QUALITATIVE RESEARCH

When and How to Use It!

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Objectives

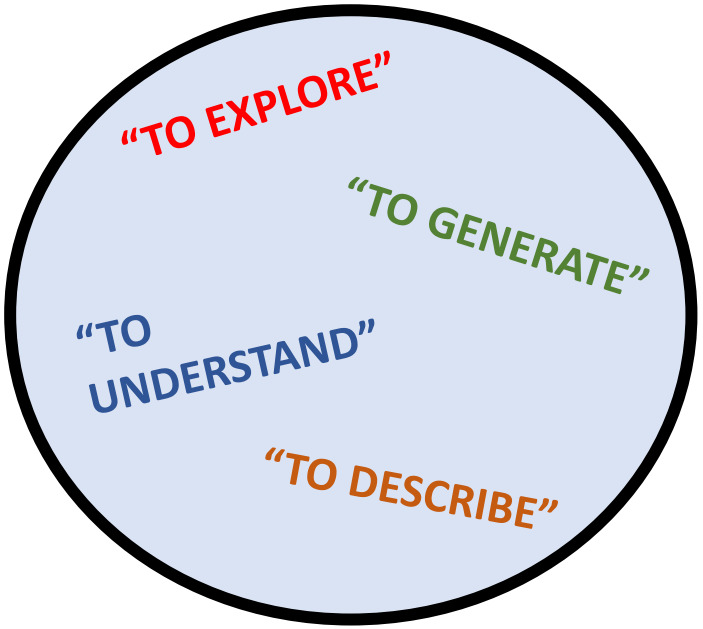
- To provide an overview of:
  - Qualitative Research
  - Research Question
  - Research Designs
  - Sampling & Recruitment
  - Data Collection Methods
  - Data Analysis
  - Verification Procedures

What is qualitative research?

- In-depth descriptions of situations
- Inductive in nature
- Generally non-numerical data
- Interpretive and descriptive
- Observations of a “natural” setting

Research Question

- Provides major objective or intent of study
- Includes study purpose, central phenomenon, participants, research site
- Includes central and sub-research questions
- Open-ended



