Qualitative research methods

Economics Research Methods

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Qualitative research methods

Aims

- Understand when you should use qualitative research methods
- Learn the basic principles being qualitative research
- Understand the difference between qualitative and quantitative research methods
- Note: *This is just a general overview of qualitative research methods as economists are increasingly using this technique – not a substitute for a specialised course in qualitative research methods!*

Qualitative methods

- Qualitative data consists of text not numbers. As with quantitative data, analysis and interpretation is needed to bring order and understanding

- Get over the idea that research just means counting.

- The text that you will analyse can come in many forms. The two most likely avenues for you are likely to be in the form of responses to open-ended comments from survey questionnaires or individual interviews

When should I use qualitative research methods

When the paramount objective is "understanding"

- When variables cannot be quantified
- When studying intimate details of roles, processes or groups
- Answer questions such as the 'what', 'how' or 'why' of a phenomenon rather than 'how many' or 'how much'

Qualitative Research Goals

- **Meaning**: how people see the world
- **Context**: the world in which people act
- **Process**: what actions and activities people do
- **Reasoning**: why people act and behave the way they do
- In situations where little is known it is often better to start with qualitative methods

  - can help with generating hypotheses that be tested subsequently or just useful in their own right

- Methods aim to answer questions about the 'what', 'how' or why of a phenomenon rather than 'how many' or 'how much' which are answered by quantitative methods.

Elements of the Research Process

Deductive thinking (Quantitative)

THEORY

HYPOTHESIS

OBSERVATION

CONFIRMATION

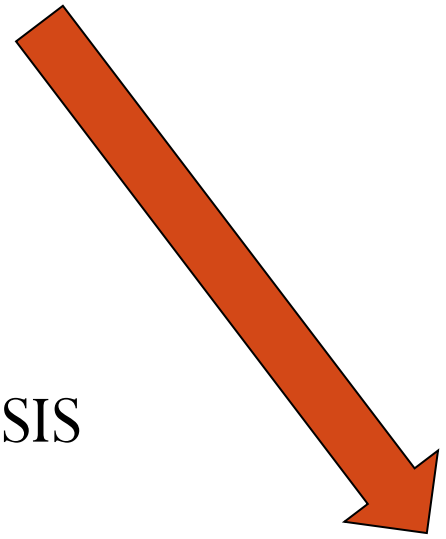
Inductive thinking (Qualitative)

OBSERVATION

PATTERNS

HYPOTHESIS

THEORY



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- Stories may provide data from personal accounts of experiences and results of programs in people's own words.

IDEAL QUANTITATIVE	QUALITATIVE
Research process is deductive.	Research process is inductive.
Measure objective facts.	Document social reality, meaning is constructed.
Focus on variables.	Focus on in-depth meaning.
Cross-contextual.	Contextual dependence.
Many cases.	Few cases.
Statistical analysis	Thematic analysis
Highly structured research process.	Loosely structured research process.
Often Generalize to population	Generalization to properties and contexts

Qualitative methods: Sampling

- The research is reflexive—design is flexible and can change given the needs of the research.
- **Theoretical Sampling**: The goal of theoretical sampling is not the same as with the probabilistic sampling; the researcher's goal is not the representative capture of all possible variations, but to gain a deeper understanding of analysed cases
- The researcher must be reflexive as well!
- Principles of selection: While qualitative research often (nearly always) includes non-probability sampling, the respondents selected should be theoretically justified (purposive sampling)
- Saturation point

Data collection: Interviews

Three types: 1) *informal, conversational*; 2) *semi-structured*; and 3) *standardized, open-ended*.

Recording Data.

- written notes or recorder (Time consuming but good idea to transcribe all the data)

- Observations are another potential approach: Observing participants in their natural setting

The analysis process

- **Thematic analysis of data:** looks across all the data to identify the common issues that occur, and identify the main themes that summarise all the views you have collected.

- Get to know the data!

- **Code the data**
  - In qualitative analysis, coding is the process of identifying categories and meanings in text, creating and applying a name or code to each, and systematically marking similar strings of text with the same code name.

