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.

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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

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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

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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

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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?

Discourse analysis

Thematic analysis

Phenomenology

Grounded theory

Case study

Ethnography

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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

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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

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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

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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

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Example of case study research I

Hennel et al. 2022, Med Educ: How does multisource feedback influence residency training? A qualitative case study.

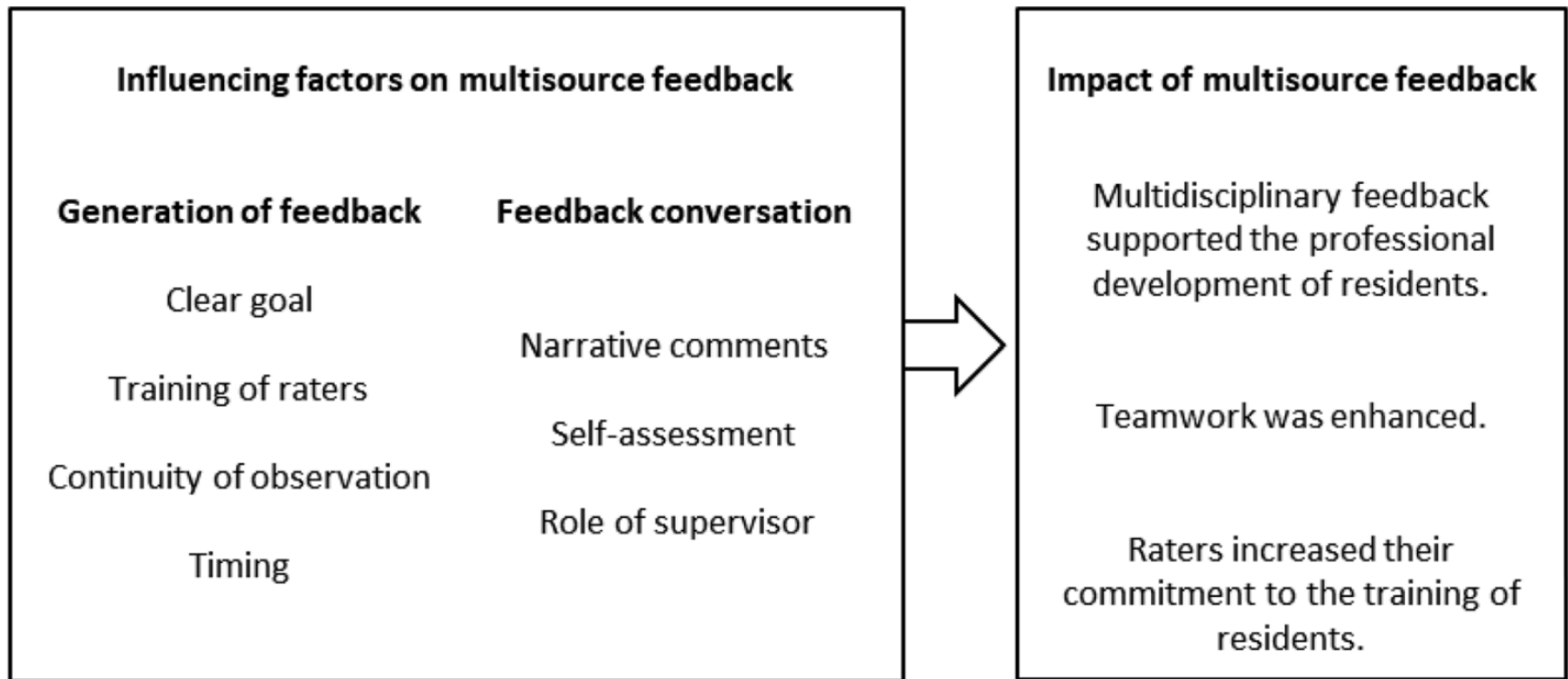**Study type**: single case study, constructivist (Merriam), inductive

