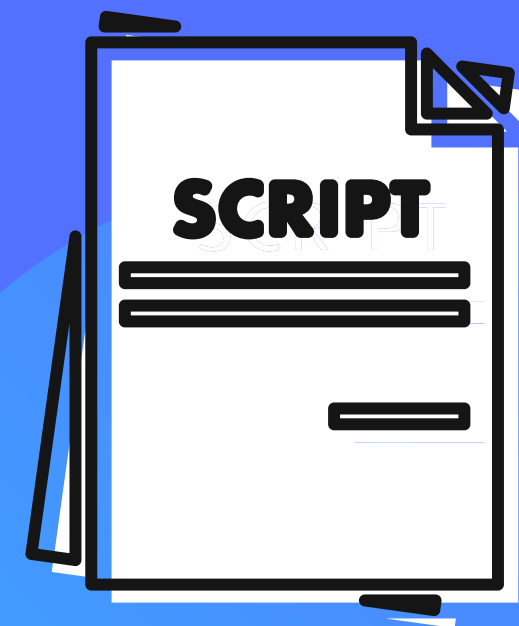


Yarmouk University

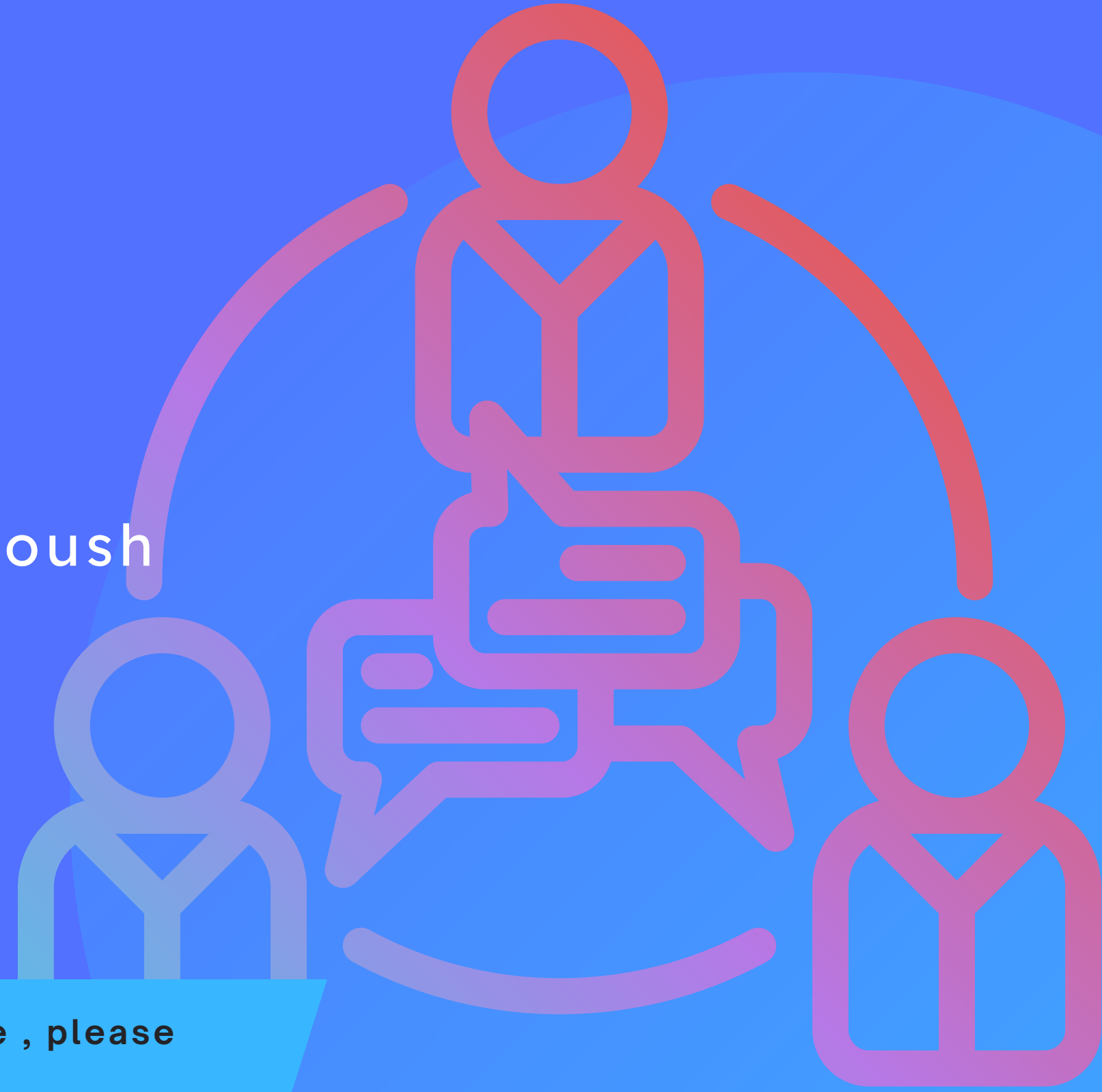
# Community Medicine

Lec. 16 - Qualitative Study Design

Written By : Group H2 - Forat Alomoush



If you come by any mistake , please  
kindly report it to  
[shaghafbatch@gmail.com](mailto:shaghafbatch@gmail.com)



# *Qualitative Study Design*

*MED 410*

*Dr. Ola Soudah*

- Case Report and case series are parts of qualitative research method, Because you don't count anything, we have text we don't have statistical test

○ We go to qualitative research method

## When numbers can't help

(Powered by biostatistics)

كل اشئ بكونه measurable بالضبط

• **Quantitative research** uses structured, hypothesis driven approaches to gather data that can be statistically analyzed.

We need to dig deep into the problem in order to understand hidden factors we didn't see or we can't measure

**Theory  
Generating**

• **Qualitative research** uses in-depth interviews, focus group discussions, participant observation, and other unstructured or semi structured methods to explore attitudes and perceptions, identify themes and patterns, and formulate new theories.

