



FACULTY OF  
HEALTH SCIENCE

Department of Rural Health

# Using theory as a framework for research

Sue Kilpatrick

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# Session overview

- Welcome and introductions 10.30 – 11.00
  - Brief outline of topic and theories used/under consideration from everyone
- Background – Sue, 11.00 – 12.00
  - Relationship between theory and research
  - Using theory as a framework for research
- Choosing the "right" theory and using it in the "right" place for your project 12.00 – 1.00
  - Small group discussions about your projects

# Background

- Your thesis has to satisfy 2 Examiners that you:
  - Understand the relevant existing knowledge base for your topic
    - The literature
    - Includes relevant theories
  - Use sound methodology
    - Often includes 'use' of theory
  - Make an original contribution to knowledge
    - Can advance a new or revised theory

# What is a theory?

- Theories consist “of plausible relationships proposed among concepts or sets of concepts” (Strauss and Corbin 1994)
- A systematic explanation for the observations that relate to a particular aspect of life (Creswell)
- Can be at micro, meso or macro level

# Relationship between theory and research

- Depends on whether design is quantitative or qualitative
- Quantitative is testing a theory
  - Start with a theory
- Qualitative is theory building. Either:
  - The end point (grounded theory approach)
  - A lens that shapes the project
  - Phenomenology can get away without – a rich description of a phenomenon

# Where does theory fit?

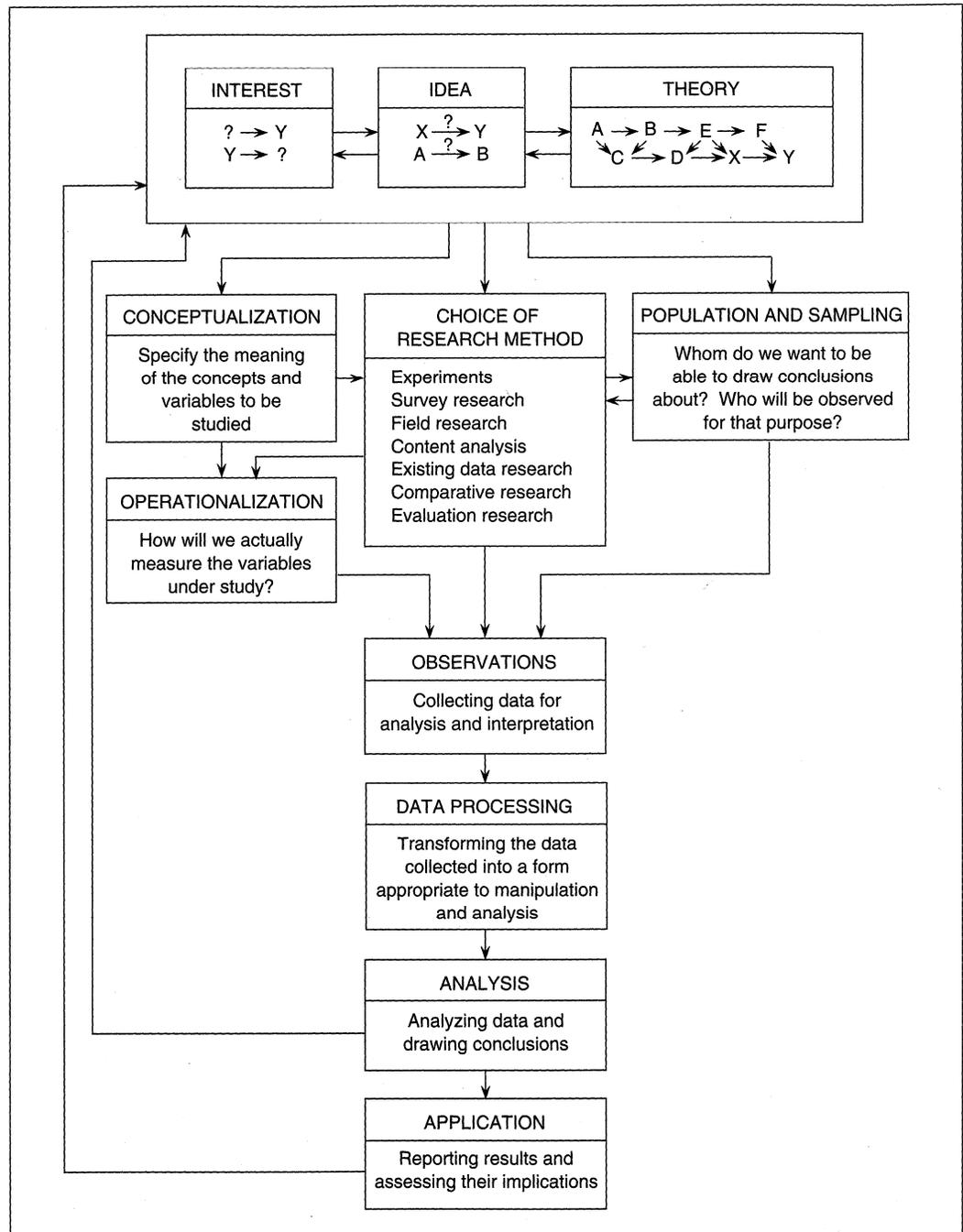
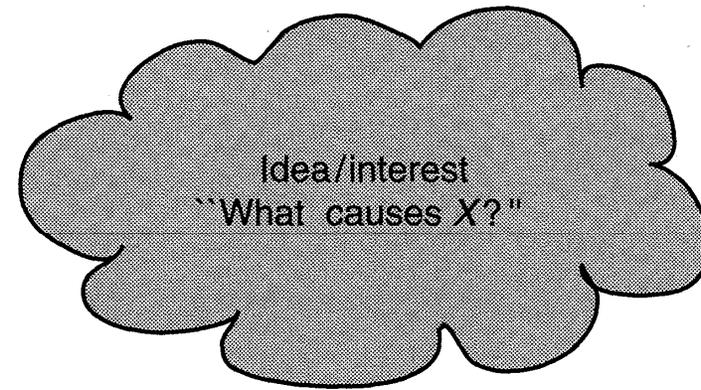
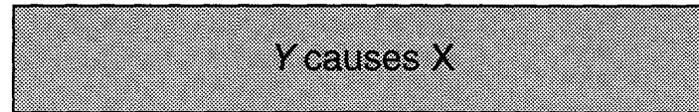


