School of Population Health

Qualitative Research Introduction

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Presentation for StepUp team

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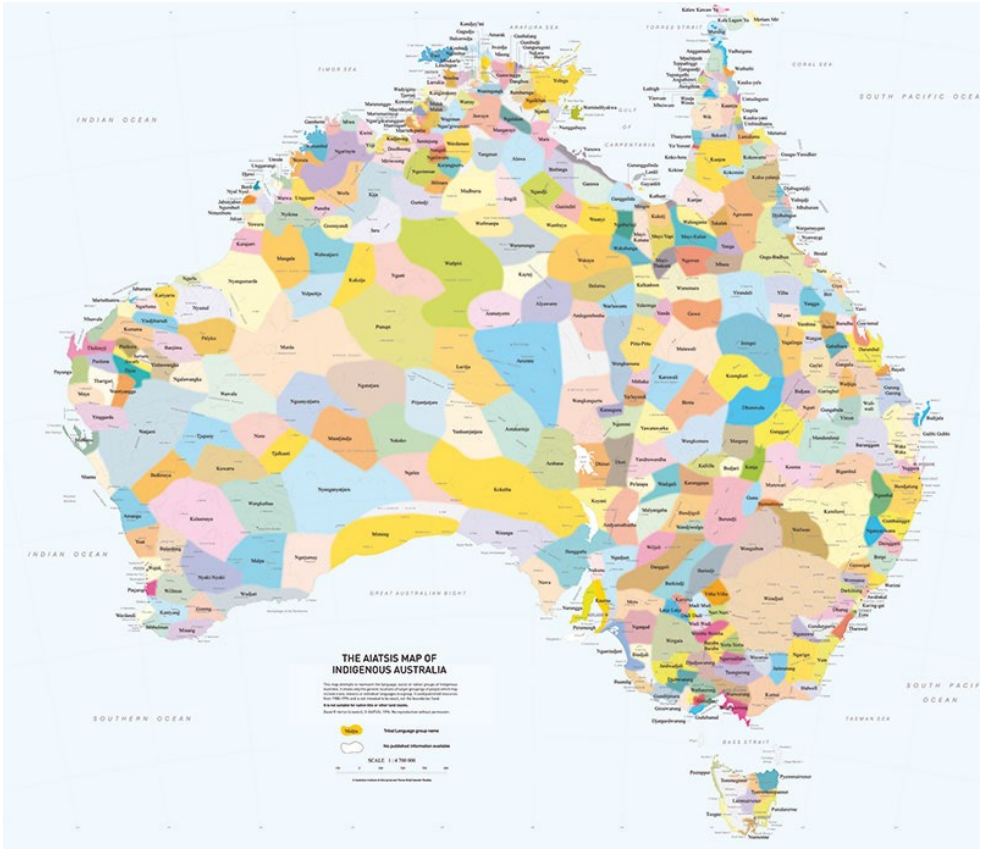
Acknowledgement of Traditional Custodians



I begin with respectful acknowledgement of the Traditional Custodians and Traditional Owners of the lands on from where I am presenting this.

I pay my respects to Elders past, present and emerging and acknowledge that these lands were never ceded and respect their sovereignty.

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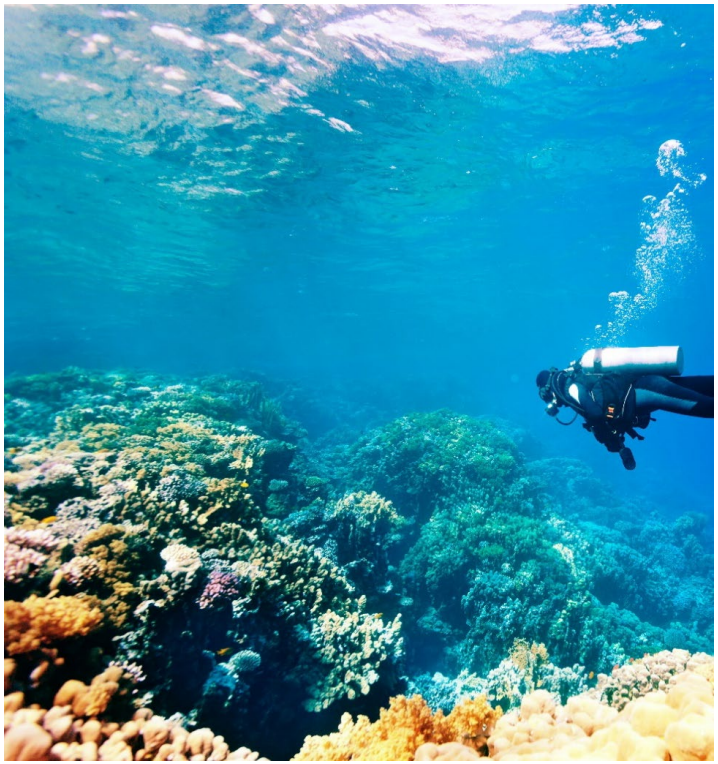
Organization of presentation

