McMaster University

Family Medicine

David Braley Primary Care Research Collaborative

@McMasterFamMed

Qualitative Research: Overview of Methods

Watch a recording of the session here

Meredith Vanstone

February 28th, 2017

Michael G. DeGroote SCHOOL OF MEDICINE

McMaster University
FAMILY MEDICINE

Qualitative Research: Overview of Methods

DFM In Service
February 28, 2017

Meredith Vanstone, PhD
Assistant Professor, Department of Family Medicine
Meredith.Vanstone@mcmaster.ca

Michael G. DeGroote
SCHOOL OF MEDICINE

Today

- Why should you care about qualitative research?
- What is it?
  - Description
  - Toolkit for QR
- What is rigour in QR?
- Parked for future reference:
  - Overview of Methodologies

What's the point of qualitative research?

Qualitative research holds different assumptions and uses different methods to answer different types of questions than quantitative research

QR may be helpful if:

- Your research question concerns something that cannot be measured.
- You are interested in the opinions, experiences, beliefs of participants.
- You're not sure exactly what information you need to answer the question (e.g. what factors are important)
- The boundaries/parameters of the question are still broad and may need exploration within the data collection process itself.

QR asks different questions

- Why don't patients take their medications as prescribed?
- How do physicians develop good clinical judgment?
- What makes a particular clinical teaching unit an effective place to learn?

QR can help explain unexpected findings

Quant study: Survey of types of power use experienced by clinical clerks on various learning rotations.

Finding: clerks with resident preceptors more likely to experience negative forms of power use and report lower quality learning experiences.

Qual study: How do clerks experience power in clinical learning environments?

Baird, J., Bracken, K., Grierson, L. (2016). *Medical Education.* DOI 10.1111/medu.13065

Qualitative study ongoing

QR can help identify factors of interest for further study or intervention

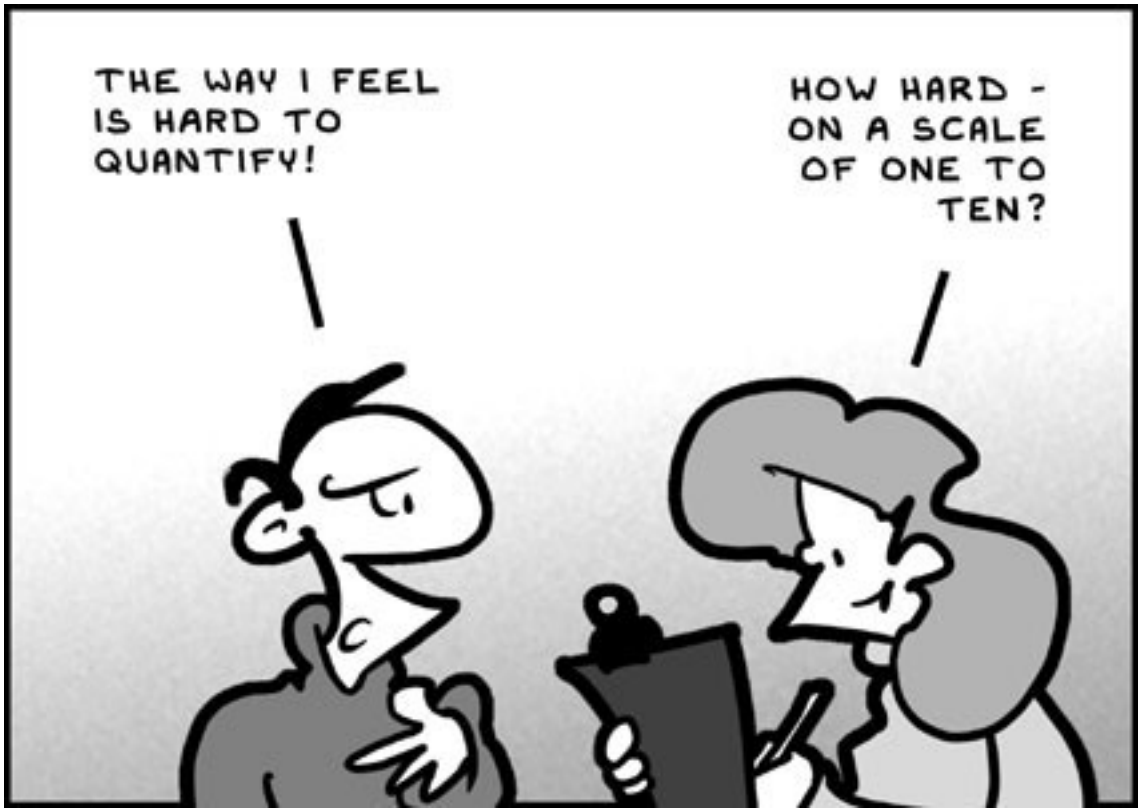
Problem: low levels of medication adherence among people with T2DM.

