

# Kumar: Research Methodology

## Chapter 1

# Research: A Way of Thinking

Prepared by Stephanie  
Fleischer



# Topics covered

- Reasons for doing research
- How evidence from research can inform practice
- Applications of research
- Characteristics and requirements of research process
- Types of research
- Mixed methods approach
- Paradigms of research



# Reasons for doing research

- To understand a field you are studying/working in
- To explain and find answers in relation to what you perceive
- To critically examine certain aspects
- To make changes
- To find answers to theoretical questions



# How evidence from research can inform practice

- Decision makers use evidence to improve services or make processes more effective
- Evidence-based practice is used to collect information to determine the appropriateness of practice taking into account:
  - Evidence to deliver process/services effectively
  - Critical judgement of service providers on suitability and appropriateness
  - Consumer experience or preference



# Application of research

- Examine your own field
- Methodologists have developed research methods to understand your specific area
- There are many different procedures and techniques
- Reliability and validity depends on the soundness of the research methods adopted



# Figure 1.1 The applications of research

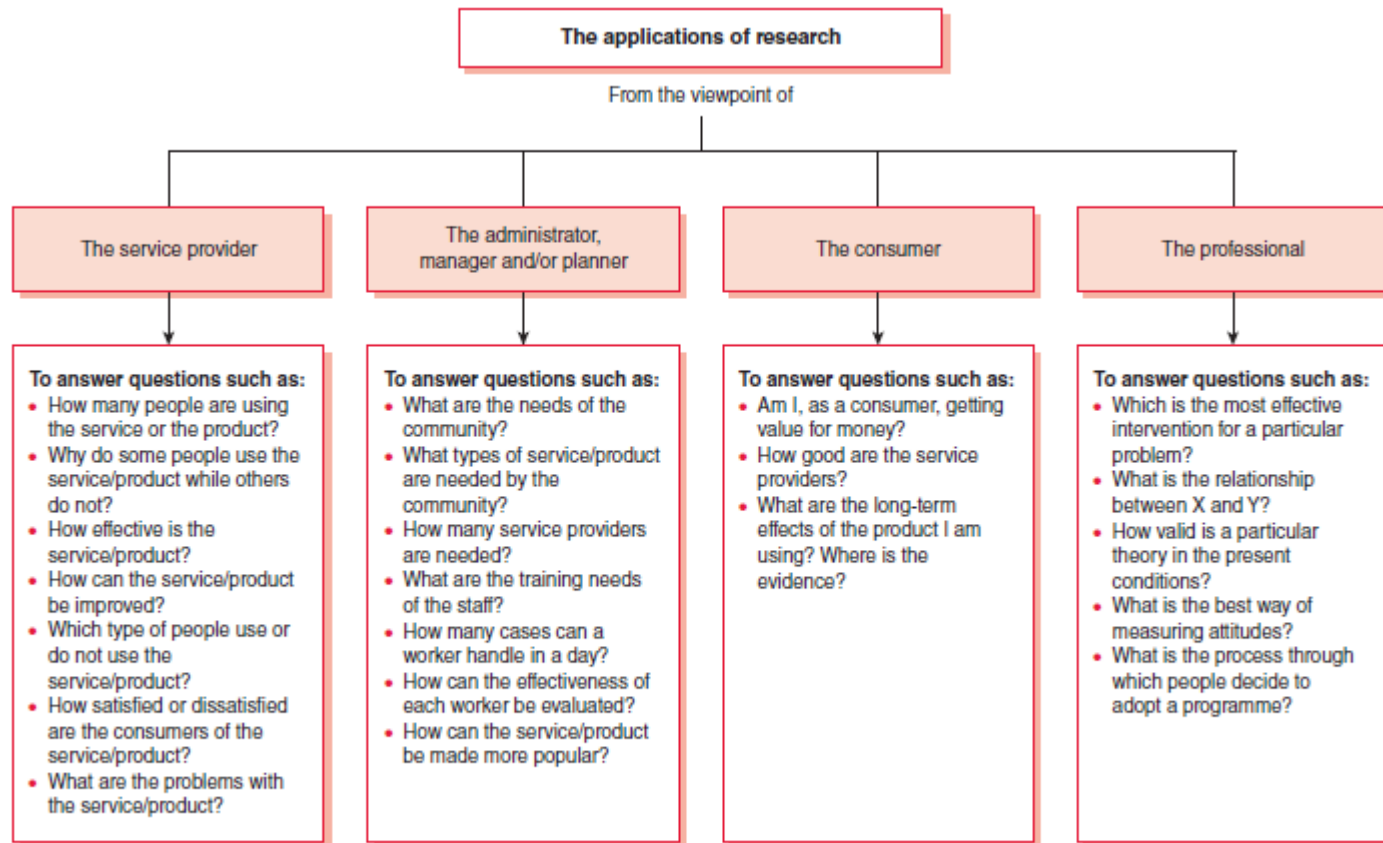


Figure 1.1 The applications of research



# Research: What does it mean?

- “Research is a structured inquiry that utilises acceptable scientific methodology to solve problems and creates new knowledge that is generally applicable.” (Grinnell 1993:4)
- “a systematic investigation to find answers to a problem” (Burns, 1997:2)

authored by Stephanie Fleischer © SAGE publications  
Ltd 2014



# Characteristics and requirements of research process

Collecting, analysing and interpretation of information to answer questions must require certain characteristics:

- Controlled
- Rigorous
- Systematic
- Valid and verifiable
- Empirical
- Critical





# Types of research

- Mode of enquiry to find answers to a research problem underpinned by different philosophies:
  - **Quantitative approach** or the **structured approach**
  - **Qualitative approach** or the **unstructured approach**
  - **Mixed methods approach**
- The choice of approach depends on
  - **Aim of enquiry** – exploration, confirmation or quantification.
  - **Use of the findings** – policy formulation or process understanding.



