

A blue pen with a silver nib is positioned diagonally across the top left of the frame. The background is a document with a bar chart consisting of several blue bars of varying heights. A dark grey banner is overlaid at the bottom, containing the title and author information.

# Qualitative Data Analysis

Abd. Lateef Krauss Abdullah, PhD

Taken in part from: Prof. Dr. Azimi Hj Hamzah

# Goals of qualitative analysis

---

## The discovery of:

- regularities
- patterns
- themes

## The comprehension of the meaning of:

- text
- action

## Unveiling:

- systems
- processes
- new domains

# Qualitative data

- Interview transcripts from open ended, focused, in-depth exploratory interviews
- Recorded observations (both video and participatory)
- Texts and documents
- Multi-media
- Policy manuals, photographs, and lay autobiographical accounts

# Qualitative data analysis

---

- Most complex and mysterious of all of the phases of a qualitative project
- An active and demanding analytic process to generate findings that transform raw data into new knowledge
- Need a sense of some form of assertion/contention to develop a critical eye – *what's happening here?*

# Analyzing qualitative data

---

- Involves *summarizing the mass of data* and presenting the results in a way that communicate the important features
- Start by *labelling segments* that one can recognize differences and similarities with reference to the research questions
- Involves *coding and classifying data* or categorising and indexing data to extract the important 'hidden' message

# Code/Category/Theme

**Code:** the label you attach to a phrase or other short sequence of text you are analysing.

- For example: 'politician' for each mention in the text of any political figure.

**Category:** a grouping you impose on the coded segments, in order to reduce the number of different pieces of data in your analysis.

- For example: 'people in public life', covering those coded as politicians, celebrities, sportspeople etc.

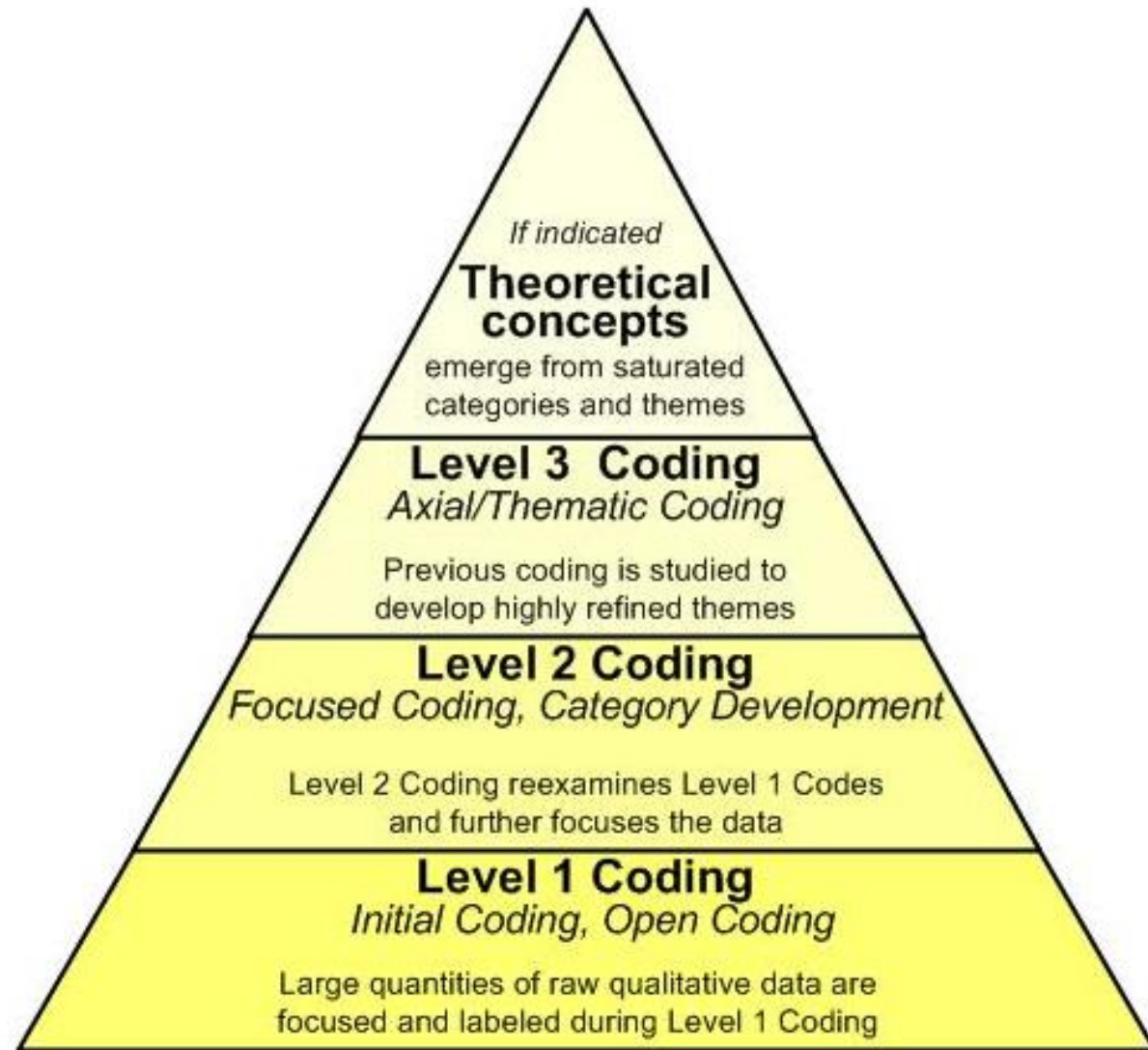
**Theme:** a higher-level of categorisation, usually used to identify a major element (perhaps one of four or five) of your entire analysis of the text(s).

