QUALITATIVE DATA MANAGEMENT AND ANALYSIS USING NVIVO SOFTWARE

Rasaq M. Adisa Ph.D
Dept. of Mass Communication
University of Ilorin, Nigeria
+234 8164065154

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NOT EVERYTHING THAT COUNTS CAN BE COUNTED; AND NOT EVERYTHING THAT CAN BE COUNTED, COUNTS.

- Albert Einstein

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Qualitative Research Philosophical paradigm

Not about established assumptions but reality & lived experience

Epistemology: Experiencing the real life or natural settings. **Ontology**: There are multiple realities

Don't judge a book by its cover" encourages researchers to challenge assumptions and explore uncharted territories.

Who is the successful person here?

Stereotyping

What's this man's religion?

Qualitative method Philosophical paradigm

Byjus founder

Now in 2022, the company worth over $22 billion. It is the most valued company in India.

Pastor Wale speaks on Family Life

Live EVERY TUESDAY @ 12NOON

The saying "Don't judge a book by its cover" emphasizes the importance of not forming hasty or superficial judgments based solely on outward appearances or initial impressions from Theories. In the context of research methods, this phrase holds several significant implications
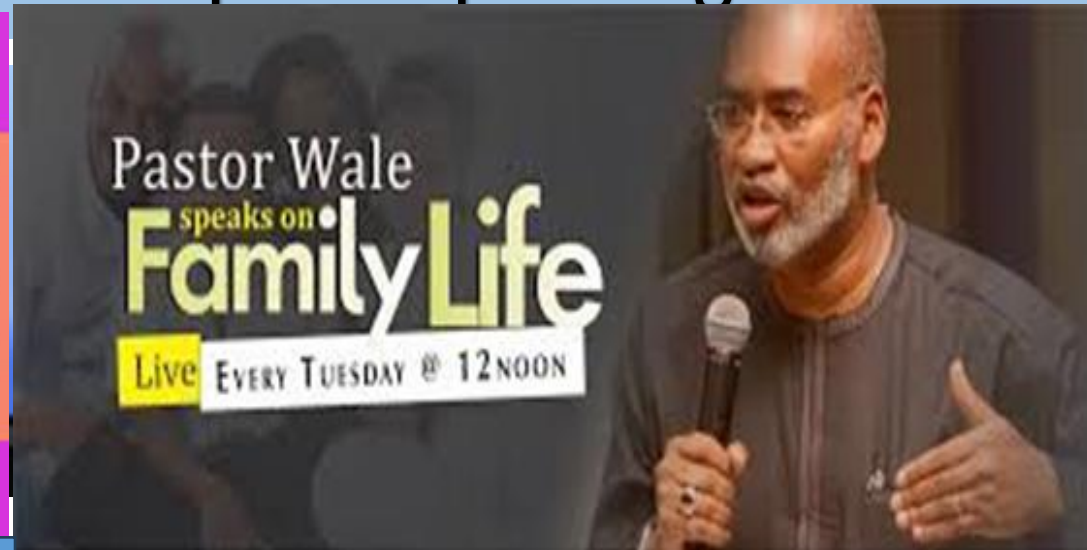
'You all look the same': non-Muslim men targeted in Islamophobic hate crime because of their appearance

Why Qualitative Research?

- **If concept is immature –** lack of theory and previous research: to conform to natural science expectations, that *people change. the early stages of a study or when little is known*

- Notion that available theory may be inaccurate, **inappropriate or biased:** that <u>only the research participant can authentically describe her interpretation of her experience</u>. Qualitative research emphasizes the context in which behavior and experiences occur.

