#### Unit One: Basic Foundation

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#### By the end of this session, you will be able to:

- Understand what research is and its role in developing science/knowledge.
- Explore the various purposes of research.
- Describe why it is essential to follow scientific methods.

#### Meaning of Research

 The term research derives from the Old French word 'recerche' which means to go back and search closely. Here, 're' is go back, 'cherche' means rare or to seek, and 'recercher' is to search. It was first used in the 17th century to describe a series of inquiries for knowledge.

## **Scholarly Definitions**

- "Research is defined as the creation of new knowledge and/or
- the use of existing knowledge in a new and creative way so as
- to generate new concepts, methodologies and understandings.
- This could include synthesis and analysis of previous research
- to the extent that it leads to new and creative outcomes."



## "A <u>systematic</u> investigation (i.e., the gathering and <u>analysis</u> of information) designed to develop or contribute to <u>generalizable</u> knowledge."

**Code of Federal Regulations** 



 Research is an elastic term: different research and methodological communities have unique and distinct methods, or ideas about what it means to conduct research.



 Research is a <u>contested</u> term: different methodological communities have different epistemological assumptions about knowledge and knowledge claims that lead them to disagree with about what constitutes a valid knowledge claim or research method.

# Take away message



Systematic: it has to follow reliable and valid methodologies.



Bring new knowledge.

## Purposes of Research

# **Exploratory Research**

# Understand a phenomenon (phenomenology)

#### Inform action

## Purposes of Research

## **Descriptive Research**

#### **Understand characteristics**

#### Understand behaviour

## Purposes of Research

# Causal Research

Analyze the relationship between variables.

Explain changes.

Test a theory.

#### Non-Scientific Ways of Knowing

- Intuition/Belief
- Consensus
- Authority
- Casual Observation
- Informal Logical

Opinion

#### **Biased/Flawed**

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