

Formulating a Research Problem:

- No problem, no research
- A problem that someone would like to research
- Researchable
- Power Meenaghan&Troomney (1985): “Potential research questions may occur to us on a regular basis, but the process of formulating them in a meaningful way is not at all an easy task”

Definition of research problem

- “A problem is an interrogative sentence or statement that asks what relation exist between two or more variables. The answer to questions will provide what is having sought in the research.”

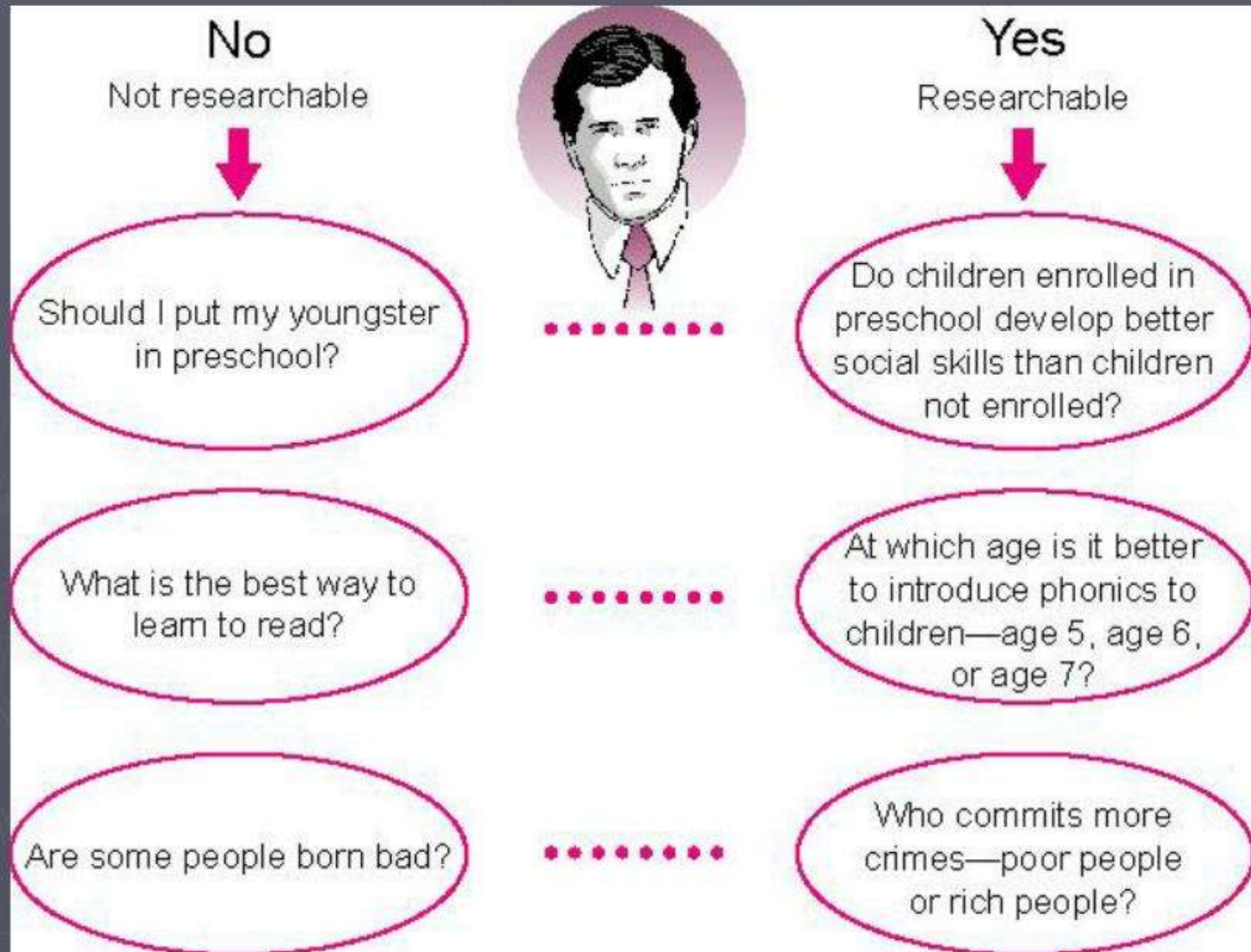
-Kerlinger.