FIGURE 4-5 The Research Process

# Quantitative

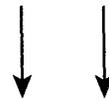


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THEORETICAL UNDERSTANDING



HYPOTHESIS

$X = f(Y)$       Theoretical expectation



Operationalization

$x = f(y)$       Testable hypothesis



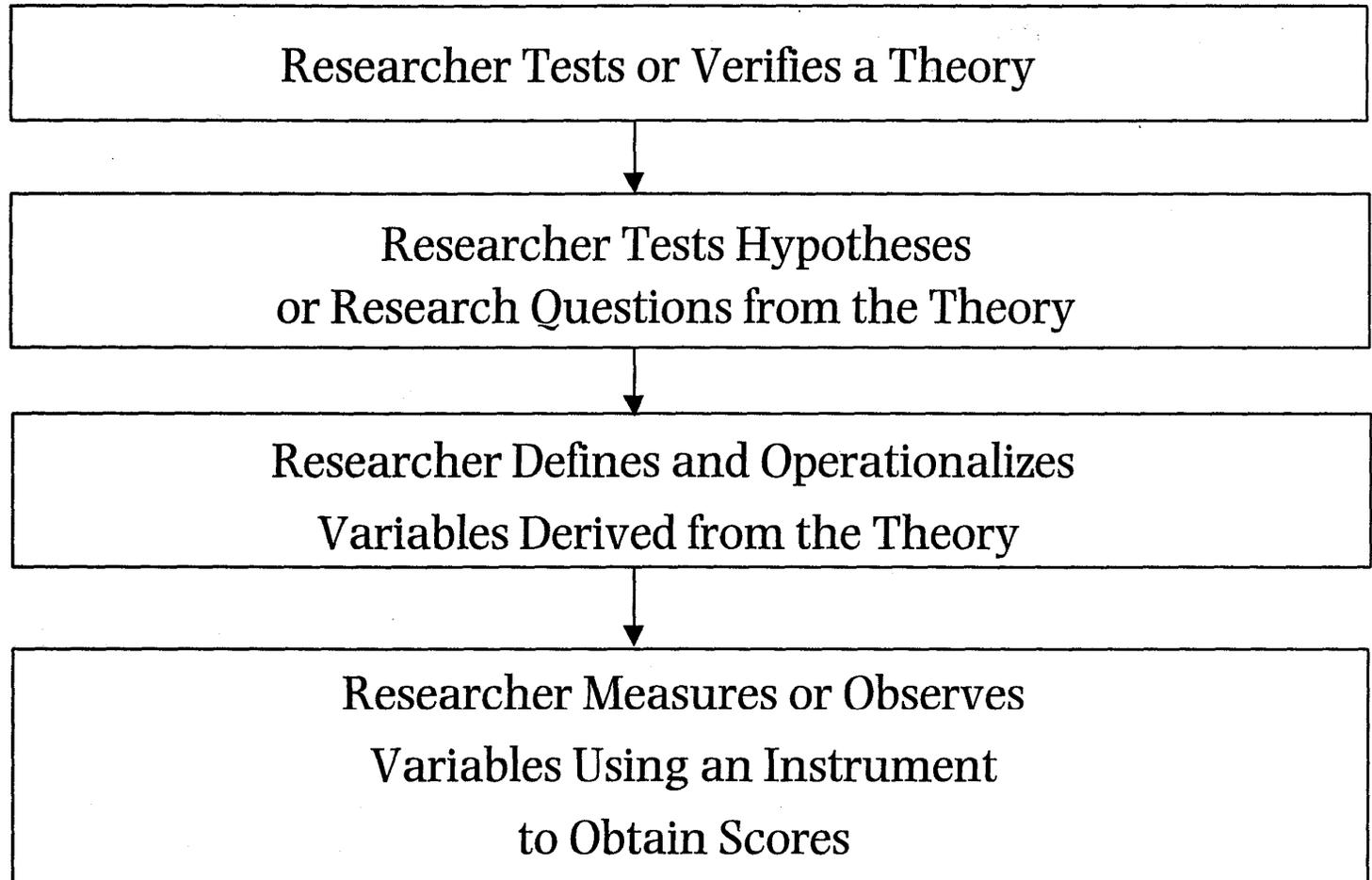
$x^? = f(y)$       Observation  
(hypothesis testing)

FIGURE 2-2 The Traditional Image of Science

# Hypotheses

- Stated as the relationship between 2 or more variables
- Become theories through testing in multiple contexts

# Using a theory deductively



**Figure 7.4** The Deductive Approach Typically Used in Quantitative Research

# Qualitative - options for theory

- Use theory as a broad explanation (similar to quantitative design)
  - Can use themes, e.g. social justice, interprofessional education, as a series of ready made hypotheses
- Start with a tentative theory and modify it as part of the study

# Qualitative - options for theory

- Theory as a lens, guide to what is important in study, e.g. gender, primary health care, social capital
  - Indicate the position of the researcher
  - Can be an advocacy lens, e.g. empowerment