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

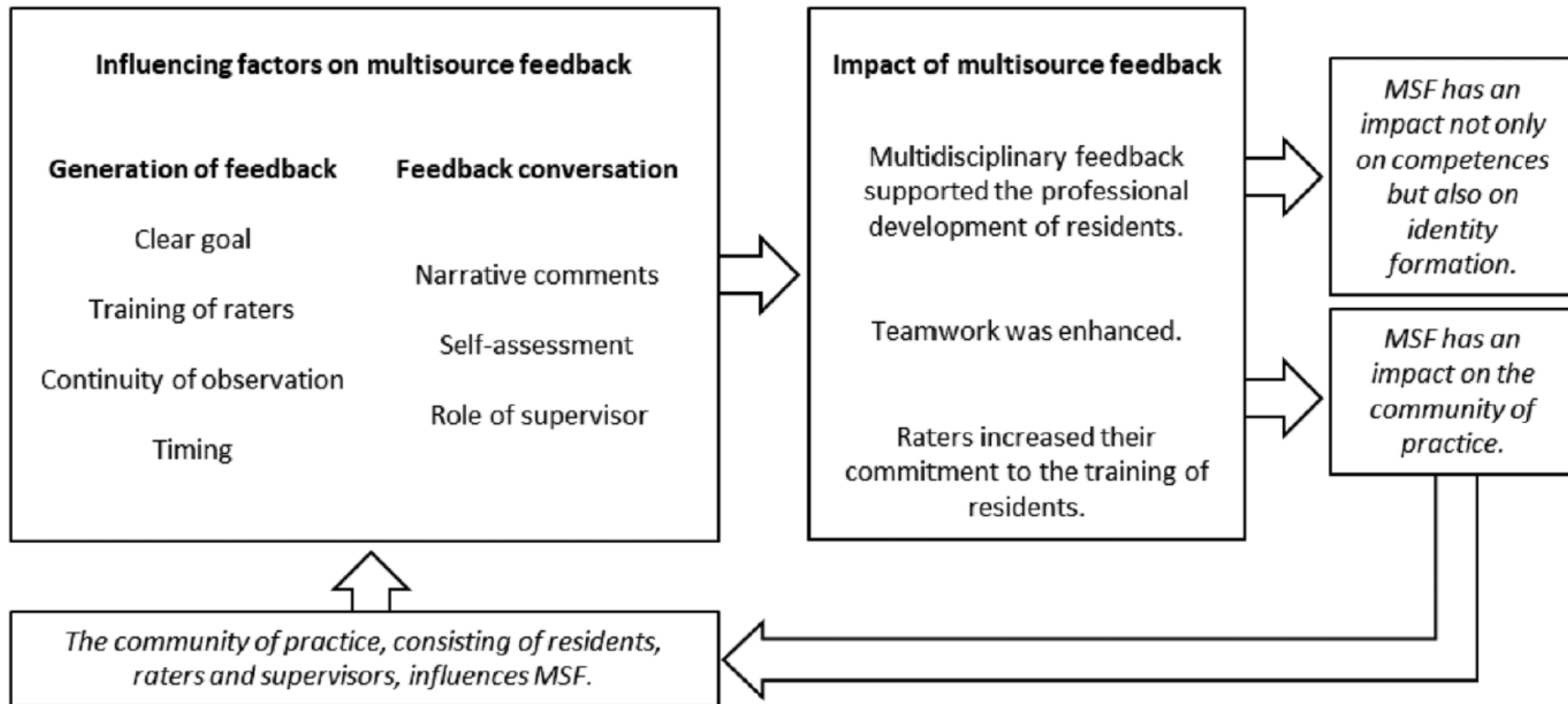**Conceptual framework**: professional identity formation for interpreting the results

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

Data analysis: thematic analysis

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Visualisation results case study Hennel

Hennel et al. 2022

Visualisation results case study Hennel

Influencing factors on multisource feedback

Generation of feedback   **Feedback conversation**

Clear goal

Training of raters   Narrative comments

Continuity of observation   Self-assessment

Timing   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.

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

MSF has an impact on the community of practice.

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

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Hennel et al. 2022

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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