Qual study: How do patients with T2DM manage their medications? What barriers and facilitators do they experience?

Intervention: Designed to alleviate particular barriers

Further Study: Assessing the prevalence of particular barriers

What is qualitative research?



Common distinctions

Qualitative

- Description, Interpretation
- Induction
- Meaning
- Depth, uniqueness
- Multiple realities
- Holistic
- Develops theory
- Process oriented
- Rich descriptions

Quantitative

- Explanation
- Deduction
- Numbers
- Generalizability
- Single reality
- Reductionistic
- Tests theory
- Outcome oriented
- Precise measurement

Qualitative research

- Generates theory using an inductive approach.
- Emphasizes the ways in which individuals interpret their social world.
- Emphasizes participant descriptions and understandings of human behavior.
- Strives for careful and detailed descriptions or interpretations of social practices to understand how participants experience and explain their own world.

Bryman, 2001; Jackson & Verberg, 2007

QR Reasoning

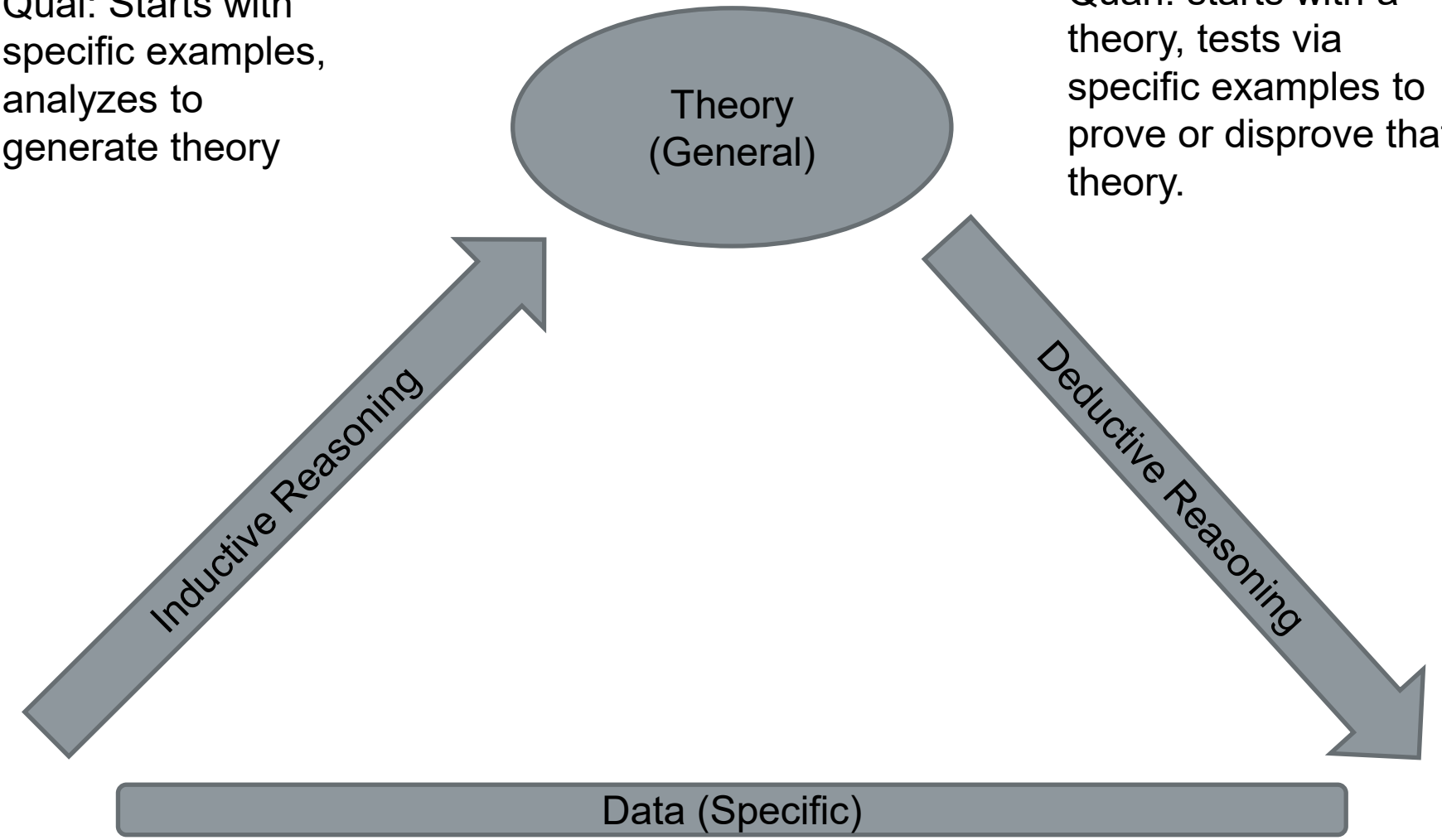
- Induction, exploration
  - More tentative idea of what is important at beginning of study

