

# Chapter 4.

## The Validity of Assessment- Based Interpretations

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# What is validity?

## Validity is...

- The degree to which a test measures what it purports to measure.
  - The accuracy of the inferences (or interpretations) that are made based on students' performances on measurement devices.
-  the concept of **validity** deals with **the validity of score-based interpretations.**

# What is validity?

- **first-level inferences** = score-based inferences
- **second-level inferences** = the inferences that are drawn from score-based inferences about students' status with respect to an assessment domain

ex) These schools with low standardized test scores are ineffective.

➡ Measurement validity does not extend to second-level inferences.

# Content-related evidence of validity

## Definition

- **Content-related evidence of validity** is evidence indicating that an assessment suitably reflects the content domain it represents.
- **Content-related evidence** demonstrates the degree to which the sample of items, tasks, or questions on a test are representative of some defined domain of content.

– in the *Standards* –

# Content-related evidence of validity

“Dose the test deal with the content it’s supposed to be measuring?”

“How can we determine whether a test deals with the appropriate content?”

**Human judgment**

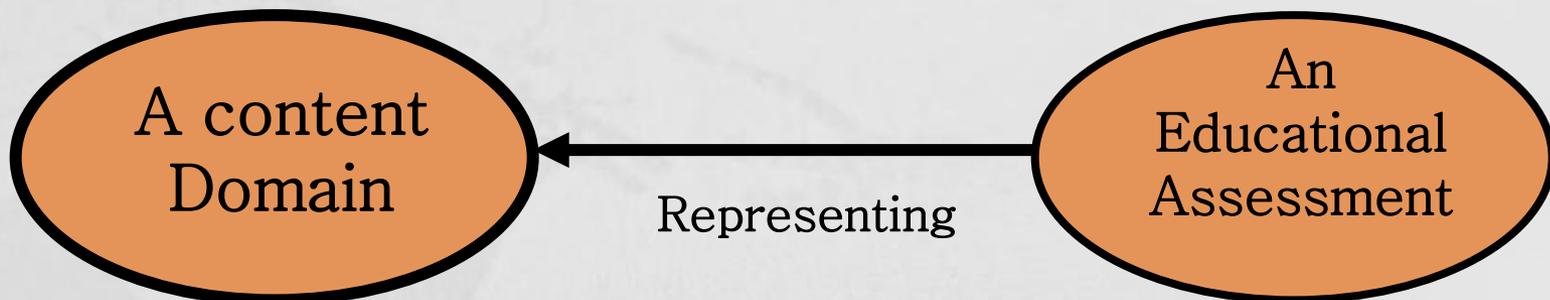
# Content-related evidence of validity

- **face validity** : the type of superficial judgment regarding whether the test appears, on the face of it, to be relevant for a given purpose.
- It often rests on a single judgment of the match between a test's appearance and its intended use.

# Content-related evidence of validity

## Representativeness

- Two basic strategies
  - (1) An attempt to incorporate suitable content on the test can be carried out during test development itself.
  - (2) Post facto judgments about the representativeness of its content.



# Content-related evidence of validity

## Interpretation Influences

- **Relative interpretations**

(1) The absence of procedures for assembling content-related evidence of validity.

(2) The absence of numerical indicators.

(3) The dominant relative on normative interpretations of a student's performance.

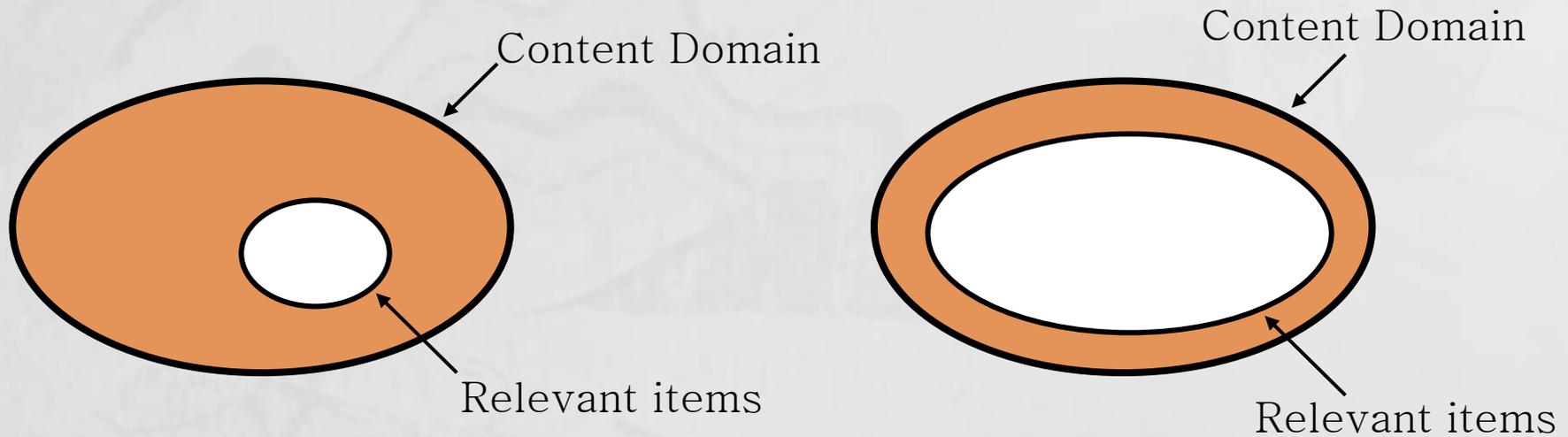
- **Absolute interpretations**

For absolute interpretations, content-related evidence of validity should be a matter of importance.

