Exploring Two Approaches to Qualitative Research: Case Study Methodology and Thematic Analysis

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Disclosures

The speaker does not have any financial relationships to disclose.
Learning objectives

Participants will be able to identify central aspects of qualitative case study methodology and qualitative thematic analysis

Participants will practice coding, an essential part of the thematic analysis method

Participants will discuss opportunities and highlights associated with qualitative research approaches and how to overcome common challenges
Some background of you

Do you have experience with qualitative research? If yes, please raise your virtual hand.

If you have experience, would you mind sharing some lesson learned from you?

Do you have a project in mind that you would like to analyze using a qualitative (or mixed method) approach? If yes, what are envisioned barriers when doing that?
Introduction

Small innovation projects challenging to study and publish

This is where qualitative approaches show promise

Which qualitative methodologies fit best for such a purpose?

I will introduce two methodologies which are well suited
What is qualitative research?

Qualitative research is naturalistic; the natural setting is the data source.

Researchers go where the action is; talk with individuals or groups, observe their behaviour and their setting, or examine their artefacts.

Christancho et al. 2018
What questions are appropriate for qualitative research?

- Explore human experiences
- Ask about **what, why and how**
- Seek to explore and explain

They DON’T ask:
How much?
How much better or worse?
Qualitative approaches/ methodology

**Grounded theory:** developing a theory grounded on practical experiences

**Phenomenology:** understanding individual lived experiences

**Discourse analysis:** studies language-in-action in society

**Ethnography:** culture as a lens through which to interpret data

**Case study:** developing in-depth understanding of a case (bounded system: programme, event, activity)

**Thematic analysis:** flexible approach for analyzing/ reporting themes

*both* methodology and analyzing method
Qualitative approaches/ methodology

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Case study methodology

**Purpose:** to describe in depth a (complex) case within its real-world context, with a view to understand the issue from the perspective of participants

**Key feature:** starts with defining the case or ‘bounded system’

**Methods:** ideally multiple sources of data (e.g. interviews, observations, documents, artefacts)

**Outcomes:** e.g. recommended best practices from exemplar case

**Key scholars:** R. Yin, S. Merriam, R. Stake
Fundamental elements of case study research

The case: entity of interest or unit of analysis

A bounded system: bounded by time, space, activity

Studied in context: Studied in its real life setting, context is significant to understanding the case

In-depth study: chosen for intensive analysis of an issue

Selecting the case: Based on purpose/conditions of study

Multiple sources of evidence: ideally

Case study design: Single/multiple cases, approach

Harrison et al. 2017
Three approaches of case study research

- Quantitative, postpositivist
- Pragmatic constructivist
- Constructivist, interpretivist

Yin
Merriam
Stake
Main steps in designing a Case Study

Ensure fit

how and why questions, interesting “case”?

Determine the type of case study & bounding of the case(s)

e.g. single vs multiple cases, description of bounding, approach

Decide on conceptual frameworks

help define data collection and analysis

Decide on data collection strategy and process of analysis

e.g. interviews, observation; thematic analysis
Example of case study research I


**Study type**: single case study, constructivist (Merriam), inductive

**Bounded to**: residency training for pediatricians and pediatric surgeons surgical clinic of University Children's Hospital Zurich, Switzerland, between 2015 and 2018

**Conceptual framework**: professional identity formation for interpreting the results

**Data collection**: 7 focus groups with different stakeholders (participants, rater, supervisor)

**Data analysis**: thematic analysis
Visualisation results case study Hennel

Influencing factors on multisource feedback

- Generation of feedback
  - Clear goal
- Training of raters
- Continuity of observation
- Timing

Feedback conversation

- Narrative comments
- Self-assessment
- Role of supervisor

Impact of multisource feedback

Multidisciplinary feedback supported the professional development of residents.

Teamwork was enhanced.

Raters increased their commitment to the training of residents.

Hennel et al. 2022
Visualisation results case study Hennel

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The community of practice, consisting of residents, raters and supervisors, influences MSF.

Impact of multisource feedback

- Multidisciplinary feedback supported the professional development of residents.
- Teamwork was enhanced.
- Raters increased their commitment to the training of residents.

MSF has an impact not only on competences but also on identity formation.

MSF has an impact on the community of practice.

