Qualitative Research Design & Data Analysis

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RESMA course Research Skills

Lecture #6

QUALITATIVE RESEARCH DESIGNS

Qualitative Research Designs (Babbie)

- Naturalistic (participant) observation
  - Case study
  - Observation
  - Open interview
- Focus (group) interview
- Key informants
- Ethno-methodology: everyday experience in ‘experiments’ in a natural setting
- Non-participant observation (ethology)
- ‘Naturally’ occurring ‘texts’: proceedings, websites, books, images, diaries, advertisements

Creating qualitative data: text

- The heart of any qualitative research project is text:
  - Diary (‘logboek’) with field notes
  - Semi-structured interview: report
  - Open interviews: literal or global transcripts
  - Observation logs (human and animal ethology)
- Make it electronic → codable.

Common threads in qualitative and quantitative research (Hardy & Bryman) ?

- Data reduction
- Answering research questions
- Relating data to research literature
- Variation
- Frequency
- Avoid deliberate distortion
- Transparancy
- Assessing error

Data reduction

- Qualitative research:
  - Create typologies or ‘vignettes’
  - List topics or themes
  - Develop ‘concepts’
  - Result is a proposed theory
- Quantitative research
  - Collect numbers in a data matrix
  - Reduces this to means & standard deviations (distributions), correlations, regressions (distributions)

Answering research questions / use of research literature

- There is nothing intrinsically qualitative of quantitative about this point; literature review is in fact the core of growth of knowledge.
- However, at least some qualitative approaches seem to avoid formulating research questions that are based in the literature!

Variation

- Variation is indeed the central concern of science: most research problems are of the nature to account for variation.
- This is clearly applicable to the statistical models we use.
- It is not so clear to me that qualitative research is so much concerned with variation; in fact it often seems to be concerned with the mean / modal type.

Frequency

- Frequency is at the heart of scientific analysis
- Counting is the most elementary form of quantification.
- H&B remark that qualitative researchers *"often"* use quasi-quantitative qualifiers. I fact, most quantitative researchers do this too.
- This practice is very often criticized and discouraged in qualitative methodologies.

Avoid distortion

- Major approaches to avoid systematic bias:
  - Compare theories to data; use multiple theories
  - Exact description of research procedures
  - Replication
  - Meta-analysis
  - Use publicly available data
  - Archive data and let others use them
- How much do we find of this in qualitative research?

Assessing error

- Any observation is bound to be in error
  - Random error (unreliability) and systematic error (bias or invalidity).
  - Measurement error and representation error
- Quantitative methods explicitly theorize and model errors, in particular random errors.
- This seems to be missing in qualitative approaches, although there are obvious way to implement these ideas (by repeating analyses).

Transparency

- The general principle should be that research must be reported in such a way that it is fully replicable.
- Both qualitative and quantitative researchers often fail to meet this criterium.
- But qualitative researchers more so.

In conclusion …

- H&B's list of common threads seems to have been invented to have quantitative methods outshine qualitative approaches.
- Or it is not, but then the conclusion still holds.

GROUNDED THEORY

‘Grounded’ theory

- Strongly inductive (ultra-positivist or ultra-empiricist): let the observations ‘generate’ the theory.
- “grounded theorists would worry that knowing what others have concluded might bias observations and theories” (293),
- Keep questioning the data: observation reports, interview transcriptions, etc. until you find a ‘pattern’ or a ‘story’.

Glaser & Strauss methodology

- Avoid reading the literature (!) and do not formulate theoretical ideas before research.
- Collect data from multiple sources and a variety of contexts. The data are transcripted and become unstructured text.
- Analyze the data by developing an open coding scheme → write up keywords or sentences to characterize part of text, and your thought about it.

Glaser & Strauss methodology (2)

- Main operations to analyze coded texts:
  - Sorting or selecting
  - Connect code to broader constructs
  - Divide broad constructs into smaller parts
- Develop theoretical notions in memoranda ("memo's").

Glaser & Strauss methodology (3)

- Constant comparison: search for instances and cases (theoretical sampling) that seem to offer contrasting evidence (to one another or to emerging theoretical ideas).
- Continue analysis until you think you have heard it all.

What is the quarrel about?

- Qualitative designs have a place in social science:
  - There are many (interesting) contexts in which structured data-collection (e.g. standardized interviewing or observation) is not possible.
  - Naturally occurring ‘texts’ as indicators of social processes are plentiful.
- There is nothing wrong with using qualitative designs as exploration of a field. However, there is also nothing superior about this compared to reading the previous literature or thinking ahead.

Everyone needs to do it..

- In fact, there is one stage of social science research, in which everyone needs to be qualitative, this is literature review.
- Literature review is a crucial step in the research cycle, as you want to make progress relative to earlier research.
- Qualitative data analyses can be very helpful in literature review.
- Take note that there exists also quantitative literature review: meta-analysis. This is very important in experimental research.

Harry Ganzeboom's list of flaws in qualitative methodologies (1)

- Qualitative approaches are new: No, in fact this has been the dominant mode of analysis until the mid 1950s.
- Theories consist of 'concepts' or 'types' or 'classifications'. Not so, theories consist of explanations that are formulated in deductive causal propositions.
- Qualitative research brings explanation and in-depth understanding to quantitative analysis: Not so, we need theories for this.

Flaws (2)

- Theories are better, when they have been developed with reality in mind. This may be true, but there is no way of knowing other than testing.
- People's everyday understanding of social processes constitute good social theory.
- Quantitative research is all about testing theories. True in a sense, but it would be more adequate to say that research applies theories, or examines the applicability of existing theories to a certain case.

QUALITATIVE ANALYSIS

Nudist / N5 / Atlas-TI

- Basis: **add keywords to text**
- Keywords can be elaborate: memo's, comments.
- Sort, compare, and structure (relate) keywords
- Finding words across documents is crucial
- Much of this can be done in Word or Excel, but more specialized programs may help