### Research Proposal and Ethics Workshop

Lecture 10 Analyzing Qualitative Data

**Dr Andre Samuel** 

andre.samuel@sam.edu.tt

http://www.samuellearning.org

### Introduction

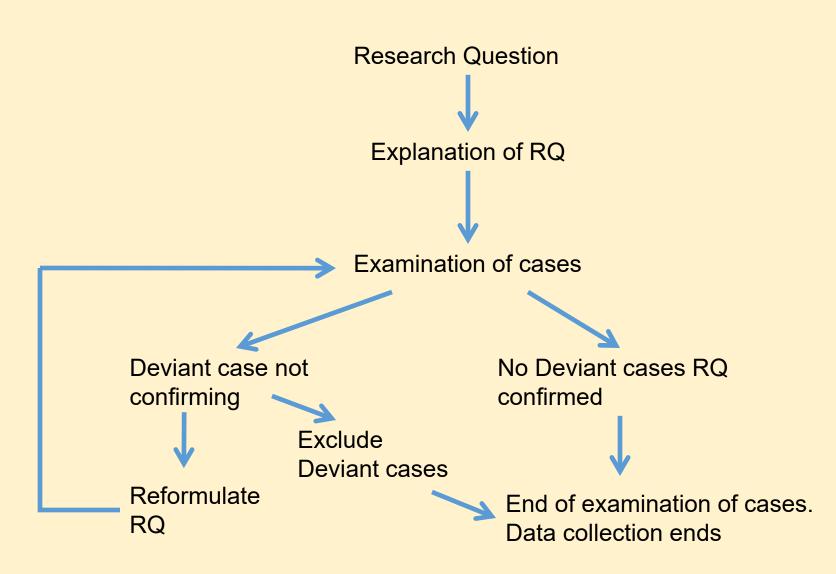
- •Qualitative research generates a large and cumbersome amount of data
- Data is usually generated from field notes, interview transcripts, focus groups and observations
- •The researcher must guard against being captivated by the richness of the data (analytic interruptus) and focus on carrying out a true analysis

### **General Strategies**

### 1. Analytical Induction-

- It is an approach to the analysis of data in which the researcher seeks universal explanations of phenomena
- This is done by pursuing the <u>collection of</u> <u>data until no cases that are inconsistent</u> with a hypothetical explanation (deviant or negative case) of a phenomena are found

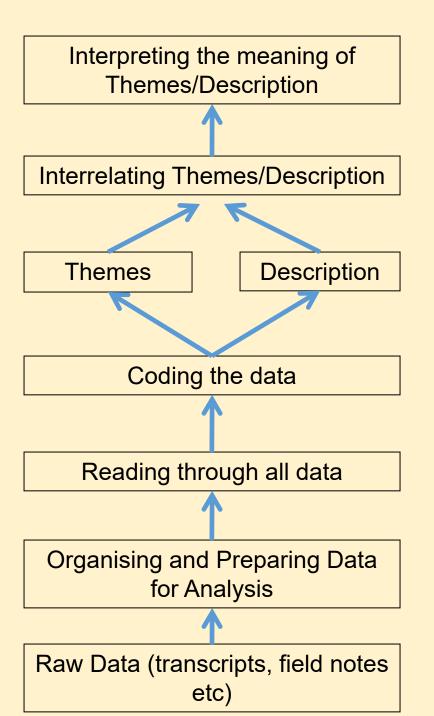
### The Process of Analytical Induction



#### 2. Grounded Theory-

- Defined as 'theory that was derived from data' systematically gathered and analyzed through the research process.
- In this method, data collection, analysis and eventual theory stand in close relationship to one another
- The approach is iterative, meaning that data collection and analysis proceed in tandem, repeatedly referring back to each other
- Key tool of grounded theory strategy is **CODING**breaking down data into components, which are given names
- Outcomes of grounded theory will be: **Concepts, Categories then Theory** either *Substantive theory* or *Formal theory*

#### Data Analysis in Qualitative Research Creswell (2009, pg 185)



# Step 1- Organizing and Preparing

- This involves:
  - transcribing interviews
  - Optically scanning material
  - Typing up field notes
- Sorting and arranging the data into different types depending on the source of the data

## Step 2- Read through all the data

- Obtain a general sense of the information
- Reflect on its overall meaning
- •What general ideas are the participant saying?
- Write notes in margins
- Start recording thoughts about the data

### Step 3- Coding the data

- •Coding is the starting point for most qualitative research also called **indexing**
- It entails reviewing transcripts and field notes and **giving labels (names)** to component parts
- •Coding also refers to the **creation of categories** in relation to data
- •The **grouping together** of different instances of datum under an umbrella term to be regarded as of the same type

Types of Coding Practice Strauss and Corbin (1990)

- Open Coding- the process of breaking down, examining and <u>categorizing data</u>
- Axial Coding- a set of procedures whereby data are put back together in new ways after open coding by making connections between categories
- Selective Coding- the procedure of <u>systematically</u> <u>relating the core category to other categories</u> and validating those relationships. The core category is the central issue or focus

Consideration in developing Codes Lofland and Lofland (1995)

- •Of what general category is this item of data an instance?
- •What does this item of data represents?
- •What is this item of data about?
- Of what topic is this item of data an instance?