- For example: 'Differences between public and private individuals'.

# Analysis progression....

---

- Hahn, 2008





## **Category: Teacher Skills**

### ***Subcategory 1: Instructional Skills***

Code: PEDAGOGICAL

Code: SOCIO-EMOTIONAL

Code: STYLE/PERSONAL EXPRESSION

Code: TECHNICAL

### ***Subcategory 2: Management Skills***

Code: BEHAVIORIST TECHNIQUES

Code: GROUP MANAGEMENT

Code: SOCIO-EMOTIONAL

Code: STYLE (overlaps with instructional style)

Code: UNWRITTEN CURRICULUM



# What is conceptualization?

---

Abstraction level	Example of coding
More abstract ↑ ↓ More concrete	<p>Collaboration</p> <p>Developing a team framework</p> <p>Working together to reach the same aim</p> <p>Taking the responsibility of doing a task collectively</p> <p>Relying on each other commitments and efforts to take a united action</p> <p>Coming together to resolve an issue related to all individuals using the power of collection</p>

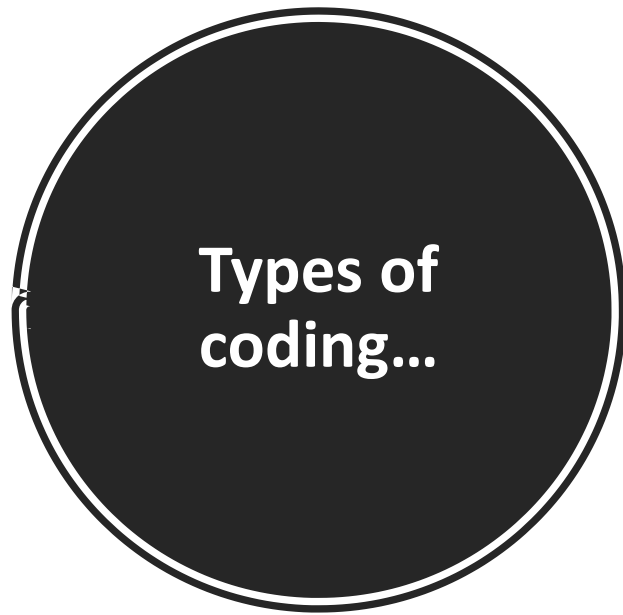
Figure 1. An example of abstraction for coding in qualitative content and thematic analysis

# Thus, in data analysis...

- Let the data 'talk' to you, look for patterns/ commonalities (words, opinion events)
- Data reduction – use coding to organize data
- Classify coding and look for meaningful categories
- Compare to initial assumptions – develop themes, prepositions/theory, check for unanswered research questions, set direction for further study

# Guidelines for coding

- Always code using specific data
- Coding develops categories in the data
- Relate these categories to each other - develop subcategories
- Be aware of the number of occurrences of a particular theme or category
- Categories may emerge from the data: induction
- As you are coding make memos or notes about how the data may link together – *emerging theory, conceptualization*
  - From particulars to universals