  - Codes help researchers identify patterns in data

  - This can be labour intensive depending on the amount of data you have but this is the crux of qualitative analysis

Coding data

- Codes may be based on:

  Actions, Behaviors, Topics, Ideas, Concepts,

  Terms, Phrases, Keywords, and so forth

- Coding is **purposeful interpretation**, with mindful reflection on the meanings of the persons, context, interactions, statements, assumptions, and so forth

Sources of codes (typically both):

1. A priori codes—expected, looked for
   - Previous research
   - Previous theory
   - Research question
   - Your intuition of the data or setting

2. Grounded codes—discovered

   (suspend ideas about the subject and let the data determine codes)

Coding

- A three step coding process is common

- **Open coding**: Identify first order codes

  -interviewing and coding can be done in parallel – dynamic process

- **Axial coding**: Group the discrete codes according to conceptual categories that reflect commonalities among codes, e.g. Statements referring to a common topic/behavior are grouped together to form larger categories

- **Selective coding**: General themes are identified based on the grouping of similar categories – i.e. the analyst constructs a set of relational statements that can be used to explain, in a general sense, what is going on.

  - let the theory emerge from the data rather than using a set of predetermined categories

Displaying material visually really helps

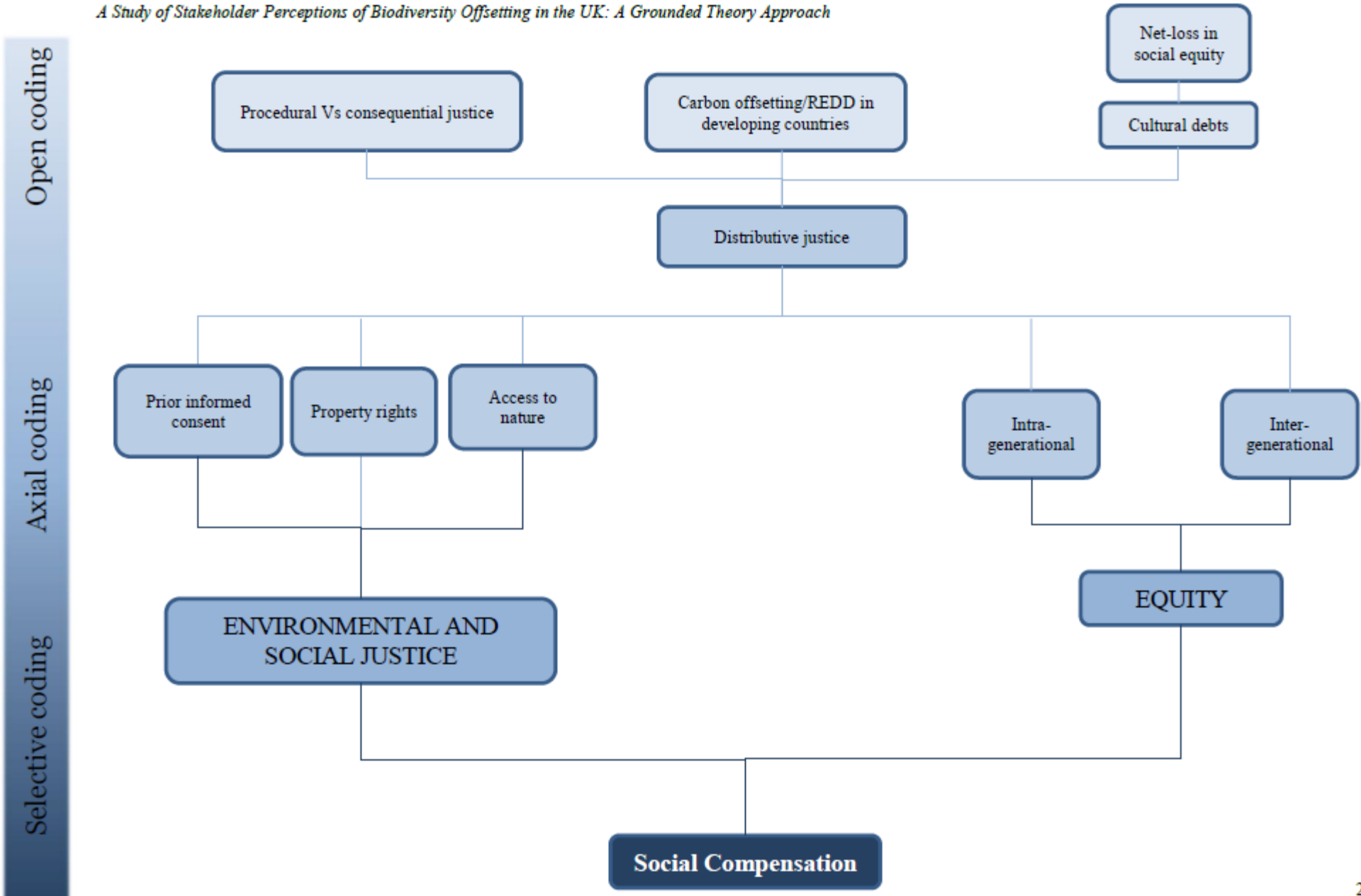

***Figure 5** - A schematic showing themes from the grounded theory analysis for social compensation*

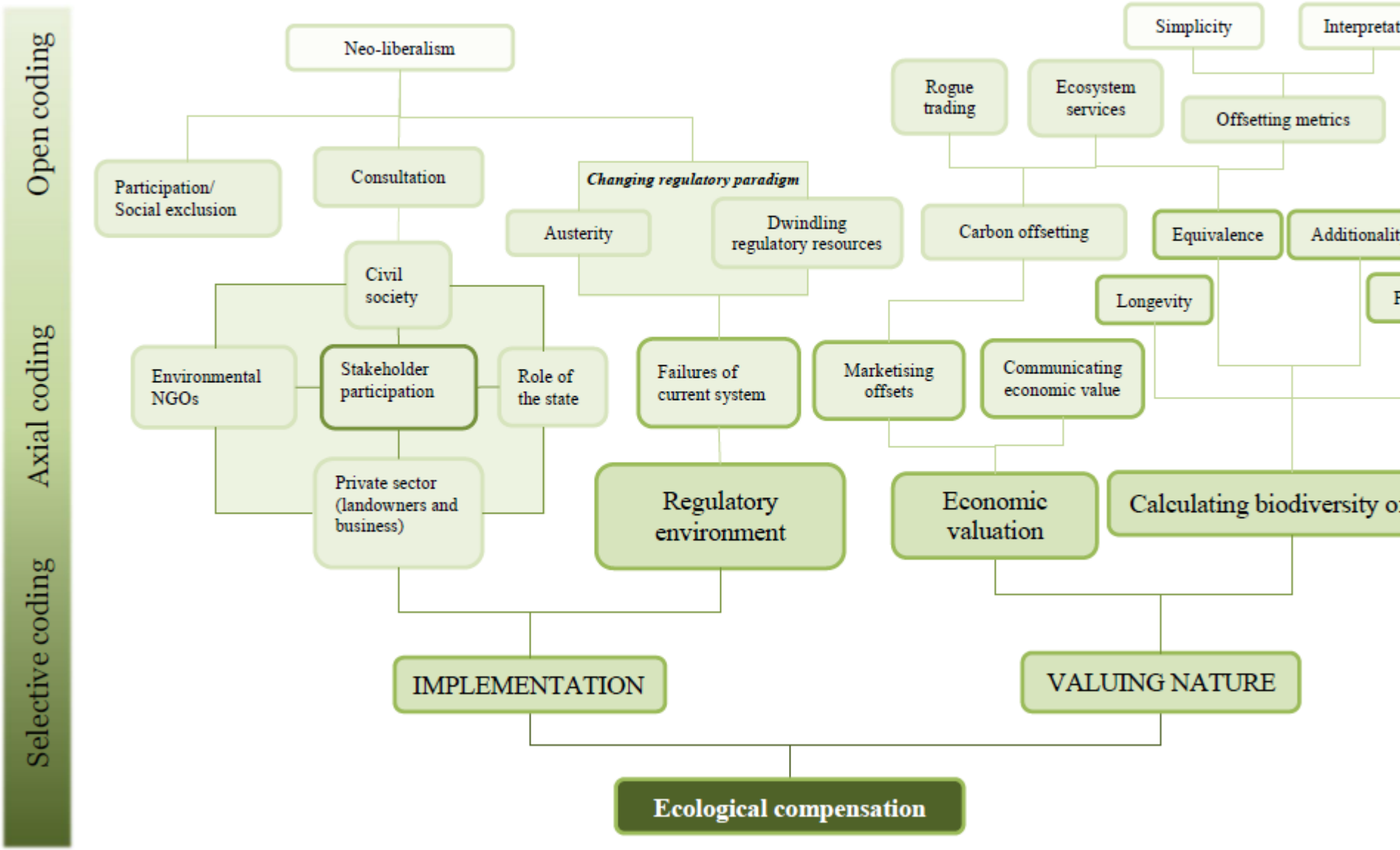

***Figure 4** - A schematic showing themes from the grounded theory analysis for ecological compensation*

Coding

- As you organize the data into categories you should begin to see patterns and connections both within and between the categories (axial coding).

