

Principles of Qualitative Research: Designing a Qualitative Study

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Objectives

- As a group activity, to plan a qualitative study on the topic of leadership (you may plan a study on your topic, if you wish)
- To develop a PowerPoint presentation of this group plan
- To cover some basic ideas about qualitative research (set all of us on the same footing) using the “Gunman” qualitative case study as an example
- To introduce you to the idea of traditions or “types” of qualitative research

What we need to know to develop this plan:

- ✓ **What is qualitative research?**
- ✓ **What types of problems are best suited for qualitative research?**
- ✓ **How to write a qualitative purpose statement and research questions**
- ✓ **What tradition or type of qualitative research best fits our research problem?**
- ✓ **What types of qualitative data we should collect?**
- ✓ **Identifying our procedures for analyzing the data**
- ✓ **Assessing our software packages that will help with data analysis**

What is qualitative research?

Qualitative research is an inquiry approach in which the inquirer:

- explores a central phenomenon (one key concept)
- asks participants broad, general questions
- collects detailed views of participants in the form of words or images

What is qualitative research?

Qualitative research is an inquiry approach in which the inquirer:

- analyzes and codes the data for description and themes
- interprets the meaning of the information drawing on personal reflections and past research
- and writes the final report that includes personal biases and a flexible structure. (adapted from Creswell 2002, p. 58)

What do we need to keep in mind when designing a qualitative study?

- Focus on process as well as outcomes
- Let the design emerge
- Use inductive reasoning
- Develop a complex picture of the phenomenon (studying many ideas with few participants and sites)
- Discuss the context of the phenomenon
- Follow the “scientific method” (e.g., problem, questions, method, results)

Starting our plan

- Let's provide a title for our project

Start with a research topic and a research problem

- Identify the subject area or topic for the study
- Specify the research problem: The practical issue that leads to a need for your study.
- Complete these sentences:
 - “The topic for this study will be...”
 - “This study needs to be conducted because...”

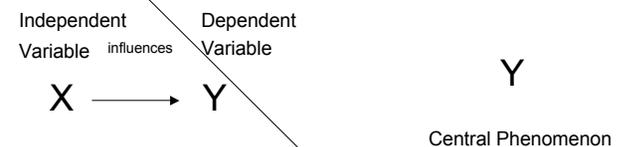
- Let's write down the topic and the research problem leading to our study

Now we will write a good qualitative purpose statement:

- What it includes:
 - Single sentence
 - “The purpose of this study . . .”
 - Central phenomenon
 - Qualitative words (e.g. “explore,” “understand,” “discover”)
 - Participants
 - Research site

Understanding the central phenomenon:

- Quantitative research • Qualitative research



Let's stay away from quantitative language that might mislead readers

- What is not included in this statement:
 - Not a comparison
 - Not relating variables
 - Not proving hypotheses
 - Not measuring variables

Here is a script for a good qualitative purpose statement:

“The purpose of this qualitative study (replace later with type of qualitative tradition) will be to _____ (understand, describe, develop, discover) the _____ (central focus) for _____ (participants: person, process, groups) at _____ (site).”

Writing good qualitative research questions

- Questions narrow the purpose
- Two types:
 - Central question
 - The most general question you could ask
- Sub questions
 - Sub-divides central question into more specific topics questions
 - Limited number

Use good qualitative wording for these questions

- **Begin with words such as “how,” “what,”**
- **Tell the reader what you are attempting to “discover,” “generate,” “explore,” “identify,” or “describe”**
- **Ask “what happened?” to describe**
- **Ask “What was the meaning to people of what happened?” to understand**
- **Ask “What happened over time?” to explore a process**

Avoid words such as:

- “relate”
- “influence”
- “impact”
- “effect”
- “cause”

Scripts to help design qualitative central questions and sub-questions:

Central Question Script: (usually write only one)

“What does it mean to _____ (central phenomenon)?”

“How would _____ (participants) describe _____ (central phenomenon)?”

Sub-Question Script:

“(What) _____ (aspect) does _____ (participant) engage in as a _____ (central phenomenon)?”

- Write the purpose statement, central question, and sub-questions for our qualitative study

Let’s design the methods for this qualitative study. What to include:

- Data collection
- Data analysis
- Data representation
- Data interpretation
- Data validation
- The type of qualitative “tradition” we will use in our methods

What are the qualitative traditions?

- Narrative research
- Phenomenology
- Ethnography
- Grounded Theory
- Case Study

| Dimension | The Qualitative Traditions | | | | |
|-----------------|---|---|--|---|--|
| | Narrative | Phenomenology | Grounded Theory | Ethnography | Case Study |
| Focus | • Exploring the life of an individual | • Understanding the essence of experiences about a phenomenon | • Developing a theory grounded from data in the field | • Describing and interpreting a cultural or social group | • Developing an in-depth analysis of a single case or multiple cases |
| Data Collection | • Primary interviews and documents | • Long interviews with up to 10 people | • Interviews with 20-30 individuals to "saturate" categories and detail a theory | • Primarily observations and interviews with additional artifacts during extended time in the field (e.g. 6 months to a year) | • Multiple sources including documents, archival records, interviews, observations, • Physical artifacts |
| Data Analysis | • Stories • Epiphanies • Historical content | • Statements • Meanings • Meaning themes • General description of the experience | • Open coding • Axial Coding • Selective Coding • Conditional Matrix | • Description • Analysis • Interpretation | • Description • Themes • Assertions |
| Narrative Form | • Detailed picture of an individual's life | • Description of the "essence" of the experience | • Theory or theoretical model | • Description of the cultural behavior of a group or an individual | • In-depth study of a "case" or "cases" |

What criteria will we use to select a tradition?

