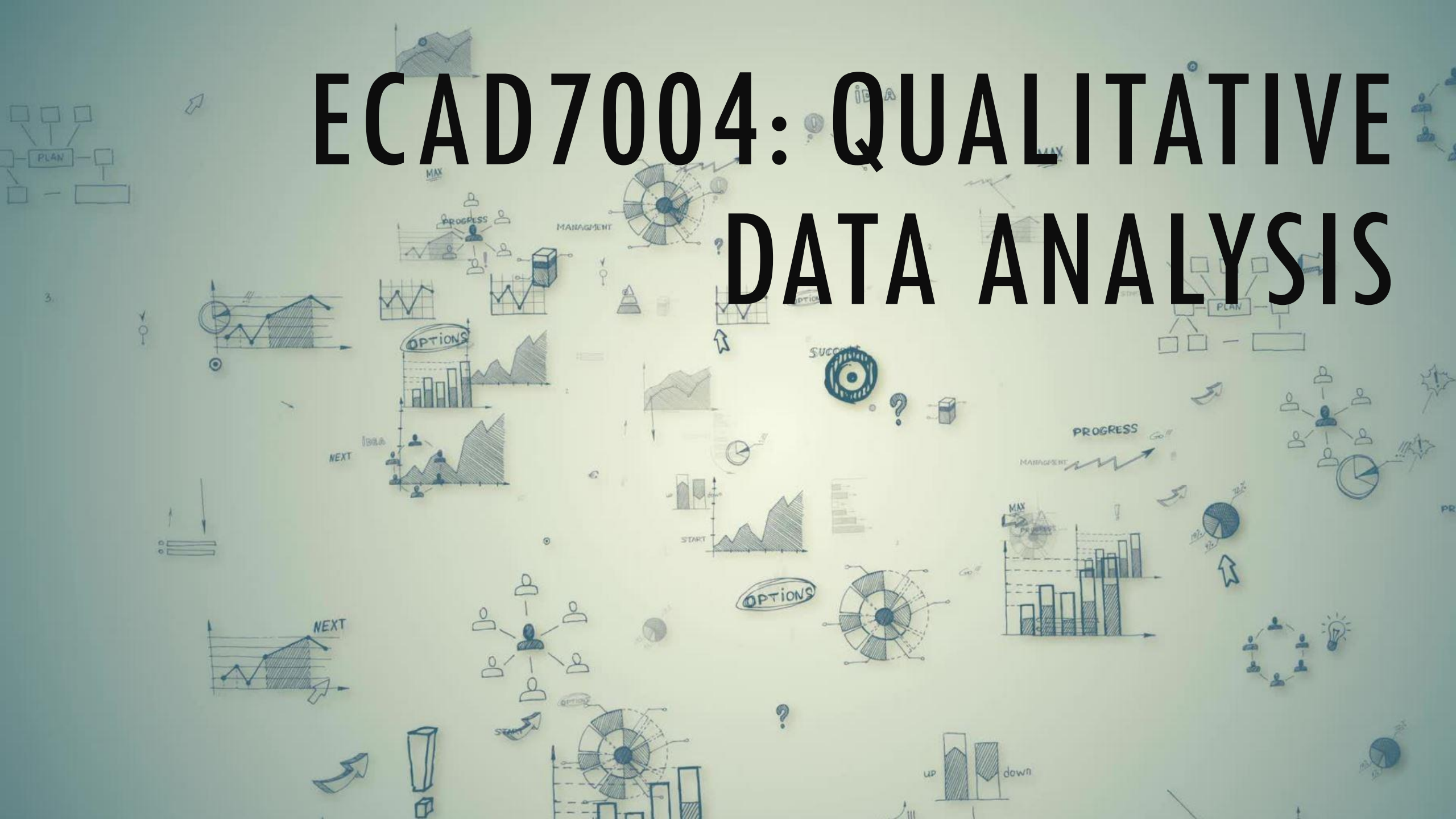


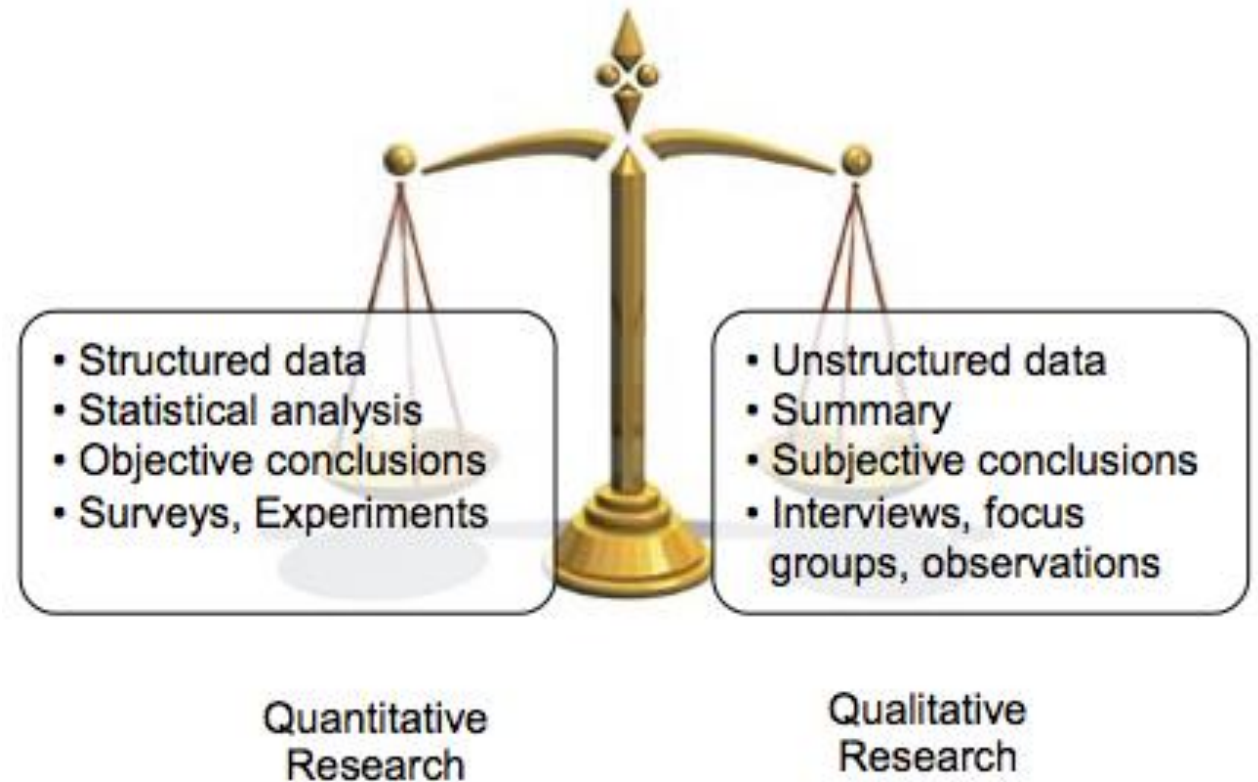
ECAD7004: QUALITATIVE DATA ANALYSIS



QUALITATIVE AND QUANTITATIVE DATA

Quantitative data refers to numerical information generated through the research process that can be understood, represented and analysed statistically.

Qualitative data is non-numerical (e.g. text, image, audio) and offers the researcher a descriptive account of the phenomenon being studied.



DATA ANALYSIS

Data can be analysed differently depending on the method used for analysing it.

If you have collected qualitative data, there are a number of ways in which you could analyse the data depending on the type of data that you have collected.



Photo by [Arie Wubben](#) on [Unsplash](#)



DATA ANALYSIS

The way you analyse the data should meet the aim(s) of the research – be 'fit for purpose' (see Cohen et al., 2011)

i.e. what do you want the data to do? For example:

- Describe
- Summarise
- Interpret
- Generate themes
- Understand individuals
- Understand groups
- Raise issues
- Demonstrate
- Explore?



ACTIVITY

Go back to your research question.

Which of these elements (from the previous slide) are you trying to answer?