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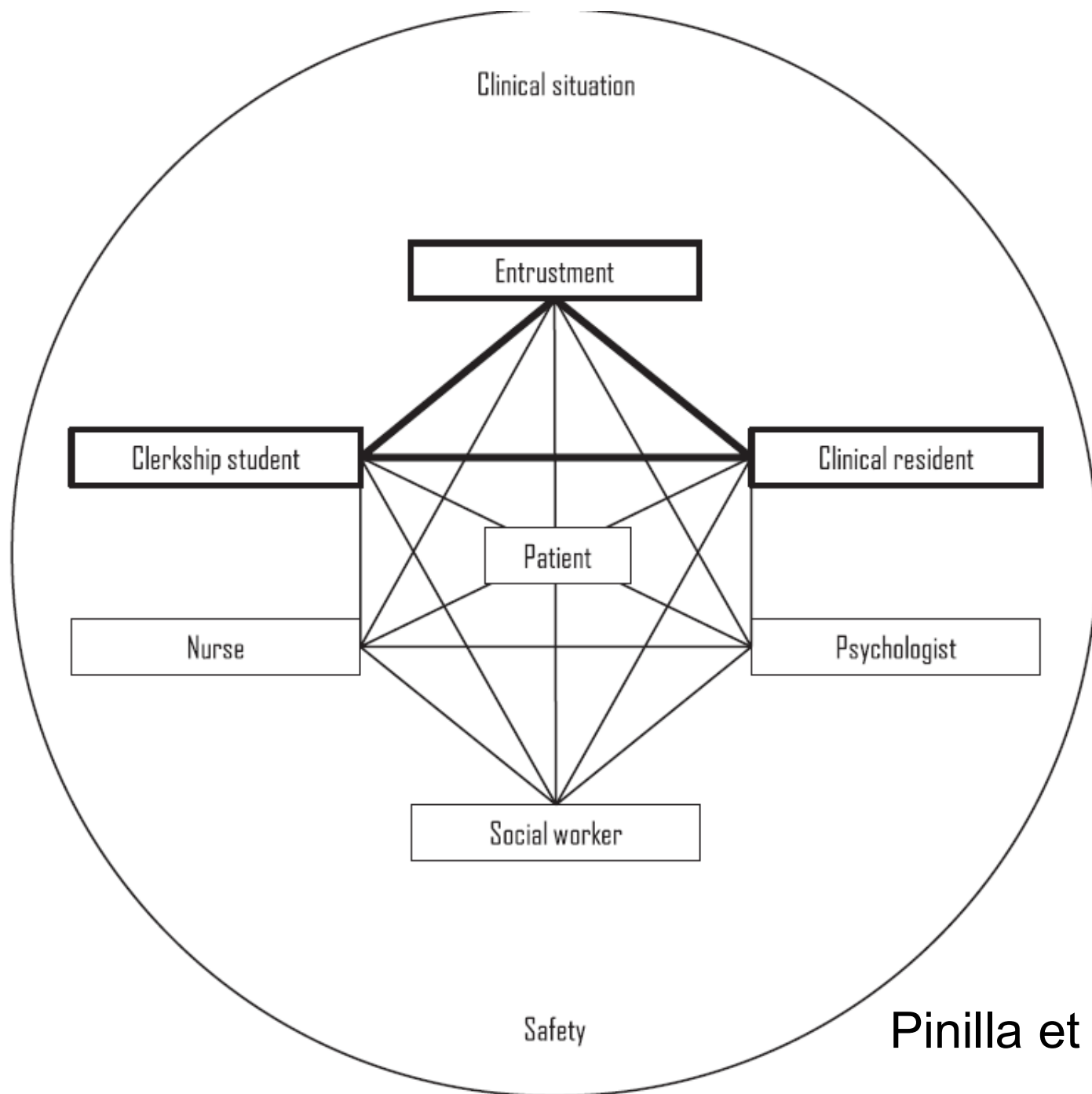
Exchange in pairs in zoom for 5 minutes

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.

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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

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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)

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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).
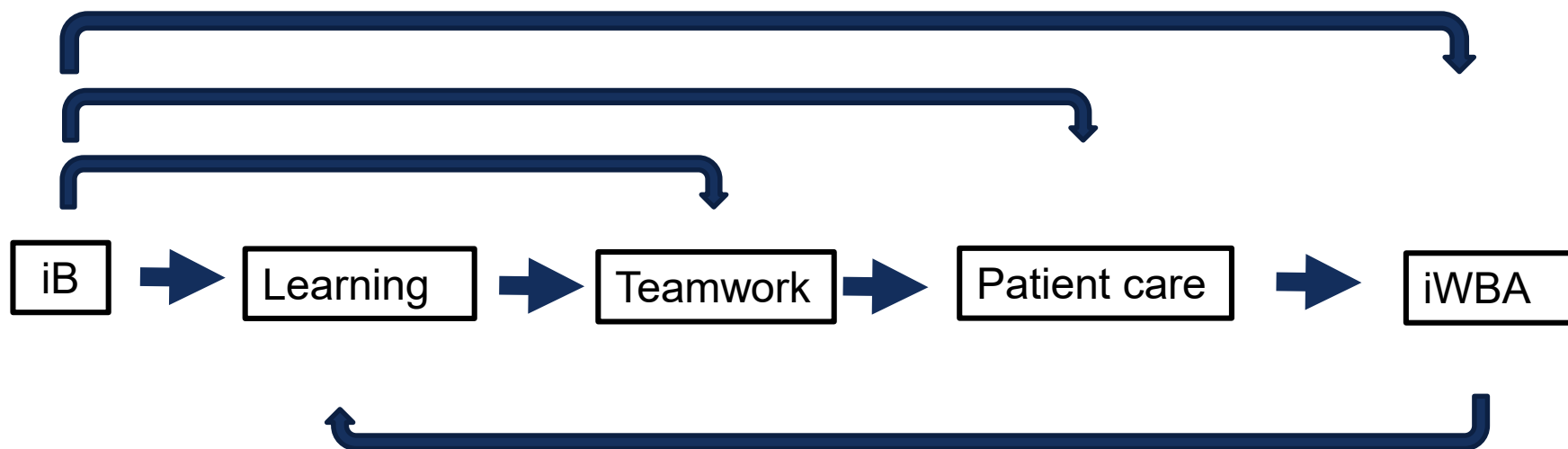
Data analysis: thematic analysis