# Some ways in which Categories can be related

- •Cause- Code A causes Code B
- Property- Code A is a Property of Code B
- •Aspect- Code A is an Aspect of Code B
- •Associate- Code A is Associated with Code B
- Result- Code A Results from Code B
- •Contrast- Code A contrasts with Code B

### Steps and Consideration in Coding Bryman (2008, pg.550-552)

- 1. Code as soon as possible i.e. code as you go along
- 2. Begin transcription at an early stage
- 3. Read through you initial set of transcripts and jot down a few general notes; interesting, important, significant
- 4. Do it again, this time make marginal notes perhaps keywords, names to themes in the data i.e. generate an index of terms

- 5. Review your codes and compare them to the concepts from your literature review
- 6. Finalize your codes and categories
- 7. Turn the data into fragments i.e. cut and paste the chunks of data into a file
- 8. Try to maintain track of origins of each chunk
- 9. Do this for all your transcripts
- 10.You should end up with a file for each category or code

# Step 4- Generate a Description and Theme

- Description involves a detailed rendering of information
- •Use the code to generate a small number of themes or categories 5 to 7
- These themes are the ones that appear as major findings and are used to create headings and subheadings in the Findings and Analysis Chapter of the Dissertation

### Step 5- Interrelate Themes

- •Use a **narrative passage** to convey the findings of the analysis
- Interconnect themes into a story line
- Build additional layers of complex analysis
  - Theme A cause Theme B etc
  - Intervening Themes
- •Use visuals, figures and tables to aid discussions

### Step 6- Interpretation

- Make sense of the data
- •Get the meaning
- •Ask- What were the lessons learned?
- •Lessons could be:
  - Researchers personal interpretation

 Meaning derived from comparison of the findings with information gleaned from the literature and theories reviewed in earlier chapter or best practice By doing this comparison you can

Suggest that the findings confirm past findings

– Diverge from past findings

Suggest new questions that need to be asked (future research)

- More importantly you can form interpretations that call for:
  - Action
  - Reform and change
- •That's how you get the Conclusions and Recommendations!

### Writing Up the Analysis

- Use quotes from participants and vary their lengths from short to long embedded messages
- Intertwine quotes with your interpretations
- Use literature and best practice i.e. industry examples or industry research findings to compare
- And of course **present in accordance with the Theme** derived i.e. use headings and sub headings

### Tools/Techniques for Qualitative Analysis

- Narrative Analysis- concerned with the search for and analysis of the stories that people employ to understand the phenomena around them.
  - Riessman (2004) identified four models
    - <u>Thematic Analysis-</u> focus on what is said rather than how it is said
    - <u>Structural Analysis-</u> emphasis on the way the story is related.
    - <u>Inter-actional Analysis-</u> emphasis on dialogue between the teller of the story and the listener
    - <u>Performative Analysis-</u> emphasis on narrative as a performance that explores the use of words and gestures to get across a story

### Thematic Analysis

- Concerned with the search for themes from data collected. A theme is more or less the same as a code or a group of codes.
- •These codes should relate back to the concepts from the literature review
- General strategy should be to use a Framework, a method developed by National Centre for Social Research UK

- Framework is described as a matrix, for ordering and synthesising data
- The idea is to construct a index of central themes and subthemes
- •These themes are then represented in a matrix
- The themes and subthemes are the result of a thorough reading and re-reading of the transcripts or field notes that make up the data

### The Framework Approach

#### **Employee Commitment**

Line of Questioning	Interviewee 1	Interviewee 2	Interviewee 3	Key Themes that emerged
Importance of Job	Place brief snippets from responses to questions.			
Work is Necessary				
Boredom with work				

Ritchie et al (2003)

- Indicate where in the transcript the fragment comes from, use question number
- •Keep the language of the research participant as far as possible
- •Try not to insert too much quoted material
- •Use abbreviations in cells so that cells do not become too full

### References

- Bryman. A (2008) Social Research Methods, 3rd edition, Oxford University Press
- Bogdan. R C & Biklen. S K (1992) Qualitative research for education: An introduction to theory and methods, Boston, Allyn & Bacon
- Riessman. C K (1993) Narrative Analysis, Newbury Park, Sage
- Ritchie J, Spencer L, O'Connor W (2003) Carrying out Qualitative Analysis in J Ritchie and J Lewis (eds), Qualitative Research Practice: A Guide for Social Science Students and Researchers, London Sage
- Lofland J and Lofland L (1995) Analysing Social Settings: A Guide to Qualitative Observations and Analysis, 3rd edition, Belmont California, Wadsworth

- Strauss A and Corbin J M (1990) Basics of Qualitative Research: Grounded Theory Procedures and Techniques, Newbury Park, Sage
- Ryan G W and Bernard H R (2003) Techniques to Identify Themes, Fields Methods 15, pg 85-109
- Creswell. J.W., (2009) Research Design, Qualitative, Quantitative and Mixed Method Approaches, 3rd Edition, Sage Publications Inc.
- Tesch R (1990) Qualitative Research: Analysis types and software tools, New York, Falmer