- Look for participants to identify what is important to them, not imposing assumptions.
  - Widely elicit priorities, opinions, beliefs, actions of participants

- Requires open research question and open interview questions, to give room for participants to express surprising ideas.

Qual: Starts with specific examples, analyzes to generate theory

Quan: starts with a theory, tests via specific examples to prove or disprove that theory.



Inductive Reasoning

- Exploratory
  - Don’t know what you’re looking for, or what might be important
- Data-driven
  - Let participant show what’s important- researcher doesn’t yet know
- Methods evolve as data is collected, to respond to emerging insights.

Iterative process

- Qualitative methodologies accept that research question will evolve as data is collected and analysed

- Start broad, ask broad questions, start analysis immediately, let emerging ideas guide further data collection.

Example

- Initial question: What is it like to wait for an organ transplant?

1. Interview a couple of individuals who are currently waiting.
2. In analysis, notice prevalence of talk about ideas of who deserves an organ, and prioritization of patients on the list.
3. Recruit some more patient participants and ask specifically about their ideas of fairness and equity in organ transplantation.
4. Analyze responses, notice that talk about prioritization and fairness also coincides with talk about feelings of guilt.
5. Recruit some organ recipients, re-work questions to query these issues.
6. Eventually…… develop findings or build a theory about notions of ethics, resource allocation, fairness, equity in organ donation and how those waiting for an organ navigate these ideas, how these ideas affect the way that organ recipients think & act about their experience later in life.

Sampling

- Not striving for statistical inference or generalizability, so sampling doesn't seek to be representative of a particular group.
- Important to specify thoughtful inclusion/exclusion criteria.
  - Ensures all participant responses are relevant to the phenomena under study.
- Rather, "purposive", looking for participants who will yield rich data.
- May evolve with data analysis (seek participants with a particular trait to fill in a gap in emerging theory)

When do you have enough participants?

- B/c not aiming for generalizability, sample size cannot be calculated.

- Instead, aim for “saturation”
  - When new data does not yield new ideas
  - Further sampling yields “predictable” responses.

- How many is enough? Depends on homogeneity of participants, breadth of experience you are trying to examine.

Anatomy of a qualitative research project

"Geez, you're the worst focus group I've ever seen."

AllPosters

Using Qualitative Research

- Worldview
  (paradigm, theoretical perspective)
- Research Approach
  (methodology)
- Data Collection Strategy
  (methods)

Last thing you choose, not the first.

