

# **Sampling in qualitative research: Insights from an overview of the methods literature**

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Stephen Gentles  
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# Outline

- Background & methods for review
- Findings re 8 sampling-related topics
- Emphasize 3 top findings  
(conclusions re where clarity is lacking)

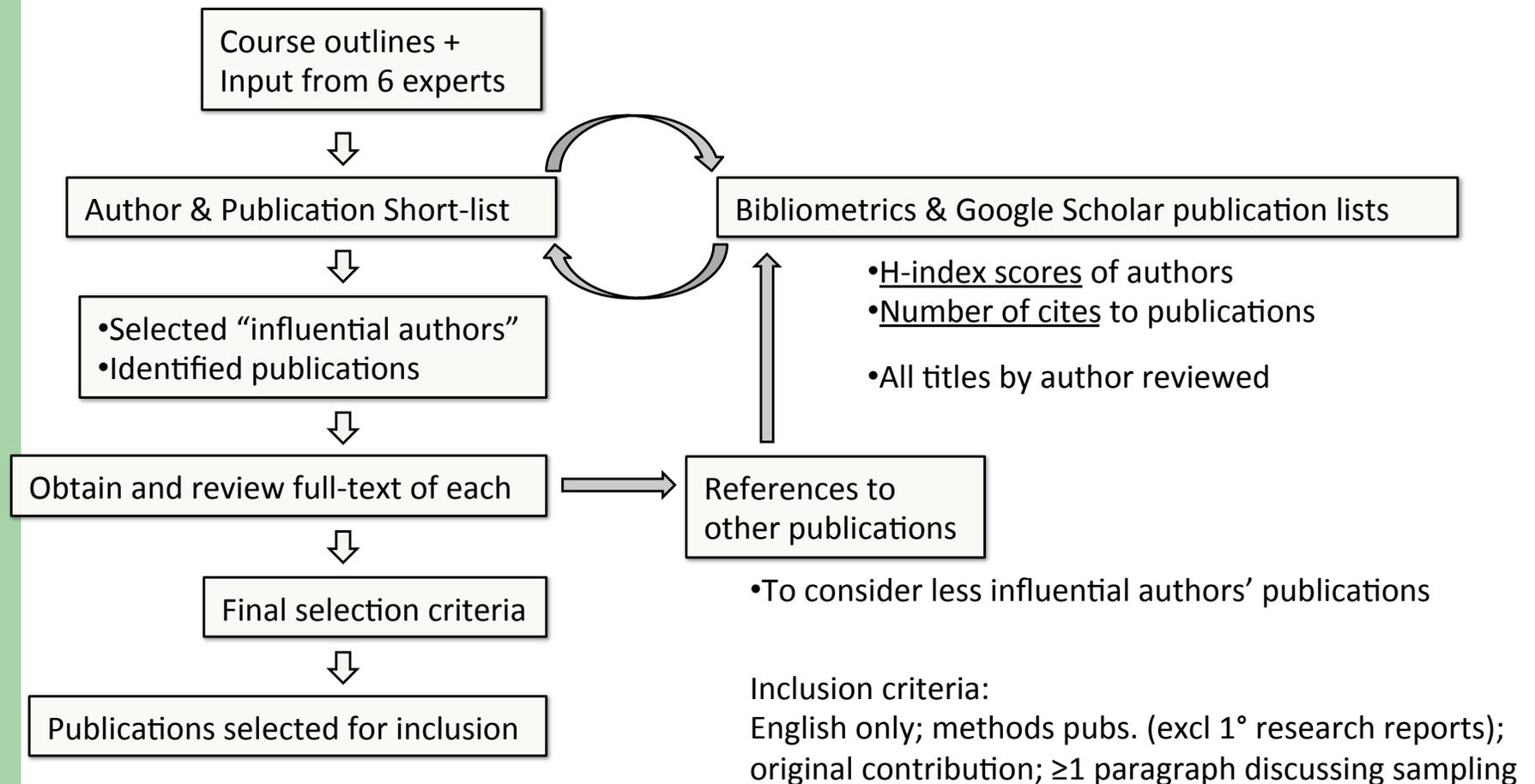
# What makes QUAL sampling confusing?