# Figure 1.2 Types of research

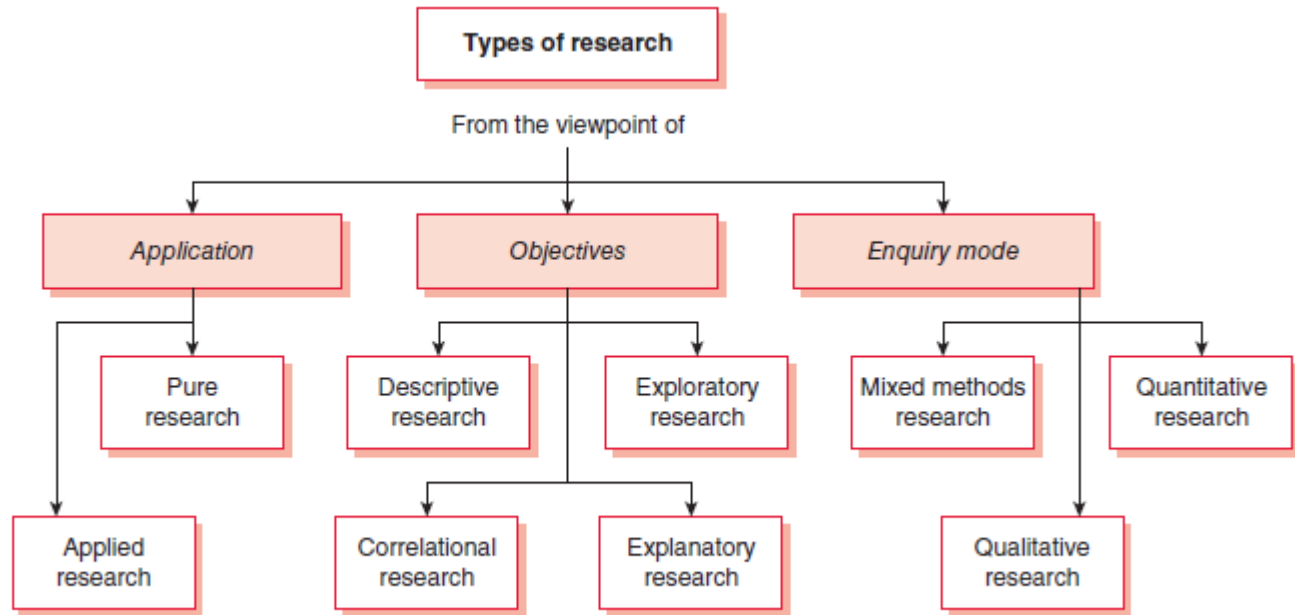


Figure 1.2 Types of research



# The mixed methods approach

Combine multiple methods of different paradigms (quantitative /qualitative ) to improve findings

- Advantages:
  - Enhances research possibilities
  - Better for more complex situations
  - Enrichment of data
  - Collecting additional research evidence
- Disadvantages:
  - More data means more work and resources
  - Requires additional and diverse skills
  - Contacting two study populations
  - Resolving disagreements in data



# Paradigms of research

Form the basis of research methodology

- Quantitative approach (systematic, scientific or positivist approach to social enquiry)
- Qualitative approach (ethnographic, ecological or naturalistic approach)
- Mixed methods approach  
(combination of quantitative and qualitative approach)



# Table 1.2 Differences between qualitative, quantitative and mixed methods approaches

**Table 1.2** Differences between qualitative, quantitative and mixed methods approaches

Difference with respect to:	Quantitative approach	Qualitative approach	Mixed methods approach
<i>Underpinning philosophy</i>	Rationalism: 'That human beings achieve knowledge because of their capacity to reason' (Bernard 1994: 2)	Empiricism: 'The only knowledge that human beings acquire is from sensory experiences' (Bernard 1994: 2)	Both are valuable to social research theory and practice. That knowledge can be gained through both the capacity to reason and sensory experiences.
<i>Approach to enquiry</i>	Structured/rigid/predetermined methodology	Unstructured/flexible/open methodology	Can be structured, unstructured or both
<i>Main purpose of investigation</i>	To quantify the extent of variation in a phenomenon, situation, issue, etc.	To describe variation in a phenomenon, situation, issue, etc.	To quantify and/or explore with multiple or mixed methods a phenomenon to enhance accuracy or yield greater depth
<i>Measurement of variables</i>	Emphasis on some form of either measurement or classification of variables	Emphasis on description of variables	Measurement and/or description
<i>Sample size</i>	Emphasis on greater sample size	Fewer cases	Larger sample size for some aspects and smaller for others, depending upon the purpose
<i>Focus of enquiry</i>	Narrows focus in terms of extent of enquiry, but assembles required information from a greater number of respondents/sources	Covers multiple issues but assembles required information from fewer respondents	Narrow or broad, or both, depending upon the methods used
<i>Dominant research topic</i>	Explains prevalence, incidence, extent, nature of issues, opinions and attitude; discovers regularities and formulates theories	Explores experiences, meanings, perceptions and feelings	Both or either, depending upon the methods used
<i>Analysis of data</i>	Subjects variables to frequency distributions, cross-tabulations or other statistical procedures	Subjects responses, narratives or observational data to identification of themes and describes these	Quantitative or qualitative or both, depending upon the objectives
<i>Dominant research value</i>	Reliability and objectivity (value-free)	Authenticity, but does not claim to be value-free	Dominant value of one or both of the paradigms
<i>Communication of findings</i>	Organisation more analytical in nature, drawing inferences and conclusions, and testing magnitude and strength of a relationship	Organisation more descriptive and narrative in nature	Similar to the quantitative and/or qualitative approach

