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Lecture 04& 05

- 1. Research Problem
- 2. Research starts from a problem
- 3. Any research problem should be well identified
- 4. Why do we need to justify the research problem?
- 5. Techniques used for problem identification
- 6. Considerations for Selection of a Research Problem

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1. Research Problem

In research process, the first and foremost step happens to be that of selecting and properly defining a research problem. A researcher must find the problem and formulate it so that it becomes susceptible to research. Like a medical doctor, a researcher must examine all the symptoms (presented to him or observed by him) concerning a problem before he can diagnose correctly the illness. To define a problem correctly, a researcher must know: what a problem is?

What is a Research Problem?

A research problem, in general, refers to some **difficulty** which a researcher **experiences** in the context of either a theoretical or practical situation and wants **to obtain a solution** for the same. Thus, a research problem is one which requires a researcher to find out the best solution for the given problem. It is also defined as **unanswered** question.

2. Research starts from a problem

Most students start thinking of a title. They may spend a great deal of time searching in the internet so that they can find an interesting title for their dissertation; however, this is not how research starts. **Research starts from a problem.** We do not find a problem, the problem is **observed**. For example, in applied linguistics and social sciences, this problem might have been faced during the students' learning process, which means inside the classroom or observed by teachers during teaching. **Therefore, writing the finale title** is proved to be the **last step in any research**.

03. Any research problem should be well identified

The majority of researchers **exclude this step**, which is considered as a **crucial step** before conducting any kind of research. The most raised question among novice researchers is: why do we have to justify the existence of a problem? The answer "yes" because when conducting a research about a specific problem of interest, it has to be **existed and observed** by a group of people who live in the same context.

For example, ask teachers who have a considerable **experience** in teaching or faced by a group of learners in the learning process concerning a problem that is faced by students.

The problem should be **worth doing**, which means that not all the problems we observe are research problems .Some problems are not research problems since they do not need any kind of investigation to be solved. There are types of problems that will be discussed below.

04. Why do we need to justify the existence of a research problem?

A good identification of the research problem means

- A good understanding of what is it exactly(narrowing it down)
- A good expectation of potential factors that lead to this problem
- A good formulation of Research questions and / or hypothesis(es) if there are any

• A clear identification and understanding of the dependent variable(s) and independent variable(s)

05. Techniques used for problem identification

There are ways of justifying the existence of the problem or what we call a "**Pilot study**". A good statement of a problem should go through this step because the researcher will understand more about the problem and make him avoid being **subjective. Generally, a research** problem can be observed and derived from the same **context (environment)** of study. Therefore, you can use one of the techniques as a pilot study. **The** following are **useful insights and techniques for the pilot study:**

a) Surveying the available literature

By checking previous studies related to our topic of interest, we will be able to:

	Understand more about our problem
	Understand the gap(s) in the related literature
	Understand the method used for data collection (instruments, possible limitations).
	Understand the difficulties faced by other researchers throughout studying such a problem.
b)	Classroom observation

This technique is found to be extremely important for problem identification because the researcher can understand the problem in relation to its context.

• It provides the researcher with a strong vision about the problem.

c) Developing ideas through Focus Group discussions(FGD) and Interviews:

Discussions with those who face the problem provides us with a great deal of information about them as participants (**teachers and /or students**), and about the problem under investigation

d) Questionnaires

Another technique that can be followed for our pilot study is what is called a preliminary questionnaire.

This tool is usually said to be an easy instrument in terms of administration.

06. Considerations for Selection of a Research Problem

When selecting a research problem/topic there are a number of considerations to keep in mind which will help to ensure that your study will be manageable and that you remain motivated. These considerations are:

a) Interest

Interest should be the most important consideration in selecting a research problem. A research endeavor is usually time consuming, and involves hard work and possibly unforeseen problems. If you select a topic which does not greatly interest you, it could become extremely difficult to sustain the required motivation and put in enough time and energy to complete it.

b) Magnitude or Knowledge

You should have **sufficient knowledge** about the **research process to** be able to visualize the work involved in completing the proposed study. **Narrow the topic down** to something manageable, specific and clear. It is extremely important to select a topic that you can manage within the **time** and with the **resources** at your disposal. Even if you are undertaking a descriptive study, you need to consider its magnitude carefully.

c) Measurement of concepts

If you are using a concept in your study (in quantitative studies), make sure you are clear about its indicators and their measurement.

Do not use concepts in your research problem that you are not sure how to measure. This does not mean you cannot develop a measurement procedure as the study progresses. While most of the developmental work will be done during your study, it is imperative that you are reasonably clear about the measurement of these concepts at this stage.

d) 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 supervisor and others, but remember that you need to do most of the work yourself.

e) Relevance

Select a topic that is of **relevance** to you as a **professional**. it means that you should conduct a research that belongs to your domain of study.

Ensure that your study adds to the existing body of knowledge,

f) Availability of data

If your topic entails **collection of information** from secondary sources (office records, client records, census or other already-published reports, etc.) make sure that this data is available and in the **format you want** before finalizing your topic.

 \checkmark Think of a feasible research problem

> The majority of students think of ambitious research problems

Before thinking of research problem think of its **Feasibility.**

Feasibility is an important aspect when conducting research. One should think about it right from the beginning of research.

Feasibility means having the potentiality in terms of data gathering (i.e. available sources of data collection, and time constraints i.e. being able to finish the study during the allotted time.

Practice

Not all the problems that we face are research problems. There are three types of problems: "Researchable problem", "Non researchable" problem, and "Day to day" problem

Read the following statements/ questions .Then answer the following questions:

- **1** Why do people sleep?
- 2- Students don't express themselves.
- **3-** Why won't students use the library?
- 4- What is going wrong in seminars when students do not speak?
- 5- Why is cancer a disease?
- 6- My friend doesn't know how to operate his new mobile phone.
- 7- All people have breakfast every morning.
- 8- Why do pupils hate school?
- **9-** Poor nutrition results in poor health.
- 10- The road to the metro station is not well known by the foreign visitors.
- 11- Why do students go to school?
- **12-** The board is a mixture of white and black colors.
- 13- Why people in hot climate don't wear black clothes?

A) What do you notice?

b) According to the previous examples, explain researchable, non researchable, day to day problems

c) Insert the previous questions/statements in the appropriate column in the following table:

Researchable problem	Day to day problem	Non-researchable problem