



Session 6.1: Research Methods

- 1 Why Research and Pre-requisites for doing research
- 2 Steps in the Research Process
- 3 Research Design => Strategies of Inquiry
- 4 Structure of an Empirical Research Paper
- 5 Ethical Consideration
- 6 Some Useful Tips in Research

- Undertake discovery to create new knowledge
- Review policy issues
- Identify the intricacies of a specific problem
- Assert the relevance of an existing theory
- Communicate effectively

Why Research and Pre-requisites

- Research starts with SEARCH and then (RE-search)
 - Getting to the frontiers of existing knowledge
 - Orientation – philosophical perspective
 - Ontology, epistemology and methodology
 - Distinguish between research and ‘near’ research (evaluation)
 - Research orientation
 - Basic or applied

Steps in the Research Process?

- Identifying a topic (via a knowledge gap)
- Reviewing the literature
- Defining gap to be filled and specifying objectives/hypotheses
- Designing Research
- Collecting data
- Analyzing and interpreting findings
- Dissemination

Research Design => Strategies of Inquiry

- Level 1
 - Quantitative
 - Qualitative
 - Mixed
- Level 2
 - Experimental and Non-experimental
 - Mixed method and Mixed model
 - Phenomenology, Ethnography, Case study, Grounded theory and Historical

Research Design => Strategies of Inquiry

Issues of
Emphases

Quantitative
Research

Mixed Research

Qualitative
Research

Scientific
Method

Confirmatory or
"top-down"

Confirmatory and
exploratory

Exploratory or
"bottom-up"

Ontology

Objective, material,
structural, agreed
upon

Pluralism, appreciation of
objective, subjective and
inter-subjective reality and
their interrelations

Subjective, mental,
personal and
constructed

View of
Human
Thought

Regular and predict
able

Dynamic, complex and
partially predictable
Multiple influences include
environment/nature,
freewill/agency, and
chance/fortuity.

Situational, social,
contextual,
personal, and
unpredictable

Research Design => Strategies of Inquiry

Issues of Emphases	Quantitative Research	Mixed Research	Qualitative Research
Focus	Narrow-angle lens, testing specific hypothesis	Multilens focus	Wide-angle and “deep-angle” lens, examining the breath and depth of phenomena to learn more about them
Nature of observation	Study behaviour under controlled conditions; isolate the causal effect of single variable	Study multiple contexts, perspectives, or conditions; study multiple factors as they operate	Study individuals in natural setting; attempt to understand insider views, meanings and perspectives.
Forms of data collection	Collect quantitative data based on precise measuring	Collect multiples kind of data	Collect qualitative data such as interview

Research Design => Strategies of Inquiry

- Which of the three study designs should you use?
 - Depends on the research focus
 - Expertise of the researcher
 - Mixed methods is currently the way to go
 - Basis for corroboration
 - Fertile ground for new discovery
 - Provides more detail and rigour

Structure of an Empirical Research Paper

A. Abstract

1. Introduction

- A. The general situation
- B. The specific situation
- C. The gap in our knowledge of the specific situation
- D. What you did to fill the gap
- E. Background/Context
 - What is known about the subject (relevant research/theories)
 - Where your research fits in

2. Methods

- A. The data used
- B. Clear definitions of dependent and independent variables
- C. Statistical techniques used

3. Results

- A. Help the reader understand the tables.
- B. Highlight important findings
- C. Summarize

4. Discussion/Conclusions

- A. The single most important finding
- B. How your results relate to previous research findings
- C. Limitations of your study
- D. Policy recommendation and implications

B. References

c. Appendices



- Sensitisation
- Obtaining informed consent
- Participant confidentiality and anonymity
- Protection of personal data
- Consider how to manage expectations
- Should incentives be provided for participation?
- Avoid 'survey fatigue'

- Clear, concise and consistent articulation of research idea
- Academic dishonesty
 - Plagiarism
 - Data massage
 - Hiding findings that are contrary to hypotheses
- Be open to comments and criticisms
- Appreciate and document the limits of your research