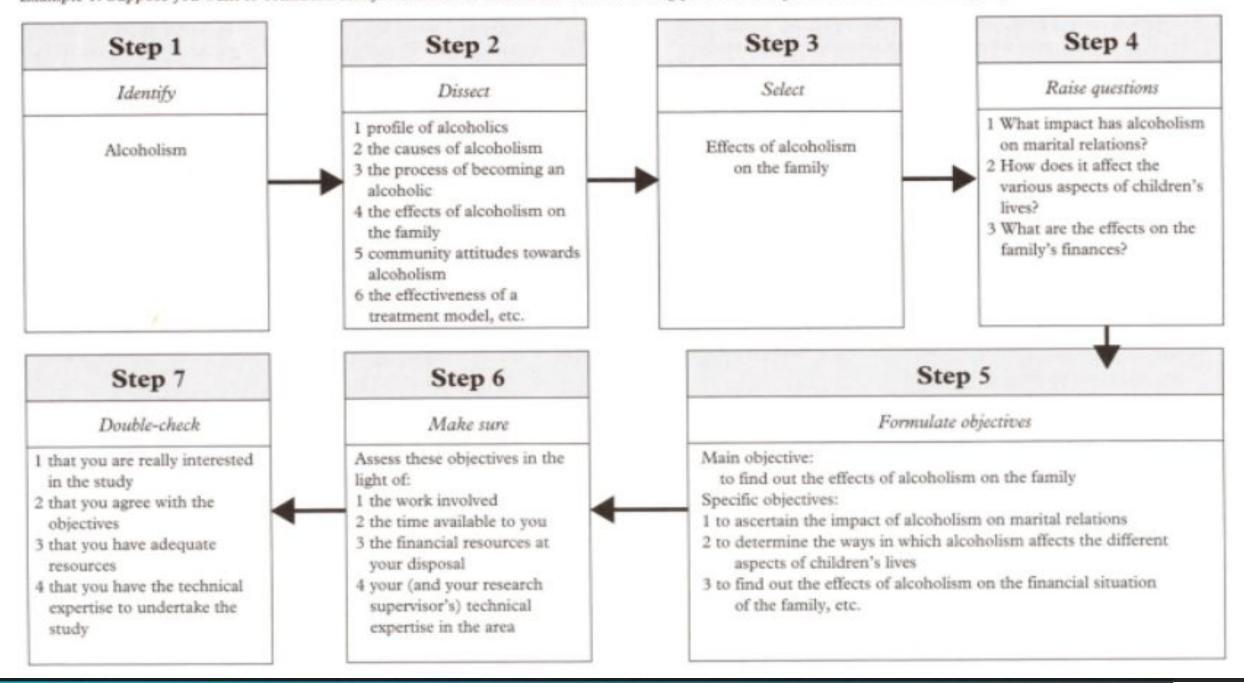
Steps in formulating a research problem

- 1. Identify subject area of interest to you
- 2. Dissect the subject area into sub-areas
- 3. Select the most interest to you
- 4. Raise research questions
- 5. Formulate objectives
- 6. Assess your objectives
- 7. Double-check



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Example 1: Suppose you want to conduct a study in the area of alcoholism. In formulating your research problem take the following steps.



representation and the relationship between returnly and mortality. Pollow these steps. Step 1 Step 2 Step 3 Step 4 Identify Dissect Select Raise questions 1 trends in fertility and 1 What happens to fertility Fertility and mortality mortality Relationship between when mortality declines? 2 determinants of fertility fertility and mortality 2 What is the time lag between behaviour the start of decline in 3 relationship between fertility mortality and the start of and mortality decline in fertility? 4 impact of health services on 3 What are the factors that mortality contribute to the decline in 5 impact of contraceptives on fertility? etc. fertility behaviour, etc. Step 7 Step 6 Step 5 Double-check Make sure Formulate objectives 1 that you are really interested Assess these objectives in the Main objective: to explore the relationship between fertility and mortality in the study light of: Specific objectives: 2 that you agree with the 1 the work involved 1 to find out the extent of the decline in fertility in relation to the objectives 2 the time available to you decline in mortality 3 that you have adequate 3 the financial resources at 2 to ascertain the time lag between the decline in mortality and the your disposal resources decline in fertility 4 that you have the technical 4 your (and your research 3 to identify the factors that affect the changes in fertility expertise to undertake the supervisor's) technical 4 To explore the relationship between socioeconomic-demographic study expertise in the area characteristics of the population and the extent of changes in fertility and mortality PAGE 11

Research Objectives

"Main objective: is an overall statement of the thrust of your study. It is also a statement of main associations and relationships that you seek to discover or establish.

"Sub-objectives: are the specific aspects of the topic that you want to investigate within the main framework of your study.

Sub-objectives

"Should be numerically listed

"Should be worded clearly and unambiguously

"Each sub-objective should contain only one aspect of the study.

"Should start with words such as "To determine", "To find out", "To ascertain", "To measure", "To explore", etc.



THANK YOU!