Hennel et al. 2022
Example of case study research II

Pinilla et al. 2020, Med Educ: Entrustment decisions and the clinical team: A case study of early clinical students

**Study type**: single case study, constructivist, inductive

**Conceptual framework**: models of entrustment in clinical education

**Bounded to**: core clerkship psychiatry which was one of the first core clerkship programmes to implement an EPA-based curriculum in Bern, 2019-2020

**Data collection**: interviews with 16 medical students and 4 members of healthcare team

**Data analysis**: framework analysis
Clinical situation

Entrustment

Clerkship student

Nurse

Patient

Social worker

Clinical resident

Psychologist

Safety

Pinilla et al 2020
Exchange in pairs in zoom for 5 minutes

**Task:** Please talk with your zoom partner for 5 minutes about:

What are your lessons learned about and questions regarding case study methodology?

Afterwards I will ask some of you for sharing ideas with the plenary.
What is thematic analysis?

A versatile method/ology for analyzing qualitative data

Fits a variety of paradigmatic orientations

Appropriate for exploring experiences, thoughts, or behaviors

Themes can be generated inductively or deductively

Paradigmatic orientations and assumptions should be outlined

Good first qualitative analytical method for novice researcher

Kiger & Varpio 2020, Med Teach
Thematic analysis: Braun & Clarks 6 Step approach

Step 1: Familiarizing yourself with your data

Step 2: Generating initial codes

Step 3: Searching for themes

Step 4: Reviewing themes

Step 5: Defining and naming themes

Step 6: Producing the report

Braun & Clarke (2006)
Example of thematic analysis research

Steiner et al. 2020: Innovating Pediatric Emergency Care and Learning Through Interprofessional Briefing and Workplace-Based Assessment: A Qualitative Study, Ped Emergency Care 2020

**Study type:** constructivist thematic analysis approach

**Setting:** Residency training at the Department of Pediatric Emergency Medicine, University Children's Hospital, Bern

**Conceptual framework:** no explicit

**Data collection:** from 4 focus groups (N = 18) with nurses (4), supervisors (5), and 2 groups of residents (4 + 5).

**Data analysis:** thematic analysis
Innovating Pediatric Emergency Care and Learning through Interprofessional Briefing (iB) and Workplace-Based Assessment (iWBA):

Steiner et al. 2020
Innovating Pediatric Emergency Care and Learning through Interprofessional Briefing (iB) and Workplace-Based Assessment (iWBA):

\[ \begin{array}{c}
\text{iB} \rightarrow \text{Learning} \rightarrow \text{Teamwork} \rightarrow \text{Patient care} \rightarrow \text{iWBA} \\
\end{array} \]

\[ \text{= impacts} \]

Steiner et al. 2020
Thematic analysis

Step 1: Become familiar with the data reading, and re-reading the transcripts

Step 2: Generate initial codes
organizing your data in a systematic way
Reduces lots of data into small chunks of meaning
Exercise

Familiarizing and generating initial codes for the following text:

1. By your own for 5 minutes
2. Exchange experiences with the person in your zoom room for 10 minutes
3. Tell about your experiences in the plenary

The link to the document is in the chat.
What were your experiences with familiarisation and coding?

Would anybody like to share your experiences?

Are there any challenges or questions?
Why do qualitative research?
Opportunities and highlights

Great insights

Very positively perceived by participants

Also high ranked publishable with small participant numbers

(Group) interviews are interventions themselves

Great fun
Challenges with qualitative research

Transcription and analysis of data takes time
  -> have a student and team supporting you

It takes some time to come into this field
  -> team up with a researcher who has experience with qualitative research

You might be hesitant to get started
  -> start with a small project and you will get a taste whether you like it
Further reading 1

Qualitative research in general:


Ramani & Mann: Introducing medical educators to qualitative study design: Twelve tips from inception to completion. Med Teach. 2016 May;38(5):456-63


Chen & Teherani 2016: AM last page: Common Qualitative Methodologies and Research Designs in Health Professions Education. Acad Med
Further reading 2

Case study methodology

Cleland et al. 2021: The curious case of case study research. Med Educ


Harrison et al. 2017: Case Study Research: Foundations and Methodological Orientations, FQS
Further reading 3

Thematic analysis


What are your take home messages from this session?

Do you have any feedback/suggestions for improvement for me?
Thank you very much

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