➢ Need to explore and describe the phenomena and **to develop theory**

➢ **If problem requires in-depth probing**: phenomena needs to be understood in greater depth: Rich data collection

➢ **Sensitive topics** or exploring emotions and experiences that may be difficult to capture using quantitative methods alone. Nature of phenomenon may not be suited to quantitative measures

Qualitative Data Collection Methods

Individual Interview

Qualitative Surveys

Focus Group Discussions

Record Keeping

Case Studies

Observations

Qualitative Data Collection/Management

- **Primary (interview, observations)**
- **Secondary (content analysis, documents)**

- **Types of interview**
- **In-depth/face to face:** In-depth interviews involve one-on-one interactions between the researcher and the participant.
- **Focus group discussion:** group discussion led by a researcher where participants share their opinions, experiences, and attitudes on a specific topic
- **Observation**
- **Participatory:** systematically watching and recording behaviors, interactions, and activities in natural settings
- **Non-participatory**

Secondary: examination of various documents, such as diaries, letters, official records, newspapers, social media posts, or other written materials

Mixed methods

- Mixed methods offer a tool for understanding complex problems.

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- Group pressure is eliminated
- One-on-one situation gives the respondent the feeling of being the focus of attention
- More sensitive to non-verbal communication
- Without influence from others.
- The interview can be conducted anywhere
- The Disadvantage of Interviews
- Much more expensive in focus groups
- Generate more data

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FOCUS GROUPS

1. Consists of 3 to 12 participants who are led by a moderator in an in-depth discussion on one particular topic or concept for one to two hours, typically.

2. Yield a large amount of information over a relatively short period of time

3. The emphasis is on getting people to talk at length and in detail about the subject at hand.

QUALITATIVE ANALYSIS TECHNIQUES: DESIGNS AND METHODS

1. Narrative
Use of stories as data: From the story people tell to understand the experience

2. Phenomenology
Study of experience from the perspective of the individual: underlying structure of phenomenon (e.g. Poverty, Human trafficking)

3. Ethnography
uncover people's behavior in specific, natural settings: indigenous institutions, innovative capacities and knowledge

4. Case study
Understand an issue or problem using a case: to know one thing really well Eg environment and disease spread

5. Grounded theory
uncovering basic social processes. Substantive theory (not grand theory) is localized for solution e.g. poverty

6. Mixed Method

Definition	➤Using the story people tell to understand the experience
	➤Narrate the life of individual - specific focus on stories told ➤First person account of individual told in story ➤Other terms for this types of research include biography, autobiography, life history, and oral history. ➤E.g. Fire and Fury book, ➤Against the Run of Play
Data collection method	**SAMPLE SIZE:** one or more but small number **Technique:** multiple (record, diary, interview, journal, observation)

Definition	➢Seeks understanding about the essence and underlying structure of phenomenon (e.g. Human trafficking) ➢Study of experience from the perspective of the individuals ➢Inner experiences unprobed in everyday life ➢Experiences are gathered and analyzed to understand the essence of the issue ➢**EG Life as HIV positive** ➢**E.g.** Cultural sensitivity of maternal health radio messages in North Central Nigeria ➢RQ: 'WHAT individual experience' and 'HOW' he/she experiences it
Data collection method	**Sample size: 15-25** **In-depth interview and Focus group interview, observations**

Definition	To build substantive theory different from grand or formal theories
	Substantive theory is localized for solution e.g. Human Trafficking, is it due to: poverty, mindset, values, culture etc?
	Applicable when uncovering basic social processes that need model E.g Consumer behavior during a recession. E.g. How young, innocent and well-trained student transforms into a truancy, cultist, etc.
	If you want to build a theory (system, paradigm) from the ground up *E.g. Experience of children of alcohol abused parents*
types	Glaser & strauss (1965) Strauss & Corbin (1990) Charmaz Constructivist GT (2006) Non use of literature before findings
Data collection method	SAMPLE SIZE: 40-60 In depth interview, document, observation

ETHNOGRAPHY

Definition	Ethno = people or custom Graphy = writing To understand the interaction of individuals not just with others, but with culture of the society in which they live Eg. "rules" of behavior between lecturers and students with focus on sexual abuse. Ethnography is used to uncover people's behavior in specific, natural settings. E.g. when the study of a group provides understanding of a larger issue. Focus on entire cultural group and society Eg. Susan Wenger of Osun Osogbo artist turned ethnographer
Data collection method	Participant Observation AI-powered tools can assist in the collection and analysis of ethnographic data, enhancing the depth of cultural studies.

