QUALITATIVE RESEARCH: An Overview

Nagoya University June 2011

WHAT IS RESEARCH?

- **Both process and outcome**
  - finding the truth about phenomena
  - important source of knowledge/truth
- **What is knowledge?**
  - justified true belief
- **How do we know?**
  - seek reliable sources/authorities **(where)**
    - documents, researchers, government reports, teachers, religious leaders, parents, peers etc
- **How do we know that we know?** (trustworthy methods)
  - (like the **source** the **"how"/method** must be open to critique)

NEED TO KNOW THE ANSWER(S)

- What is the answer?
- How do we find the answer?
- **Some questions can be answered quickly**
  - just looking outside the window
  - referring to the right book
    - E.g. where is my notebook?
    - what is the birth rate in Japan?
- **Other questions are more complex**
  - the choice of how to get the answers/the knowledge is basically the same.
    1. Search for the answers ourselves (**do the research**) or
    2. Consult an authority (**refer to reliable source**)

ACCEPTING KNOWLEDGE CLAIMS

- It is not viable to insist on knowing everything through our own direct experience and there is nothing wrong with accepting authority of others. However we need to **accept answers with a critical mind and choose the authorities carefully**.

RESEARCH AS A WAY OF KNOWING

- **No need to insist** on knowing everything through direct experience and
- **Nothing wrong** with accepting authority of others.
  - However need to **accept answers with a critical mind and choose the authorities carefully**
- **Then why do research?**
  - Doing research is an option when we need to know something but:
    1. **no authority** to consult
    2. **not ready to accept** without questioning authority (suspect/lack of source)
    3. **existing literature does not answer** our question
    4. **not satisfied** with answers available in sources
    5. **authorities disagree**
    6. **groups fail to agree with the authority** we choose to consult
    7. **authority may not be able** to answer the question we present

Purpose of Research

- **Discovery** of new knowledge (**seek/generate** the **facts**, correct interpretation, practical application etc)
- **Description** of phenomena accurately by **identifying related events**, **nature of relationships** and their **consequences** (**observations** & measurements)
- **Explanation** of phenomena/occurrences (accurate **observation**, measurement and description)
- **Prediction** of a given occurrence (**Experiment**)
- **Control/Regulate occurrences (systematic observation** of natural occurrences and their associations; **manipulation** of natural phenomena to find out its impact on other phenomena etc)
- **Theory** d**evelopment** (formulation of relevant concepts, relationships, and generalisation of phenomena)
- **Validation/challenging** of existing t**heory/ stereotypes/ perceptions**

HOW DO RESEARCHERS PURSUE THESE PURPOSES?

What is Quantitative Research?

- Asking relevant questions that seeking
  - measurements/quantifications (quantitative answers/research)
  - Contexualisations and meanings (qualitative answers/research)

- **Quantitative research**
- **employs** experimental methods/quantitative measures that help test hypothetical generalizations (Hoepfl, 1997). Emphasis on:
  - measurement
  - analysis of causal relationships between variables
  - use of charts and graphs to illustrate results
  - use of concepts such as 'variables', 'populations', 'result' etc…
- **allows** researcher to generate hypotheses to be tested with emphasis on
  1. the facts
  2. causes of behaviour
  3. information in the form of numbers - quantifiable and summarizable
  4. mathematical calculation/process as the norm for analysing the numeric data
  5. final result expressed in statistical terminologies
- **generally**, **supported** by positivist or scientific paradigm
  - Presupposes the world is made up of observable, measurable facts
  - Assumption that "social facts have objective reality" and "variables can be identified and relationships measured" (problematic for qualitative researchers)