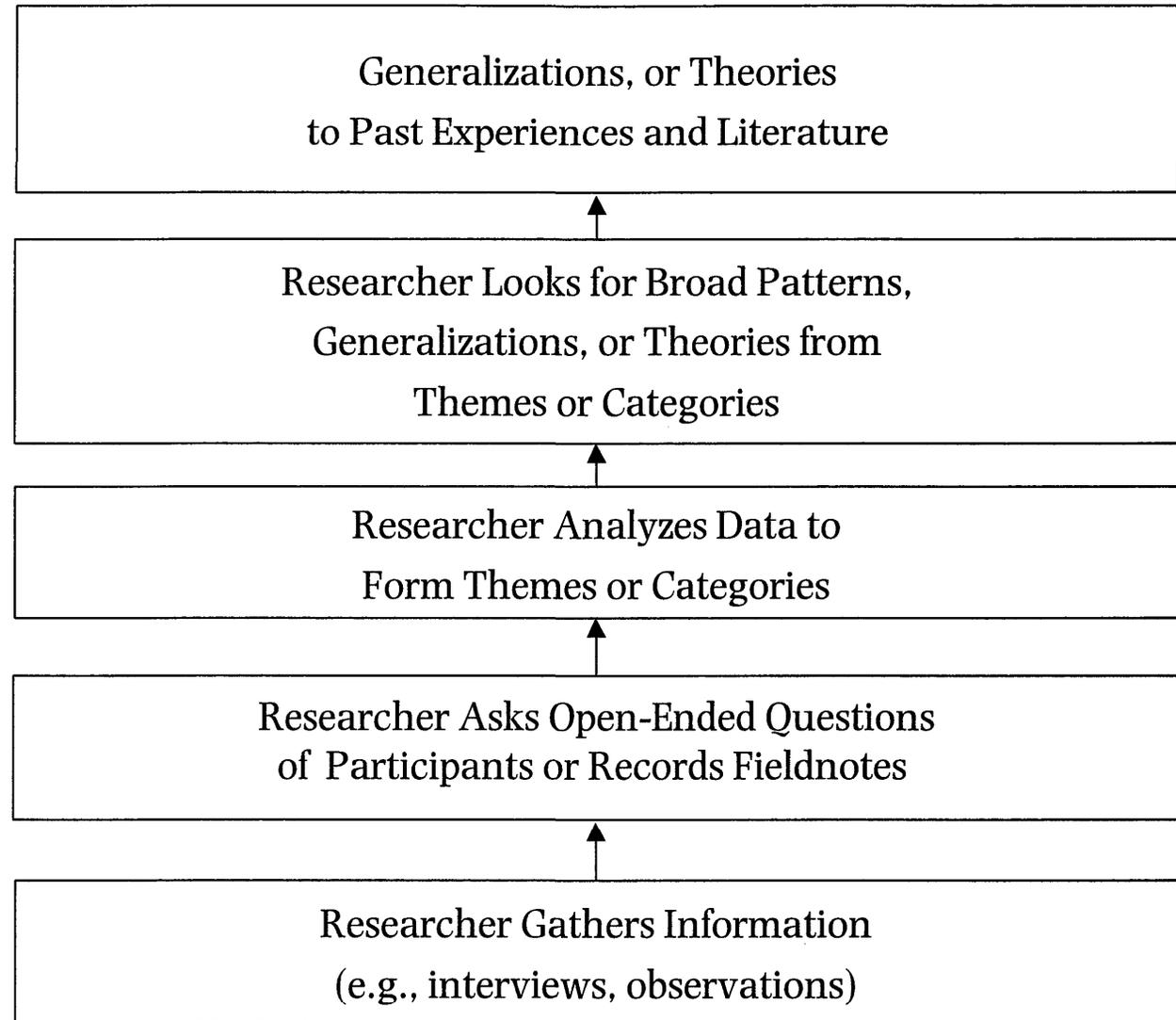
# Qualitative - approaches

- Paradigms – a model or scheme that organises our view of something
  - Positivist – social system can be studied scientifically, action is rational
  - Feminist – gender differences and how they relate to social organisation
    - Can be applied to marginalised groups
  - Structural functionalist – society viewed as an organism, parts contribute to functioning whole
  - Postmodern – reality is personal; researcher is visible

# Qualitative - options for theory

- Grounded theory (e.g. Glaser and Strauss)
  - Observing aspects of social life and then seeking to discover universal patterns that may point to relatively universal principles.
  - Constant comparison/ iterative method
  - Anthropological tradition
  - Developed in clinical research in medical sociology
- One case does not a theory make!