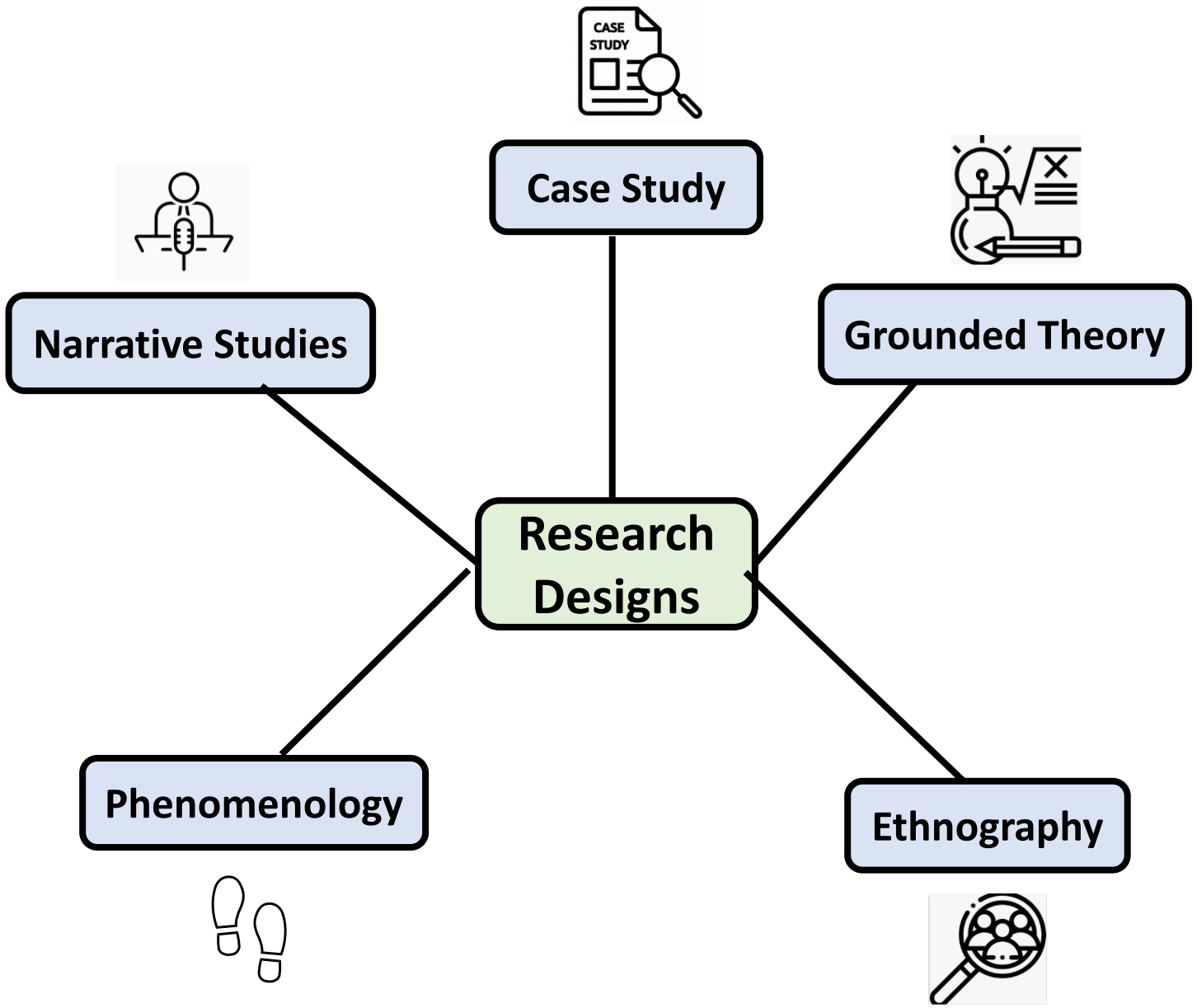
Example Research Question

QUALITATIVE RESEARCH QUESTION

- How do personal experiences related to HPV and cervical cancer influence African American mother's intention to vaccinate their girls against HPV?

QUANTITATIVE RESEARCH QUESTION

- How many mothers have had a personal experience related to cervical cancer and HPV?



Note: Design can determine analysis.

Phenomenology

- **Purpose**: Describes the meaning of the lived experience about a concept or a phenomenon for several individuals.
- **Goal:** To reduce individual experiences with a phenomenon to a description of universal essence.
- **Challenge:** Must understand phenomenon, carefully choose participants.
- **Best fit research question:** To understand several individuals' common or shared experiences of a phenomenon to develop practices or policies or to develop a deeper understanding about the features of the phenomenon.
- **Sample Research Question:** *What is the lived experience of adults who are integrating a hearing loss into their lives?*

Grounded Theory

- **Purpose:** Moves beyond description and generates a theory that relates to a particular situation.
- Theory development is not “off the shelf”, but rather generated or “grounded” in data from participants who have experienced the process.
- **Challenge:** Difficult to set aside theoretical ideas or notions so that the analytic, substantive theory can emerge.
- **Best Fit Research Question:** Inquirer asks questions on understanding how individuals experience and steps in the process. What is the process?
- **Sample Research Question:** *What theory explains the change process in the revision of general education curricula on three college campuses?*

Ethnography

- **Purpose:** To examine shared patterns of a cultural or social group or system (e.g., behavior, customs, and ways of life).
- Involves prolonged observation of the group
- Many ethnographies may be written in a narrative or story telling approach.
- **Challenge:** Inability to complete the study or compromise the study
- **Best Fit Research Question:** To describe how a cultural group works and to explore the beliefs, language, behaviors, and issues such as power, resistance, and dominance.
- **Sample Research Question:** *What is it like to be a young urban African-American who has a AIDS-afflicted family member?*

Case Study

- A case study is an exploration of one or more cases in a "bounded system" over time through detailed, in-depth data collection involving multiple sources of information rich in context. (e.g., cultural sharing group in ethnography may be considered a case.)

- The context of the case involves situating the case within its setting, which may be physical, social, historical and/or economic.

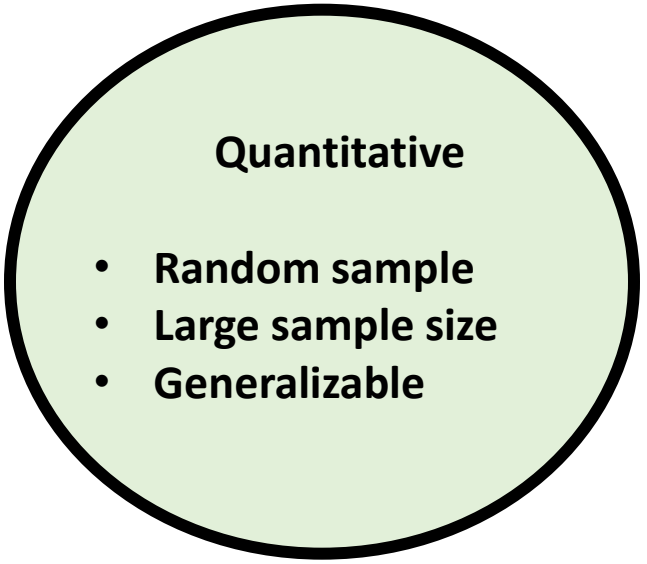
- **Challenge**: Identify ones' case

- **Best Fit Research Question:** Includes a clearly identifiable case(s) with boundaries and seeks to provide an in-depth understanding of the cases or a comparison of several cases.