**Types of coding...**

**Table 3.** Examples of different types of coding

Types of codes	Example	Extracted code	Principles of coding according to Polit & Beck (2010) <sup>[40]</sup>
Conceptual code	I knew only what the name of the drug was and which diseases it would treat, but I knew nothing about how it should be administered in practice.	Lack of knowledge on drugs' practical administration	In line with the reductionist nature of qualitative data management, the researcher converts large masses of data into smaller, more manageable segments as codes;
Relationship code	Instructor's presence with students in clinical placement is necessary to make the collaboration of students in medication administration in clinical practice possible.	Necessity of instructor's supervision in medication education	Coding leads to breaking down data into incidents and examining their similarities and differences;
Participant perspective code	I believe that patients are fully able to check the accuracy of the nurse's medication administration.	Positive attitude towards patient's participation	The coding process is a cyclic process without a finite interpretation and the researcher's efforts determine the level of coding abstraction;
Participant characteristic code	As a final year and senior nursing student, I liked helping the nurse to administer drugs, but she did not allow me to work with her.	Senior student's eagerness to collaborate	Investigator triangulation as independent coding and analysis of some of the data by two or more researchers is an appropriate method for enhancing quality of the coding process.
Setting code	In critical care settings, I have been provided with more chances to practice medication administration.	Critical care settings' cooperation in medication education	

- correspondence (they happen in relation to)
- causation (one appears to cause another) (p. 155)

### **Coding filters**

The act of coding requires that you wear your researcher's analytic lens. But how you perceive and interpret what is happening in the data depends on what type of filter covers that lens. For example, consider the following statement from an older male: "There's just no place in this country for illegal immigrants. Round them up and send those criminals back to where they came from." One researcher, a grounded theorist using In Vivo Coding to keep the data rooted in the participant's own language, might code the datum this way:

<sup>1</sup> There's just no place in this country for illegal immigrants. Round them up and send those criminals back to where they came from.

<sup>1</sup> "NO PLACE"



A second researcher, an urban ethnographer employing Descriptive Coding to document and categorize the breadth of opinions stated by multiple participants, might code the same datum this way:

<sup>1</sup> There's just no place in this country for illegal immigrants. Round them up and send those criminals back to where they came from.

<sup>1</sup> IMMIGRATION ISSUES

And a third researcher, a critical race theorist employing Values Coding to capture and label subjective perspectives, may code the exact same datum this way:

<sup>1</sup> There's just no place in this country for illegal immigrants. Round them up and send those criminals back to where they came from.

<sup>1</sup> XENOPHOBIA

When you move into your own home, you're alone. There is no bustle of people around the house. I miss having someone to chat to when I get home. I put the TV or some music so there's some background noise, the silence makes me feel so alone. Sometimes I will be sat watching trash TV and thinking I should be out doing something rather than watching this rubbish. I read a lot but sometimes I am too tired and just want to veg out. But it's been good to move out of mum and dads as it's not healthy to rely on them as they won't last forever. I become independent and made my own decisions. It's good they still there when I need them. It's good to have some distance as when I was at home I was arguing a lot with my dad and that was made me decide it was time to go.