- Intent or focus
- Audience
- Personal training/skills
- Personal comfort level with structure

Now, let's select a tradition for our study

- Choose a qualitative tradition for our research problem.
- Tell why we chose it and how it relates to the study's purpose.

Within this tradition, what data will we collect?

- Who will be studied?
- What information will be collected?

Four considerations for selecting people/sites to study:

- Can the people and sites help us learn about our central phenomenon? (purposefully select people and sites)
- How many people and sites should we study? (keep sample size small)
- Do we have access? (gain access)
- Do we have permissions (obtain permissions)

What types of information can be collected in qualitative research?

- Observations
- Interviews
- Documents
- Audio-Visual Materials

If we choose to observe, how do we do it?

- Create an observational protocol
 - Record descriptive notes
 - Record reflective notes
- Decide on your observational stance
- Enter site slowly
- Conduct multiple observations
- Summarize at end of each observation

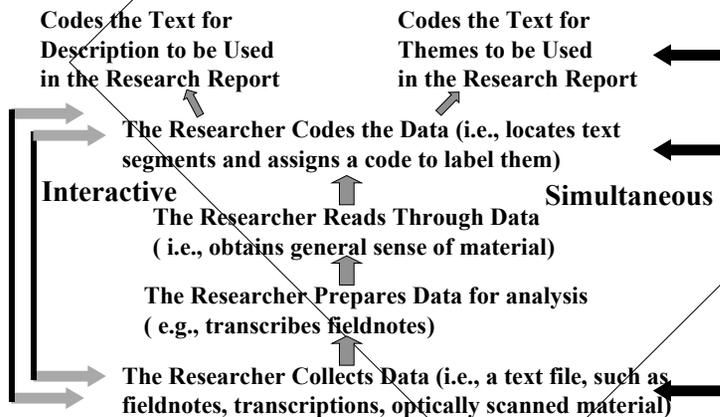
If we choose to interview, how do we interview?

- Decide on the type of interview to use
 - Individual
 - Focus group
 - Telephone
 - e-mail
- Create an interview protocol
- Ask open-ended questions (5-7)
 - allows the participant to create options for responding
 - participants can voice their experiences and perspectives
- If possible, tape record and transcribe for analysis

- Let's write down in our plan our data collection approach

- 1) Sites to be studied
- 2) People to be studied
- 3) Permissions needed
- 4) Types of data to be collected
- 5) Forms needed for data collection

Once we collect the data, how will we analyze it? The overall process



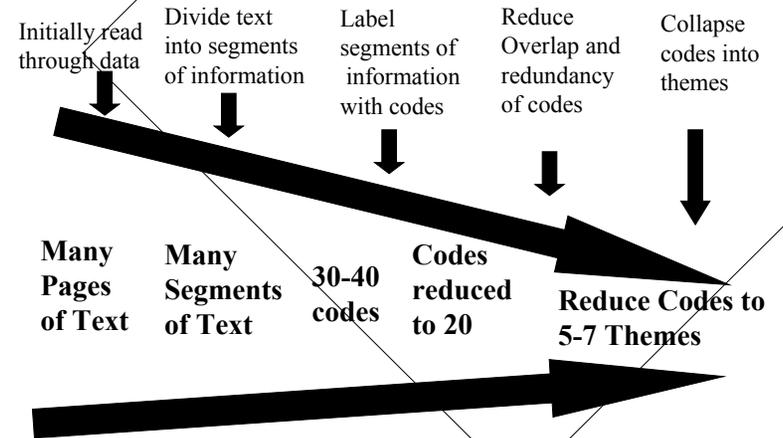
More specific steps in the analysis process

- Exploring the database
- Coding the data
- Developing findings - a description and themes
- (Re) presenting the description and themes
- Interpreting the findings
- Validating the findings

How do we first explore the database?

- Obtain a general sense of the data
- Write down memos on hard copy
- Think about the organization of the data
- Consider whether more data are needed

Then we engage in the coding process that involves several steps:



How do we divide the text into segments? (actual coding)

- Transcribe the interview
- Initially read through for general meaning
- Determine coding frame (sentence, paragraph, or phrase) and determine what the person is saying in the coding frame
- Assign code labels in left margin
 - Use *in vivo* coding (their words) when possible
 - Do not over code - practice “lean coding”
 - Stay away from interpreting comments (10 sec rule)
- Look for overlap among codes
- Combine codes into 5-7 themes

What are themes?