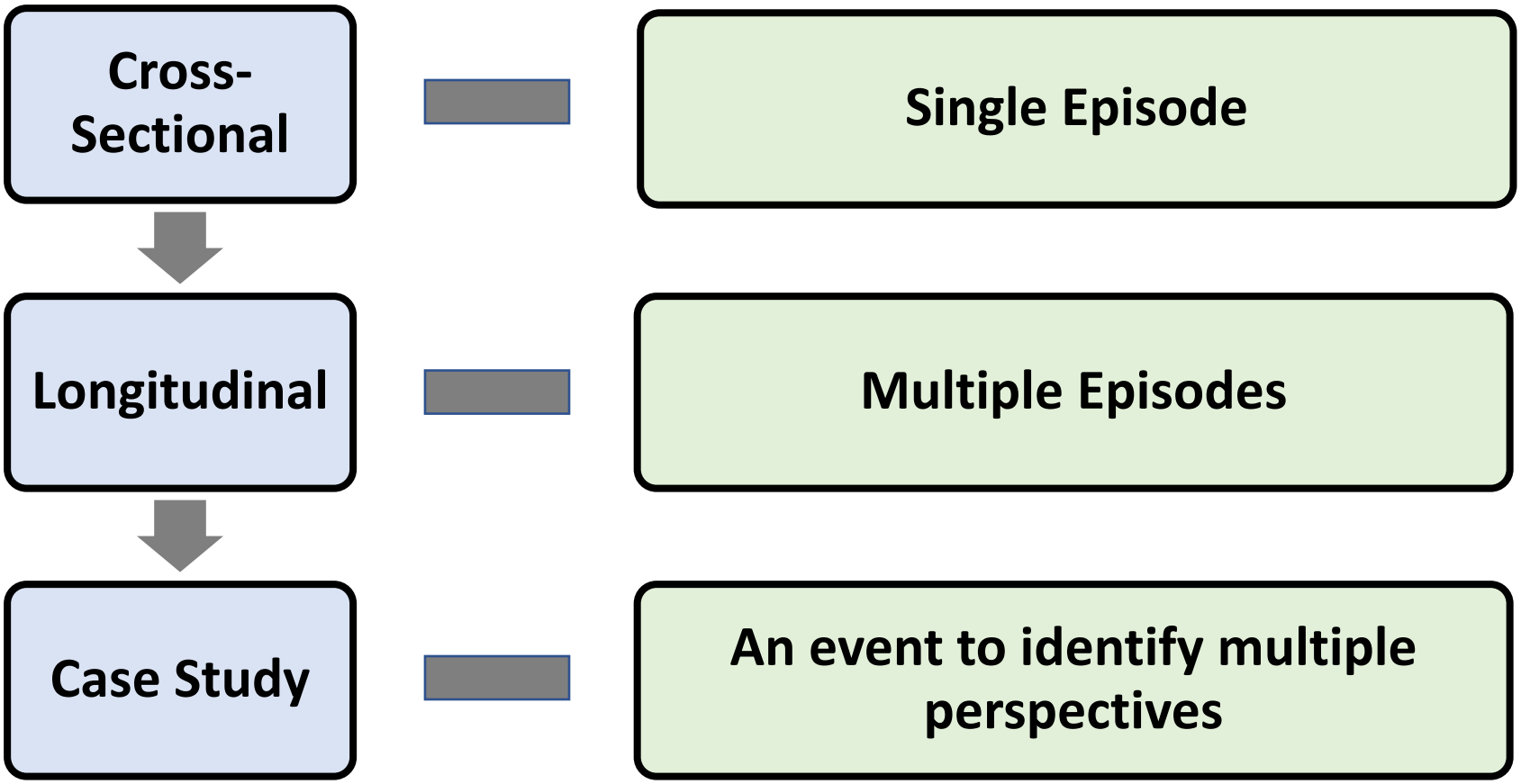
- **Sample Research Question:** *What was the campus response to the gunman incident at the Midwestern university?*