Quantitative → used to **prove** point of view "hypothesis".

Qualitative → used to **generate** theory & hypothesis -  
"we look for ideas"

Qualitative

Quantitative

Mixed

Approach: Inductive

Goal: Depth, generate hypotheses

Setting: Natural

Sampling: Purposeful

Data Collection: e.g., interview guides, observation tools

Data Analysis: Iterative interpretation

Data Type: text

Subjective

Approach: Deductive

Goal: Breadth, test hypotheses

Setting: Experimental/quasi

Sampling: Random

Data Collection: e.g., surveys, administrative/clinical data

Data Analysis: Statistical tests, modeling

Data Type: Numbers

Objective

Ex: Systemic review

بجتمد على الشئ  
فلا تهاكي/فلان قال

more controlled / tested  
if valid

open

# Inductive vs. deductive reasoning

[ I don't assume anything ]

Inductive

Qualitative



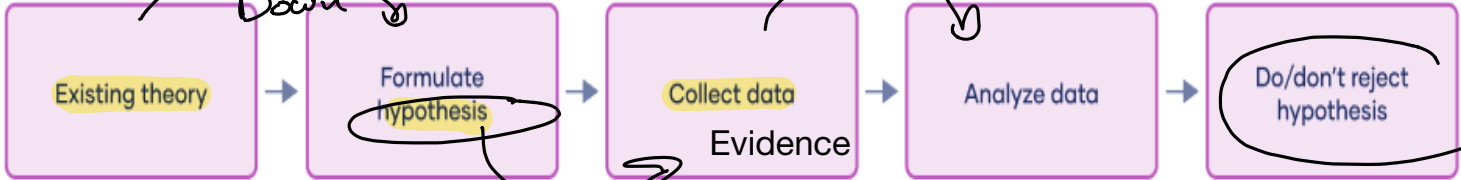
Build up Theory

Quantitative

Deductive

Approve or disapprove

Break it Down



Test data

# Data Types and collection

- **Qualitative researchers** collect **data** from a **variety of sources** using **different methods** such as:

- **Interviewing using open ended questions**; either **unstructured or semi-structured interviews**.

