INTRODUCTION TO QUALITATIVE RESEARCH

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An Outline

- Research Paradigms
- Differences between Qualitative and Quantitative Research Design
- Qualitative Research Design
  - Definition
  - The When and The Why
  - Methods
  - Data Collection Techniques
  - Sampling
  - Validity & Reliability
  - Data Recording Procedures
  - Data Processing, Data Analysis & Data Interpretation

Research Paradigms

- Quantitative and qualitative research may largely be seen as existing within two separate ***scientific paradigms***.
- A ***scientific paradigm*** connects and categorises a variety of research techniques through underlying philosophical assumptions surrounding appropriate research practice.
- Positivism - Quantitative
- Interpretivism/Naturalistic – Qualitative
- Critical Theory - Action Research

Research Paradigms

- The ontological question
  - Questions on reality
  - Ontological assumptions
- The epistemological question
  - Questions on knowledge
  - Epistemological assumptions
- The methodological question
  - How to find out

Research Paradigms

- Positivism argues that research should act "… as an organised method …" surrounding precise **empirical observations** of individual behaviour in order to discover and confirm a set of probabilistic **causal laws** that can be used to **predict** general patterns of human activity" (Neuman, 1997: 63)

- **Empiricism** argues that only that which can be experienced through the senses may be known to be real.

- Positivist research gained dominance in the natural sciences and was later adopted in social sciences.

Research Paradigms

- The **interpretive** approach argues that research should explore "…socially meaningful action through the direct detailed observation of people in natural settings in order to arrive at **understandings** and **interpretations** of how people create and maintain their social worlds" (Neuman, 1997:68).

- We use "… methods that try to **describe** and **interpret** people's **feelings** and **experiences** in human terms rather than through quantification and measurement" (Terre Blanche & Kelly, 1999: 123).

Positivism

- Ontology:
  - An objective, true reality exists.
  - Governed by unchangeable natural cause-effects laws
  - Reality can be generalized
  - Nature of human beings –

    Rational

    External factor - same cause for everyone

Positivism

- Epistemology

Knowledge – described in systematic ways

- consists of verified hypothesis (facts/laws)
- probabilistic
- accurate and certain

Research – uncover reality ie. natural laws

- explain, describe, predict and control phenomena

Positivism

- Methodology
  - Objective, independent from subject
  - Investigator often controls the investigated
  - Science: value-free
  - Empirical, structured and replicable observation, measurement, experimental
  - Survey studies, quantitative descriptive studies, verify hypotheses

Interpretivism

- Ontology:

  Reality – Complex, dynamic, subjective, multiple

  Nature of human beings – created the meanings of their words

Interpretivism

- Epistemology

Knowledge :

- observable phenomena, subjective beliefs, values, reasons, understandings.
- is constructed
- about the way people make meaning in their live
- research

  - describe multiple realities
  - grasp meaning of phenomena
  - study mental, social, cultural phenomena

Interpretivism

- Methodology
  - Personal involvement of researcher
  - Own subjective experience
  - Understanding of the whole, deep understanding of each parts
  - Values, integral part of social life
  - Field research, natural settings
  - Observation, interviews etc

Differences between Quantitative and Qualitative Research Design

1. Philosophy
2. Goal
3. Focus
4. Method
5. Data collection techniques
6. Research design
7. Sample
8. Generalisation
9. Analysis
10. Role of researcher

Qualitative Research

"Any kind of research that produces **findings not** arrived at by means of **statistical procedures** or other means of quantification".

(Strauss & Corbin, 1990)

Qualitative Research

"**Collection**, **analysis**, and **interpretation** of comprehensive **narrative** and **visual data** in order to gain insights into a **particular phenomenon** of interest".

(Gay& Airasian, 2006)

Qualitative Research

"Uses a **naturalistic approach** that seeks to understand phenomena in **context-specific settings** such as "real worlds setting" [where] the researcher does not attempt to manipulate the phenomenon of interest".

(Patton, 1990)

Why? When? Reasons…

- Have deep and holistic understanding of particular phenomenon.
- Discover and understand a phenomenon/a process/ the perspectives and worldviews of the people involved.
- Explores the richness, the depth and complexity of phenomena.