Sampling

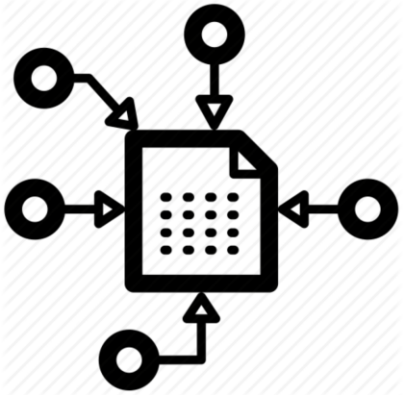
- Purposive Sampling
  - Non-probability **sample** (i.e., not random)
  - Study population selected based on characteristics of a population and the objective of the study.
  - Smaller sample size
  - No generalization
  - Note: Must define study population



Data Collection Study Designs



Data Collection Methods



- Focus Groups
  - 6-10 people give opinions and perceptions on phenomenon
- Observations
  - Occurs in natural settings and involves the researcher taking lengthy and descriptive notes of what is happening
- Interviews
  - Unstructured, Structured, Semi-Structured
  - Conversational in Nature
- Documents
  - newspapers, magazines, books, websites, memos, annual reports
- Audiovisual materials
  - Cassettes, films, tv programs

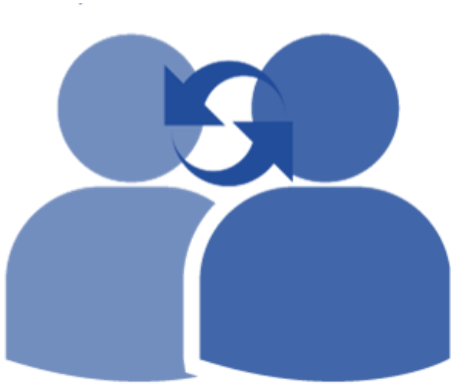
Methods and Sample Size

Focus Groups

- 3 (minimum)
- 4-6 (usual)
- 10-15 (larger studies)

Interviews

- 30 participants

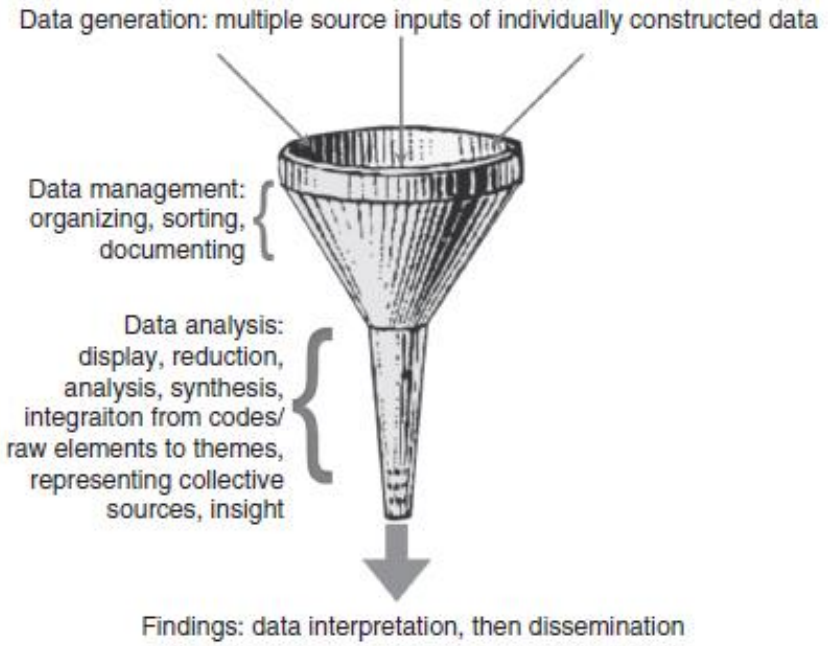


What is saturation?

- It ensures adequate and quality data are collected to support the study.
- It is frequently reported in qualitative research and may be the gold standard.
- There is no one-size fits all method to reach data saturation.

Qualitative Data Analysis

A complex, inductive process whereby we move from the qualitative data that have been collected into some form of explanation, understanding, or interpretation of the people and situations we are investigating.