بمسألة سؤال واحد  
وبخلاف المشفى  
يكمل كالمه

أكثر من سؤال / أكثر تعقيداً

- **Observation.**
- **Documents including texts, images, or videos.**

most **marketing** researchers → **Qualitative**

- **Data type can be:** **Words, images, non-verbal communication, documents, and artifacts** (آثار).

structured Q's  
For Quantitative

# Qualitative research Approaches

- *Case Study.*
- *Grounded Theory.*
- *Ethnography.*
- *Phenomenology.*



# Case Study

*"In-depth study undertaken of one particular 'case', which could be a site, individual or policy"*

*- Green and Thorogood*

**Case study** refers to the collection and presentation of detailed information about a particular participant or small group, frequently including the accounts of subjects themselves and to draw conclusions only about that participant or group and only in that specific context

Here I don't focus on the general idea instead I want to write full description about the case and clear description / I want to show detailed description

*Researchers do not focus on the discovery of a universal, generalizable truth, nor do they typically look for cause-effect relationships; instead, emphasis is placed on exploration and description.*

# Phenomenology

- **Phenomenological study** describes the meaning for several individuals of their **lived experiences of a concept or a phenomenon**.

Focus on describing the phenomena

- Phenomenologists focus **describing what all participants have in common as they experience a phenomenon** (e.g., **emotions, perceptions, social trauma ...**).
- Phenomenology answers the question **“What is like to have a certain experience?”**. This description consists of **“what” they experienced and “how” they experienced it**.

- **Example:**

- *A phenomenological approach was chosen to explore the lived experience of COVID-19 pandemic at the peak in Jordan.*
- *The focus of the study will be people perceptions, emotions toward COVID-19 and COVID-19 associated forced preventive measures like curfew, & lockdown.*
- *Data were collected through interviews, & social media posts.*

# Ethnography

"The study of the culture and social organization of a particular group or community... Ethnography refers to both the data gathering of anthropology and the development of analysis of specific peoples, settings, or ways of life."

- Calhoun, C. J.

- Ethnography answers the question

"What is the culture of a group of people?"

• Ethnographers often use participant observation

methods to understand a group's collective experiences, values, beliefs, and behaviors.



- **Ethnography** is the systematic study of people and cultures in their natural environments.

- *Ethnography is an anthropological approach in which researchers aim to develop an insider's view (an emic perspective), rather than an outsider's view (an etic perspective), of how members of a particular sociocultural group understand their world.*

*It is typical for ethnographers to immerse themselves in the study community and to intentionally interact with the group for many months or years.*

الغيش حقه  
فشي ينفع

Putting  
yourself in  
their  
shoes

- *In healthcare someone may choose ethnography when cultural parameter is suspected to play a role.*
- **For example:**
- *Cultural role in obesity pandemic in certain countries ; ex. Some African countries definition of beauty still value overweight girls.*
- *Ethnography will help healthcare professional become cultural sensitive and make them understand peoples behaviors, believes, and feelings.*

## Grounded Theory

- *The intent of a grounded theory study is to move beyond description and to generate or discover a theory, an abstract analytical schema of a process.*
- *A key idea is that this theory-development does not come “off the shelf,” but rather is generated or “grounded” in data from participants who have experienced the process.*
- *Data collection and data analysis occur simultaneously, so that theories can be developed and refined (back and forth between data and theory concept).*

- *Grounded theory researchers write down ideas while collecting or analyzing data ... Called **Memoing** which help in sketching the process.*  
(note taking)

- **Example:**

- *Understand how do people influence other people's behaviors. By observing the behavior of people and their surrounding social web ... researcher concluded that behavior is contagious (social contagion theory emerged).*



