

Experimental methods

Key features
to identify by

Lab

advantage

disadvantage

Field

Quazi

Natural

Experimental design

Independent groups design

How are participants allocated to conditions?

Advantage

Disadvantage

Participant variables

How do you deal with this disadvantage?

Matched pairs design

How are participants allocated to conditions?

Advantage

Disadvantage

Time consuming

Repeated measures design

How are participants allocated to conditions?

Advantage

Disadvantage

Order effects

How do you deal with this disadvantage?

	Deception	Right to withdrawal	Informed consent	Protection of participants	privacy
What is the potential issue?					
In what ways can this be dealt with?					

Sampling

Random

How do you do it?

Advantage

Disadvantage

Opportunity

How do you do it?

Advantage

Disadvantage

Volunteer

How do you do it?

Advantage

Disadvantage

Systematic

How do you do it?

Advantage

Disadvantage

Stratified

How do you do it?

Advantage

Disadvantage

What is a directional hypothesis and when do you choose one?

What is a non-directional hypothesis and when do you choose one?

How do you write a non-directional hypothesis (use example)

What is an IV and DV and which is which using the e.g.

Hypothesis writing

Aim-Does exercise impact on your happiness?

How do you write a non-directional hypothesis (use example)

**What is operationalisation of variables?
Operationalise the example above**

What is reliability and why is it important?

How do you make sure an experiment is reliable?

Reliability and validity

Internal validity

External validity

Ecological

Population

Temporal

Sketch a scatter graph for the following correlations and describe what the covariables are doing- positive, negative, no correlation.

Write a directional and non-directional **correlational hypothesis** below for the covariables- age and stress levels.

"there will be a difference" is incorrect for correlation remember

Designing a correlation- for age and stress

-Operationalise the co-variables

-Sample?

-Ethical considerations?

-How will the data be analysed?

What is a correlation co-efficient? What does it show us?

What is a Correlation?
Definition-

Advantage

Disadvantage

Describe the strength of the following correlation coefficients

- 0.2
- -0.9
- 0.9
- +1
- -0.4
- -1

Content analysis- turning **qualitative** data into _____ data

Give 5 examples of mediums that can be used for content analysis (same for thematic)

What are the 5 stages to follow when conducting a content analysis? (pg 29 pack)

How do you present your data for content analysis? Sketch an rough example and make up some codes if analyzing kids tv ads.

Advantage

Disadvantage

Thematic analysis- starting with **qualitative** data and ending with _____ data

What are the 6 steps to conducting a thematic analysis? (pg30)

EXAM TIP-steps

2,3,and 4 mention codes but you only use codes initially to work out over all themes.

If you mention counting or % or numbers linked to the codes it is incorrect

Advantage

Disadvantage

Observation					
Naturalistic	Controlled	Covert	Overt	Participant	non-part
How do you do it?	How do you do it?	How do you do it?	How do you do it?	How do you do it?	How do you do it?
Advantage	Advantage	Advantage	Advantage	Advantage	Advantage
Disadvantage	Disadvantage	Disadvantage	Disadvantage	Disadvantage	Disadvantage

Designing an observation- You have been asked to design an observation on behaviour at a football match

1. What type of observation will be used? Justify your answer
2. Identify 3 behavioural categories
3. How will the data be presented? (remember we don't write out observation, sketch your table)
4. What sampling will be used? Justify your answer
5. How will you ensure reliability of your observations

Self-report techniques

Interviews

*What are the 3 types-
define them.*

Questionnaires

What is an open question? Write one

What is a closed question? Write one

Advantage

Advantage and of open
and closed qu

Disadvantage

Disadvantage and of
open and closed qu's

Case studies- Define

List 5 techniques used and the type of data
gathered (quant or qual)

Advantage

Disadvantage

Confounding variable

Extraneous variable

Dependent variable

Independent variable

Demand characteristics

Variables

operationalisation of variables

investigator effects.

counterbalancing

standardisation

randomisation

Controls

random allocation

What is it?

Pilot studies

Aims of pilot studies

Measures of central tendency

- Mean
- Median
- Mode

How do you work it out?

Advantage

Advantage

Advantage

Disadvantage

Disadvantage

Disadvantage

Measures of dispersion

- Range
 - Standard deviation
- How do you work it out?
- What is it? What does it show us?