- Defined uniquely in QUAL
- Multiple methodological traditions, perspectives
- Guidance often not clear, consistent & comprehensive
- Difficulty searching & retrieving methods literature

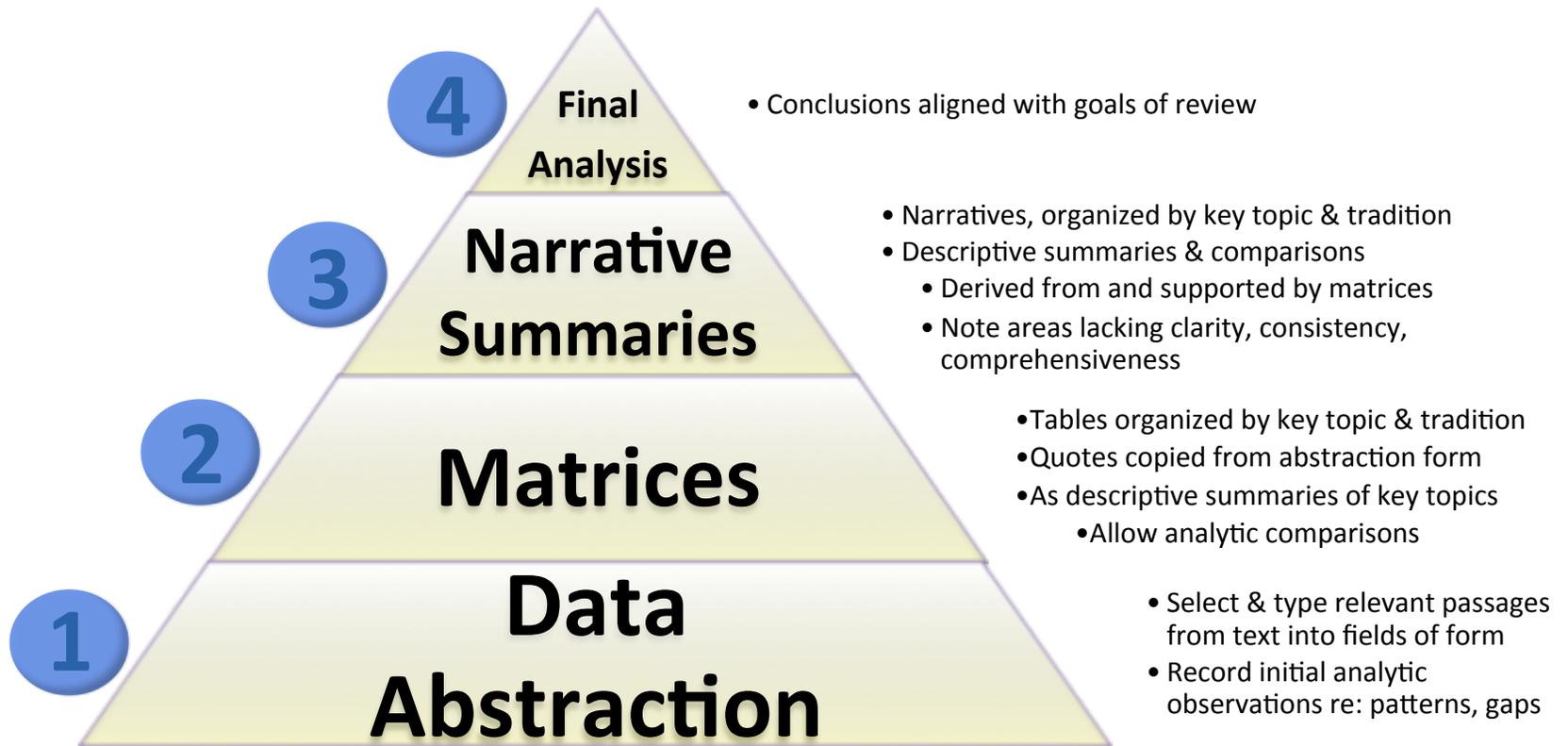
## → Systematic methods overview

- PhD comprehensives project
- Combine expertise (reviews) & interest (methods)
- No guidelines
- Attention to developing & recording methods
  - Methods publication: principles and strategies
- Useful for other “methods overviews”

# Literature identification & selection



# Progressive steps in the analysis



# Scope: Traditions & sampling-related topics

How 8 topics vary between 3 research traditions:

1. Grounded theory
2. Phenomenology
3. Case study

*Sample size*

*Saturation*

*Sampling units*

*Sampling definitions*

*Theoretical sampling*

*Purposeful sampling*

*Timing?*

# 3 methodological traditions

- **Grounded theory:**
  - To explain a human social-psych process; produces a substantive theory
  - Interviews, often other data types
  - Theoretical sampling, constant comparison
- **Phenomenology:**
  - To describe (sometimes interpret) a phenomenological experience
  - Interviews only
  - Analysis methods derived from philosophical foundations
- **Case study:**
  - To describe in depth one / small number of cases (“one among others”)
  - Multiple data types
  - Methods: general qualitative, less defined by its own methods (Stake)

Excludes literature on general qualitative research methods.