## FIGURE 13-5 Examples of Qualitative Methodologies

*Summary*

	<b>Phenomenology</b>	<b>Grounded Theory</b>	<b>Ethnography</b>	<b>Case Studies</b>
Goal	Understand how individuals gain meaning from lived experiences	Construct a theoretical model to explain a phenomenon	Understand the collective experience of sociocultural groups	Understand an event, process, or program
Common methods	In-depth interviews	Interviews and observations	Participant observation	Observations, interviews, documents, and other reports

# Sampling

- The aim of qualitative to collect rich information ... thus

## Purposive sampling

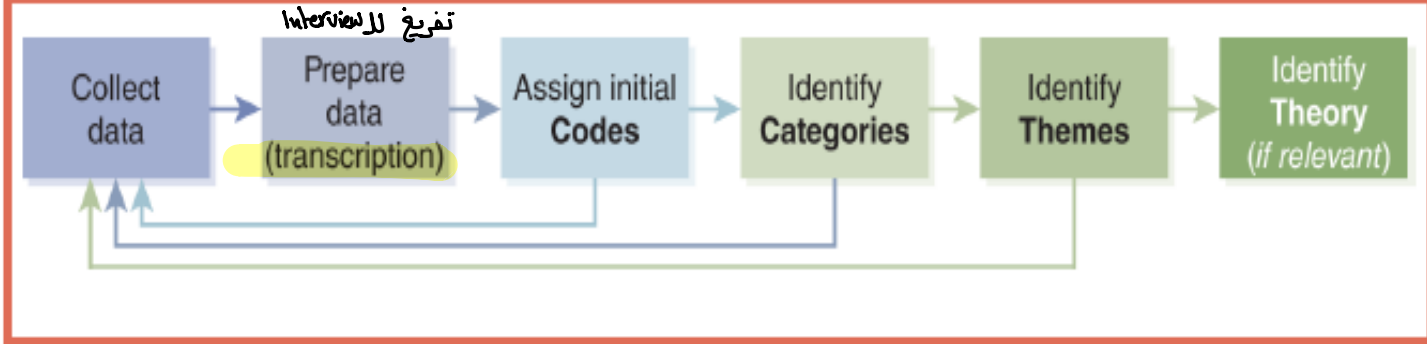
### Types of purposive sampling:

- Convenient sample
- Heterogeneous sample : aim for diversity. بہ درجہ علی نامی مختلف
- Homogenous sample.
- Snowballing to reach hidden population.
- Typical case sampling.
- Extreme case sampling.

