# Qualitative research 1

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# Overview of presentation

This presentation will:

- Introduce qualitative research, its advantages, disadvantages and uses
- Discuss the various approaches to qualitative design

# Introduction

- Qualitative research is a study done to explain and understand the meaning or experience of a phenomenon or social process and the viewpoints of the affected individuals.
- Investigates opinions, feelings and experiences.
- Understands and describes social phenomena in their natural occurrence- holistic approach.
- Does not test theories but can develop theories.

Mason, 2002

# Features of qualitative research


- Exploratory
- Fluid and flexible
- Data-driven
- Context sensitive
- Direct interaction with affected individuals

Mason, 2002

# Advantages and disadvantages

**Advantages**:

- Richer information
- Deeper understanding of the phenomenon under study

**Disadvantages**:

- Time consuming
- Expensive
- Less objective
- Findings cannot be generalized

Mason, 2002

# Uses of qualitative studies

**Exploratory or pilot study**:

- Precedes a quantitative study to help refine hypothesis
- Pilot study to examine the feasibility of a program/ project implementation
- Designing survey questionnaires
- To improve the reliability, validity and sensibility of new or existing survey instruments in a new population

Green, 2013

# Uses of qualitative studies

**To explain quantitative data findings:**

- Can follow a quantitative research to help provide a deeper understanding of the results. For example, the use of ethnography to explain the social context in which mortality and birth rate data are produced.
- Parallel studies in a mixed qualitative and quantitative design to provide greater understanding of a phenomenon under study.

Green, 2013

# Theories grounded in the qualitative research


1. Phenomenology
2. Ethnomethodology- study culture and settings through observations
3. Grounded Theory
4. Symbolic Interactionists
5. Interpretivists- study the feelings, perceptions and understanding of people about an issue
6. Critical approach
7. Feminists

University of Surrey, n.d.

# Approaches to qualitative design

- Research question
- Sampling
- Data generation
- Data management, analysis and presentation
- Ethics

# Research Question

- Answer questions on ‘how’, ‘what’ or ‘why’ (‘how many’ and ‘how much’ quantitative
- Should be clear
- Determines data sources and methods

Mason, 2002

# Sampling

- Depends on study purpose, population and phenomenon of interest
- Includes categories that will provide data in answer to the research question
- Sample size is usually small but should be large enough to provide sufficient and relevant data
- Depends on available time and resources

Mason, 2002

# Sampling

**Purposive sampling**: deviant case sampling; typical case sampling; snowball sampling; political sampling

**Theoretical sampling** (sampling to saturation)

- A type of purposive sampling
- More rigour
- On going until theory–saturation point is reached: there is meaning and understanding of the phenomenon from data already generated and no new information from data

**Convenient sampling**: Less rigour, useful for hard-to-reach groups

Barbour, 2001; Green, 2016

# Data sources

- People- individuals or groups
- Organizations and institutions
- Texts- published and unpublished
- Settings, environments
- Objects, artefacts
- Media productions
- Events
- Multiple data sources- more rigour

Mason, 2002

# Methods of generating data

1. Individual interviews
2. Focus groups
3. Observations
4. Ethnography
5. Action Research
6. Others: Longitudinal, historical, case studies
7. Triangulation: use of different methods- improves internal validity

University of Surrey, n.d.

# Documenting data

**Note taking/transcribing:**

- Researcher may be subjective
- Time consuming (approximately 5 hours for 1 hour of interview)

**Tape recording:**

- More objective
- Better flow of discussion
- More detailed information
- Researcher can refer back to the recording
- Research concentrates better and interacts better

**Tape analysis:** researcher makes note from the recording

- More prone to bias like note taking

University of Surrey, n.d.

# Data analysis

- Aims to describe the phenomenon and its meaning in order to establish or provide an in-depth understanding of the problem
- Data is transcribed before analysis and participants' identifying information is removed
- Approach is usually inductive
- Mostly uses thematic analysis: familiarization with data, identification of codes and themes; data coding; and organizing of codes and themes
- Examples of approaches: thematic content analysis-framework analysis; narrative analysis.