- “A situation for which we have no ready and successful response by instinct or by previous acquired habit. We must find out what to do “

i.e the solution can be found out only after an investigation”

-R.S.Woodworth.

Researchable vs. Non-researchable Questions



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).

The Importance of formulating a Research Problem



- Research problem determines
 - type of study design
 - type of sampling strategy
 - research instrument
 - type of analysis



SOURCES OF RESEARCH **PROBLEM**

- **The common sources of research problem are as follows.**
- **1. Personal experience.**
- **2. Practical experience.**
- **3. critical appraisal of literature.**

- **4. Previous research.**
- **5. existing theories.**
- **6. Social issues.**
- **7. Brainstorming.**
- **8. Intuition.**
- **9. Folklores.**
- **10. Exposure to field situation.**
- **11. Consultation with experts.**

1. Person experience

- Day-to-day personal experience of a researcher may serve as good source of ideas to formulate a research problem.
- For example, a researcher observed domestic violence suffered by wives of alcoholic husbands. This experience may provide ideas to identify several research problems related to domestic violence against women. There may be so many such life experiences of a researcher which could be used to develop a research problem.

share
YOUR
STORY



• 2. Practical experience:

- Nurses get plenty of ideas to formulate research problems from their clinical experiences. Every curious nurse has several questions to be answered that are encountered during clinical experience.
- For example, a nurse finds that unrestricted visiting hours in surgical wards reduced the analgesic demand among postoperative patients. In another instance, a nurse observed that application of ice at the site of heparin injection reduced the chances of ecchymosis. Such clinical experiences could be rich sources of ideas to identify a significant research problem.



- **3.Critical appraisal of literature:**

- When we critically study books and articles relating to the subject of our interest, including research reports, opinion articles, and summaries of clinical issues, pertinent questions may arise in our mind. These may strike reader's mind indirectly by stimulating imagination and directly by stating what additional research is needed.
- For example, a nurse reads an article on the prevalence of the pin site infection among patients with external fixators





- **4.Previous research:**

- A body of knowledge should be developed on a sound foundation of research findings. Usually, at the end of a research, further research problems are suggested, based on the shortcomings of previous research, which can be investigated. In nursing profession, not much research has been yet done; therefore, this profession needs researchers who are willing to replicate or repeat other studies on different samples and settings where all the essential elements of the original study are held intact. Further refinements may be made in the experimental treatments, or more appropriate outcome measures may be identified.



- **5.Existing theories:**

- Research is a process of theory development and theory testing. Nurses use many theories from other disciplines in their practices. If an existing theory is used in developing a researchable problem, a specific statement from the theory must be isolated. Generally, a part or parts of the theory are subjected to testing in the clinical situation. The testing of an existing theory is definitely needed in nursing; therefore, they serve as good sources of research problems.



• **6.Consumer feedback:**

- Research problems may be generated from the results of activities aimed to solicit patient feedback.
- For example, at the time of discharge of patient after angiography, a nurse obtained a feedback from the patient. Patient verbalized that it was a wonderful experience except discomfort during removal of pressure dressing at the oral puncture site. This feedback provided a concept for nurse to research on efficacy available alternative means of dressing at puncture site to minimize the discomfort g patient undergoing angiography.



• **7.Performance improvement activities:**

- The performance improvement activities, also known as quality improvement activities, are used to improve processes and outcomes to meet regulatory requirement. In the process of performance activities, several issues merge that require answers through research. Thus performance improvement activities also serve as an important source of research problem.

8.Social issues:

- Sometimes, topics are suggested by more global contemporary social or political issues of relevance to the health care community.
- For example, HIV/AIDS, female feticide, sexual harassment, domestic violence, and gender equality in health care and in research are some of the current social and political issues of concern for health care professionals. An idea for a study may stem from a familiarity with social concerns or controversial social issues.





- **9. Brainstorming:**

- Brainstorming sessions are good techniques to find new questions, where an intensified discussion among interested people of the profession is conducted to find more ideas to formulate a good research problem.
- For example, ideas for studies may emerge from reviewing research priorities by having brainstorming session with other nurses, researchers, or nursing faculty



- **10.Intuition:**
- Traditionally, intuitions are considered good sources of knowledge as well as sources to find new research problems. It is believed that the reflective mind is a good source of ideas, which may be used to formulate a good research problem

- **11.Folklores:**

Common beliefs could be right or wrong.

