QUESTIONNAIRE ACCURACY AND VALIDITY



KATHIRESAN GOPAL
DR. NUR RAIDAH SALIM
DR. MALATHI LETCHUMANAN

Steps in developing a questionnaire

A simple sequence from a final draft to reliability testing

01

Final draft questionnaire

02

Validity

03

Pilot study

04

Questionnaire reliability



Sequence: draft questionnaire → validity → pilot study → reliability

Instrument accuracy

Validity and reliability are key psychometric properties

MEASUREMENT



Accuracy

Can an instrument measure well?

VALIDITY

How do we know that we are truly measuring what we intend to measure?

RELIABILITY

Can we be confident that repeated measurements will produce the same results?

Validity and reliability are quality indicators of measurement instruments, known as psychometric properties.

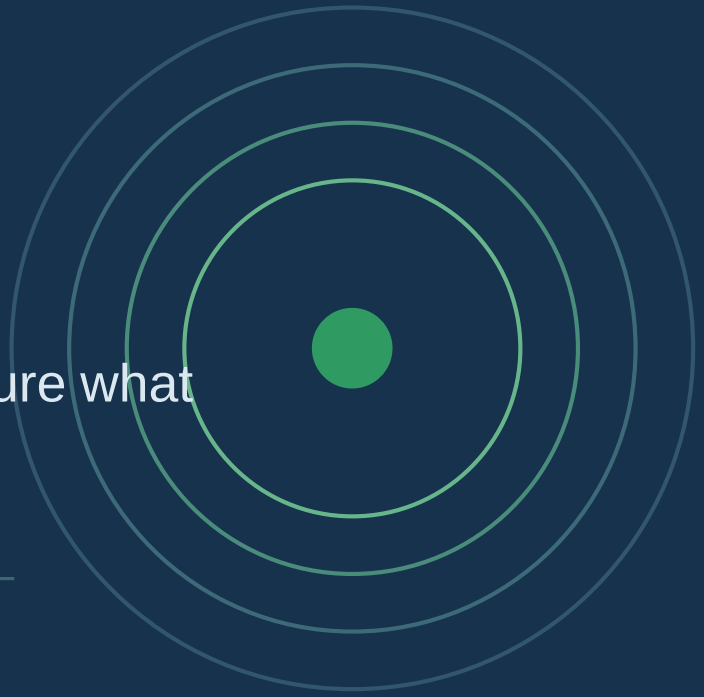
Measurement quality

Reliability and validity are two important characteristics of behavioural measures



VALIDITY

Does the instrument measure what it is intended to measure?



A closer look at evidence for meaningful measurement

What validity means

The intended measure - and the evidence behind the interpretation

Validity refers to the extent to which questions measure what they are intended to measure, and not something else.

01

Evidence

Evidence supports inferences made by the researcher from data collected with a particular instrument.

02

Instrument

Researchers need to use valid instruments when collecting information.