feelings

Living alone

New relationship with parents

Independence

Old relationship with parents

Argument with Dad  
Relation with father



The Process of Reconstructing Curriculum in a Rural High School Setting

Codes Here		Themes (And other Ideas) Here
	<p>JJ: One thing, Lucy, that I've heard talked about was the fact that schools reflect the strengths of communities. What do you perceive as strengths of Greenfield as a community and how that relates to schools?</p>	
Close-knit community	<p>LU: Well, I think Greenfield is a fairly <u>close-knit community</u>. I think people are interested in what goes on. And because of that, they have a sense of ownership in the schools. We like to keep track of what our kids are doing and feel a connection to them because of that. The downside of that perhaps is that kids can feel that we are looking TOO close. But most of the time, that is the nurturing environment that we do provide an atmosphere of concern and care. To back up, you said the <u>health of the community</u> itself is reflected in schools. A lot of times communities look at schools and say they are not doing this or they aren't doing that, or we're missing something in our schools. I think perhaps we look at the school and see, this is probably a pretty conservative community overall, and look to make sure that what is being talked about in the schools really carries out the <u>community's values</u>. There is a little bit of an idealization I think, perhaps in terms of what we thought of "basic education." [And I think there might be a tendency to hold back a little bit too much because of that idealization of "you know, we learned the basics, the reading, the writing and the arithmetic."] So you know, any <u>change is threatening</u>. And I think that goes for the community as well as what we see reflected at the school. Sometimes that can get in the way of trying to do different things. I think, again, idealization, older members of the community forget, some of the immaturity that they experienced when they were in school and forgetting that kids are kids. So there is a little bit too much of that mental attitude. But for the most part, I think there is a sense of we're all in this together, and concern for the kids.</p>	<p>Potential theme: The community</p> <p>Idea: getting a good sense here for the community and its values</p>
Health of community or community values		<p>A good quote</p>
Change is threatening		
	<p>JJ: In terms of looking at leadership strengths in the community, where does Greenfield set in a continuum there with planning process, understanding the need to plan, forward-thinking, visionary people. You talked about that a little bit before.</p>	<p>Potential theme: Leader</p>
Visionary skills of talented People	<p>LU: I think there are people that have wonderful <u>visionary skills</u>. I would say that the community as a whole would be . . . would not reflect that. I think there are people who are driving the process, but the rest of the community may be lagging behind a little bit. I think we have some incredibly talented people who become frustrated when they try to implement what they see as their . . .</p>	<p>Idea: returns to description of community again</p>

# Categorizing and Thematizing

- > The process of looking for categories that cut across codes
- > After categorizing, you build themes – integrate categories
- > You can't classify something as a **theme** unless it cuts across *the preponderance* of the data
- > Themes should answer the research questions of the study
  - e.g., if our RQ is Why do UM students undertake post-grad study?
    - Enhanced job prospects
    - Upgrading of self
    - Desire to give back