Building Your Project

- Not necessarily pre-packaged sets of paradigm + methodology + methods.
- Mixing and matching is acceptable, as long as it is justified.
- Some techniques tend to be used together more frequently
- Some are in philosophical opposition

Choose Methods To Match Broader Research Considerations

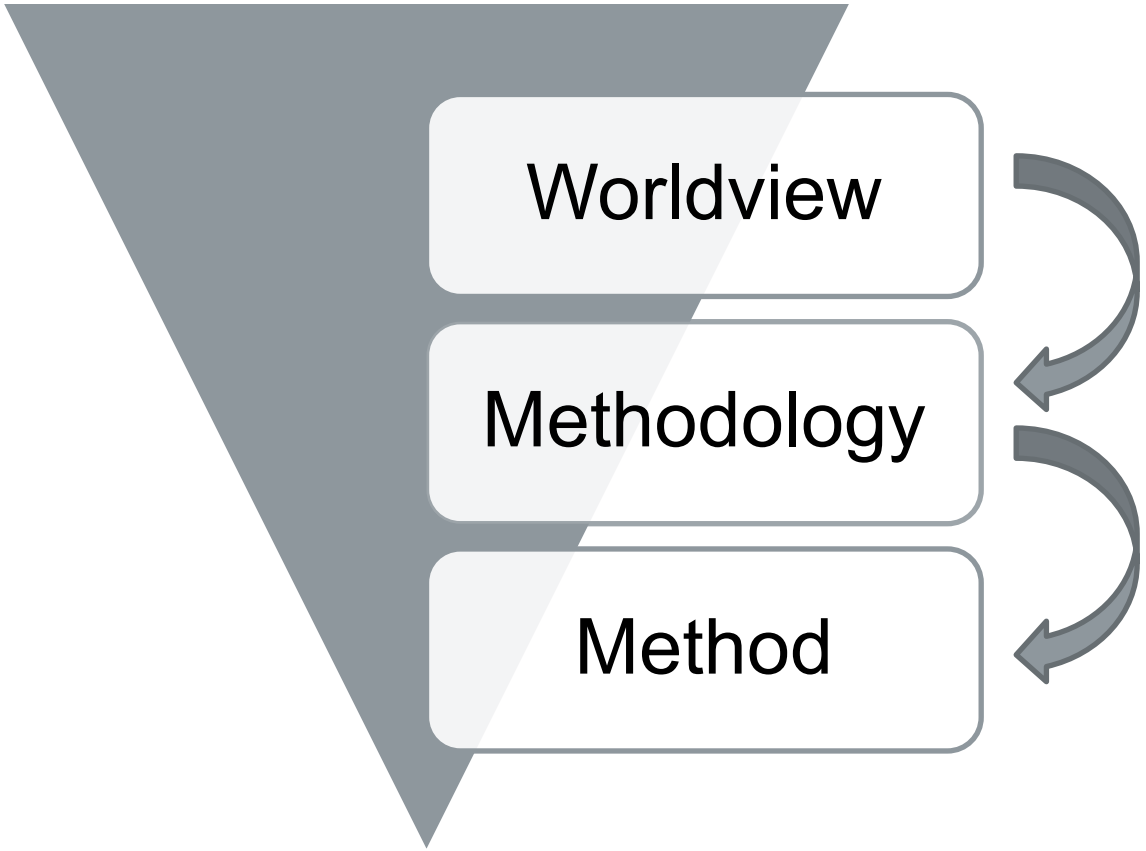
"Let's do a focus group study"

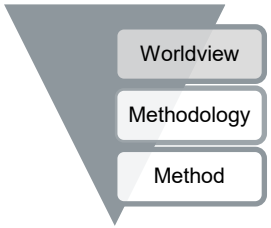
=

There are many different purposes, formats, uses of focus groups.

"Let's use a wrench"

Components of a Qualitative Research Study





Worldview

- “Paradigm”, “Worldview”, “Epistemological Paradigm”, “Theoretical Tradition”

- Ontology (what exists) + Epistemology (what can be known) + Methodology (how we can know it)

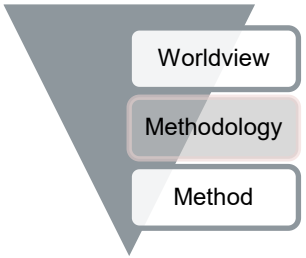
- Foundation of all research, qual + quant

Additional Reading Resources

Giacomini, M. Theory matters in qualitative research. In Handbook of Qualitative Health Research. Bourgeault, I., DeVries, R., Dingwall, R. (Eds). Thousand Oaks: SAGE.