# Using a theory inductively



**Figure 7.5** The Inductive Logic of Research in a Qualitative Study

# Comparing deductive & inductive

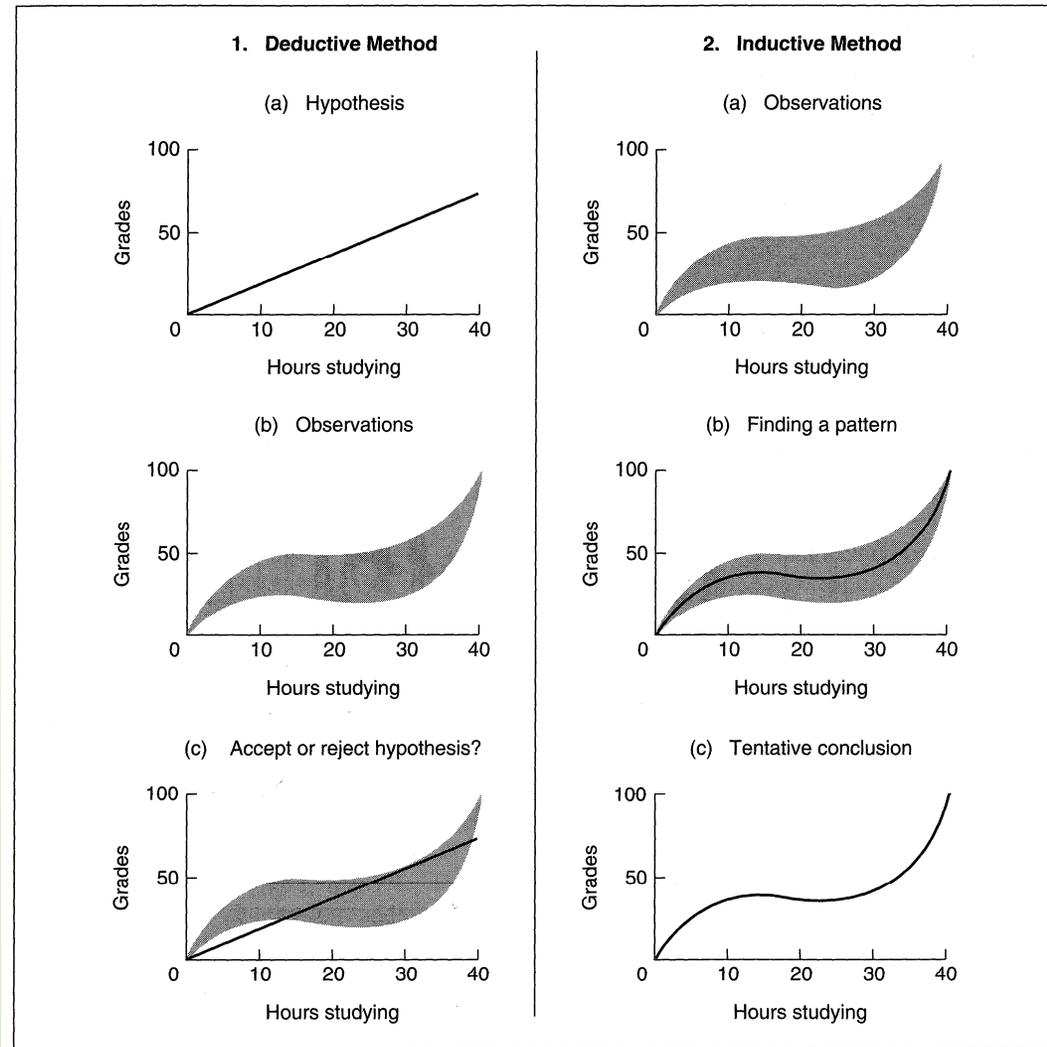


FIGURE 2-3 Deductive and Inductive Methods

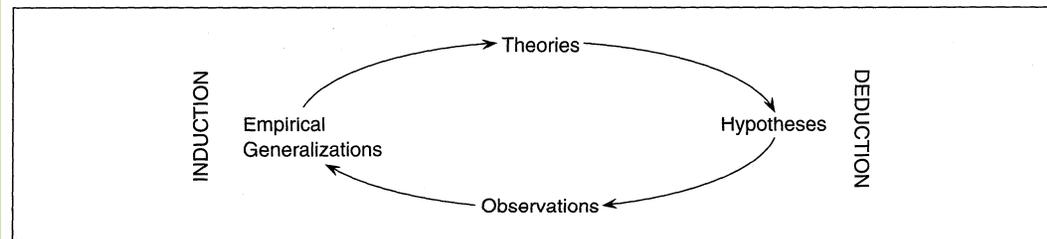


FIGURE 2-4 The Wheel of Science

# Where to find a theory

- Consider the scope. If it is:
  - About individuals – psychology
  - About groups or organisations – sociology
  - About individuals and groups – social psychology
  - About other topics in the relevant discipline, e.g. economics
- Look at similar studies for the theory they used

# Constructing your theory

- Specify the topic
- Specify the range of phenomena your theory addresses – scope
- Identify and specify major concepts and variables
- Find out the known relationships between those variables – literature
- Reason logically from those propositions to your specific topic

After Babbie (2004, p.53)

# Scripting a theory

- The theory I will use will be...
- It was developed by...
- And it was used to study...
- This theory indicates that (propositions or hypotheses)...
- As applied to my study this theory holds the I would expect...
- Because...

After Creswell (2003)