For example, it is generally believed that studying just before the test decreases the score. We believe we should not study just before test to relax our mind. Researchers can conduct a research study on whether one should study before the test or not.

- **12.Exposure to field situations:**

During field exposure, researchers get variety of experiences, which may provide plenty of ideas to formulate research problems.

For example, while working in field, a researcher observed a specific traditional practice for cure of a disease condition, which can be used as research problem to investigate its efficacy



- **13. Consultations with experts:** Experts are believed to have sound experience of their respective field, which may suggest a significant problem to be studied. In addition, experts may help in finding a current problem of discipline to be solved, which may serve as basis for formulation of research problem.



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.

- Relevance

Ensure that your study adds to the existing body of knowledge

- Availability of data

Before finalizing the topic, make sure that data are available

- Ethical issues

How ethical issues can affect the study and how ethical problems can be overcome.

Steps in the formulation of a research problem

A step in the formulation of a research problem is the most crucial part of the research journey on which the quality of the entire project depends.

Steps in formulating research problem alcoholism

Step1: Identify a broad field or subject area of interest to you.

Asked yourself, what is it that really interest me as a professional?

Steps in the formulation of a research problem (con)

Step 2: Dessert the broad area into subareas
You will relies that all the broad areas mentioned above __youth welfare, refugees, domestic violence, consumer behavior and HIV/AIDS__ have many aspect.

Steps in the formulation of a research problem (con)

Domestic violence

- Profile of families in which DV occurs
- Profile of the victims of DV
- Profile of the perpetrators
- Reasons of DV
- Extent and types of DV
- Impact of DV on the family
- Impact of DV on children
- Services available to the victims of DV
- Effectiveness of the services provided to the victims of DV
- Extent¹⁴ of DV in a community

Steps in the formulation of a research problem (con)

Step 3: Select what is of most interest to you.

- It is neither advisable nor feasible to study all subareas.
- Select issues or subareas about which you are passionate.

Step 4: Raise research questions

1. What is it that I want to find out about in the subareas?
2. Asked the question what you want to find yourself in a situation.

Steps in the formulation of a research problem (con)

Step 5: Formulate objectives

Formulate your main objectives and your sub objectives

- The main difference between objectives and research questions is in to behavioral aims by using action –oriented words such as to find out, to determine’ , ‘to ascertain and ‘to examine’

Step 6: Assess your objectives

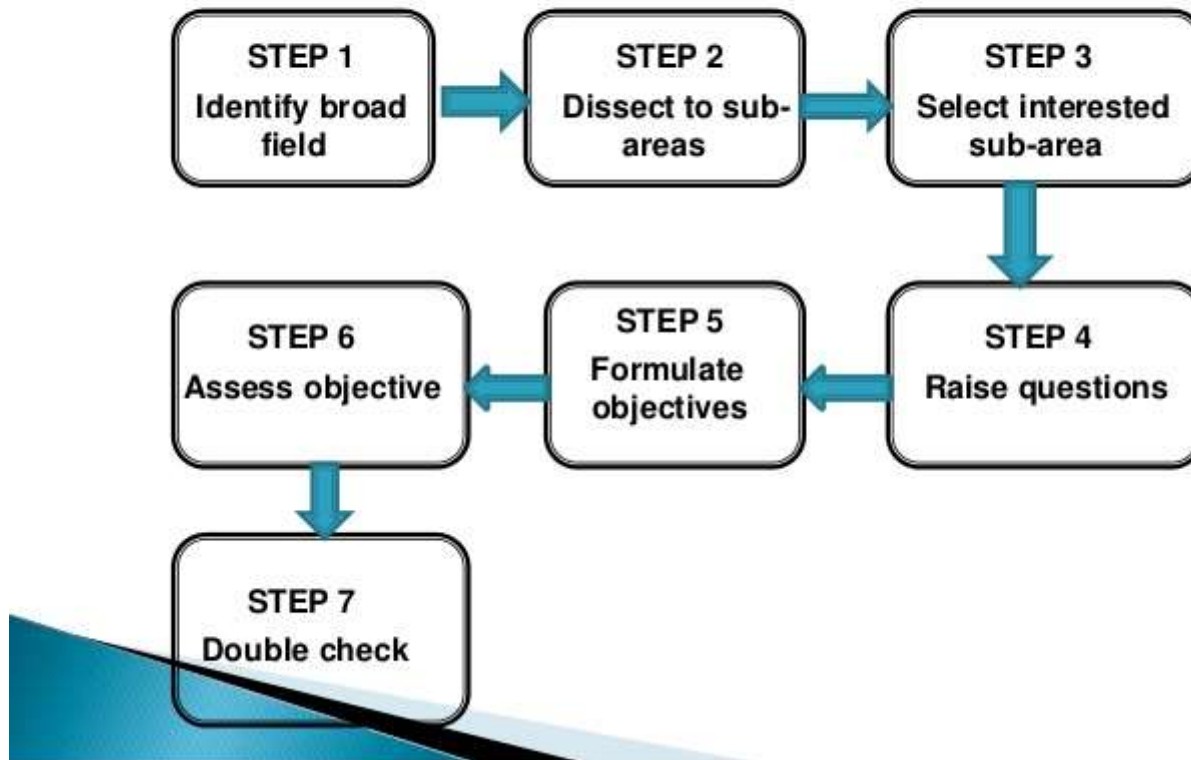
- Now examine your objectives to ascertain the feasibility o achieving them through your research endeavor.
- Consider them in the light of the time, resources (financial and human) and technical expertise at your disposal.