Why? When? Reasons…

- When variables cannot be quantified
- When variables are best understood in their natural settings
- When variables are studied over time
- When studying roles, processes, and groups
- When the paramount objective is "understanding"

Qualitative Research Methods

Eg:

- Case study
- Ethnography
- Phenomenology
- Historical
- Content analysis
- Grounded theory
- Generic

Case Study

In case study:

- an entity is studied as a single unit;
- with clear boundaries;
- in depth

Entity: an activity, a program/an event, a group, an individual person, an institution.

Bounded: the case is separated out for research in terms of time, place, or some physical boundaries.

Ethnographic Study

Focus upon the **cultural aspect** of a **group of people**.

Culture:

- Set of belief, patterns of behaviour, values, language, habits that is shared by every member of the group.
- It also includes rituals, economic and political structures, life styles, interaction and communication style.

Purpose:

To understand the phenomena.

Ethnographic Study

Some types of ethnographic study:

- Realist ethnography
- Ethnographic case study
- Critical ethnography

Descriptive ethnography (Patton, 1990):

- through analysis, uncover patterns, typologies and categories

Important aspect in ethnographic study:

- triangulation of data

Narrative Study

Gay & Airasian (2006):

- Description of the lives of individuals.
- Collection of individual's experience stories.
- Discussion of the meaning of those experiences for the individual.

Moen (2006)

- a story that tells a sequence of events,
- significant for the narrator or her or his audience

Narrative Study

Forms of Narrative Study:

Eg.: Autobiographies
(author and participant is the same person)
Biographies
Life writing

Basis of categorization:

- Person who authored the account.
- Scope of narrative
- Person who provide the ‘story’
- Theoretical/conceptual framework influencing the study
- One or more narrative

Grounded Theory

A systematic qualitative procedure used to generate theory that explains, at a broad conceptual level, a process, an action, or interaction about a substantive topic.

Aim:

Generation of theory from the data.

Data Collection Techniques

- Observation
  - Participant Observation
  - Non-participant Observation
- Interview
- Focus Group
- Document Analysis

Observation

Non-participant/Passive observation

- Keep your distance
- Unobstrusive
- Outsider observation/etic
- Phases of non-participant observation (Adler & Adler, 1998; Denzin, 1989, Spradley (1980):
  - Selection of a setting (where and when)
  - Definition of what is to be documented in observation and in every case
  - Training of observers for standardisation in observation
  - Descriptive observations – initial, general presentation of the field
  - Focused observation – on aspects relevant to research Q
  - Selective observation – to purposively grasp central aspects
  - The end of observation – when theoretical saturation is reached

Participant Observation

- Participates in activities
- Insider/emic perspective
- Active to stimulate discussion
- Phases of participant observation (Spradley, 1980)

- descriptive observation – provides orientation to field under study, non-specific descriptions to grasp complexity of the field and develop more concrete research questions
- focused observation – narrows perspectives on processes and problems most essential for research questions
- selective observation – towards end of data collection and focused on finding further evidence and e.g. for the types of practices and processes found in step 2.

Process of Observation (Cresswell, 2005)

- Select a site to be observed that can help you best understand the central phenomenon – obtain required permission to gain access
- Ease into the site slowly by looking around, getting a general sense of site, taking limited notes initially
- At the site, identify who, what, when, how long to observe
- Determine your role
- Conduct multiple observation over time
- Design some means of recording notes during observation – protocol/fieldnotes

Example of Observation Protocol

- Event/Activity of observation:
- Site/Address:
- Observer
- Role of observer
- Date and time of observation
- Length of observation
- Place of observation

Guideline	Obsevational notes	Researcher's reflective notes
Descripton of • physical environment • social enviromment • participants Desciption of activites conducted - types of learning activities - teacher's teaching style - use of materials - students' responses Description of social interactions T – P P – T P - P		Repetitive event/ activity/issue Emerging idea/issue/theme Unique event/ activity/issue

Interview

Three types

- Structured interviews
- Semi-structured interviews
- Unstructured interviews

Three types of probe questions

- Detailed oriented “What happened after you found out that your friend cheated?
- Elaboration e.g “Can you tell me more”
- Clarification e.g “Did you talk to your teacher?