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Case study

Definition	Study of social unit, individual, group, community etc
	Understand an issue or problem using a case, target To determine the implications for others. E.g. product life-cycle, challenges of widow. E.g. Spread of disease in a community, treatment of widow, experience of a single woman
	If you want to know one thing really well: E.g. Environment and disease spread E.g. Case study of Monkey Pox in Bayelsa State Eg. Aljazeera's 20 years of me Eg. To know the behaviour of animals.
Data collection method	Observations, In depth interview, documents.

CASE STUDY

Application of Mixed Methods Research for Complex Issues like monitoring and evaluation, Sustainable Development

Exploratory

Qualitative Data Collection → Qualitative Analysis and Findings → Raises New Questions → Quantitative Data Collection → Quantitative Analysis and Findings

The findings of the qualitative analysis would then inform the content and wording of subsequent quantitative survey items. To develop survey instrument
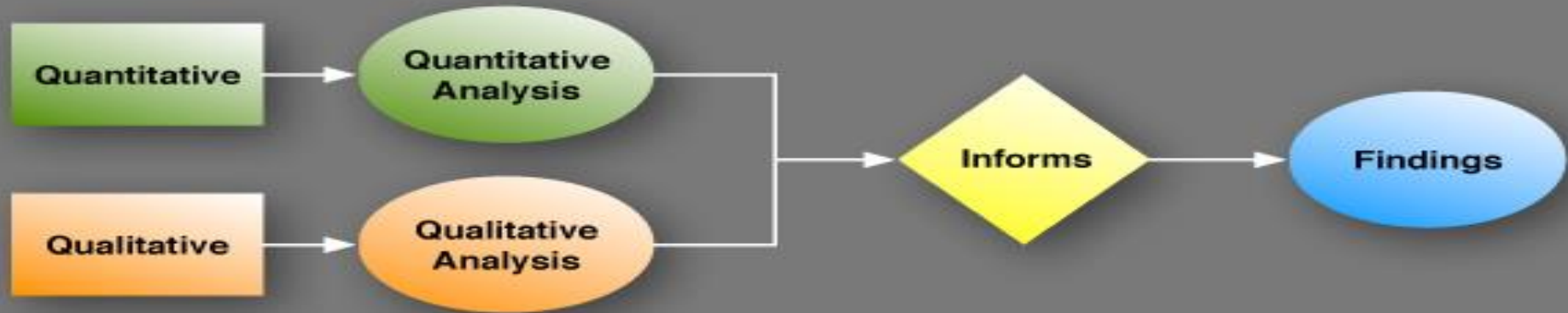

Explanatory

Quantitative Data Collection → Quantitative Analysis and Findings → Raises New Questions → Qualitative Data Collection → Qualitative Analysis and Findings

The goal of explaining and/or providing insight into earlier quantitative findings.

