

# Session 6.2: 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 Considerations
- 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
- Generate data to inform development of relevant interventions

## 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
    - Use of triangulation in research

## 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
- Approaching gatekeepers
- Obtaining informed consent
- Conducting research among children
- Participant confidentiality and anonymity
- Protection of personal data
- Consider how to manage expectations
- Should incentives be provided for participation?
- Avoid 'survey fatigue'
- Obtaining approval from relevant IRBs

- Organise national and regional workshops
- Take advantage of national conferences
- Policy briefs
- Use of website, emails
- International conferences
- Feedback to communities where data was collected
- Publications in journals

- 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