# Data analysis

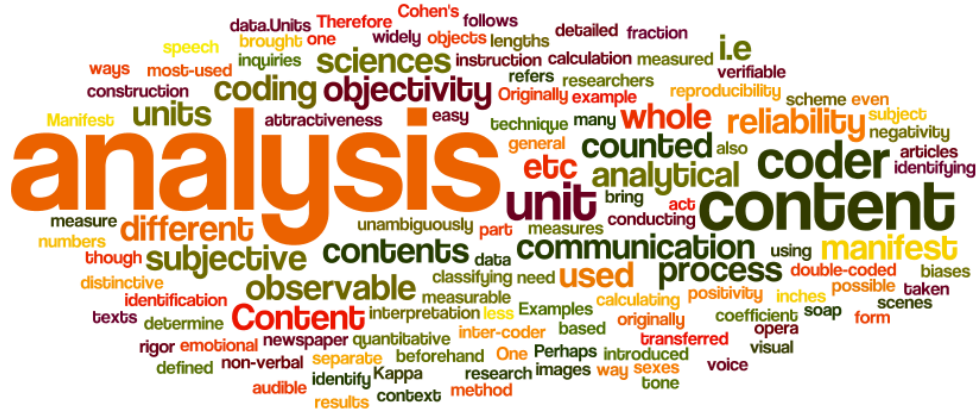
*Time consuming/cheaper*

**FIGURE 32-2 Qualitative Analysis Process**



Approach	When to use	Example
<p><b>Content analysis</b></p>	<p><i>To describe and categorize common words, phrases, and ideas in qualitative data.</i></p> <p><b>Frequency of words</b></p>	<p><i>A market researcher could perform content analysis to find out what kind of language is used in descriptions of therapeutic apps.</i></p>
<p><b>Thematic analysis</b></p>	<p><i>To identify and interpret patterns and themes in qualitative data.</i></p> <p><b>Generate ideas and themes</b></p>	<p><i>A psychologist could apply thematic analysis to diabetic patients to explore how patients shapes self-care.</i></p>
<p><b>Textual analysis</b></p> <p>يمكن جمع اول نوعيت</p>	<p><i>To examine the content, structure, and design of texts.</i></p> <p>هون أنا بتطلع على الأفكار و ترتيبها</p>	<p><i>A media researcher could use textual analysis to understand how news coverage of COVID-19 has changed people responses.</i></p>

# Word cloud for content and text analysis



The analyst begins by systematically coding the text using labels and categories derived from the text or from existing theories or previous research findings.

The analyst determines which codes occur most often and then uses that information to identify the most prominent patterns and themes in the text.

# Codes, Categories, and Themes

- *The first level of coding is often called **open coding or initial coding**.*
- *In qualitative analysis, **coding (or indexing)** is the use of words or short phrases to briefly summarize the contents.*

*A **code** is a label attached to a word or phrase.*

- The second level of coding sorts the codes and then groups the codes into categories.

A category is a group of related codes.

- The goal is to identify trends and patterns, look for relationships between codes, and begin to understand multiple layers of meaning.
  - The analyst seeks to identify similarities and differences among codes, observe which codes occur frequently or infrequently, note the sequence of codes, and recognize other types of patterns and relationships.

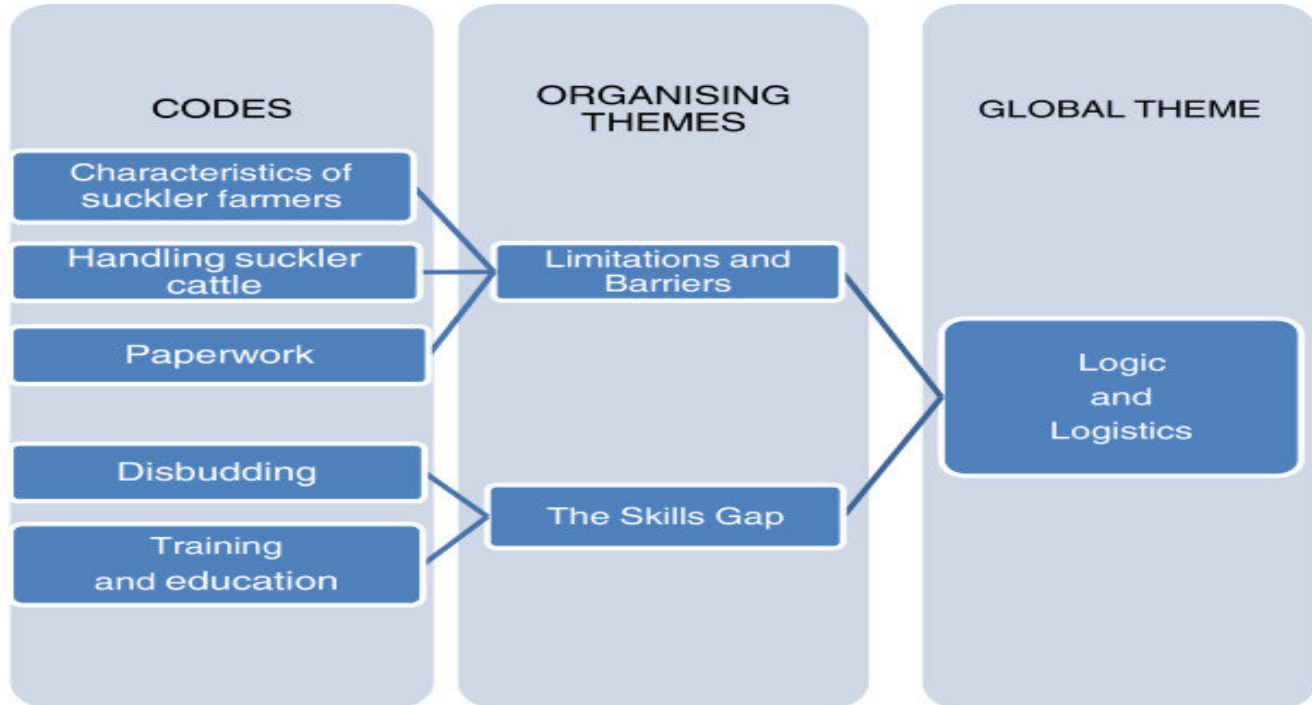
- A third level of coding, typically called **thematic coding**, synthesizes the categories in order to identify the concepts, meanings, and themes that answer the study question.