Advantage

Advantage

Disadvantage

Disadvantage

Distributions

Sketch a Normal distribution

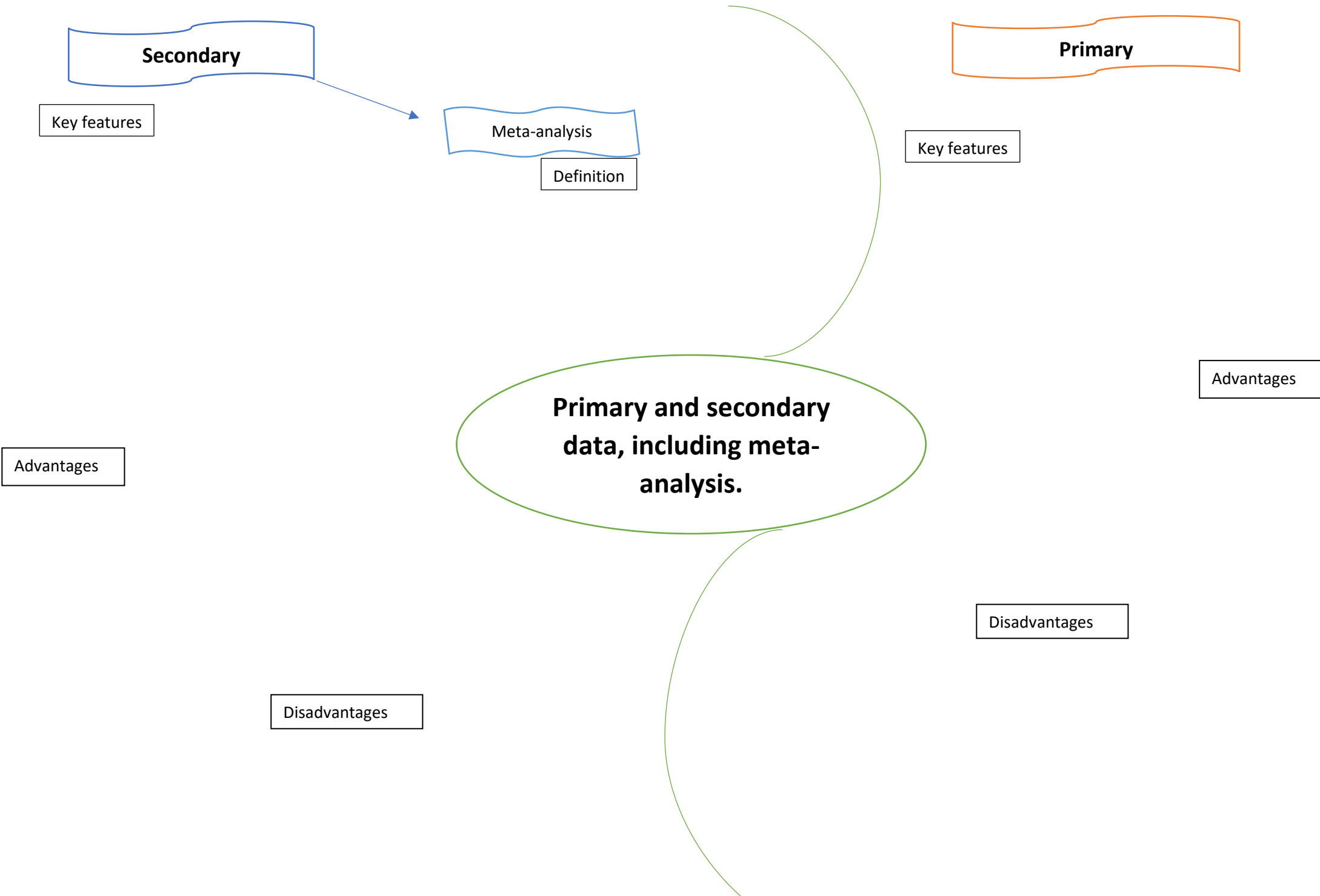
Sketch a positive skew

Sketch a negative skew

The mean, median and mode are all around the mean

Add the mean, median and mode on your graph.

Add the mean, median and mode on your graph.



Quantitative and qualitative data

	<i>Definition</i>	<i>Advantages</i>	<i>Disadvantages</i>
Quantitative data			
Qualitative data			

Levels of measurement

	<i>Definition</i>	<i>Example</i>
Nominal		
Ordinal		
Interval		

What is the level of measurement?

What do you do if it is ordinal?

Is it related or unrelated data?

Is it a test of difference or a correlation?

How do you work out the value of S?

The sign test

How do you work out the value of N?

before	After
22	21
11	11
13	16
-5	3
12	13
16	13
10	10
2	3

S=2 Write beneath exactly why.

How could these results be written out as nominal data?

____ people scored less, ____ people scored more and ____ stayed the same