Similar to explanatory design except the data are collected concurrently. The findings of one are not informing the *design* **of the other but the findings of one might** inform or explain the *findings* **of the other**. **One form of data collection and analysis is embedded within the other.**
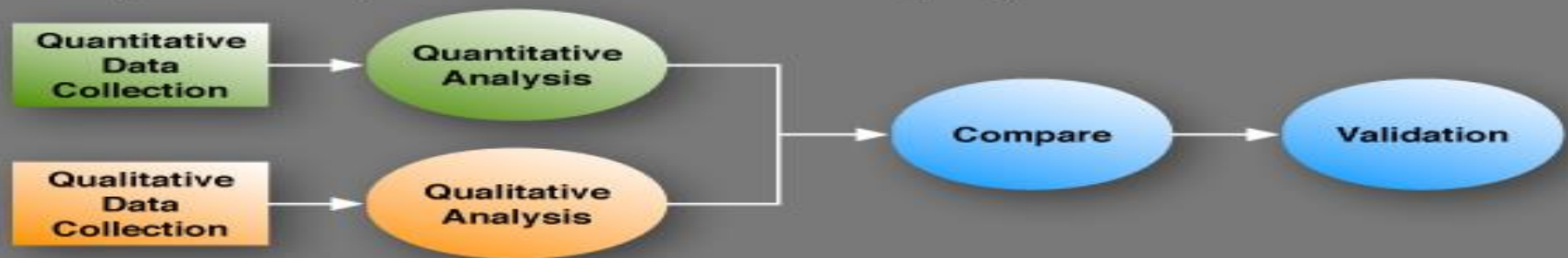
To establish validity of the study findings by comparing the findings from the same sample to determine if they have reached the same conclusions.
Integrate research throughout the data collection, analysis, and interpretation stages
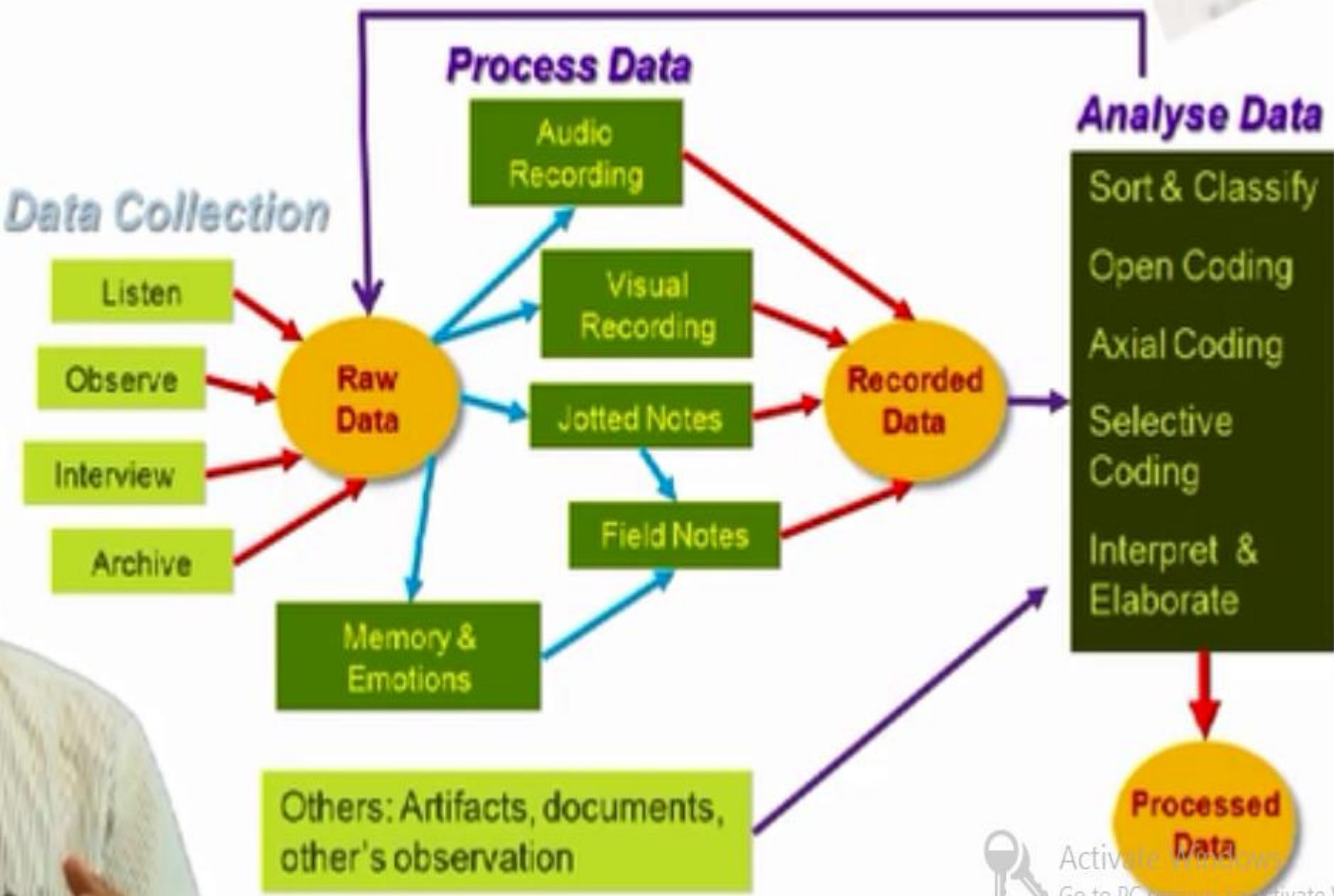
Population, Sampling Techniques and Sample