  - Discrete categories identified in open coding are compared and combined in new ways as the researcher begins to assemble the "big picture."

- *Thematic analysis*: Identify and tentatively name the conceptual categories into which the phenomena observed will be grouped.

- **goal - to create descriptive, multi-dimensional categories which form a preliminary framework for analysis.**

Reporting Results

- **Find the main themes**
  - Purpose of coding not only to describe but to acquire new understanding of a phenomenon of interest.

- **Use quotes / scenarios to represent them**

- Include counts for codes (optional, but often a very good idea)

- Include diagrams (optional, but again often a very good idea)

- **<u>Be careful that results don't just seem like a random assortment of quotes – you need to structure the presentation</u>**

- Make it salient

Getting 'Good' Qualitative Results

- Depends on:
  - The quality of the data collector
  - The quality of the data analyzer
  - The quality of the presenter / writer

- Quality of the data collector: listening skills, interpersonal skills, observational skills

Quantitative vs. Qualitative

- Explanation through numbers
- Objective
- Deductive reasoning
- Predefined variables and measurement
- Data collection before analysis
- Cause and effect relationships

- Explanation through words
- Subjective
- Inductive reasoning
- Creativity, extraneous variables
- Data collection and analysis intertwined
- Description, meaning

Mixed methods

- Use both quantitative and qualitative approaches
- A survey could have both open as well as closed ended questions
- *Closed ended question*: Usually asked in a precoded way where the participant is given a range of options and asked to tick or circle one
- *Open ended*

  - answers can vary in length, topic and style of response

  - give greater freedom of expression to the respondent which preserves the richness and spontaneity of a response

  - time consuming to code and open to bias on the part of the researcher in that they may misinterpret a response

- Use open-ended questions in surveys sparingly to either develop further questions or inform the categories to be used in a further study or to explore a topic in greater depth

Non-traditional data sources (e.g. often not intended for research)

- Diaries
- TV shows and programming
- Advertisements
- Court transcripts
- Meeting minutes
- Policy documents
- Art pieces
- School reports
- Public speeches

Non-traditional data sources

Social Media: Twitter, facebook, Instagram, youtube etc.

- Massive datasets: millions or billions or records produced by people through interaction with technologies
- Social network analysis examines online communities and the relationships between them.
- Qualitative analytical methods such as content analysis and thematic analysis, can be used to manually label social media posts.

Using data not originally intended for research

Health and Longevity: The Nun Study

Dr. Snowdon with Sisters Agnes and Gertrude

- Danner, D. D., Snowdon, D. A., & Friesen, W. V. (2001): Positive emotions in early life and longevity: findings from the nun study.

Using data not originally intended for research

1. *Nuns autobiographies at age 22*: Researchers accessed the convent archive to review documents such as autobiographical essays that had been written by the nuns upon joining the sisterhood;

    - *Content Analysis*: Examined Expression of positive emotions

2. Happy and less happy nuns living in same life circumstances through lifespan

How long do they live?

Longevity in the Nun Study

Survival Rate at Age:	**85**	**93**
Most Cheerful Quartile	**79%**	**52%**
Least Cheerful	**54%**	**18%**

Positive emotional content in early-life autobiographies was strongly associated with longevity 6 decades later

Extra reading

- This chapter and associated references will give you a good introduction: http://fieldresearch.msf.org/msf/bitstream/10144/84230/1/Qualitative%20research%20methodology.pdf

- Analysing Qualitative data: http://learningstore.uwex.edu/assets/pdfs/g3658-12.pdf

- https://www.youtube.com/watch?v=MlU22hTyIs4

- No net loss of what, for whom? Stakeholder perspectives on Biodiversity Offsetting in England: https://www.sei-international.org/mediamanager/documents/Publications/SEI-WP-2016-11-Nonetlosssm.pdf - example of a qualitative study undertaken by a third year student for their dissertation and subsequently published

- The accidental environmentalists: https://www.sciencedirect.com/science/article/abs/pii/S0743016718304133 - paper by one of our PhD students using qualitative research methods

- Nivio which is available to all students can really help with presenting qualitative information