



Lecture02: Introduction to Research Approaches

Dr Chaima MENNAI
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Intended Learning Outcomes

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

- Understand the context of quantitative and qualitative research.
- Recognise the terminology used to describe the differences between both traditions.

What is Quantitative Research?

- **quantitative research** seeks to explain the causal or correlational relationship between variables through testing hypotheses.
- Quantitative research is defined by Creswell (2014) as “a means for testing objective theories by examining the relationship among variables” (p. 247).

What is Qualitative Research?

- “Qualitative research invites researchers to inquire about the human condition, because it explores the meaning of human experiences and creates the possibilities of change through raised awareness and purposeful action” (Taylor, 2013, p. 24)
- “Qualitative researchers are interested in understanding the meaning people have constructed, that is, how people make sense of their world and the experiences they have in the world” (Merriam, 2016, p.6)

The Comparison

	Qualitative Inquiry	Quantitative Inquiry
Purpose	<ul style="list-style-type: none">• seeks to build an understanding of phenomena (i.e. human behaviour, cultural or social organization)• often focused on meaning (i.e. how do people make sense of their lives, experiences, and their understanding of the world?)• maybe descriptive: the research describes complex phenomena such as: social or cultural dynamics, individual perception	<ul style="list-style-type: none">• seeks explanation or causation

The Comparison

Qualitative Inquiry

RQs

- Qualitative inquiry is often used for exploratory questions, such as How? or Why?

Example:

How is transition to postgraduate studies experienced differently by students?

Quantitative Inquiry

- Quantitative research aims to be more conclusive and pertain to larger populations, answering questions such as What? When? Where?

Example:

What is the relationship between transition to postgraduate studies and students' wellbeing?

The Comparison

Qualitative Inquiry

- Data**
- may be comprised of words, behaviours, images
 - the goal is data that can enhance the understanding of a phenomenon

Quantitative Inquiry

- can be manipulated numerically
- the goal is precise, objective, measurable data that can be analysed with statistical procedures

The Comparison

QUALITATIVE INQUIRY

Design

- Because the goal is exploratory, the researcher often may only know roughly what they are looking for. Thus, the design of the project may evolve as the project is in progress in order to ensure the flexibility needed to provide a thorough understanding of the phenomenon in question

QUANTITATIVE INQUIRY

A central tenet of quantitative research is the strictly controlled research design in which researchers clearly specify in advance which data they will measure, and the procedure that will be used to obtain the data

The Comparison

Data Collection tools

Qualitative Inquiry

- researchers are themselves instruments for data collection via methods such as in-depth interviewing or participant observation. Data are thus mediated through a human instrument

Quantitative Inquiry

- tools are employed to collect numerical data (e.g., surveys, questionnaires or equipment)

The Comparison

QUALITATIVE INQUIRY

Analysis

- often inductive: the researcher builds abstractions, concepts, hypotheses, and theories from the data gathered
- often relies on the categorization of data (words, phrases, concepts) into patterns
- Often, complexity and a plurality of voices are sought

QUANTITATIVE INQUIRY

- often deductive: precise measurement, mathematical formula, testing hypotheses

The Comparison

Results

Qualitative Inquiry

- The goal of qualitative research is to understand participants' own perspectives as embedded in their social context
- contextually based and thus do not seek generalizability in the same sense as quantitative research

Quantitative Inquiry

Goal is prediction, generalizability, causality

References

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- Creswell, J. W. (2014). *Research Design Qualitative, Quantitative and Mixed Methods Approaches* (4th ed.). Thousand Oaks, CA Sage.
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