Grix, J. (2002). Introducing students to the generic terminology of social research. *Politics.* 22(3), 175-86.

Guba, E. & Lincoln, Y. (2004) Competing paradigms in qualitative research. In Hesse-Biber, S. & Leavy, P. (Eds) *Approaches to Qualitative Research.*

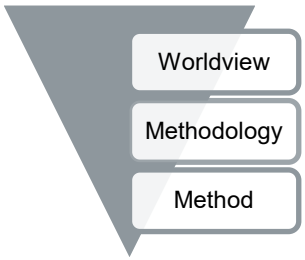


Methodology

- Package of guidelines for conducting qual research
  - Affiliated with a particular worldview/ epistemological paradigm(s)
  - Data collection guidelines
  - Sampling
  - Data analysis guidelines
- Developed out of different disciplines, each has a different focus.

Choosing a methodology

- Concentrate on focus of each methodology, look for one that asks the type of question you are interested in.
- Might end up refining your RQ slightly after choosing a methodology.
- Wikipedia is an excellent resource for a short summary of what each methodology is about, and list of key texts to start with.



Methods (Tools)

- Interviews
  - Semi-structured
  - Unstructured
- Focus Groups
- Observation
  - Participant/Non-Participant
- Textual Analysis
- Arts-based approaches
  - Photovoice
  - Mind map

Your QR Toolkit

- Worldview
  - Epistemology
  - Ontology
- Methodology
  - Affiliation with a particular worldview
  - Linked to particular disciplinary and theoretical perspectives
  - Guidance for all stages of research
- Methods
  - Data collection techniques

What do you choose first?

<u>Some potential starting points</u>

-Question you want to ask
- Type of data that's accessible
-Methodology you are comfortable with
-Congruency with theory you want to use, way you see the world

Overview of Methodologies

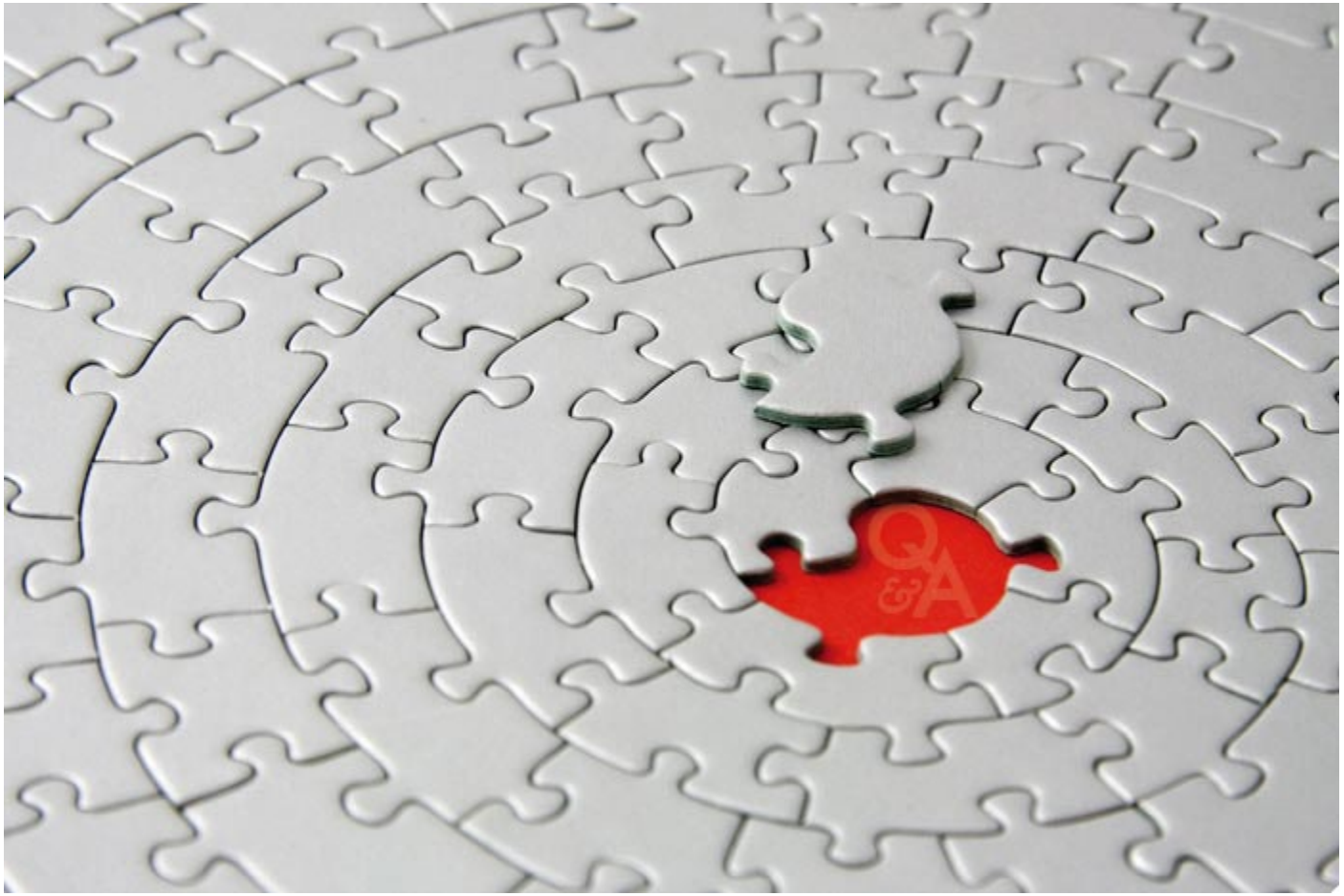
- Recognize the variation of methodologies
- Appreciate the influence of the methodology on the research
- Place to start if you need to choose one