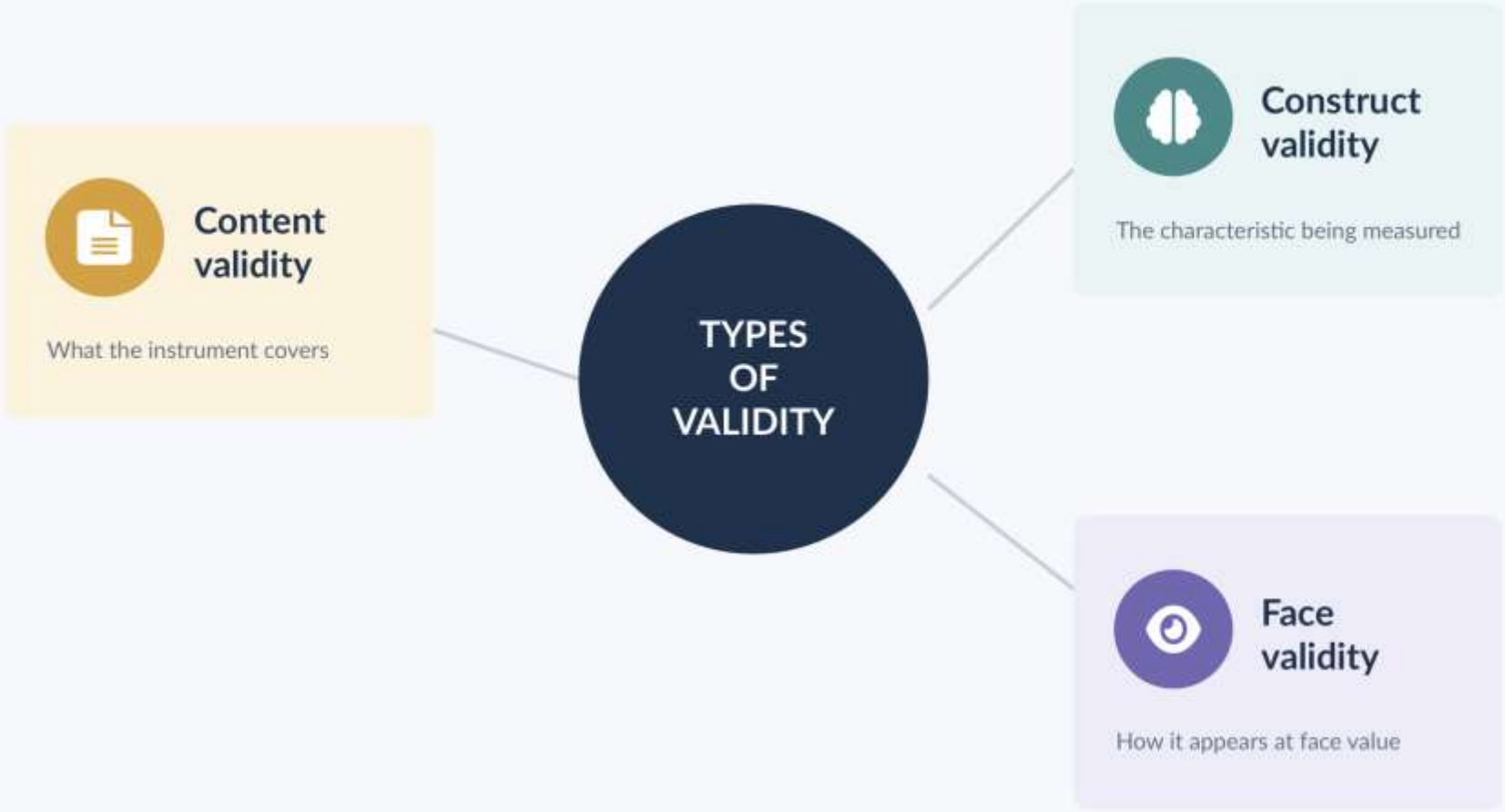
03

Conclusions

Research conclusions are based on the information obtained through the instrument.

Three types of validity

The source material highlights content, construct, and face validity



These labels organize different questions about the quality of a questionnaire.

Content validity

Evidence of content-related validity refers to the content and format of the instrument

Review whether the content is appropriate, comprehensive, representative, and correctly formatted.

- How appropriate is the content?
- Are the items stated comprehensively?
- Do they logically measure the intended variables?
- To what extent does the sample of items represent the content to be assessed?
- Is the format appropriate?
- Content and format must match the variable definitions and the sample of subjects.

Core check

Do the questions cover the intended content in a format suited to the participants?

Construct validity

Focus on the construct or psychological characteristic being measured



CONSTRUCT

Validity asks whether the items measure the variable being studied.

ITEMS

Construct validity refers to the nature of the construct or psychological characteristic measured by the instrument.