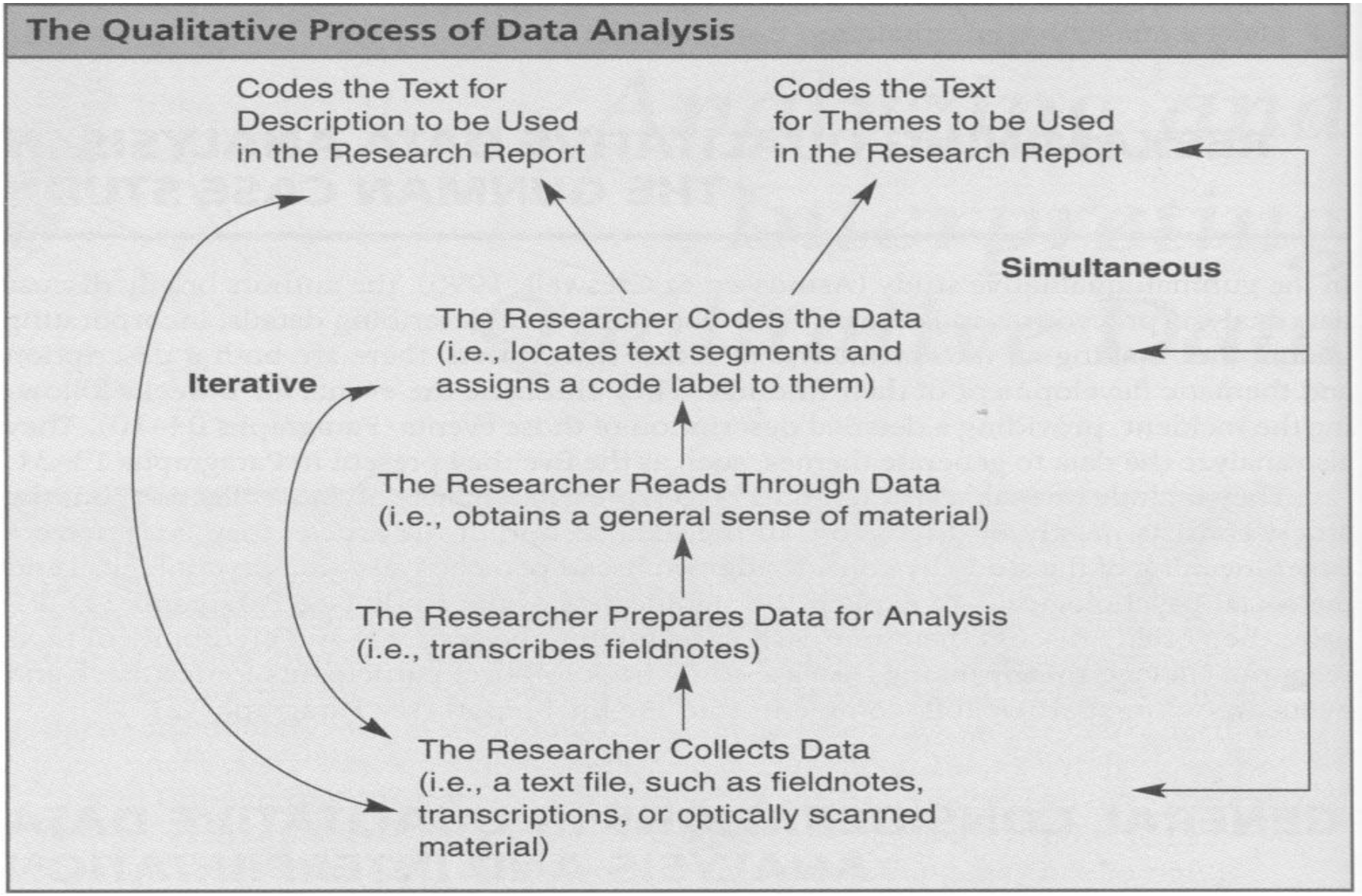
Analysis Preparation

Key Steps:

- Ensure all data analysts understand the qualitative data analysis process
- Identify researcher bias
- Emphasize that qualitative analysis is conducted by each individual separately initially to reduce bias
- If community members are involved, ensure they have a clear understanding of the issue or phenomenon

Steps in Data Analysis

1. Preliminary Exploratory Analysis
2. Coding of Data
3. Develop Descriptions
4. Develop Themes
5. Connecting Themes
6. Represent or visual information