Overview of Methodologies

- Grounded Theory
- Ethnography
- Phenomenology
- Narrative
- Case Study
- Text-Based approaches
- Participatory approaches

Slides parked at the end of lecture in case you need them in the future

Rigour in Qualitative Research



You can't evaluate QR with *a priori* standard criteria
QR requires it's own criteria, but there are criteria applicable to all QR
All research should stand up to the same criteria (quant. criteria)
Non-Foundationalist
Foundationalist
Quasi-Foundationalist

Assessing Quality

- No unified QR paradigm
- No consensus on methods and standards for critical appraisal
- Procedural details typically under-reported
- Good procedures do not ensure a good product
- High quality research also requires conceptual and analytical prowess

What QR strives for

- Theoretically sophisticated findings
- Usefulness
- Resonance
- Originality
- Trustworthiness
- Credibility
- Reflexivity, acknowledgement of limitations and researcher influence
- Enough details reader can evaluate resonance between data and conclusions

Some ways to achieve this

- Triangulation
- Member-checking
- Memos, field notes
- Audit trail of analytic decisions
- Theoretical saturation
- Theoretical sampling
- Present a “thick description” of data

Critical Appraisal

- From evidence based medicine
  - Developed for causal (hypothesis testing) research
  - Focus on experimental design & logical inference
  - Presumes a hierarchy of worse -> better designs
  - …leading to worse -> better quality evidence

- Reinforced by the strategic use & abuse of clinical research
  - Fear of bias by authority figures, pharmaceutical companies, etc.
  - Also problems of “equipoise” – evidence as a disciplining influence on overzealous theoreticians

Critical Appraisal

- Basic premise:

  The methods reported can warrant the results as true (or not)

  – This holds true enough for experimental, hypothesis testing studies
    - (when the causal mechanism is plausible and accounted for)

  – But it is largely untrue for qualitative studies

Research as cooking: Appraising quantitative methods

- Specify the:
  - **Ingredients**
    - (…data)
  - **Recipe**
    - (…design)
  - **Machine**
    - (…analysis, stats)