Interview

- List points that are needed (to answer research questions)
- Draft possible question
- Organize questions into categories/themes
- Sort question; eg. general to specific

Interview

- General question:
- Why, when, how, who, what…

- Specific questions:
- How often, how many…

- Yes/No questions…need elaboration

Interview

- Questions to avoid:
- Biased language
  - Eg: What is your opinion about the problems with PPSMI?
  - How have merit demerit system help you in reducing the disciplinary cases rate in your school?
- Leading questions
  - Eg: Don’t you think it is better to say that….?

Conducting an Interview (Cresswell, 2005)

- Identify the interviewees
- Determine type of interview you will use
- During interview, audiotape the questions and responses
- Take brief notes during interviews
- Locate a quite and suitable place for conducting interview
- Obtain informed consent from interviewee to participate in study
- Have a plan, but be flexible
- Use probes to obtain additional information
- Be courteous and professional when interview is over

Example of Interview Protocol

Name of project:

Time of interview:

Date:

Place:

Time:

Interviewer:

Interviewee:

Duration of interview:

Guideline	Researcher's notes	Researcher's reflective notes
Establishing Rapport: Desribe the project, tell interviewee of purpose of study, sources of data being collected, how long the interview will take, read and sign the consent form. **Probe Questions** • *detailed-oriented* • *elaboration* •*Clarification* ***Closure*** Thank interviewee, assure confidentiality and potential for future interview (if required)		

Document Analysis

- Is the study of recorded human communications
- Eg: newspapers, magazines, web pages, poems, books, songs, paintings, speeches, letters, e-mail messages, laws, constitutions, etc
- Technique: involves making inferences by systematically & objectively identifying special characteristics of messages
- Manifest:
  - visible content of communication
  - intended meaning
- Latent:
  - underlying meaning, unintended, require corroboration

Sampling

- Qualitative Sampling:

  The process of selecting a small number of individuals for a study in such a way that the individuals chosen will be able to help the researcher understand the phenomenon under investigation.

  (Gay & Airasian)

Sampling

Miles & Huberman (1994):

- The setting
  - (where the research will take/took place)
- The actors

  (who will be observed/interviewed)
- The events
  - (what the actors will be observed/interviewed)
- The process
  - (the involving nature of events undertaken by the actors within the settings)

Table Sampling

Probability Sampling	Non probability sampling
•Representative of the population	•Represent itself (non-representative samples)
•Can be generalize	•Targeting on particular group
•Eg: Simple random sampling Systematic sampling Stratified sampling Cluster sampling Stage sampling Multi-phase samples	•Eg: Convenience sampling Quota sampling Purposive sampling Dimensional sampling Snowball sampling

Sampling

- Purposive sampling
  - Most common in QR
  - A non-representative subset of larger population
  - Respondents chose based on specified criteria, to serve specified purpose
  - Relevant to research question

- Eg.
  - Teachers involved in MLM
  - zero in on the target group
  - take whoever available