Steps in the formulation of a research problem (con)

Step 7: Double-check.

- Go back and give final consideration to whether or not you are sufficiently interested in the study, and have adequate resources to undertake it.
- Ask yourself , am I really enthusiastic about this study?
- Do I really have enough resources to undertake it?
- Answer these questions thoughtfully and realistically.

Steps in formulating research problem



Characteristics of a good thesis research problem:

1 The Problem Can Be Stated Clearly and Concisely

Unless the problem can be stated clearly and concisely it is probably a poor problem or a non-problem. The best way to test the problem statement is to write it into a concise sentence or paragraph and to share it with others. If the problem cannot be stated in a clear paragraph it has difficulties and will not endure as a suitable problem. Of course, it is not easy to express complex issues in simplistic terms and it may take many weeks and countless drafts before the statement is satisfactory. Good critics are essential. If your spouse or mother cannot understand it, it is probably flaky.

2 The Problem Generates Research Questions

The problem should generate a number of more specific research questions. These turn the problem into a question format and represent various aspects or components of the problem. The research questions make the more general statement easier to address and provide a framework for the research. Formulating these questions can be a challenge, particularly specifying them at the right level of abstraction.

3 It Is Grounded in Theory

Good problems have theoretical and/or conceptual frameworks for their analysis. They relate the specifics of what is being investigated to a more general background of theory which helps interpret the results and link it to the field.

4 It Relates to One or More Academic Fields of Study

Good problems relate to academic fields which have adherents and boundaries. They typically have journals to which adherents relate. Research problems which do not have clear links to one or two such fields of study are generally in trouble. Without such a field it becomes impossible to determine where, in the universe of knowledge, the problem lies.

5 It Has a Base in the Research Literature

Related to the former points, a well-stated problem will relate to a research literature. Tight problems often relate to a well-defined body of literature, written by a select group of researchers and published in a small number of journals. With some problems, it might at first be difficult to establish the connections and literature base, but there should be a base somewhere.

6 It Has Potential Significance/importance

This is the important ‘so what’ question: Who cares once you solve the problem? Assume that you have solved the problem and answered the questions and then ask yourself if you are any further ahead. At the very least, the problem must have importance to the researcher, but ideally it should also be of consequence to others.

7 It Is Doable Within the Time Frame, Budget

There are logistic factors in terms of your ability actually to carry out the research. There is no point pursuing a problem which is not feasible to research. Do not do a study of education in India unless you have the means to go there and collect data—which may require years to collect. This factor helps explain why few theses relate to longitudinal data. The only exceptions come from research shops where there is a long history of collecting and studying data on a defined population. Terman's study of genius (1954) in which a defined sample was traced over 30 years, is a good example.

8 Sufficient Data Are Available or Can Be Obtained

In some cases, there are insufficient data to address the problem. Historical persons may have died, archival materials may be lost, or there may be restrictions on access to certain environments. As noted, it is difficult to conduct research on a distant country unless you can go there and collect local data. One under-used approach is to use an existing database. Some data banks have been developed over many years and contain many opportunities for exploration of new questions and issues.

9 The researcher's methodological strengths can be applied to the problem.

10 The problem is new; it is not already answered sufficiently.

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