- & anybody should get the **same results**

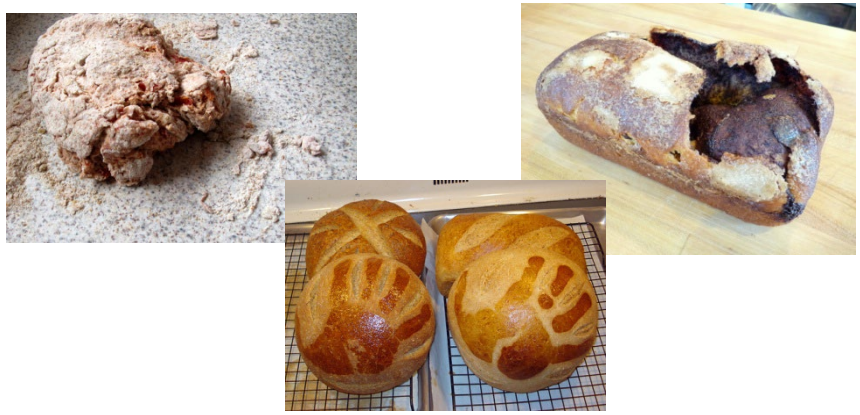
- The design & procedures tell you much about the quality

(& keep yourself out of it)

Research as cooking: Appraising qualitative methods

- Specify (limited features of) the:
  - **Ingredients** (data)
    - Always “local”
    - Never the same twice
  - **Recipe** (design)
    - Pinch of this, bit of that…
    - & mind the bowl …
  - **Machine** (analysis)
    - Coding, corroboration, etc.
    - Walking in the woods…

- Different cooks get **different results**
  - & may differ from intended result



- Many good, many bad, some a matter of taste
- **The proof is in the eating**

Bottom Line

- No research project is perfect. What steps did they take to make it better? Does the project have more strengths than weaknesses? Did they acknowledge their limitations? Can you trust what they are saying? Is it relevant and/or useful?

Meredith.Vanstone@mcmaster.ca
905-525-9140 x 22113

McMaster University

FAMILY MEDICINE

Department of Family Medicine
Michael G. DeGroote School of Medicine
Faculty of Health Sciences

fhs.mcmaster.ca/fammed
@McMasterFamMed

Grounded Theory

Focus: How do people interact, take action, or engage in a process?

Among the most widely used qualitative methodologies, in many disciplines.

Question starts very broad, mainly to identify phenomenon of interest, and is refined as data collection progresses.

Grounded Theory

Disciplinary origin: Sociology

Theoretical Traditions: Objectivism/Post-Positivism (Glaser, Strauss & Corbin); Constructivism (Charmaz)

Theoretical foundation: Symbolic interactionism (how people define events and how those beliefs affect the way they act)

Main Authors: Barney Glaser, Anton Strauss, Juliet Corbin, Kathy Charmaz, Adele Clarke, Antony Bryant.

GT Example

- Hall, Tomkinson & Klein, 2012
- "How do care providers and women manage birth?"
  - Focus groups of women + health care providers (family docs, midwives, nurses, obstetricians, doulas)
- Generated a theory about how women and providers used different strategies to minimize risk and maximize integrity, including: accepting or resisting recommendations for surveillance and intervention; plotting courses v. letting events unfold.

Ethnography

Focus: Interested in examining shared patterns of behaviour, beliefs, and language by studying groups of people who interact and share a common experience.

Aims to describe and interpret the culture AND the behaviors, belief, and language of the culture-sharing group, usually through observation and/or conversation. Sometimes the researcher is immersed within the group (participant-observation).

Ethnography

Disciplinary origin: Anthropology

Theoretical Traditions: Realist ethnography is post-positivist, critical ethnography uses critical theory or critical realism.

Theoretical foundation: See above. May include structural functionalism, symbolic interactionism, feminism, Marxism, ethnomethodology, critical theory, cultural studies, postmodernism.

Main Authors: Atkinson, Hammersley, Coffee, Delamont, Madison, Fetterman, Wolcott, Dorothy E. Smith.

Ethnography

- McGibbon, Peter, & Gallop (2010)

- What are the forms of stress experienced by nurses (in a particular hospital)?
  - Examines existing formulations of stress in relation to data collected about the culture-sharing group.
  - Described stress in the context of the ruling relations at work in the hospital under study, focusing on how stress may be socially organized.