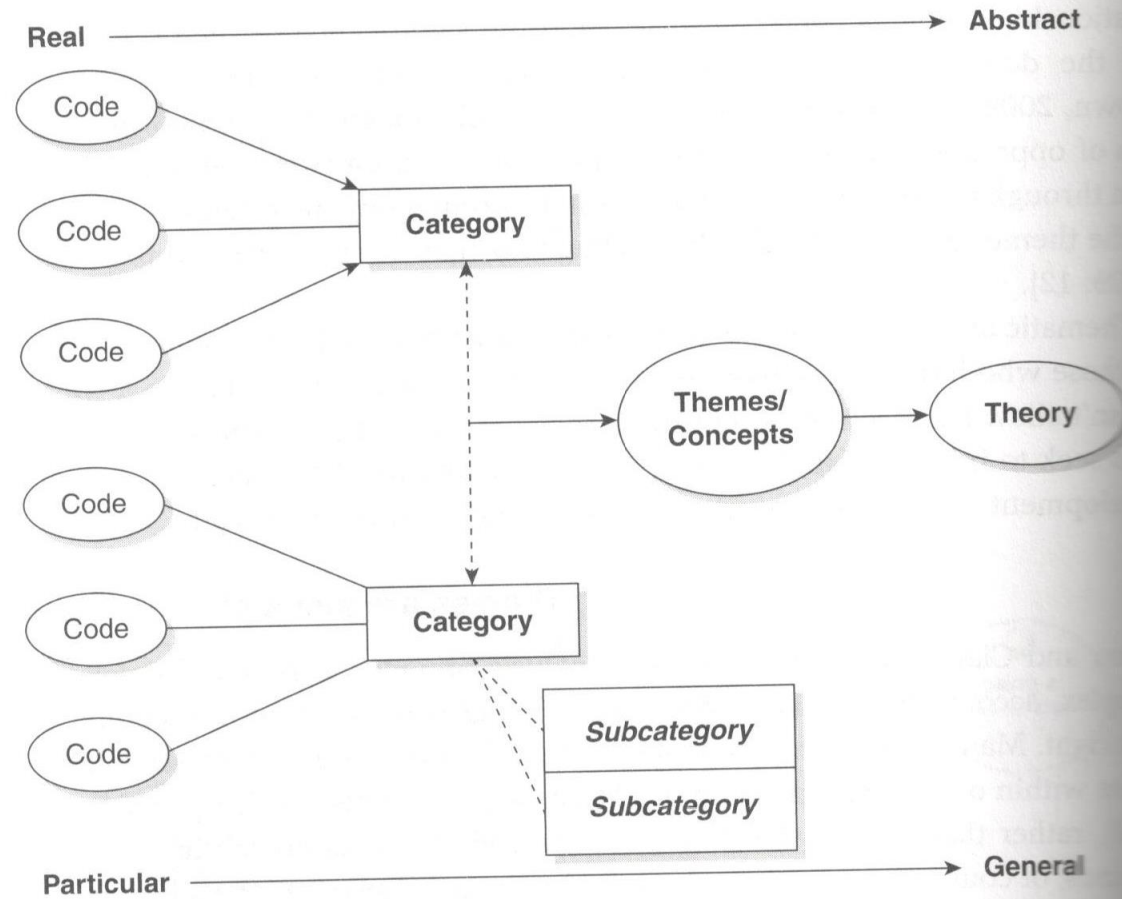


Figure 7.2 A streamlined codes-to-theory model for qualitative inquiry

Source: Saldaña, 2009: 12, Figure 1.1



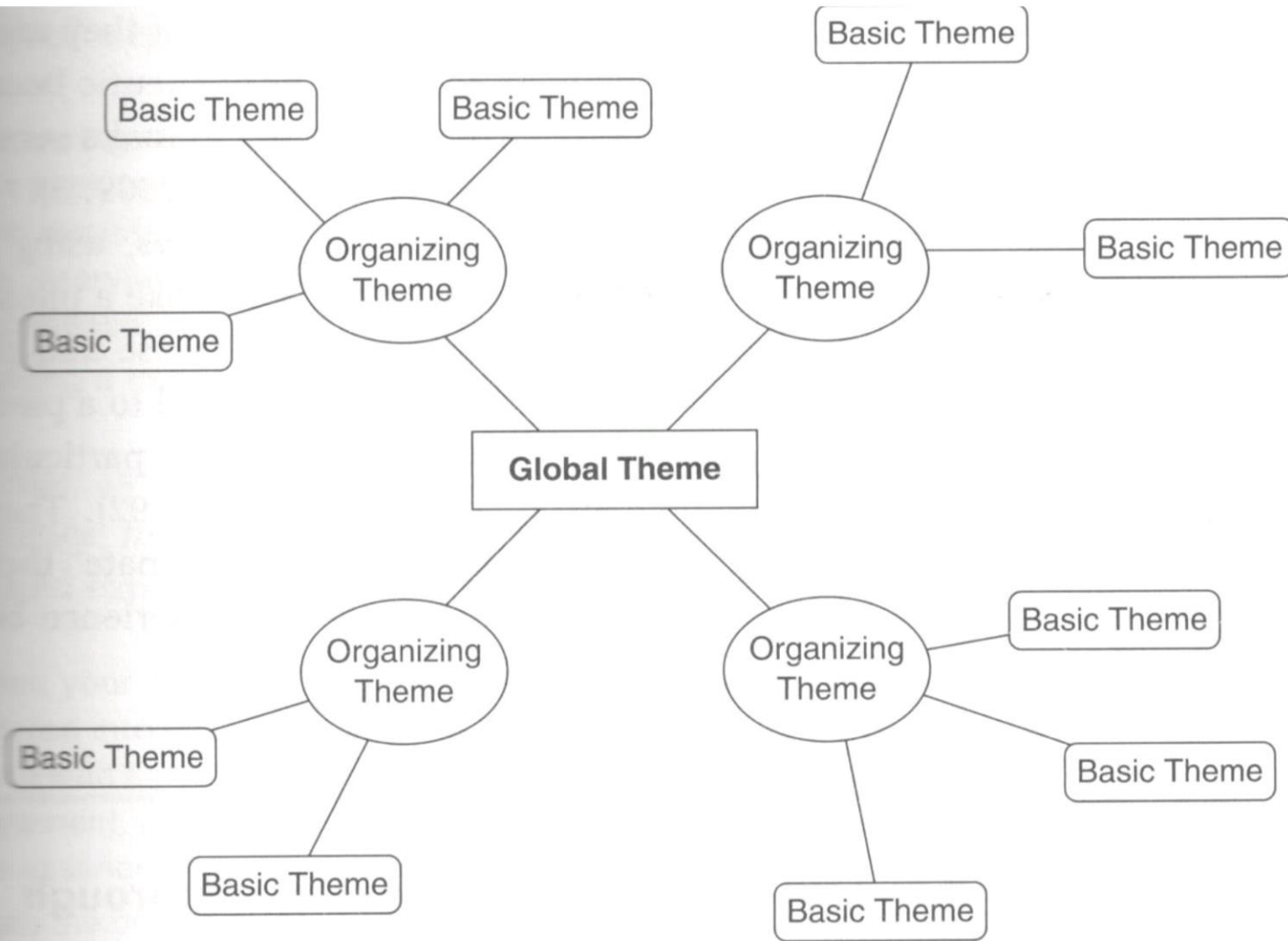
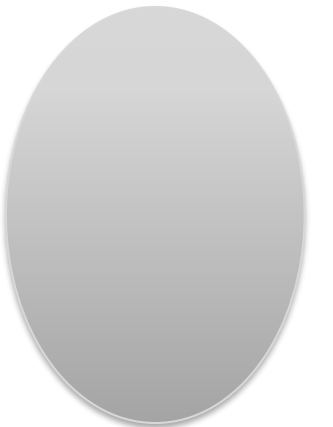
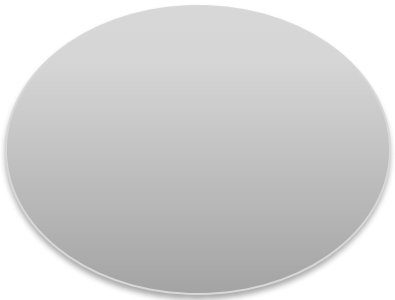