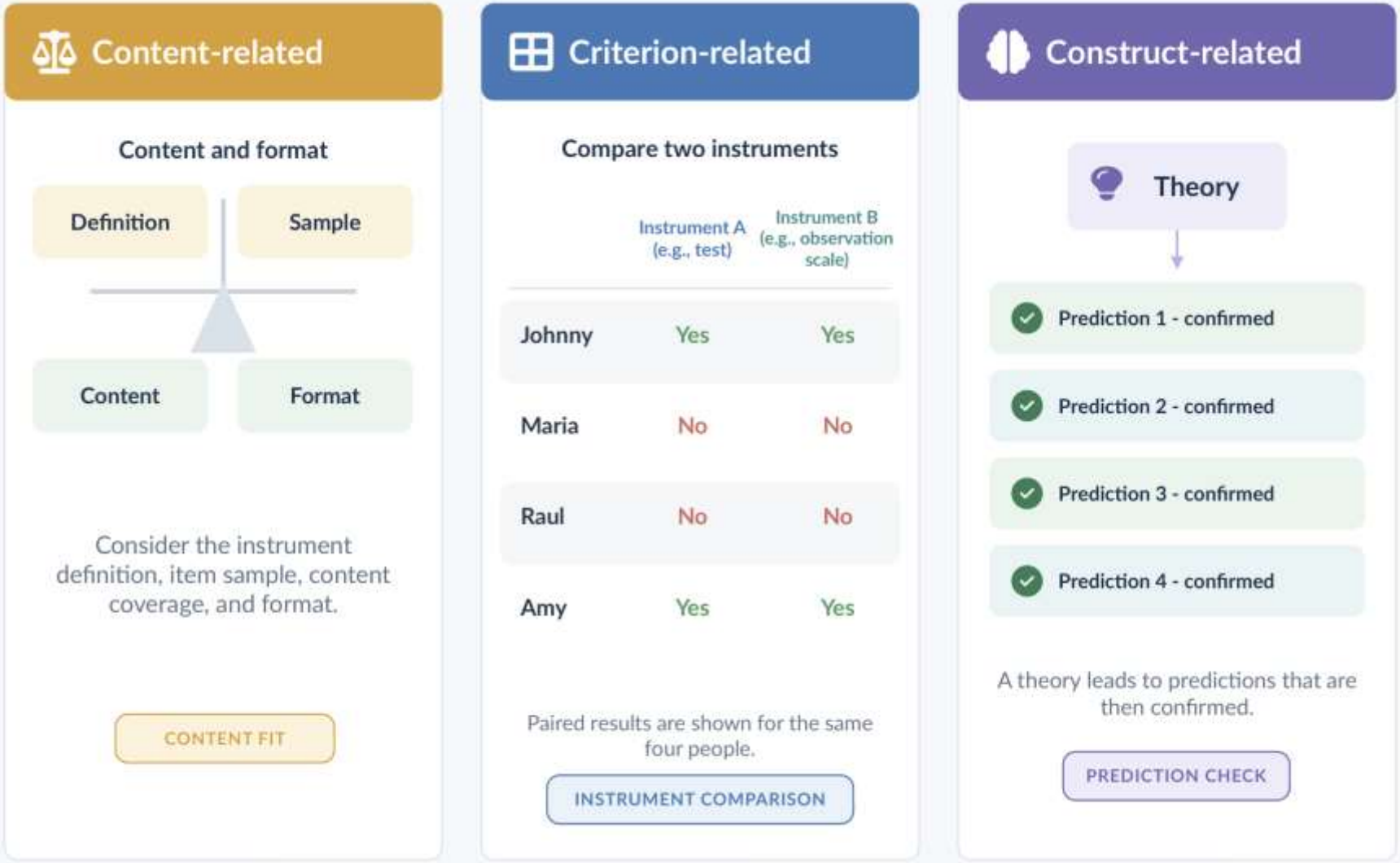
To what extent does the measurement explain differences in individual behaviour or performance on a particular task?

To what extent do the items used measure the construct or variable being studied?

A construct should have a minimum of **5 items**

Examples of validity evidence

Three visual examples from the source material



Face validity

Does the questionnaire appear credible, relevant, and appropriate at face value?



Credible on the surface

Face validity refers to whether the questionnaire appears credible in terms of its format, arrangement, and other surface features.

Relevant and appropriate

This type of validity concerns whether a measure appears relevant and appropriate for the matter being assessed, at face value.

FORMAT | ARRANGEMENT | SURFACE FEATURES

Face validity checklist

Use these items to review the questionnaire’s appearance and clarity

No.	Item	Yes	No
1	The study instrument format is appropriate.	☐	☐
2	The meaning of each question item is clear.	☐	☐
3	The language used is easy to understand.	☐	☐
4	Appropriate and easily readable font type and size.	☐	☐
5	Instructions given are clear.	☐	☐
6	No spelling mistakes.	☐	☐
7	Objective of the instrument is clearly stated.	☐	☐
8	Appropriate number of items.	☐	☐
9	Item should be able to measure the variable of the study.	☐	☐
10	Appropriate scale.	☐	☐

Likert scale

Agreement is assessed using a five-point response scale



1. **Strongly disagree**
2. **Disagree**
3. **Neutral**
4. **Agree**
5. **Strongly agree**

Lower agreement → Higher agreement

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Thank you