1. What is qualitative research
2. Relevance of qualitative research to the StepUp initiative
3. Methods of data collection
4. Sample size and sampling in QR
5. Ensuring rigour
6. Brief overview of qualitative analysis

The qualitative approach



The goal of qualitative research is to develop concepts which helps us to understand social phenomena in a natural (rather than experimental) setting, giving due emphasis to meanings, experiences and views of all the participants" (Pope & Mays, 1995, p.43)

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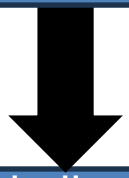
StepuP objectives

- ✓ Understand the mechanisms that underpin transfer from improvements in gait to improvements of mobility in daily life in people with PD
- ✓ Understand for whom treadmill training does improve lab-based gait characteristics and for whom it does not and understand for whom treadmill training does improve mobility in daily life and for whom it does not.



Medium term: targeted allocation of interventions

Long term: Personalization of interventions → improve outcomes for all

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StepuP Project

Participant Engagement and Process Outcomes

- ✓ Acceptability of intervention
- ✓ Usability issues
- ✓ Barriers and enablers to long term intervention

Why qualitative research in health? (Ritchie, 2001)

1. Understand *meanings* and *interpretations* people give to their behavior.
2. In-depth explanations of social determinants of health and disease
3. Elaborate causal relationships documented by epidemiological and clinical research
4. Provide contextual data to improve the validity and cultural specificity of quantitative survey instruments.

StepuP Project

Participant Engagement and Process Outcomes

- ✓ Acceptability of intervention
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When to use QR

- To better understand any phenomenon about which little is known.
- To gain new perspective on things about which little is known.
- To gain more in-depth information that may be difficult to uncover through quantitative means.
- Appropriate to identify variables that may later be tested quantitatively.
- Used in situations where the researcher determines quantitative measures cannot adequately describe or interpret a situation.

Which Approach?

" There is increasing recognition by most disciplines in the social sciences that **both types of research** are important for a good research study. The **research problem itself** should determine whether the study is carried out using quantitative or qualitative methodologies." (Kumar, 2005, p.13)

Qualitative Data Collection Methods

Interviews

Photo by LinkedIn Sales Solutions on Unsplash

Document Reviews

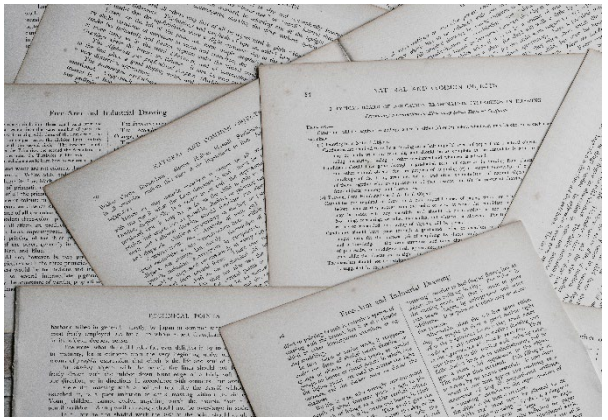

Photo by Annie Spratt on Unsplash

Focus Group Discussions

Photo by Redd on Unsplash

Observations

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Data Collection Method for StepUp

Interviews using semi-structured interview guide

Experiences of persons with PD regarding intervention

- ✓Acceptability of intervention
- ✓Usability issues
- ✓Barriers and enablers to long terms intervention