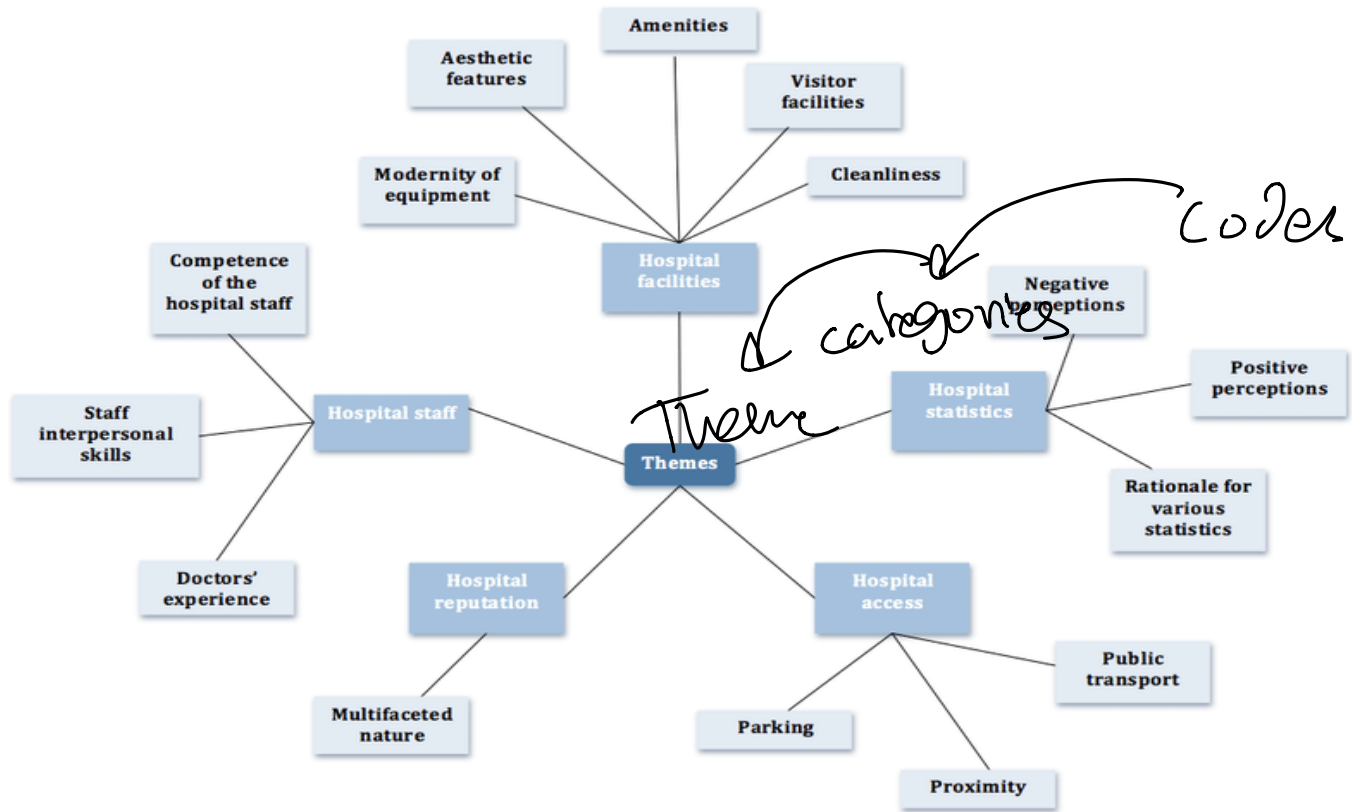
A **theme** is a concept that encompasses one or several categories.

