

# LECTURE 3: THE RESEARCH PROBLEM

## Lecture Outline

- Definition of the research problem
- The relationship between the research problem, hypotheses, and objectives
- Characteristics of a good research problem
- Sources for deriving a research problem
- Steps for identifying and formulating the research problem
- Forms and styles of presenting the research problem
- Common errors in defining a research problem
- Evaluating the quality of a research problem

### 1. Linguistic and Conceptual Definition of the Research Problem

**Linguistically**, the term *problem* originates from the Arabic verb meaning “to become unclear or confusing,” indicating a situation that requires clarification or deeper understanding.

**Conceptually**, the research problem refers to the issue or set of questions that draw the researcher’s attention and motivate them to gather and analyze data in order to reach an explanation or solution.

Some scholars define it as **the gap between the current situation and the desired situation**, meaning the presence of a phenomenon or condition that requires investigation or interpretation.

Thus, the research problem represents the *central axis* around which the study revolves, and it determines the researcher's objectives and direction.

### 2. Relationship Between the Research Problem, Hypotheses, and Objectives

The research problem is **organically connected** to both the hypotheses and the objectives.

Once the problem is identified, the researcher formulates the **objectives** that

the study seeks to achieve—that is, the outcomes the researcher aims to reach by the end of the work.

From the problem, the **hypotheses** are derived as well. These are temporary or tentative explanations that are tested empirically.

**Accordingly:**

- The **research problem** is the starting point
- The **objectives** are the destination
- The **hypotheses** serve as the scientific pathway toward answering the questions posed by the problem

### **3. Characteristics of a Good Research Problem**

1. **Originality and relevance**
2. **Clarity and precision**
3. **Researchability and measurability**
4. **Relevance to the researcher's field of specialization**
5. **Availability of data, literature, and resources**

### **4. Sources for Deriving a Research Problem**

1. **Field observations and practical experience**
2. **Previous studies**
3. **Social and field-based issues**
4. **Research recommendations**
5. **Academic and scientific discussions**

### **5. Steps for Identifying and Formulating the Research Problem**

1. **Observing the phenomenon**
2. **Identifying the research gap**

3. Formulating a main research question and sub-questions
4. Writing the problem statement clearly and precisely

## 6. Forms and Styles of Presenting the Research Problem

1. **Descriptive (narrative) formulation**
2. **Interrogative (question-based) formulation**
3. **Declarative (statement-based) formulation**

## 7. Applied Examples from the Field of Special Education

- **Descriptive example:**  
Many children with Autism Spectrum Disorder (ASD) experience deficits in social communication skills despite participation in training programs, raising concerns about the effectiveness of these programs in improving their engagement.
- **Interrogative example:**  
*To what extent are individualized educational programs effective in enhancing communication skills among children with Autism Spectrum Disorder?*
- **Field-based example:**  
*What factors contribute to the dropout of children with mild disabilities from mainstream schools?*

## 8. Common Errors in Defining the Research Problem

1. Choosing overly broad or vague topics
2. Using unclear concepts or terminology
3. Selecting a problem that exceeds the researcher's abilities or time frame
4. Ignoring previous research

## 9. Evaluating the Quality of the Research Problem

- Is the problem clearly defined?
- Can it be investigated empirically?
- Does it contribute new knowledge?
- Is it aligned with the researcher's area of specialization?