ANALYSING WHAT WE READ

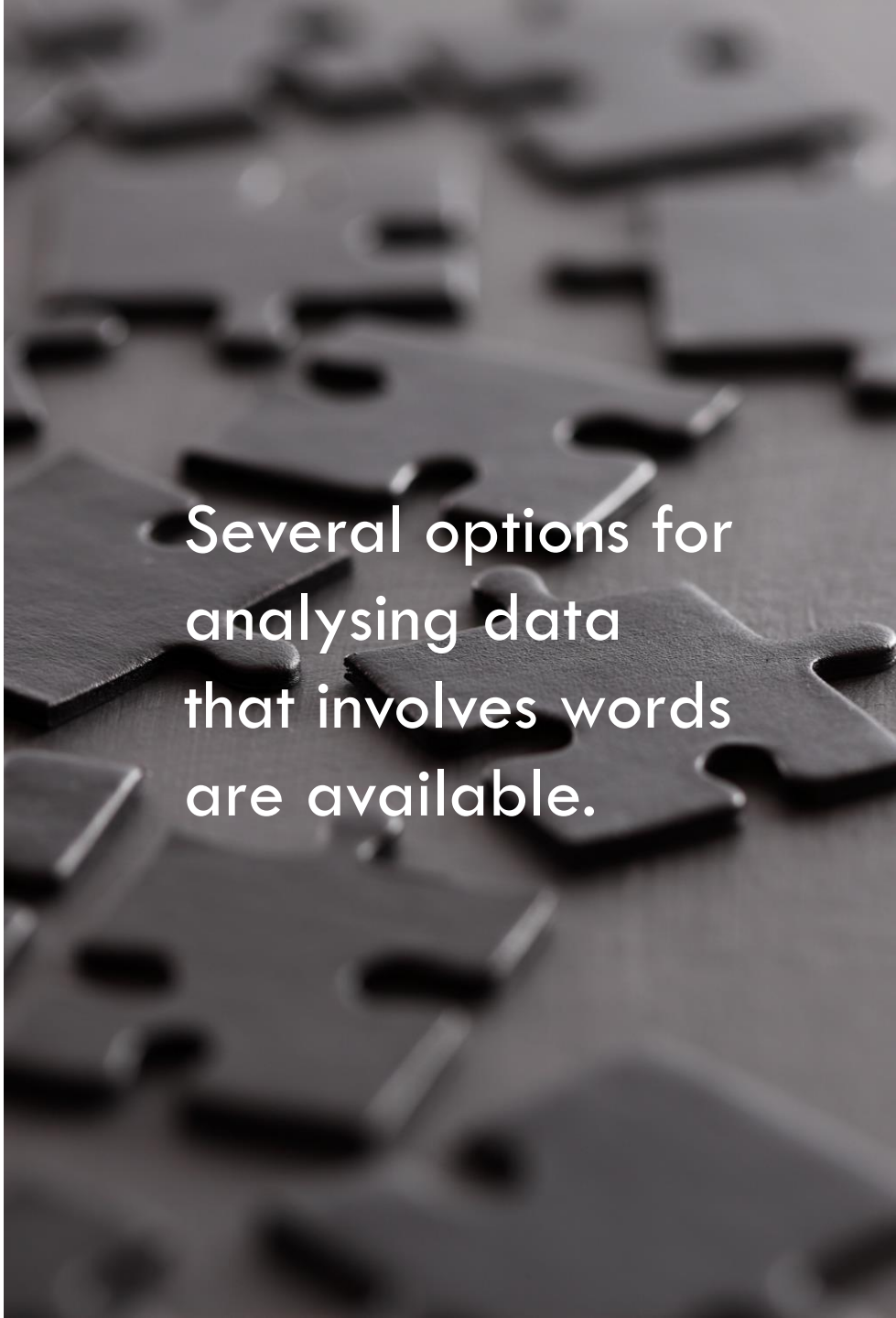
Content Analysis - used to identify the patterns that emerge from text, by grouping content into words, concepts, and themes

Narrative Analysis - focuses on the stories people tell and the language they use to make sense of them

Discourse Analysis - used to get a thorough understanding of the political, cultural and power dynamics that exist in specific situations.

Grounded Theory - formulates a theory around a single data case based on actual data and not entirely speculative. Then, additional cases can be examined to see if they are relevant and can add to the original theory.

Thematic Analysis - used to deduce the meaning behind the words that people use. This is accomplished by discovering repeating themes in text.

