



# QUALITATIVE RESEARCH: AN OVERVIEW

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# Learning Objectives

- To be able to compare between quantitative / qualitative approaches to research.
- To understand basic concepts of qualitative research.
- To be introduced to some examples of qualitative techniques and methods

# Headlines

- Quantitative vs. Qualitative approaches
- Qualitative research:
  - Characteristics
  - Methods
  - Ethical considerations
- How to / should we make a choice ?

# Consider these questions

- Why do people smoke ?
- Why do people eat what they eat ?
- Why don't most people in our part of the world exercise ?
- How do people contract infection ?
- How is such information useful ?

# Quantitative Approach

- A quantitative approach is one in which the investigator primarily uses claims for developing knowledge, i.e. cause and effect thinking, using specific variables, hypotheses and questions, using measurement and observation, and the testing theories (Creswell, 2003)
- There is no such think as qualitative data. Everything is either one or zero (Kerlinger, from Miles & Huberman 1994)

# Qualitative Research

- “... qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them” (Denzin & Lincoln 2000)
- “All research ultimately has a qualitative grounding” (Campbell, from Miles & Huberman 1994)

# Why Qualitative ?

- Do we need qualitative approaches in health research?
- In depth understanding of causal pathways of health-related events  
(habits/RFs, CDs, NCDs, indicators)
- Offers a variety of methods to be used for identifying what is really important to both patients and carers. It can also be used to identify and detect obstacles to change and the reasons why improvement does not occur.
- Can help in identifying cultural and social factors that affect health care positively or negatively.

# Comparing Approaches (I)

## Qualitative

- Understanding
- Interview/observation
- Discovering frameworks
- Text (words), images, objects
- Theory generating
- Quality of informant more important than sample size
- Subjective
- Embedded knowledge
- Models of analysis: fidelity to text or words of interviewees

## Quantitative

- Prediction
- Survey/questionnaires
- Existing frameworks
- Numerical
- Theory testing (experimental)
- Sample size core issue in reliability of data
- Objective
- Public
- Model of analysis: parametric, non-parametric



# Comparing Approaches (II)

## Qualitative

### • **Methods**

- Focus Groups
- Interviews
- Surveys
- Self-reports
- Observations
- Document analysis
- **Sampling:** Purposive

### • **Quality Assurance:**

- **Trustworthiness:** Credibility, Confirmability, Dependability, Transferability

## Quantitative

### • **Methods**

- Observational
- Experimental
- Mixed
- **Sampling:** Random (simple, stratified, cluster, etc) or purposive

### • **Quality Assurance:**

- **Reliability:** Internal and External
- **Validity:** Construct, Content, Face

# Characteristics of Qualitative Research

- Purpose is understanding meanings people have constructed
- “Naturalistic”
- Uses subjective data
- Interpret results in contexts
- The researcher is the instrument
- The researcher’s signature is apparent
- Deals with local conditions not controlled

# Qualitative Research Questions

- In qualitative study inquirers state research questions, not objectives (i.e. specific goals for the research) or hypotheses (i.e. predictions that involve variables and statistical tests). (Creswell 2003)
- Example: How do students use programme development tools?

# Choice of Methodology

Depends on:

- Research Questions
- Research Goals
- Researcher Beliefs and Values
- Researcher Skills
- Time and Funds

# Examples of Qualitative Research Methods

- Focus group discussions
- Key informant interviews
- Ethnography
- Phenomenology

# Qualitative Methodologies (Example)

- Ethnography
  - An ethnography is a description and interpretation of a cultural or social group or system. The research examines the group's observable and learned patterns of behaviour, customs, and ways of life

# Qualitative Methodologies (Example)

- Phenomenology:
  - Phenomenology is the study of human experience and of the ways things present themselves to us in and through such experience (Sokolowski 2000, 2).
- Phenomenology is the study of structures of consciousness as experienced from the first-person point of view. (Smith 2008)

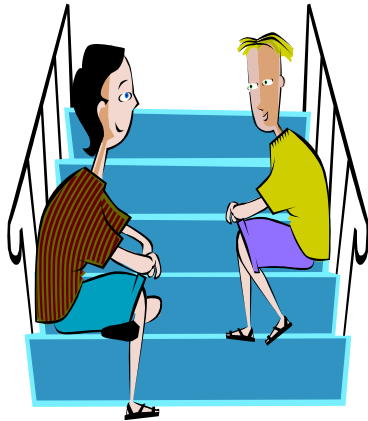
# Qualitative Research Techniques

- Participant observation (field notes)
- Interviews / Focus groups
- Video / Text and Image analysis (documents, media data)



# Qualitative Research Techniques

- Interviews



- # Content analysis

- Observation



# Involves Skills of

- Observing
- Conversing
- Participating
- Interpreting

# Qualitative Techniques (I)

- Participant observation
  - Gains insight into understanding cultural patterns to determine what's necessary and needed in tool development (complementary to interviews)
- Interviews/Focus groups with stakeholders
  - Explores how tools are used and could be used in a novice programming course
  - Gains insight into the meaning of tools for students for learning to program

# Qualitative Techniques: (II)

- Data analysis
  - Themes arising from data would provide insight into current “learning to program” issues and see what is important to students / teachers / administrators
- User Testing
  - Useful for triangulating results

# Data Analysis Steps

- Organize and prepare the data for analysis
- Read all data, get a sense of the whole
- Begin detailed analysis with coding process
- Generate a description of the setting /people as well as categories or themes for analysis
- Represent themes (writing, visual, etc.)
- Interpret and make meaning out of data
- \*iterative, non-linear process

# Limitations

- Limited generalizability
- Subjectivity

# Ethical Considerations

- Responsibilities to society
- Professional expertise and standards
- Responsibilities to participants

# Exercise

Area of investigation	Qualitative investigation	Quantitative investigation
GP Consultation		
Lung Cancer		



# Conclusion

- Is it better to continue comparing both approaches / methodologies?
- Rather, we may consider using both approaches in health research, in an integrated complementary fashion, using a mixed-methods approach, according to the research question



- Often, the person most changed by the research is the researcher

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