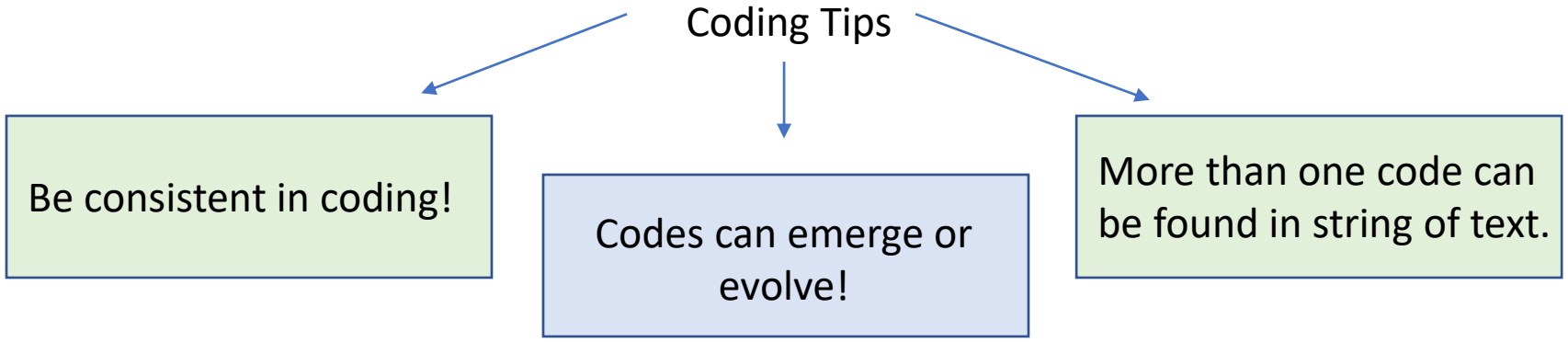

The Qualitative Process of Data Analysis
Codes the Text for Description to be Used in the Research Report
Codes the Text for Themes to be Used in the Research Report
Simultaneous
The Researcher Codes the Data (i.e., locates text segments and assigns a code label to them)
Iterative
The Researcher Reads Through Data (i.e., obtains a general sense of material)
The Researcher Prepares Data for Analysis (i.e., transcribes fieldnotes)
The Researcher Collects Data (i.e., a text file, such as fieldnotes, transcriptions, or optically scanned material)

Step 1: Preliminary Exploratory Analysis

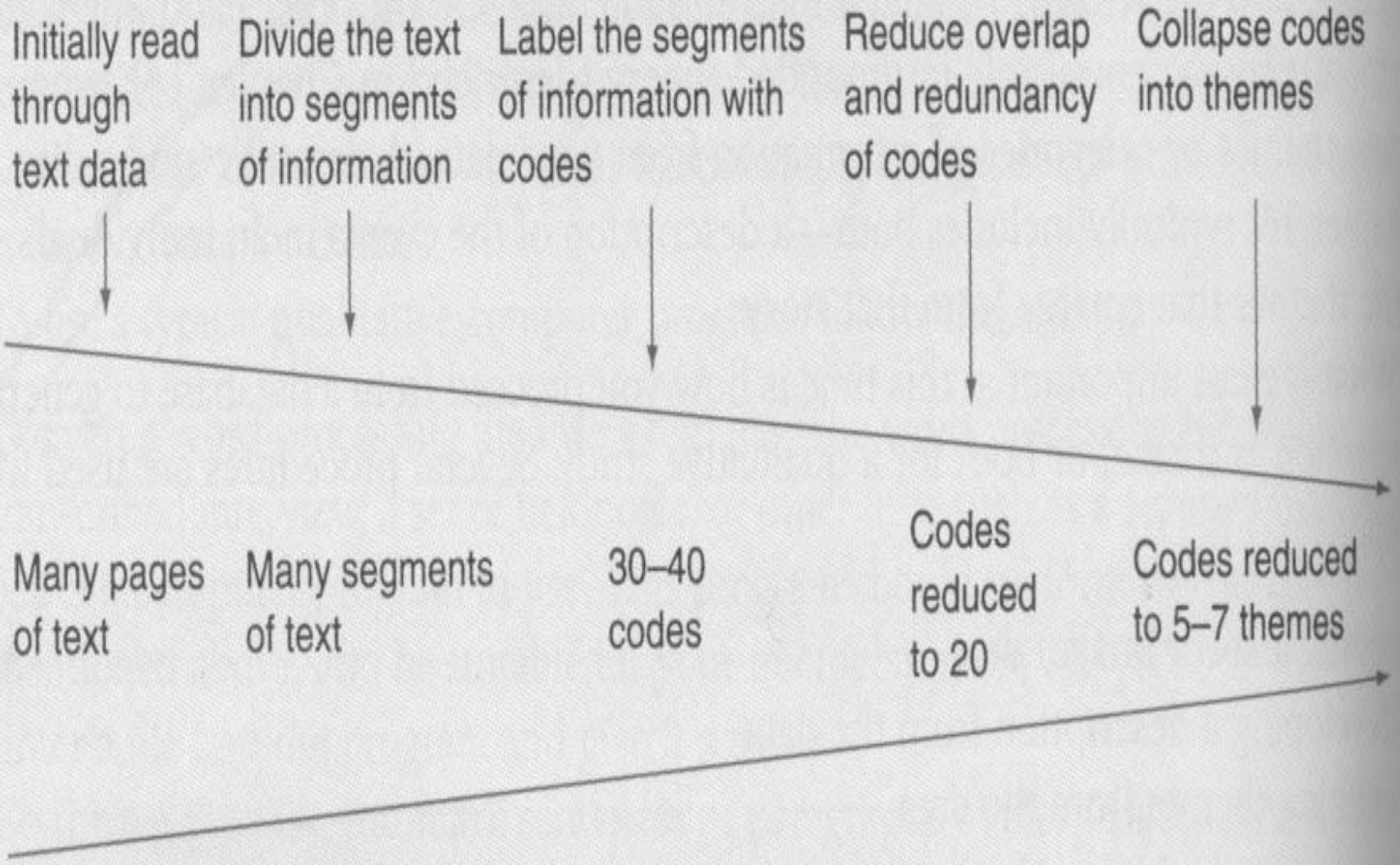
- Explore the data by reading through all of your information to obtain a general sense of the information
- Memo ideas while thinking about the organization of the data and considering whether more data are needed
  - Jot memos in margins of field notes, transcripts, documents, photos