➢ Concepts of general, target and accessible population

➢ Relatively few participants who have the ability to describe their experiences

➢ Purposive Sampling: Participants selection based on criteria
: Selection of most productive samples
: Based on Saturation

➢ Quota Sampling: Based on characteristics like age, gender, class, profession, etc
Specific on sizes and proportions

➢ Convenience Sampling: willingness to participate

➢ Snowballing Sampling: Chain referral
Hidden population

GENERAL POPULATION
TARGET POPULATION
ACCESSIBLE POPULATION

STRATEGIES FOR PROMOTING VALIDITY AND RELIABILITY: Quality in Qualitative studies
bridging the gap between qualitative and quantitative methods

|	
Triangulation	**Using multiple investigations, sources of data or data collection methods**
Member checks	**Taking data and tentative interpretations back to the people to ask if they are plausible**
Peer Review/committee	**Discussion with colleagues on the process. Departmental dissertation committee**
Researcher's reflexivity	**Research being the instrument** **Avoiding researcher's biases, orientation, worldview that may affect investigation**
Adequate engagement in data collection	**Adequate time spent in collecting data. Not early saturation**
Maximum Variation	**Purposefully seeking variation or diversity in sample selection eg urban and rural, ethnic groups etc**
Audit Trail	**A detailed account of how data were collected, how categories or themes were derived to facilitate readers transferring findings to their context: e.g. data collection process**
Rich and thick description	**Provide adequate data base, enough description, quotes from raw data to assist audience on transferability**
Ethical Consideration	**Researcher-participant relationship (eg in participatory observation), consent, interview not interrogation, confidentiality, under age treatment etc.**