- The core and related categories are then used to craft a narrative that explains the phenomenon.



# Thematic analysis





- A fourth level of coding generates a new theory about the phenomenon.

*A **theory** is a construct or framework that provides a systematic explanation about a phenomenon.*

- The analyst may also engage in **memoing**, documenting personal reflections and impressions about observations, participants, experiences, codes, categories, and themes.

**Electronic Coding:** using software like NVIVO, ATLAS ...

# Quality Assurance

- **Credibility** is present when the interpretation of the data accurately reflects the studied groups or texts. *How accurate my data*
  - Credibility in qualitative research is an indicator of **trustworthiness** that is similar *to internal validity* in quantitative research.
- **Transferability** is present when the interpretation of qualitative data is likely to be applicable in other circumstances.  
*About conclusion how much it can be applied in other circumstances*
  - Transferability is an indicator of applicability that is similar to **external validity or generalizability** in quantitative research.

- **Dependability** is an indicator of consistency that is demonstrated through transparency about data collection, analysis, and interpretation methods. How much I can replicate the conclusion

- A dependable study is one that could be **replicated**.

- **Confirmability** is an indicator of neutrality that is present when the results of a study are shown not to be due to researcher bias.

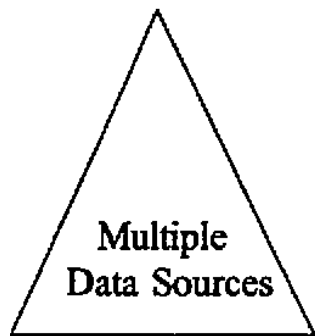
For confirmability I can do another research with the same conclusion or I can do it by triangulation

- Confirmability may be **enhanced through triangulation** in which multiple data sources, methods, and theories are used to study a phenomenon from different perspectives.

