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## The qualitative research method approach (qurma) - students guide

#### Introduction

Qualitative methods are commonly used within the area of Electronic Government as well as other fields in social science. Among students carrying out qualitative approaches in their thesis work, qualitative studies are very common but unfortunately there is often a lack of rigor when using qualitative approaches. Method books discussing qualitative studies are frequent, but they often lack some firm advices about how to actually carry out a qualitative study. There are lots of good advices about interviews and observations. Grounded theory is often mentioned although in rather general terms. The interpretive part is not very thoroughly discussed though.

Below we present an outline that might fill the mentioned gap somewhat.

Our aim is to give the student a guide in carrying out the qualitative/interpretive approach. By following the ten steps below, students will not only have to prepare the study, they will also find some solid reference support for the necessary steps in the process of research.

# Section A Planning the study

### Step 1 - Initial formulation of objective and research question

**Aim**: To formulate and motivate a research question that covers the objective of the study in a relevant, well defined, comprehensible, focused, and interesting way.

Activities: Formulating a research question. Questioning, reflecting and reformulating the RQ. If necessary iterate until satisfactory.

Outcome: A workable research question, well introduced and motivated.

References: Oates pp 25ff

#### Examples:

- How should governments prioritize the requirements in order to develop e-services that improve the efficiency of the internal public organization and provide effective services to the citizens?
- What are the differences between grassroots parties' e-participation systems?
- What do citizens think of official and unofficial channels for online communication between government and citizens? Which channel is preferred by citizens for online communication between government and citizens? And why?

- How is it possible to deliver situated learning in rural areas of developing countries using existing mobile phone networks and applications?
- What opinions do young Bulgarians have regarding political participation offline and online? Can ICT be used to promote political participation among young people in Bulgaria?

### **Step 2 – Operationalize the research question**

**Aim**: To break down the research question to manageable elements that could serve as basis for planning of data collection and analysis and that makes it possible to answer the research question(s).

**Activities**: This is usually an iterative process which includes a detailed analysis of the research question. It includes identification and definition of central concepts. Decide what sort of data to collect and analyze.

Outcome: One or more refined research question(s), measurable variables and research units.

### Step 3 - Choose a conceptual framework/model

Aim: To establish a model relevant for organizing the study and analyzing the collected data

Activities: Literature study. Using e.g. web of Science to find examples of how models are used in similar studies. Alternatively develop a conceptual framework of your own.

**Outcome**: A conceptual framework/model, appropriate for structuring data collection and analysis of the study

References: Depending on the topic

**Examples**: Using Nonaka & Takeuchi's SECI model on knowledge creation. Could be used as a perspective within a study on what IT-support teachers could use to be able to share more experiences in a teaching context.

Model of Information security:



### Step 4 - Design and test instrument for data collection

**Aim**: To develop a valid and ethical way to collect data relevant for the objective(s) and research question(s)

Activities: Organizing data collection in terms of 1) selection of sources/informants/study objects including decision of how many 2) choose and design of method (interviews, qualitative questionnaires, observation, etc.) 3) design questions and tasks 4) choose technique for registering 5) practical organization of the data collection session(s) 6) plan for ensuring ethical research 7) test the

design Possibly iteration to step 1, 2 or 3.

Outcome: A validated plan for data collection including the items above

References: Oates pp 141-217, Hall & Hall pp 156-185

### Step 5 - Design and test instrument for analysis

**Aim**: To design a realistic and useful plan for how to refine collected data in order to be able to answer the research question(s) and fulfill objective(s).

Since data collection is heavily dependent on analysis it is preferable to plan for analysis first.

**Activities**: Plan and test with fictive data. Eventually iteration to step 1, 2 or 3.

Outcome: A validated plan for analysis

References: Oates pp 266-279, Hall & Hall pp 189-211

# Section B Carrying out the study

#### Step 6 - Collect data

Aim: To collect relevant data effectively and efficiently

Activities: If interview - Carrying out interview(s), registering answers Other possible data collection methods: Observation, document studies, ...

Outcome: Depends on collecting technique but usually text

References: Interviews: Oates pp 186-201

### Step 7 - Analyze / interpret

**Aim**: To refine the collected data and generate some results relevant to the research question. To find "meaning units" (codes) in the form of named patterns, categories, relations etc within data.

Activities: Transcribe collected data. Process collected data by reading, organizing, reorganizing text. Coding: Find "meaning units" and systemize according to the chosen model. Iteratively: When some tentative meaning units have been identified and defined, interpret text from the generated perspective.

Outcome: Concepts and textual constructs organized according to the chosen model

References: Oates pp 266-280, Hall & Hall pp 189-211

### **Step 8 - Validate**

Aim: To ensure the validity of data collection and analyses.

**Activities**: If interview: Present the interpretation to the informant(s). This can be done in at least two ways, 1) ask the informant to read the transcription of the interview, 2) ask the informant to read the interpretation of the interview.

If the data collection includes triangulation, relate and compare findings.

Outcome: Either validated findings or iteration to data collection or earlier steps

#### **Step 9 - Draw conclusions**

Aim: To draw valid conclusions from analysis

Activities: Draw conclusions from analysis and with research question(s) and objective(s) as point of departure.

**Outcome**: Valid conclusions formulated as answer to research question(s) and/or statements related to objective(s)

### Step 10 - Report

Aim: To communicate findings according to instructions and in a comprehensible manner.

Activities: Writing a paper according to instructions

Outcome: A well structured and comprehensible report

References: Assignment, links on IMRaD

#### References

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