Interviews

Photo by LinkedIn Sales Solutions on Unsplash

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Approach/ tradition/ framework	Research purpose	Data collection methods
Phenomenology	Describe individuals' **lived experiences** of a phenomenon and the **meanings** assigned to that experience/ phenomenon	Interviews, personal documents (diaries)
Ethnography	Describe the **cultural** characteristics of a group of people and describe cultural scenes.	participant observation, interviews, artifacts and texts
Grounded theory	Generate and **develop theory**	Interviews, focus groups, participant observation, artifacts and texts
Case studies	Provide a **detailed account** of one or more cases	
Participatory Action Research	Produce **knowledge and action** directly useful to research participants. **Empower** people through construction and use of participants' knowledge.	Interviews, participant observation, focus group discussion, life history
Descriptive qualitative methodology	Describe individual experiences, perceptions, etc	Interviews, FGDs

Refs: Patton 2002, p. 41

Sampling

Selecting individual groups or texts for study

‘Logic of probability’ sampling - permit *generalisation* to population

‘Logic of non-probability’ or purposive sampling - to select *information-rich* cases for in-depth understanding

Sample size is less important than the ‘make-up’ of the sample.

Sampling

Sample size is less important than the ‘make-up’ of the sample.

- ✓ Participants of diverse demographic characteristics included: age, socio-economic background, sex, stage of PD, cultural & linguistic backgrounds, etc.

When do we stop sampling?

Saturation: when no new information is repeated by different participants

Flexibility – design must be flexible enough to evolve as the study progresses

Choice of specific sampling technique is determined by the research question(s) and phenomenon of interest/ type of participants

Saturation in terms of reaching the point of no new data is a contested concept

Sample size for StepUp

	SDTT	SDTT+VR	SDTT+P	SDTT+VR+P
Sydney	5			10
Kiel	5		10	
Tel Aviv	5	5		
Bologna	5	5		
Total	20	10	10	10

Sample size of 9-17 interviews achieved saturation.
Average of 12-13 interviews achieved saturation.
4-8 focus groups

Ref: Hennink, M & Kaiser, B.N. (2022), Sample sizes for saturation in qualitative research: A systematic review of empirical tests, *Social Science & Medicine,* 292

What is analysis of qualitative data?

"Process of creating meaning"(Green et al 2007, p.546)

Systematically organizing and managing data usually in the form of words

Making sense of the data in relation to the research question posed through

- ✓ breaking the text down into meaningful chunks (analysis)
- ✓ reassembling it into a meaningful new whole (synthesis) ie. concepts/ theory building

Common qualitative data analysis method

CONTENT ANALYSIS

THEMATIC ANALYSIS

ETHNOGRAPHIC CONTENT ANALYSIS

DISCOURSE ANALYSIS

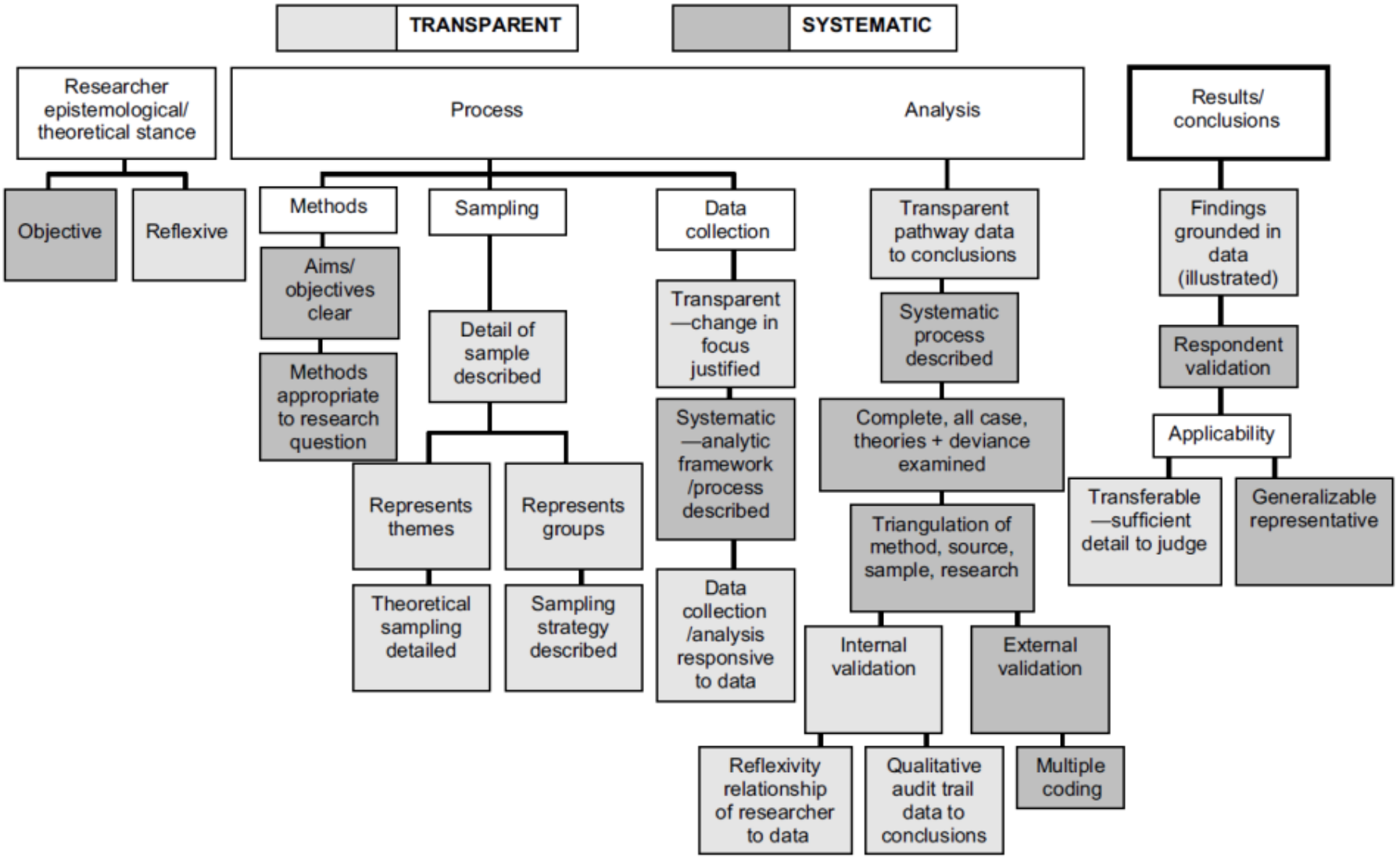
Common methods of qualitative data analysis