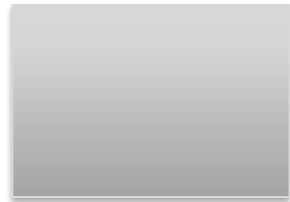
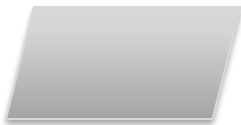
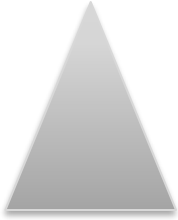
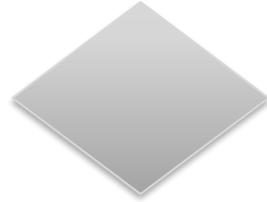
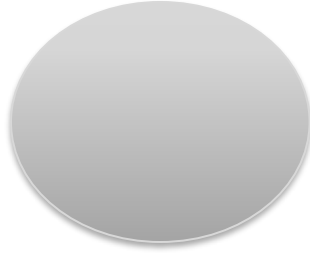
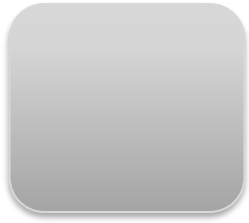
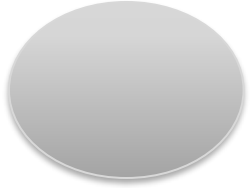