# Publications selected for inclusion (24)

- **Grounded theory:**
  - Charmaz, 2003, 2006, 2014; Clarke, 2005; Corbin & Strauss, 2008, 2015; Glaser, 1978, 1992, 1998; Glaser & Strauss, 1967; Schatzman & Strauss, 1973; Strauss & Corbin, 1998
- **Phenomenology:**
  - Cohen, Kahn, & Steeves, 2000; Colaizzi, 1978; Giorgi, 2009; van Manen, 1997, 2014
- **Case study:**
  - Merriam, 2009; Stake, 1995, 2005, 2006; Yin, 2009, 2011, 2014
- **Excluded full text (16):**
  - Nothing new compared to more recent editions (8); negligible info on sampling (7); primary research report (1)

# Topics → Questions about sampling

Question	Sampling-related topic
What is sampling?	<ul style="list-style-type: none"><li>• Definitions of sampling</li></ul>
How?	<ul style="list-style-type: none"><li>• Sampling strategies</li><li>• Purposeful sampling</li><li>• Theoretical sampling</li></ul>
What is selected?	<ul style="list-style-type: none"><li>• Sampling units (people, sites, cases, etc)</li></ul>
How much?	<ul style="list-style-type: none"><li>• Saturation</li><li>• Sample size</li></ul>
When?	<ul style="list-style-type: none"><li>• Timing of sampling decisions (a priori vs ongoing)</li></ul>

# Definition of sampling

QUAL research (abstracted): “the selection of specific data sources from which data are collected to address the research objectives.”

Merriam Webster: “the act, process, or technique of selecting a representative part of a population for the purpose of determining parameters or characteristics of the whole population.”

# Variations by research tradition

<b>Grounded theory:</b>	<u>What is selected</u> in theoretical sampling is <u>unclear or inconsistent</u> between authors (ie, it may not simply be data sources)
<b>Phenomenology:</b>	<u>What is selected</u> is restricted to <u>people</u> only (ie, a single type of data source)
<b>Case study:</b>	<u>What is selected</u> includes <u>cases</u> in addition to <u>data sources</u>

## “Sampling”

### Its meaning and appropriateness contested!

*“...use of the ‘sample’ portion of the term [ie, in purposive sampling] still risks misleading others into thinking that the case comes from some larger universe or population of like-cases, undesirably reigniting the specter of statistical generalization. The most desirable posture may be to avoid referring to any kind of sample (purposive or otherwise).”*

**—Yin, 2014, p. 42**

**Generalizes to populations vs Analytic generalizability**

# Usage of “sampling strategy”

	Authors who use term “sampling strategy”	Alternative terms
<b>Grounded theory</b>	<ul style="list-style-type: none"><li>• only Charmaz</li></ul>	~ method, ~ technique, form of ~, data gathering strategy
<b>Phenomenology</b>	-	method of choosing a sample, approach to ~
<b>Case study</b>	<ul style="list-style-type: none"><li>• Yin</li><li>• Merriam</li><li>• Stake</li></ul>	kind of ~

→ “Sampling strategy” language not used in all qualitative research traditions.

# “Purposeful/purposive sampling”

## Case study

- Example inconsistency:  
Yin (2011): *“Purposive sampling differs from several other kinds of sampling, snowball sampling, and random sampling.”*  
→ Merriam (2009) includes snowball sampling
- Almost no mention in GT, phenomenology
- Inconsistency about what qualifies as purposeful/purposive sampling in case study

## “Purposeful/purposive sampling” – broader literature

### General qual. methods

- Numerous descriptions besides Patton (1980-2015)
- “Purposeful” challenged as arbitrary (LeCompte, 1993)
  - “All sampling is done with some purpose in mind” (Guba, 1985).

- Term fraught with ambiguity, inconsistencies
  - Precludes establishing a common language
- Researchers cannot simply state sampling was purposeful, but must specify how

# Theoretical sampling

- Specific to grounded theory
- Within GT, consensus on important aspects of definition

A process where data gathering is guided by the evolving theory, and the aim is to develop categories in terms of their properties and dimensions and to integrate those categories (ie, relate them to each other) within the theory

- Outside GT, the definition often over-simplified

→ Its specific definition sometimes misrepresented in secondary sources.