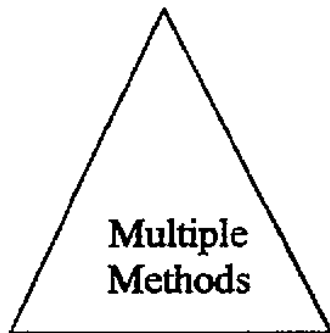
# Triangulation

Using different methods

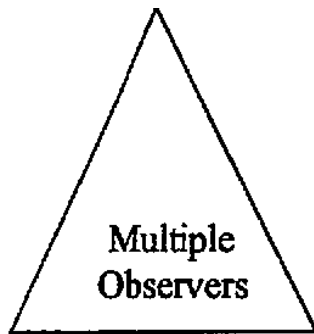
*other data source*



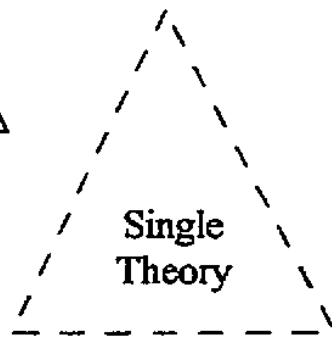
seven teachers  
multiple visits



observations  
questionnaires  
interviews



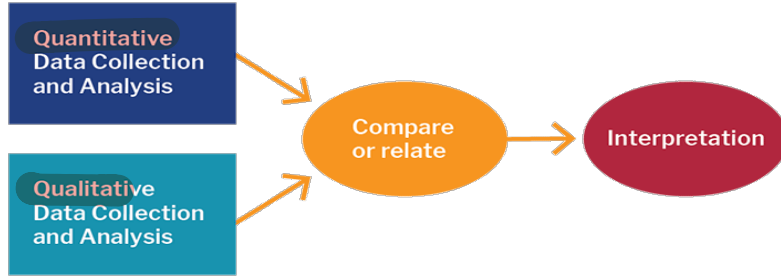
observer 1  
observer 2



EPSS guide

# BASIC MIXED METHODS RESEARCH DESIGNS

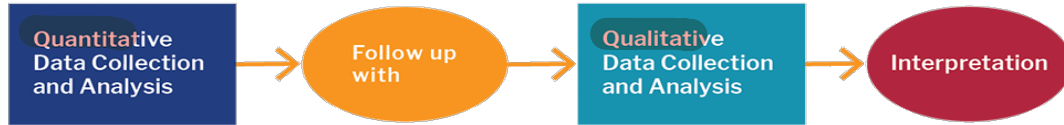
## Convergent Parallel Design



Discuss areas of convergence or divergence between the quantitative & qualitative results

## Explanatory Sequential Design

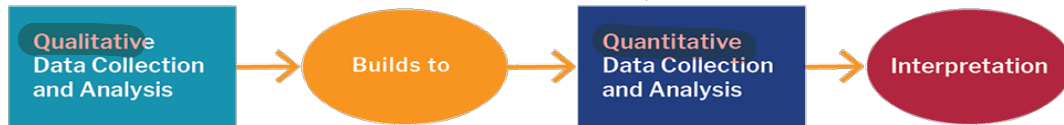
*To dig deep*



Determine what quantitative results need further explanation

## Exploratory Sequential Design

*to prove it*



Use qualitative results to develop a new instrument or taxonomy for quantitative strand

# Advantages of qualitative research

- *Flexibility*
- *Natural setting*
- *Meaningful insights*
- *Generation of new ideas*
- *In-depth insight*



# Disadvantages of qualitative research

- *Unreliability due to uncontrolled setting.*
- *Subjectivity*
- *Limited generalizability*
- *Labor-intensive*

↑ Bias → ممکن نہیں ہے  
تألیف و طبع

# Rigor reporting in qualitative research methods

Table 1

**Standards for Reporting Qualitative Research (SRQR)<sup>a</sup>**

No.	Topic	Item
<b>Title and abstract</b>		
S1	Title	Concise description of the nature and topic of the study Identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, focus group) is recommended
S2	Abstract	Summary of key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results, and conclusions
<b>Introduction</b>		
S3	Problem formulation	Description and significance of the problem/phenomenon studied; review of relevant theory and empirical work; problem statement
S4	Purpose or research question	Purpose of the study and specific objectives or questions

---

**Methods**

S5	Qualitative approach and research paradigm	Qualitative approach (e.g., ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g., postpositivist, constructivist/interpretivist) is also recommended; rationale <sup>b</sup>
S6	Researcher characteristics and reflexivity	Researchers' characteristics that may influence the research, including personal attributes, qualifications/experience, relationship with participants, assumptions, and/or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results, and/or transferability
S7	Context	Setting/site and salient contextual factors; rationale <sup>b</sup>
S8	Sampling strategy	How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g., sampling saturation); rationale <sup>b</sup>
S9	Ethical issues pertaining to human subjects	Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues
S10	Data collection methods	Types of data collected; details of data collection procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources/methods, and modification of procedures in response to evolving study findings; rationale <sup>b</sup>
S11	Data collection instruments and technologies	Description of instruments (e.g., interview guides, questionnaires) and devices (e.g., audio recorders) used for data collection; if/how the instrument(s) changed over the course of the study
S12	Units of study	Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)
S13	Data processing	Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymization/deidentification of excerpts
S14	Data analysis	Process by which inferences, themes, etc., were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale <sup>b</sup>
S15	Techniques to enhance trustworthiness	Techniques to enhance trustworthiness and credibility of data analysis (e.g., member checking, audit trail, triangulation); rationale <sup>b</sup>

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