The process of the analysis

Stages of Qualitative Data Analysis

1. **Preparation of Data** - transcriptions

2. **Data Reduction** – coding; software

3. **Displaying Data** – diagrams & tables

4. **Verifying Data** – triangulation; member checking

Reading ↔ Verifying ↔ Coding

Interpreting
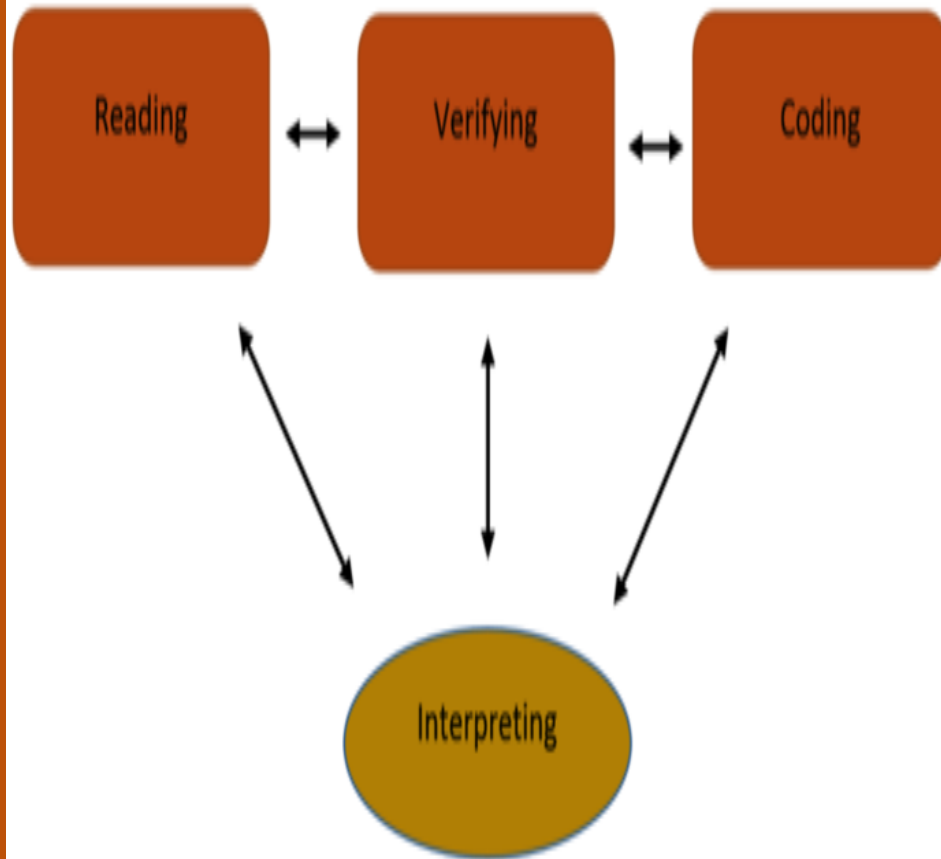
Starting the analysis

- Examine one question at a time

- Consider the words

- Consider the context

- Consider the internal consistency

- Consider the specificity of responses

- Find the big ideas

- Consider the purpose of the report

Inductive and Deductive

- There's the distinction between <u>inductive and deductive</u> approaches:

- An inductive approach involves allowing the data to determine your themes.

- A deductive approach involves coming to the data with some preconceived themes you expect to find reflected there, based on theory or existing knowledge.

Semantic and latent approach in coding

Distinction between a semantic and a latent approach in coding:

- **A <u>semantic approach</u> involves analyzing the <u>explicit content</u> of the data:**

  - ➢ Strong language,

  - ➢ Obvious contents,

  - ➢ revealing contents

- **A <u>latent approach</u> involves reading into the <u>connotation and assumptions</u> underlying the data.**

  - • Indirect contents

  - ➢ Less apparent contents

  - ➢ Disguised meaning

Theme codes & relationship of codes

- **Step 1: Familiarization-** get to know our data
- **Step 2: Coding -** Coding means highlighting sections of our text – usually phrases or sentences – and coming up with shorthand labels or "codes" to describe their content.

Coding qualitative data

Interview extract	Codes
Personally, I'm not sure. I think the climate is changing, sure, but I don't know why or how. People say you should trust the experts, but who's to say they don't have their own reasons for pushing this narrative? I'm not saying they're wrong, I'm just saying there's reasons not to 100% trust them. The facts keep changing – it used to be called global warming. For me to accept there is climate problem, I need to see the proof. Media are bias too. Many of my friends don't listen to news.	1. Uncertainty 2. Acknowledgement of climate change 3. Distrust of experts 4. Changing terminology 5. Incorrect facts 6. Media bias

Developing Thematic Analysis Structure

- **Step 3: Generating themes -** we look over the codes we've created, identify patterns among them, and start coming up with themes.

- combine several codes into a single theme

Turning codes into themes		
Codes or Sub Sub-themes	**Sub- Themes**	**Themes**
Uncertainty **Leave it to the experts** **Alternative explanations**	**Sub- Themes 1** **Uncertainty**	**Theme one** **Factors affecting Attitudes Towards Climate Change Campaign**
Changing terminology **Distrust of scientists** **Resentment toward experts** **Fear of government control**	**Sub- Themes 2** **Suspicion of experts**	
Incorrect facts **Misunderstanding of science** **Biased media sources**	**Sub- Themes 1** **Misinformation**	**Theme two** **Role of Media on Climate Change Campaign**
Integrating cultural-entertainment communication **Counter Narrative Message**	**Sub- Themes 2** **Media and Communication Approaches**	

Theme codes & relationship of codes

Step 4: Reviewing themes - Now we have to make sure that our themes are useful and accurate representations of the data. Here, we return to the data set and compare our themes against it

Step 5: Defining and naming themes - Defining themes involves formulating exactly what we mean by each theme and figuring out how it helps us understand the data.

Step 6: Writing up - Finally, we'll write up our analysis of the data. Like in all academic, monitoring and evaluation of project, writing up a thematic analysis requires an <u>introduction</u> to establish our enquiry, aims and approach.