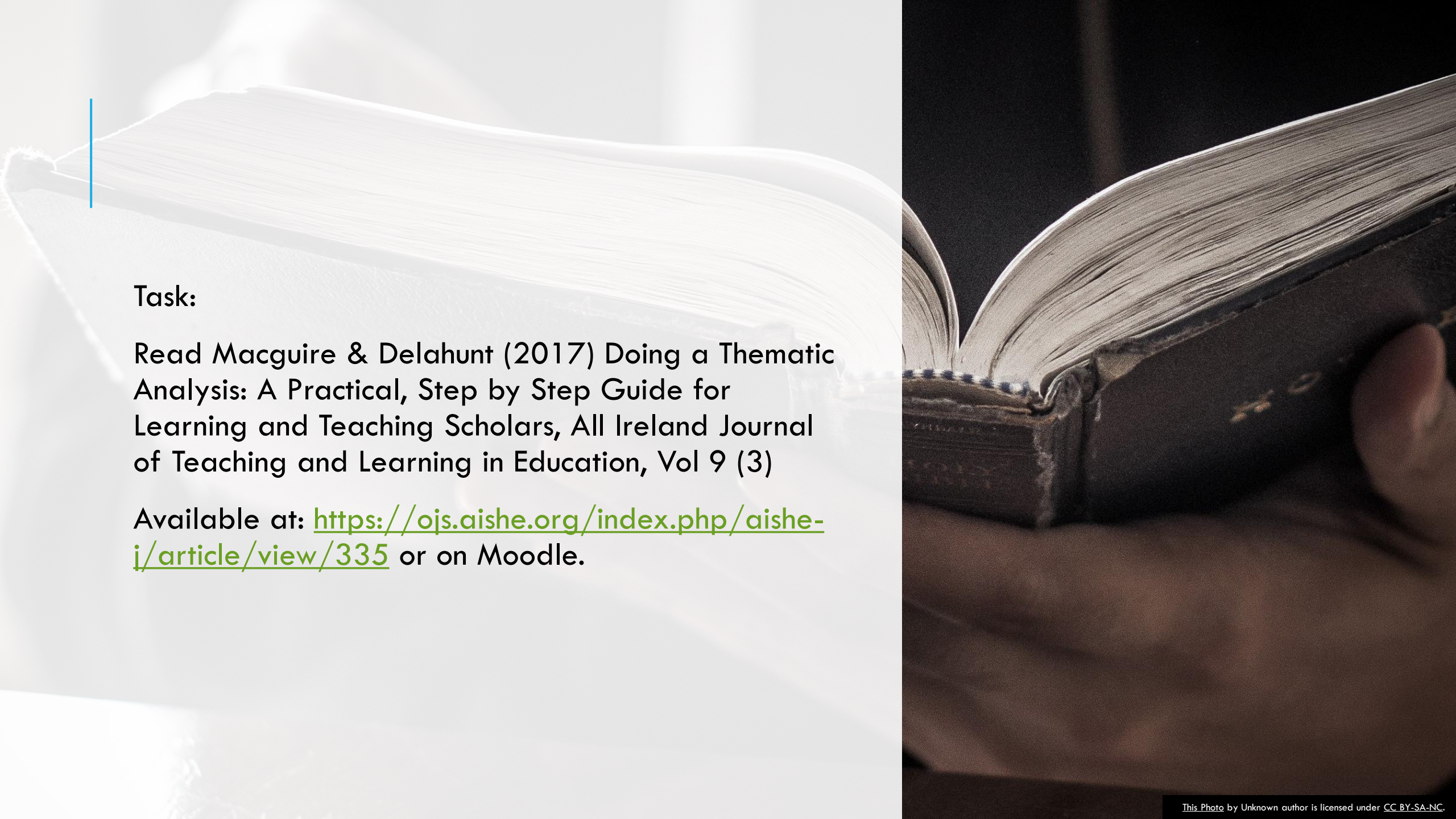


Several options for
analysing data
that involves words
are available.

THEMATIC ANALYSIS

Thematic analysis is one of the most common forms of analysis within qualitative research.

It is a qualitative data analysis method that involves reading through a data set (such as transcripts from interviews) and identifying patterns in meaning across the data to derive themes.



Task:

Read Macguire & Delahunt (2017) Doing a Thematic Analysis: A Practical, Step by Step Guide for Learning and Teaching Scholars, All Ireland Journal of Teaching and Learning in Education, Vol 9 (3)

Available at: <https://ojs.aishe.org/index.php/aishe-j/article/view/335> or on Moodle.

CONSIDERATION OF THEMATIC ANALYSIS

Strengths

- Flexible approach to qualitative analysis;
- Enables researchers to generate new insights and concepts derived from data;
- An accessible approach for novice researchers;
- Can be used for any type of research.

Limitations

- Many different ways to interpret meaning from the data set;
- Can feel intimidating to interpret what data is, or isn't, important;
- Can be time consuming.



RESEARCHER POSITIONALITY

Positionality needs to be acknowledged throughout the research process. The data that we consider and how we interpret it will be impacted by our positionality.