Step 2: Coding

- “marking segments of data with categorical names or descriptives”
- 2 sources of codes
  - A priori: codes developed before examining current data (deductive)
  - Ground: codes developed by researcher by examining the data (inductive)
- Process of Clustering
  - After open coding an entire text, make a list of all code words
  - Cluster together similar codes and look for redundant codes (Axial Coding)



A Visual Model of the Coding Process in Qualitative Research



Types of Analysis

- Content Analysis
  - Descriptive approach in coding data
  - Interpretation of quantitative counts of codes

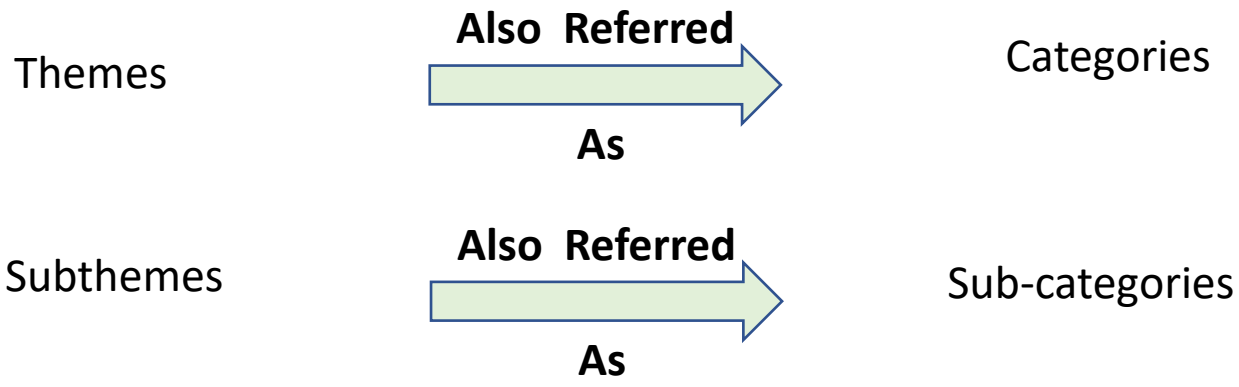
- Thematic Analysis
  - Purely qualitative
  - Detailed and nuanced account of data

Step 3: Theme Development

- Take this new list of codes and go back to the data
- Reduce this list to codes to get 5 to 7 themes or descriptions (i.e., selective coding)
- Themes are similar codes aggregated together to form a major idea in the database
  - Note: There can be sub-themes developed.
- Identify the 5-7 themes by constantly comparing the data

Why Themes?

- It is best to write a qualitative report providing detailed information about a few themes rather than general information about many themes



Naming Themes or Categories

- The names can come from at least three sources:
  - The researcher
  - The participants
  - The literature

Most common: when the researcher comes up with terms, concepts, and categories that reflect what he or she sees in the data

Themes should…

- Reflect the purpose of the research
- Be exhaustive--you must place all data in a category
- Be sensitizing--should be sensitive to what is in the data
  - i.e., “leadership” vs. “charismatic leadership”
- Be conceptually congruent--the same level of abstraction should characterize all categories at the same level

Types of Themes

- Ordinary: themes a researcher expects
- Unexpected: themes that are surprises and not expected to surface
- Hard-to-classify: themes that contain ideas that do not easily fit into one theme or that overlap with several themes
- Major & minor themes: themes that represent the major ideas, or minor, secondary ideas in a database

Narrative Description

- From the coding and the themes, construct a narrative description and possibly a visual display of the findings for your research report.