Measurement in Quantitative Research

- **'measuring'**
  - observer understanding the physical/social world (e.g. educational issues) by performing an operation called 'measurement'
  - the assignment of numerals to objects or events according to rules
  - objective, quantitative and statistically relevant
  - about numbers, objective hard data
  - fragmenting and delimiting phenomena into measurable or common categories
    - applied to all of the subjects or wider and similar situations
  - standardised measures ensure that varying perspectives and experiences of people can be fit into a limited number of predetermined response categories to which number are assigned
    - preparing a list of behaviour to be checked or rated by an observer using a predetermined schedule or numbers (scales) as an **instrument** in his/her method of research
    - Use of pre-determined procedures

Questions Raised on Measurement

- **Reliability**
- is the measuring instrument measuring what it is supposed to measure?
  - Is it **reliable**
  - Is its measurement **valid**?
- Reliability (Joppe, 2000:1)
  - extent to which results from a measurement are:
    - consistent over time
    - accurate representation of the total population under study
    - can be reproduced under a similar methodology
  - Replicability/repeatability of results
    (1) degree to which a measurement, given repeatedly, remains the same
    (2) stability of a measurement over time
    (3) similarity of measurements within a given time period
  - **Internal consistency** with which **questionnaire** [test] **items** are answered or **individual's scores** remain relatively the **same** through **test-retest** method at **two different times** (*The Qualitative Report* December 2003)
    - **high** degree of **stability** indicates a **high** degree of **reliability:**
      - **means the results are repeatable**
      - **Caution:** test-retest method may sensitize respondent to the subject matter, and hence influence the responses given

Question (cont…)

- **Validity**
  - how **truthful** are the research results?
  - Is the research **truly measuring** that which it was intended to measure?
    - *does the research instrument allow you to hit "the bull's eye" of your research object?* i.e I
    - nitial concept, question, hypothesis that determines which data is to be gathered and how it is to be gathered…
- **Two strands for quantitative research**
  - **Firstly**, **reliability** relates to whether the result is **replicable/repeatable.**
  - **Secondly**, **validity**, whether the means of measurement are **accurate** and are actually **measuring** what they are intended to measure
- Quantitative researchers **seek** causal determination, **prediction**, and generalization of findings

DOES THIS HOLD FOR QUALITATIVE RESEARCH?

POINT OF DEPARTURE

- **Concepts of reliability and validity**
  - viewed differently by qualitative researchers these concepts
  - Quantitative term may not apply to qualitative research paradigm
    - replicability in the results **does not concern** Qual Research
- **credibility, and transferability** provide the basis of evaluating the findings of qualitative research
- **Quant**Res and **Qual**Res … approaches/ perspectives are ***essentially different paradigms***

What is Qualitative Research?

- **naturalistic approach:**
  - seeks to understand phenomena in context-specific settings
  - researcher not attempt to manipulate phenomenon of interest (Patton, 2001, p. 39)
  - findings not arrived at by means of statistical procedures or other means of quantification
  - findings arrived from real-world settings
    - phenomenon of interest unfold naturally
- **qualitative researchers** seek **illumination**, **understanding**, and **extrapolation** to similar situations
  - **analysis results in a different type of knowledge**
    - **detailed interviewing & observation (interpretive)** *vis-à-vis* ***both*** **numbers and words (measurements)**

Qualitative Researcher

- **Approach characteristic:**
  - **QualRes** embrace their involvement in research and their role within the research process
  - **QuantRes** attempt to disassociate themselves as much as possible from the research process
- Real world is subject to continuous change
  - qualitative researcher should be **present** during the **changes**
- Need to **test & demonstrate credibility** of qualitative studies
  - **quantitative** research depends on impersonal **instrument** construction
  - qualitative research, depends on **researcher** as the instrument (***ability and effort of the researcher***)

Reliability and Validity in QualResearch

- **(Patton, 2001) quality** of a study in each paradigm should be **judged** by its **own paradigm's** terms
  - **reliability** in qualitative research
    - "**dependability**" through "**inquiry audit**" .
    - examine **process and product of** the research for consistency
- **reliability** and **validity** in QualRes:
  - interpretivist [**qualitative**] conceptions
  - **discovering truth through measures of reliability and validity is replaced by the idea of trustworthiness (Mishler, 2000), which is "defensible" (Johnson 1997, p. 282) and establishing confidence in the findings**

