

Faculty of Human and Social Sciences

Level: 2nd year LMD Psychology

Department of Psychology

Instructor: Ms. Saci Meriem

Module: English Language

Lesson n°5: Research Methodology

Introduction

Research is a disciplined process used to generate new knowledge, validate existing theories, or solve practical problems. To ensure reliability and scientific rigor, research must follow a methodological framework known as **research methodology**. This framework defines the overall logic of the study, the tools employed to gather data, and the procedures used to analyze and interpret findings.

Understanding research methodology is essential for scholars and practitioners across all disciplines. It allows researchers to critically justify their choices, ensure the validity of their results, and contribute meaningfully to academic discourse.

I. Definition and Importance of Research Methodology

1. Definition

Research methodology refers to the overarching strategy and rationale guiding the research process. It includes:

- The research paradigm
- The chosen research approach
- The design of the study
- Data collection and analysis methods
- Sampling procedures
- Ethical considerations

2. Importance

Research methodology is crucial because it:

- Ensures systematic and logical investigation
- Enhances the reliability and validity of results

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- Guides researchers in choosing appropriate tools
- Enables replication of studies
- Provides transparency and credibility
- Facilitates the interpretation of findings within a scientific framework

II. Research Paradigms

Research paradigms are philosophical worldviews that shape a study's direction.

1. Positivism

- Based on objectivity and measurable facts
- Uses quantitative methods
- Aims to identify generalizable laws
- Researcher is independent from the subject

2. Interpretivism

- Focuses on understanding human experiences
- Uses qualitative methods
- Emphasizes meaning, context, and subjectivity
- Researcher interacts with participants

3. Critical Paradigm

- Examines power structures, inequalities, and social change
- Often uses mixed qualitative and participatory methods

4. Pragmatism

- Values practical solutions over philosophical purity
- Encourages mixed-methods research

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III. Research Approaches

a) Quantitative Approach: Quantitative research deals with quantifiable data and statistical analysis.

Characteristics:

- Structured instruments
- Numerical data
- Objective interpretation
- Large sample sizes
- Typical methods: surveys, experiments, structured observations.

b) Qualitative Approach: Qualitative research explores experiences and meanings.

Characteristics:

- Unstructured or semi-structured instruments
- Textual or visual data
- Contextual interpretation
- Smaller, purposive samples

Methods: interviews, focus groups, case studies, ethnography.

c) Mixed-Methods Approach : Combines quantitative and qualitative techniques to

Strengthen the richness and validity of research.

IV. Research Designs

1. Experimental Design: Used to test causal relationships through controlled conditions.

Examples: laboratory experiments, field experiments.

2. Descriptive Design: Aims to accurately describe phenomena. Examples: surveys, observational studies.

3. Correlational Design: Examines relationships between variables without manipulating them.

4. Case Study Design: An in-depth exploration of one case or a small number of cases.