## Sampling units (What is selected?)

Phenomenology	<ul style="list-style-type: none"><li>• Data source (1 type):<ul style="list-style-type: none"><li>➤ People</li></ul></li></ul>
Case study	<ul style="list-style-type: none"><li>➤ Cases –AND–</li><li>➤ Multiple data sources within the case:<ul style="list-style-type: none"><li>• People, sites, documents, etc.</li></ul></li></ul>
Grounded theory	<ul style="list-style-type: none"><li>• Unclear &amp; inconsistent:<ul style="list-style-type: none"><li>➤ Data sources? –OR–</li><li>➤ Examples of concepts*? –OR– BOTH?</li></ul></li></ul>

\*specific pieces of illustrative data (whatever their source)

## Saturation (mentioned only once in case study)

- Cohen (2000): Reaching a point where “nothing new” is encountered usually doesn't happen in phenomenology.
- Van Manen (2014): “Data saturation” irrelevant to phenomenology

### Theoretical saturation — specific definition

- Glaser & Strauss (1967): “...*no additional data are being found whereby the sociologist can develop properties of the category.*”
- Charmaz (2006): It is “not the same as witnessing repetition of the same events or stories. ...The common use of the term saturation refers to nothing new happening.”

→ Theoretical saturation differs from data saturation.

## Sample size

- *Saturation* arbitrary post-hoc criterion for sufficient SS
- Impossible to specify SS *a priori*
  - Yet SS estimates necessary for proposals

### Flexible SS estimates suggested by authors

#### Grounded theory

Charmaz (2006): **At least 25 interviews**

#### Phenomenology

Cohen (2000; for hermeneutic): **<10 if intense, ≥30 if less intense**  
Colaizzi (2009; for descriptive): **around 12 participants**

#### Case study

Yin (2011): **25-50 "units"** (data sources within a single case)  
Stake (2005): **4-10 cases** (for multiple case study)

# Timing of sampling decisions

**A priori:** Where the decisions about what to select are made before data collection.

**Ongoing:** Where the decisions about what to select are made after or in response to data collection.

**Either:** Where either, and sometimes both, a priori or ongoing sampling decisions may be involved.

## Ongoing types of sampling

<b>Grounded theory</b> (major)	<ul style="list-style-type: none"><li>• <b>Theoretical sampling</b></li></ul>
<b>Phenomenology</b> (less emphasized)	<ul style="list-style-type: none"><li>• Two-tier system of sampling (Cohen, 2000)</li></ul>
<b>Case study</b> (less emphasized)	<ul style="list-style-type: none"><li>• Snowball sampling (Merriam, 2009; Yin 2011)</li><li>• Deciding on issues for the quintain (Stake, 2005b)</li><li>• Theoretical sampling=ongoing sampling (Merriam, 2009)<ul style="list-style-type: none"><li>– used to “sample within the case”</li></ul></li></ul>

→ Ongoing sampling is less emphasized in phenomenology or case study.

## *A priori* sampling

<b>Grounded theory</b>	<ul style="list-style-type: none"><li>• All authors (except Glaser) accept it for GT</li><li>• Only Charmaz considers how</li></ul>
<b>Phenomenology</b>	<ul style="list-style-type: none"><li>• Timing of sampling decisions rarely specified</li><li>• Adequate descriptions of how are lacking</li></ul>
<b>Case study</b>	<ul style="list-style-type: none"><li>• Timing of sampling decisions rarely specified</li><li>• Adequate descriptions of how are lacking</li></ul>

- To be truly *a priori*, criteria-based purposeful sampling strategies (eg, typical case, extreme case, max variation) require sampling frames & preliminary data.

# Conclusions

1. Meaning and appropriateness of the term *sampling* in qualitative research is contested.
2. The language of purposeful sampling strategies is fraught with ambiguity and used inconsistently.
3. *What* is selected (sampling unit) in theoretical sampling is unclear: data sources or examples of concepts/categories or both?

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## Questions - discussion...

**Stephen Gentles, [stevegentles@gmail.com](mailto:stevegentles@gmail.com)**

**Postdoctoral fellow**

**CanChild Centre for Childhood Disability Research**

**McMaster University, Hamilton, Ontario, Canada**