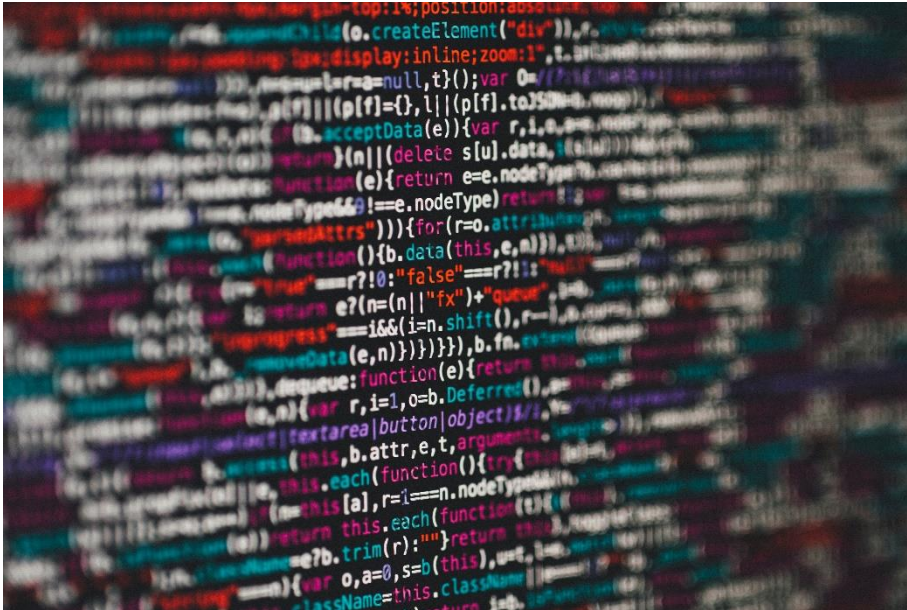
Consider the way(s) in which researcher positionality might impact upon the analysis of your data?

Optional task:

For collecting and analysing qualitative data, you may wish to read Braun and Clarke (2006) also (available on Moodle).

What issues have been identified in this article?

THEMATIC ANALYSIS



Braun and Clarke (2006, p.79) define thematic analysis as:

“a method for identifying, analyzing and reporting patterns within data”.

They propose a six-step process for carrying out this analysis.

Watch this video for more information: www.youtube.com/watch?v=rVMf1cbctYM



THEMATIC ANALYSIS PROCESS:

1. Familiarisation with data
2. Generate preliminary codes to describe the data (open coding)
3. Identification of themes – search for patterns or themes
4. Review themes to generate a thematic map of the analysis
5. Definition and naming of themes, including ongoing analysis that tells the overall story

(Braun and Clarke, 2006)

CODING YOUR DATA

Coding is “how you define what the data you are analysing are about” (Gibbs, 2007). It is a process of identifying a passage in the text or other data items (photograph, image), searching and identifying concepts and finding relations between them. Therefore, coding is not just labeling; it is linking of data to the research idea and back to other data.

You are aiming to organise the data into manageable 'chunks' so that you can compare relevant responses.

Figure 7 Coding interview data

1

Start by making a list of the particular things that you are interested in and give each one a name – these become your code labels. Alternatively or as well, you may assign each code a colour.

2

Select a code label and go through the interview notes (or transcript) and mark every time it occurs. How you do this is up to you - some people use hard copies, others do it on screen. Repeat this step with the other codes.

3

Repeat step two with all the interview notes.

(NFER, 2013, p.11)



OTHER ELEMENTS TO CONSIDER



Credibility (believability) – triangulation of methods, reflection on bias/assumptions, allowing data to 'speak for itself'



Dependability (consistency) – Are there weaknesses in data collection tools? Have you used the best method to answer question?



Confirmability (ability to corroborate) – triangulation to reduce investigator bias – would someone else arrive at similar conclusions?



Transferability (applicability) – is there sufficient context (rich data) to authentically convey meaning?, can readers use this to develop deep understanding?

ENSURING TRUSTWORTHINESS IN QUALITATIVE DATA (BLOOMBERG AND VOLPE, 2019)

See Ahmed, 2024 - The pillars of trustworthiness in qualitative research (Moodle)

REFLEXIVITY AND TRANSPARENCY

It is worth remembering that no research can ever be 100% valid or reliable

In order to increase the levels of validity and reliability, it is important for researchers to adopt a reflexive approach.

This means that you need to be aware that you are part of the research process and can never be 100% objective (Berger, 2015). We see this in discussions about the strengths and limitations of the project.

Don't worry about being critical about your study – that is expected (and welcomed).

Berger, R. (2015) Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative Research*, 15(2), 219–234. doi:10.1177/1468794112468475

ASSIGNMENT PREPARATION

Data Presentation and Analysis Method(s)

400

Explain the method(s) that you will use to report your data. Refer to relevant literature to support your decisions.

Include information about any processes that you carried out to ensure trustworthiness (credibility, transferability, dependability and confirmability) if relevant.

ETHICS FORM

(this box should expand as you type)

Proposed methods (maximum 600 words)

Provide a brief summary of all the methods that **may** be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed.

(this box should expand as you type)

You could include a sentence or two here also.

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