Sampling

Purposive Sampling

Persian cat with blue eyes

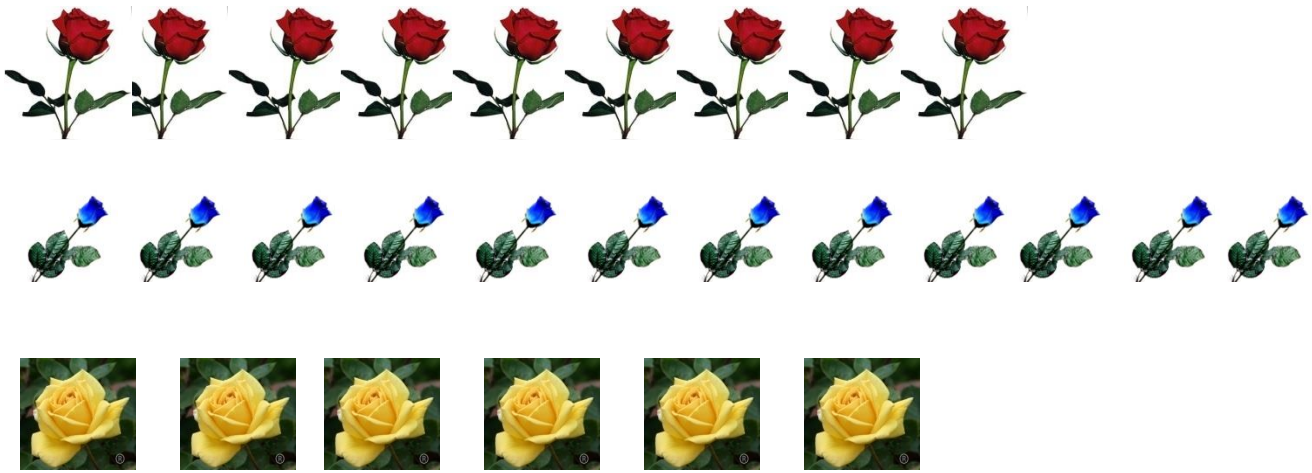
Local cat with blue eyes

Sampling

- Quota sampling
- Researcher deliberately sets the level of proportion within sample
- To make sure every part of population is included
- The proportion may/may not be parallel to actual proportion

Sampling

Quota sampling



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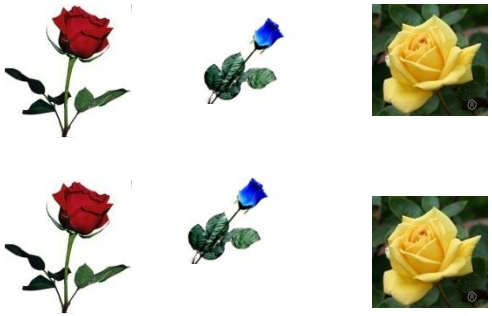

Sampling

- Convenience sampling
  - An accidental / haphazard sample
  - Whoever happens to be at the scene
- Eg.
  - Volunteers
  - At the supermarket

Sampling

- Snowball sampling
- Analogy: snowball accumulate snow as it roll down the hill
- Researcher picks the sample along the way
- Suggestion from participant-willingness, appropriate
- Hard to track population
-
- Eg.
- Drug users
- HIV patients
- Sexual abused victims

Validity & Reliability

- Different strategies used to prove/to show the trustworthiness of the findings

- Quantitative Research:
- Prove to readers procedures have been followed faithfully because very little concrete description of what anyone does is provided

- Qualitative Research:
- provides the reader with a deception in enough detail to show that the author's conclusion is valid and reasonable

Validity & Reliability

- Triangulation
  - Types of triangulation
    Data triangulation – member's check
  - Researchers' triangulation – multiple researchers
  - Method triangulation – multiple method

- Members check
- Peer review
- Inter-raters' reliability
- Audit trail

Data Recording Procedures

- Protocols:

  Forms for recording information

- Observation protocols:

  Demographic information, descriptive note, reflective notes

- Interview protocols:

  Headings, instructions of the interviewer (opening statements), the key research questions, probing questions

Data Processing, Data Analysis, Data Interpretation

- Three activities in analysis:
  - Data reduction
  - Data display
  - Verification

(Miles & Huberman, 1994)

Generic Processes:

Data management
Reading/memoing
Describing
Categorizing/Coding (data reduction)
Data display
Verification (making interpretation)

Data Processing, Data Analysis, Data Interpretation

- Description of informants – aspect of demography
- Ordering and Coding of data:

Open questions	Narratives
•List	Reread objectives
•Read	Read narratives
•Identify category and code	List key words under topic, subcategories
•Re-list	Interpret
•Interpret	Code
•Check labels	
•Final list	

Data Processing, Data Analysis, Data Interpretation

- Summary of data

  Compilation sheets – a table, per study population, every case

  Further summarizing of data – matrices, diagrams, flow charts

Data Processing, Data Analysis, Data Interpretation

Summary:

Go through notes and transcripts:

- Look for keywords
- Make categorization
- Look for patterns
- Organize your data
- Match with assumptions or models

Thank you for your attention…

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