Phenomenology

Focus: Describes the commonalities in the lived experience of several individuals. Questions often ask “what is the meaning” or “what is the experience”.

Aims to achieve a deep understanding of a phenomenon (means smaller samples). Interested in the everyday way in which people make sense of their “being” in the world. Posits the existence of an “essence” of a phenomenon which will be similar across multiple people.

Each person has a unique view of the world, and a particular social reality which is as true as anybody else’s reality.

Phenomenology

Disciplinary origin: Philosophy. Used frequently in Nursing research.

Theoretical Traditions: Varies significantly by author.

Theoretical foundation: Existentialism (the way one views the world, emphasizing the 'here and now')

Main Authors: Max Van Manen; Moustakas; Merleau-Ponty. Informed by philosophers Husserl, Heidegger, Sartre.

Phenomenology Example

- Ouelette, Achille & Paquet, 2009
- "How do patients experience kidney graft failure"
  - Develop a comprehensive description of the way individuals constructed meaning out of this experience.
- Analysis of data identified five themes which the authors then compared to an existing theoretical framework about psychosocial transition.

Narrative inquiry

- Begins with the experiences of individuals as expressed as stories. A narrative can be spoken or written, but it gives an account of an event or an action chronologically.

- Stories tell of experiences, but they also illuminate how a person understands and/or constructs their identity. Stories may be collected (found as-is), or constructed between participant and researcher. Also allows for creative methods of storytelling.

- No specific data collection or analysis techniques, although many authors have written about their own strategies. Very flexible methodology.

Disciplinary origin: Different social science and humanities disciplines, including literature, history, anthropology, sociology.

Theoretical Traditions: Constructivist, interpretive. Contextual, recognizing tentative and variable nature of knowledge.

Theoretical foundation: Postmodern, psychological, sociological, developmental. Depends on type.

Main Authors: Clandinin and Connelly**, Czarniawska, Lichtmann, Spector-Mersel

Narrative Example

- Weber, Rowling & Scanlon, 2007

- “How do university students story the ways in which they cope with loss and trauma to find meaning in that experience”

Case Study

- Examines a phenomenon by looking how the phenomenon has manifested in different “cases”.
- A case can be a group of people, a historical event, policy, programmes, communities, individuals.
- Usually mixed methods, including multiple different sources of data.
- May seek to explain (quant) OR describe (qual).

Disciplinary origin: History, political science

Theoretical Traditions: Objectivist, but varies depending on type.

Theoretical foundation: also depends on type.

Main Authors: Robert Yin, Robert Stake.

Textual methodologies

- Qualitative Content Analysis
- Discourse Analysis
- Critical Discourse Analysis
- Conversational Analysis

- Different aims, but all focus on how words convey meaning.
- Often use constructivist tradition (except QCA)
- Some (CA, some DA approaches) also analyze pauses, interruptions, false starts etc.
  - Necessitates a different type of transcription.

Discourse Analysis Example

- McKenzie & Oliphant, 2010

- "How do midwives and their clients draw on different forms of knowledge and sources of information as evidence in clinical communication"
  - Identifies and describes three different discursive strategies that women use as they discuss options that are not obstetrically standard.

Participatory/action/advocacy/community-based approaches

- Not a single methodology
  - Can be a broader approach that uses other aspects of different methodologies.

- Usually takes a critical theory or critical realism approach, aiming to empower, advocate, create change, problematize current situation etc.
- Main methodological authors: Nina Wallerstein, Meredith Minkler, Barbara Israel

Hallmarks of action/advocacy approaches

- Educates researcher, participant, those who encounter knowledge produced by research.
- Deals with individuals as members of a social group
- Is problem-focused, context-specific.
- Involves a change intervention
- Aims at improvement and involvement
- Participants are directly involved in shaping, carrying out, analyzing, research.

Example

- Cristancho, Garces, Peters, Mueller (2008)

- Explore the opinions and experiences of Hispanic immigrants living in three American Midwest communities about barriers to accessing and using healthcare.