- ✓ Content analysis – counting occurrences within categories (counting occurrences e.g. number of times 'risk' used in a media article. Does not lend itself to making sense of less structured data)
- ✓ Thematic analysis – common patterns or threads – themes
- ✓ Ethnographic content analysis – instances of meaning (meaning emerges in wider context of interview or observation ie. what before and after and number of times occurred).
- ✓ Discourse analysis - pays attention to form, that is how people say something, not just the content of what they say.

Iterative process

Data collection and analysis in qualitative research is often an iterative process with the early identification of themes or concepts in the data helping to direct future data collection – actively look for further instances to confirm a pattern or emerging hypothesis, but keep open to new events, themes or instances of meaning (Patton, 2002; Strauss and Corbin, 1990).

Quality Framework for Qualitative Research



Ref: Meyrick 2006, page 803

Rigour

- Audit trail
- Triangulation
- Respondent validation
- Attention to negative cases
- Reflexivity
- Fair dealing
- Trustworthiness and credibility

Audit trail – procedural rigour

Clear account and systematic documentation of steps taken – *audit trails* - help establish credibility

Addresses the following:

- ✓ How access was gained
- ✓ How researcher approached and presented themselves to participants
- ✓ Development of trust and rapport
- ✓ How mistakes and surprises are dealt with
- ✓ How the data were collected and recorded
- ✓ Method of data coding and analysis
- ✓ Production of report

Reflexivity

Clarify researcher's beliefs and values

Reflection on your actions and role in the research process

Reflexive questions:

Do the researcher and the researched share a common language?

What about differences of gender, culture, class, age, education etc?

What does this mean in terms of data collection and interpretation?

Acknowledges the role of the researchers and the research in the setting, context and culture they are attempting to study – the 'I' in the study.

Ensuring rigour in StepUp Qual Component - suggestions

Interview process

- ✓ Ensuring adequate probing to elicit rich data important
- ✓ Training of interviewers – unless interviewers already have experience in qualitative interviewing

Husna to supervise process

- ✓ Review of first 1-2 interview transcripts
- ✓ Discussion with interviewer on what can be improved in following interviews

Ensuring rigour in StepUp Qual Component - suggestions

Analysis of data

- ✓ Decide on what process to follow – inductive or deductive or both
- ✓ Who will code data? One person or each site codes their own data?
- ✓ Drawing up a coding framework

Husna to supervise/coordinate process

- ✓ Regular meetings with coders to ensure coding of data is through consensus
- ✓ Development of themes through a consensus process between team members

References

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