- Themes are broad categories of information (codes grouped together)
- Themes can describe a setting
- Themes can describe what occurred
- In the 5-7 themes, have some be: a) what you would expect; b) what you would not expect (unusual themes)
- Themes can also be related (chronology, grounded theory model)

- Let's practice the coding procedures using a sample two-page transcript on the topic of how department chairs balance their personal and professional lives

- Describe the procedures we will use for analyzing the data

In this analysis process, should we use a computer program to help?

Some computer programs available:

Atlas.ti <http://www.atlasti.de/index.html>
N6 <http://www.qsrinternational.com/>
NVivo <http://www.qsrinternational.com/>
Maxqda <http://www.maxqda.com>

- Demonstration of the basic features of N6 including:

- entering documents (we will enter the department chair project we have coded)
- coding texts
- tree diagram
- searching codes

How will we report our findings? (What topics do we present in the findings?)

- We might describe the setting
- We might identify and discuss 5-7 themes (including multiple perspectives, good quotes, useful dialogue, even metaphors or analogies)
- We write in detail
- We try to make the narrative as realistic as possible (even note tensions/contradictions)
- We report the narrative in a way consistent with our tradition
 - Narrative – typically a chronology
 - Phenomenology – typically description building toward the essence of the phenomenon
 - Ethnography – description of the setting and cultural themes that display the way culture-sharing works
 - Grounded theory – categories of information leading to a theoretical model
 - Case study - description of the case and themes of the case

As we present these findings, what visual presentations can we use to convey them?

- Create a visual image of the information in a “comparison” table
- Depict physical layout of the setting
- Describe personal or demographic information for each person or site
- Present a model of a theory

At the end of our study, what interpretations can we make? (Discussion section of studies)

- Interpretation is stepping back – asking what all of this means; it is not neutral
- Options:
 - We can give our own personal reflection (based on our experiences, history)
 - We can compare our findings with the literature
 - We can summarize in a general sense what we found
- We also need (as shown in scholarly discussion sections)
 - Raise potential limitations in our study
 - Make suggestions for future research
 - Discuss the practical implications for our study

How do we know that our interpretation (or themes, or questions, or the entire research report) is accurate?

- Member checking: Members check the accuracy of the account
- Triangulation: Looking for themes across different types of data; different researchers; different participants
- Others: peer review, external audit, report disconfirming evidence, clarify researcher's stance, thick description, prolonged time in the field

Let's put it all together – What topics are addressed in a proposal for a qualitative study?

- Introduction
 - Statement of the problem (including literature)
 - Purpose of the study
 - Research questions
 - Delimitations and limitations

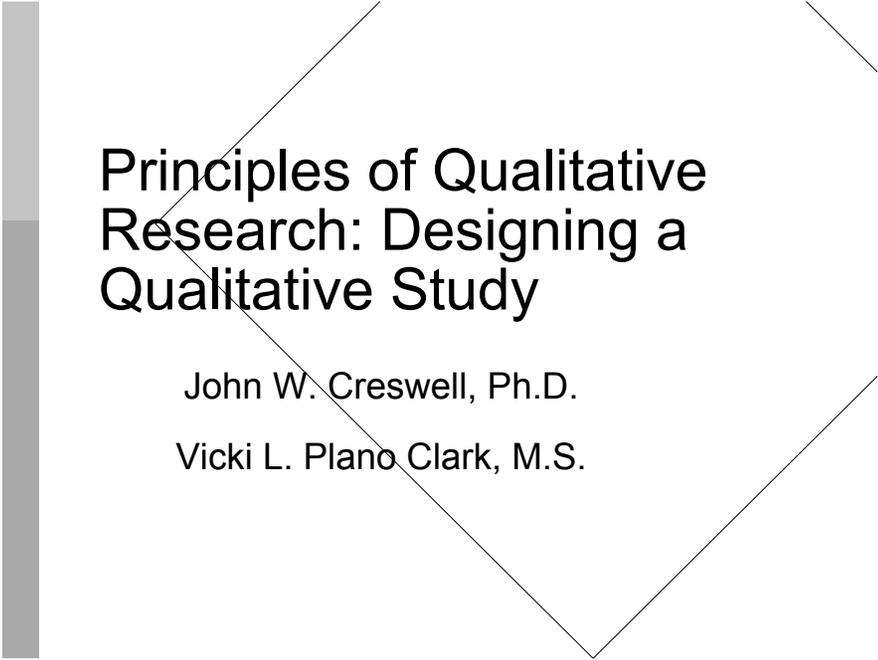
A qualitative proposal (cont'd)

- Procedures
 - Characteristics of qualitative research (optional)
 - Qualitative research strategy
 - Role of the researcher
 - Data collection procedures
 - Data analysis procedures
 - Strategies for validating findings
 - Narrative structure

A plan for a qualitative proposal

- Anticipated ethical issues
- Significance of the study
- Preliminary pilot findings
- Expected outcomes
- Appendices (interview questions, observational forms, timeline, and proposed budget)

- Let's review the plan we have developed collectively and share plans that you have developed on your own

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