Green, 2013

# Thematic content analysis

- Most common
- Shows the essential elements in the participants' narratives
- Can be used to analyse data generated through interviews, focus groups, observation and documentary analysis

Green, 2013; University of Surrey, n.d

# Framework analysis

- A type of thematic content analysis

**Steps**

1. **Familiarization with data**: Read through the transcripts or listen to tapes and make notes of interesting and relevant information
2. **Develop a coding scheme**: Read the notes and list the different types of information (repetitions, use of specific terminologies- 'in vivo', metaphors, similarities or differences); identify codes and themes; then develop the coding scheme
3. **Indexing**: Systematically apply coding to the entire data
4. **Charting**: Look for links among the categories and group them according to themes or by cases
5. **Mapping and interpretation**: Compare and contrast the themes between and within cases

Green, 2013

# Grounded theory analysis

- A more systematic approach to analysis
- Goes beyond thematic analysis
- A cyclical process entailing the data generation, analysis, development of provisional coding scheme, further sampling, more analysis, review of emerging theory until a point of saturation'
- Dictated by emerging data
- Analytical distance- initial open coding
- Uses both inductive and deductive 'moves back and forth between theory and data'
- Time consuming

# Qualitative data analysis software

- Computer assisted qualitative data analysis software (CAQDAS). Examples are: ATLAS.ti, Coding Analysis Toolkit (CAT), Nvivo, QDA Miner, Xsight

**Advantages**:

- Easier to manage data
- Analysis may be more thorough
- Easy transfer of files as software- team analysis is facilitated and more consistent
- A more transparent analysis

**Disadvantages:**

- Time to learn how to use the software
- Cost
- Standardized formatting
- Reduced closeness to data
- Grounded theory approach- less suitable to other style of analysis like narratives

Green, 2013

# Data presentation

- Based on categories/ themes that emerged from data analysis
- Themes are presented in sections and if necessary, sub-sections
- Quotes from interviews may be included- reliability and validity of quotes
- Possible use of quantitative terminologies

University of Surrey, n.d.

# Trustworthiness

- Validity, reliability and generalizability are measures of rigour in quantitative studies
- Quality and rigour in qualitative research is the ability to demonstrate the methodological, theoretical and practical steps taken to arrive at a conclusion- ‘reflexive methodological accounting’

Mason, 2002

# Improving rigour

| Criteria | Possible methods |
|---|---|
| Transparency | Clear account of procedure<br>Audit trail |
| Maximize validity | Support interpretations with evidence from the data<br>Analyse deviant cases and disconfirming data<br>Provide sufficient context to enable readers judge interpretation<br>Respondent validation/ member checking |
| Maximize reliability | Comprehensive analysis of entire data set<br>Use more than one analyst/coder<br>Simple frequency count of key themes |
| Comparative | Compare data between and within cases in the data set<br>Compare finding to other studies |
| Reflexivity | Account for researcher's role in the study: methodological and theoretical openness and consciousness of research environment and the broader social context |

Adapted from Green, 2013

# Generalizability

- Qualitative studies are not statistically generalizable
- Conceptual generalizability- The similarities between concepts that are associated with specific problems
- Transferability – adequate description of the study setting and good theoretical analysis

Green, 2013

# Ethics

- Protects individuals, communities, environment and researchers
- For research funding
- Necessary for credibility of study
- Includes the ethical principles of autonomy, beneficence, non-maleficence and justice

Green, 2013

# Ethical dilemmas

- Informed consent: not always possible- chanced interviews, observations, gatekeepers and hard-to-reach groups
- Confidentiality and anonymity may not be absolute: focus groups, participatory research, moral and legal rights
- Avoiding harm: interview process may cause unintended emotional stress
- Researchers: integrity, physical or psychological trauma to researchers

Green, 2013

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# Thank you!