Figure 7.3 Structure of a thematic network

Source: Attride-Stirling, 2001: 388, Figure 1



## Codes:

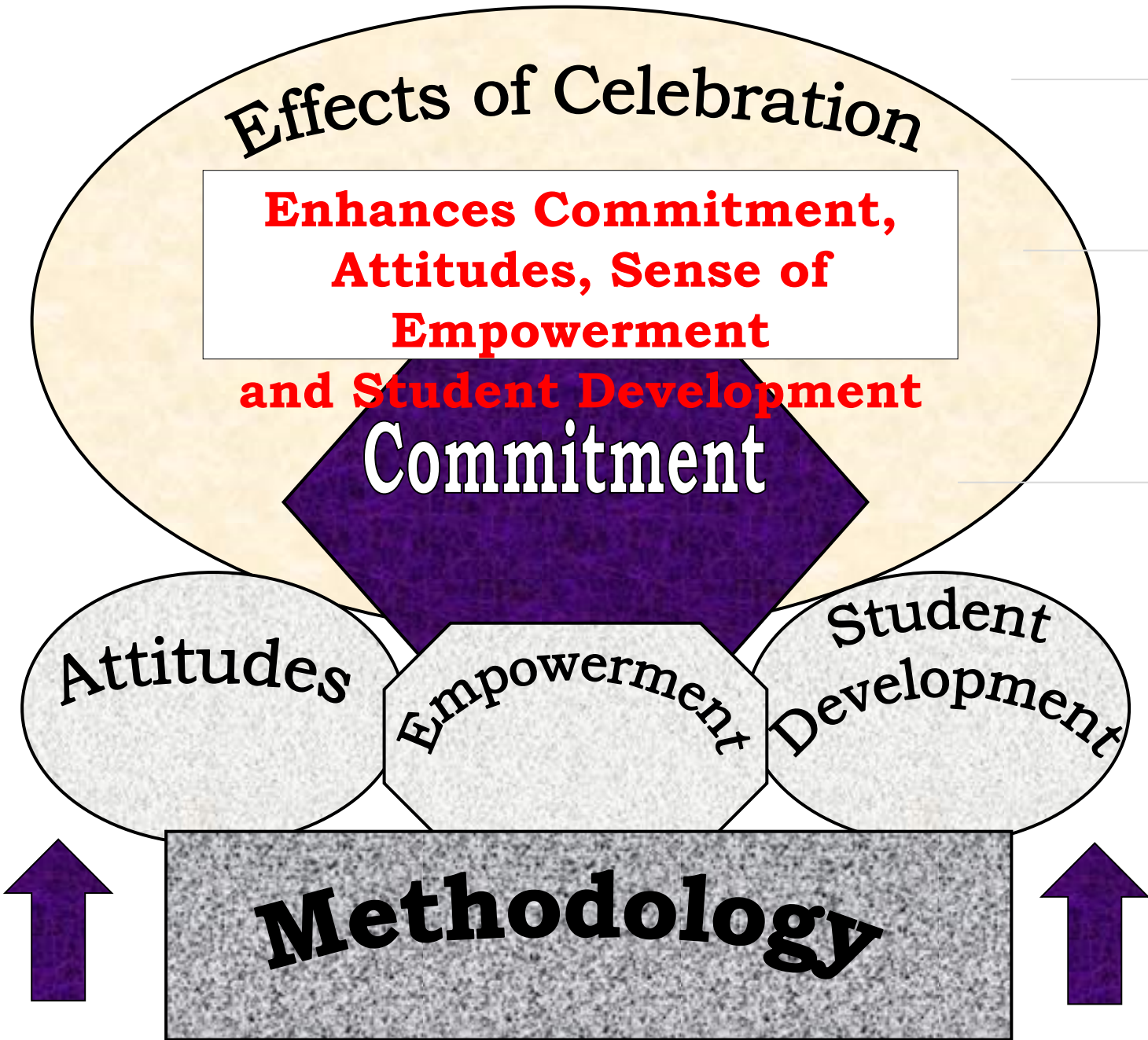
- Triangles
- Circles
- Ovals
- Rectangles
- Squares
- Diamonds
- Trapezoids
- Parallelograms

## Categories:

- Circular shapes
- Four-sided shapes
- Three-sided shapes

## Theme:

- Geometric shapes



Research question – What are the effects of celebration on students?

Narrative/description of theme

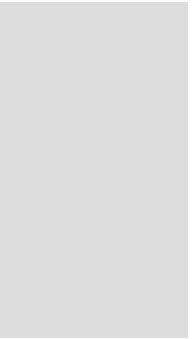
Overall theme

Sub-themes/categories





# The Analysis Continuum



Descriptive

Conceptual



Raw Data

Descriptive  
Statements

Interpretation

# **A simplified example**

Unveiling the possible  
functions of an outreach  
teenage health clinic

# Open/First-level Coding

- Pregnancy
- Smoking
- Self esteem
- Misinformed
- Peer pressure
- Time
- Staff attributes
- Sexual behaviour
- Alcohol
- Stress
- Understanding
- Own beliefs
- Venue
- Conducive setting

# Categories

- **Sexual Health**
  - Pregnancy
  - Sexual behaviour
- **Drugs**
  - Smoking
  - Alcohol
- **Mental Health**
  - Self esteem
  - Stress
- **Lack of Knowledge**
  - Misinformed
  - Understanding
- **Attitudes**
  - Peer pressure
  - Own beliefs
- **Availability**
  - Time
  - Venue
- **Approachability**
  - Staff attributes
  - Conducive setting

# Themes

- **Health issues for young people**
  - Sexual Health (Pregnancy, sexual behaviour)
  - Drugs (Smoking, alcohol)
  - Mental Health (Self esteem, stress)
- **Barriers for accessing service**
  - Lack of Knowledge (Misinformed, understanding)
  - Attitudes (Peer pressure, own beliefs)
- **Incentives to use service**
  - Availability (Time, venue)
  - Approachability (Staff attributes, conducive setting)