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

iB ➡   Patient care ➡ iWBA

Steiner et al. 2020

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

iB → Learning → Teamwork → Patient care → iWBA

➡ = impacts

Steiner et al. 2020

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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

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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

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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**

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Further reading 1

Qualitative research in general:

Cristancho et al. 2018: Qualitative research essentials for medical education. Singapore Med J. 2018 Dec;59(12):622-627

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

Obrien et al 2014: Standards for Reporting Qualitative Research: A Synthesis of Recommendations. Acad Med

Bergmann et al. 2012: AM Last Page: A Guide to Research Paradigms Relevant to Medical Education. Acad Med

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

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Further reading 2

Case study methodology

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

Cheek et al. 2018: Improving case study research in medical education: a systematised review. Med Educ
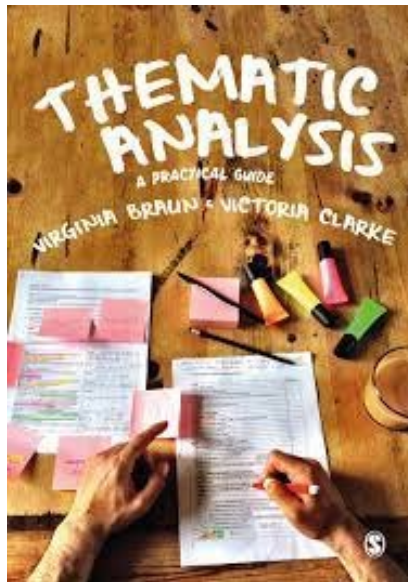
Harrison et al. 2017: Case Study Research: Foundations and Methodological Orientations, FQS http://www.qualitative-research.net/, *FQS,* Volume 18, No. 1, Art. 19.

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Further reading 3

Thematic analysis

Kiger & Varpio (2020) Thematic analysis of qualitative data: AMEE Guide No. 131,
Med Teach 42:8, 846-854,

Braun & Clarke (2006): Using thematic analysis in psychology. Qualitative
Research in Psychology, 3 (2). pp. 77-101. ISSN
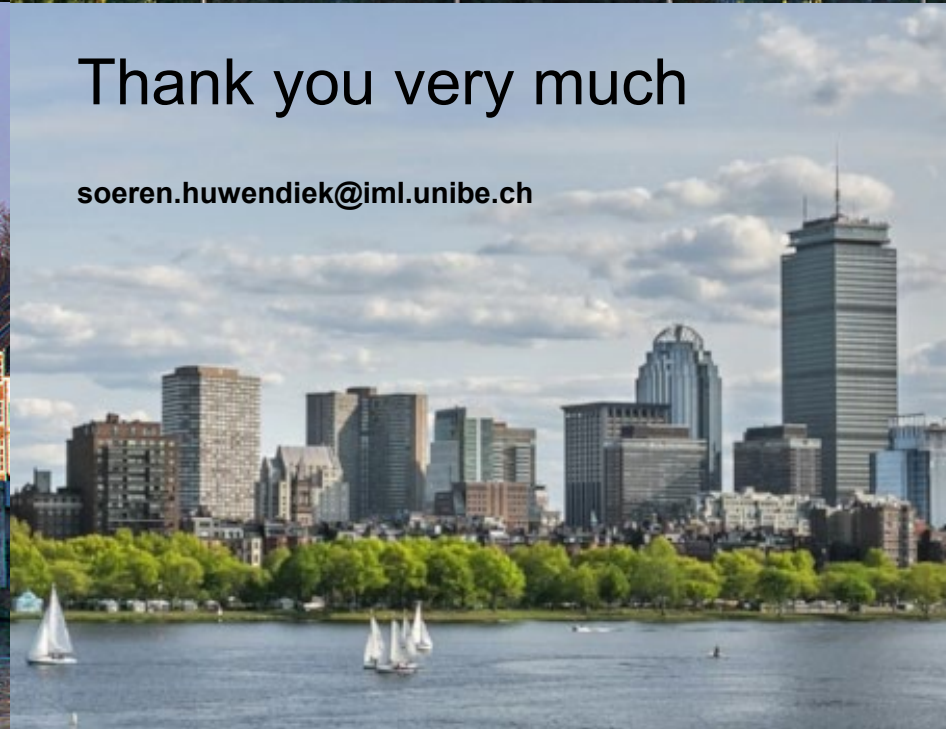1478-0887 Available from: http://eprints.uwe.ac.uk/11735

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Feedback from your side

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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