- A detailed rendering of people, places, or events in a setting in qualitative research

Step 4: Validating Accuracy of Findings

- At the end, the qualitative researcher validates the finding by determining the accuracy or credibility of the findings. Methods include:

  - Prolonged engagement & persistent observation in the field
  - Triangulation
  - Peer Review
  - Clarifying researcher bias
  - Member Checking
  - Rich, thick description
  - External Audit

Step 5: Post-Qualitative Analysis

- Community members compare and discuss the codes and themes produced
  - Set ground rules
  - Facilitator
  - Note: New codes or themes can emerge during analysis!
- Codes can be counted for each theme and/or subtheme
- Hold a final meeting to review and finalize themes and subthemes
- A consensus should be met on the themes and/or subthemes

Mixed Methods

- Combining qualitative (quan) and quantitative (qual) methods to better understand a problem.
  - Yields complete data (quan + qual)
  - Maximizes the strengths of each paradigm to understand the issue.
  - Provides multiple world views Inductive and deductive)

(Teddlie & Tashakkori, 2009)

HPV vaccine example

Cunningham, J. (2013). Using a Mixed Methods Sequential Design to Identify factors associated with African American mothers' intention to vaccinate their daughters aged 9 to 12 for HPV with a purpose of informing a culturally, relevant, theory-based intervention. Retrieved from ProQuest Research Library Database (UMI: 3605575).

Study Information

- **Research Question**
  - How does African American mothers knowledge on HPV and the vaccine influence their intentions to vaccinate their daughters aged 9 to 12 against HPV?

- **A priori codes related to Knowledge**
  - Limited Knowledge
  - Receipt of positive or negative information
  - Preferred Source of Information
  - Informational needs on HPV and the vaccine

Knowledge Question

- What do you know about HPV and cervical cancer?
- Probe for:
  - What additional information do you need/did you need to have to make a decision on whether or not to vaccinate your daughter?
  - How do you think your knowledge about HPV may have influenced your decision to vaccinate/not vaccinate your daughter against HPV?
  - Who or what would/did you refer to for information about the HPV vaccine?
    - Why?

Overall Theme: Knowledge

- "…the things to be aware of, any changes within her body or her female organs or anything like that, or the things to look for and to recognize as being protected or unprotected with HPV".
  - **Code: Knowledge Needed; Subtheme: Informational Needs**
- " I didn't know about this HPV, the vaccine, until the young lady entered our church and talked about it".
  - **Code: Lack of knowledge; Subtheme: Knowledge Deficiency**
- "I feel like I have a, you know, a great relationship with her and I feel like she's one of those doctors who yea you know who feels yea that's just my job to share and suggest this but I'm gonna give you the real scoop on it…
  - **Code: Preferred Source; Subtheme: Source of Information**

Example of a Visual Model from Cunningham (2013)

Themes and Subthemes within and across Participants

		Intention								
		Do not plan to vaccinate their daughter				Plan to vaccinate				
		Javar	MeShae	Michelle	Titanisha	Abigail Grace	Ashley	Mrs. P	Tiffany	Veronica
Themes	Subthemes									
Role of Knowledge	-Deficiency	X	X	X	X	X	X	X	X	X
	-Informational needs	X	X	X	X	X	X	X	X	X
	-Source	X	X	X	X	X	X	X	X	X
	-Type of information received	X	X	X	X	X	X	X	X	X
	-Mother-to-daughter communication	X								X
Interpersonal Influences	-Influence of family and friends									X
	-Influence of community members					X				
	-Influence of physician	X	X					X	X	X
Personal experiences	-Reinforcement	X	X	X			X	X		X
Cultural Influences	-Future of daughters' health	X	X			X		X		X
Benefits of HPV vaccination	-Protection of daughters' health	X			X	X	X	X	X	X
Barriers of HPV vaccination	-Knowledge deficiency on vaccine	X	X	X	X	X	X	X	X	X
	-Daughter's age		X	X	X					
	-Unknown effects on daughters' health	X	X	X	X	X	X	X	X	X
	-Perceived sexual activity status of daughter	X	X	X	X					
	-Employer influence	X		X						
Vaccine Uptake Recommendations	-Protection of school children					X			X	
	-Daughter's age	X	X	X	X					
	-Parental rights	X					X	X		X
	-Daughter's attitude									X
	-Knowledge deficiency on vaccine	X	X	X	X	X	X	X	X	X

Sources

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