Testing Validity and Reliability

- **How to test or maximize the validity and as a result the reliability of a qualitative study**
  - **QuantRes – generalizability** findings to wider groups is most common **tests of validity**
- **TRIANGULATION in QualRes -**typically helps test/improve **validity** and **reliability** of research/evaluation of findings.
  - judging validity and reliability relies on **multiple perceptions** about a **single reality** (**Healy and Perry, 2000**)
- **CONSTRUCTIVISM -** knowledge is socially constructed and may change depending on circumstances/contexts
  - constructed in and out of interaction between human beings and their world,
  - developed and transmitted within essentially **social context**
  - engage in research that **probes for deeper understanding not** mere examining **surface features**
  - Value or **multiple realities** that people have in their minds

TRIANGULATION

- Use of multiple methods of searching or gathering data
  - observation, interviews and recordings … for more valid, reliable and diverse construction of realities.
- Multiple investigators, method/data triangulations to record the construction of reality
- Subjects assisting researcher in the research question as well as with the data collection
- **Triangulation**
  - **"a validity procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study"** (Creswell & Miller, 2000, p. 126).
- **Reliability and validity** are conceptualized as **trustworthiness**, **rigor** and **quality** in **qualitative paradigm**

QUANTITATIVE AND QUALITATIVE CONCEPTUALISATIONS

QUALITATIVE RESEARCH –NOT EXTENSION OF QUANTITATIVE RESEARCH	
Traditional Criteria for Judging Quantitative Research	**Alternative Criteria for Judging Qualitative Research**
internal validity	credibility
external validity	transferability
reliability	dependability
objectivity	confirmability

VALIDITY IN QUALITATIVE RESEARCH

Credibility

- The credibility criteria
  - establishing that results of qualitative research are **trustworthy** or **believable** from the **perspective of the research subject**.
  - **purpose** of qualitative research is to describe or understand the phenomena of interest **from the participant's view**
  - participants are key in **legitimately judging the credibility** of the results. This calls for working collaboratively with research communities from **inception** of the study to **dissemination** of its findings.

Transferability

- degree to which the results can transferred **to other contexts** or settings **similar** to the research context. From
- primarily refers to responsibility of the one doing the generalizing.
- **enhanced** by doing a thorough job of **describing** the research **context** and the **assumptions** that were central to the research.
- **person who wishes to "transfer" the results** to a different context is then responsible for **making** the **judgment** of how sensible the transfer is

Dependability & Confirmability

Dependability

- emphasizes the need for the researcher to account for the ever-changing context within which research occurs. The researcher is responsible for describing the changes that occur in the setting and how these changes affected the way the researcher approached the study.

Confirmability

- degree to which the results could be confirmed or corroborated by others.
  - enhancing by
    1. **document the procedures for checking and rechecking the data throughout the study**
    2. Another researcher can take a "devil's advocate" (peer review)
    3. **conduct a *data audit* that examines the data collection and analysis procedures** and make judgments about the potential for bias or distortion
- These alternative criteria represent
  - different philosophical perspective
  - is subjectivist rather than realist.

Main instrument –the In-depth Qualitative (the Interviewer - Ethics & Values)

The Qualitative	Researcher as	Main Data collection	Instrument
-Subject-centredness -sensitivity to gender, age, disability, culture	- Honest -Respect for others and their views -Friendliness	-Openness -Curiosity -Ability to listen -Pursue subject's agenda	-Memory -Adaptability -Resilience …… (Add)

CONSTITUTING RESEARCH TEAMS

QUALITATIVE RESEARCH METHODS & POWER BALANCE: Choice of Interviewer and Venue

MID-TERM RECOUP INTERNATIONAL CONFERENCE –NOV 2008