# Content-related evidence of validity

A need for Quantification

- Post facto judgmental procedures



[Weak Content Coverage]

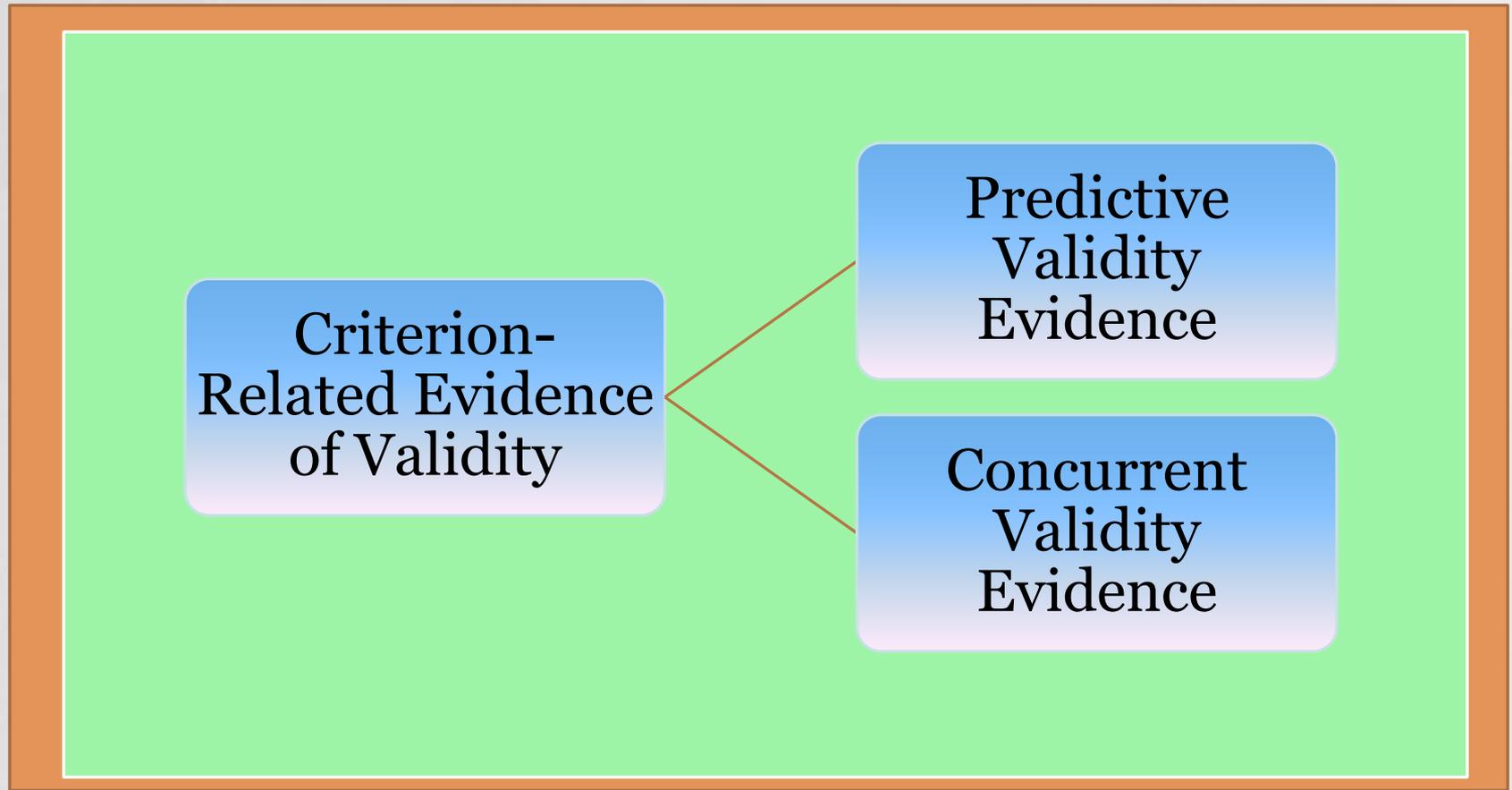
[Strong Content Coverage]

# Criterion-Related Evidence of Validity

- The extent to which a student's score on a test allows you to infer the student's performance on a criterion variable.
- Evidence demonstrating the systematic relationship of test scores to a criterion variable

Ex) a verbal aptitude test

# Criterion-Related Evidence of Validity



# Criterion-Related Evidence of Validity

## 1) **Predictive** criterion-related evidence of validity

- The degree to which the operationalization can predict with other measures of the same construct that are measured **at some time in the future**.
- It needs a substantial time interval
- It can be used for the purpose of arrangement and employment.

Ex) SAT → GPA in college

## 2) **Concurrent** validity

- the degree to which the operationalization correlates with other measures of the same construct that are measured **at the same time**.
- Time interval is not present

Ex) Test for moral behavior → L.Kohlberg's moral behavior test

# Criterion-Related Evidence of Validity

## 3) Quality of the Criterion

- Criterion variable : an external variable that serves as the target for a predictor test.
- The legitimacy of the criterion variable itself is important.

Ex) Grade point average  indicator

## 4) Quality of the Validation Study

- The conditions surrounding the validation study should be comparable to the conditions surrounding the situation you want to predict.

# Construct-Related Evidence of Validity

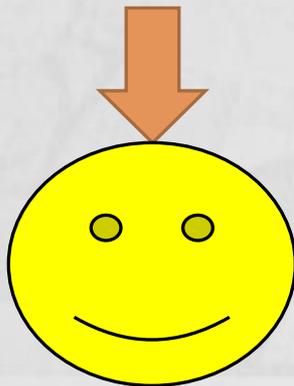
- A measure of the psychological characteristic of interest.
- Constructs

Ex) consideration for subordinates

(giving praise, explaining reasons for action, asking opinions)

initiating structure

(setting goals, keeping on schedule)



Leadership

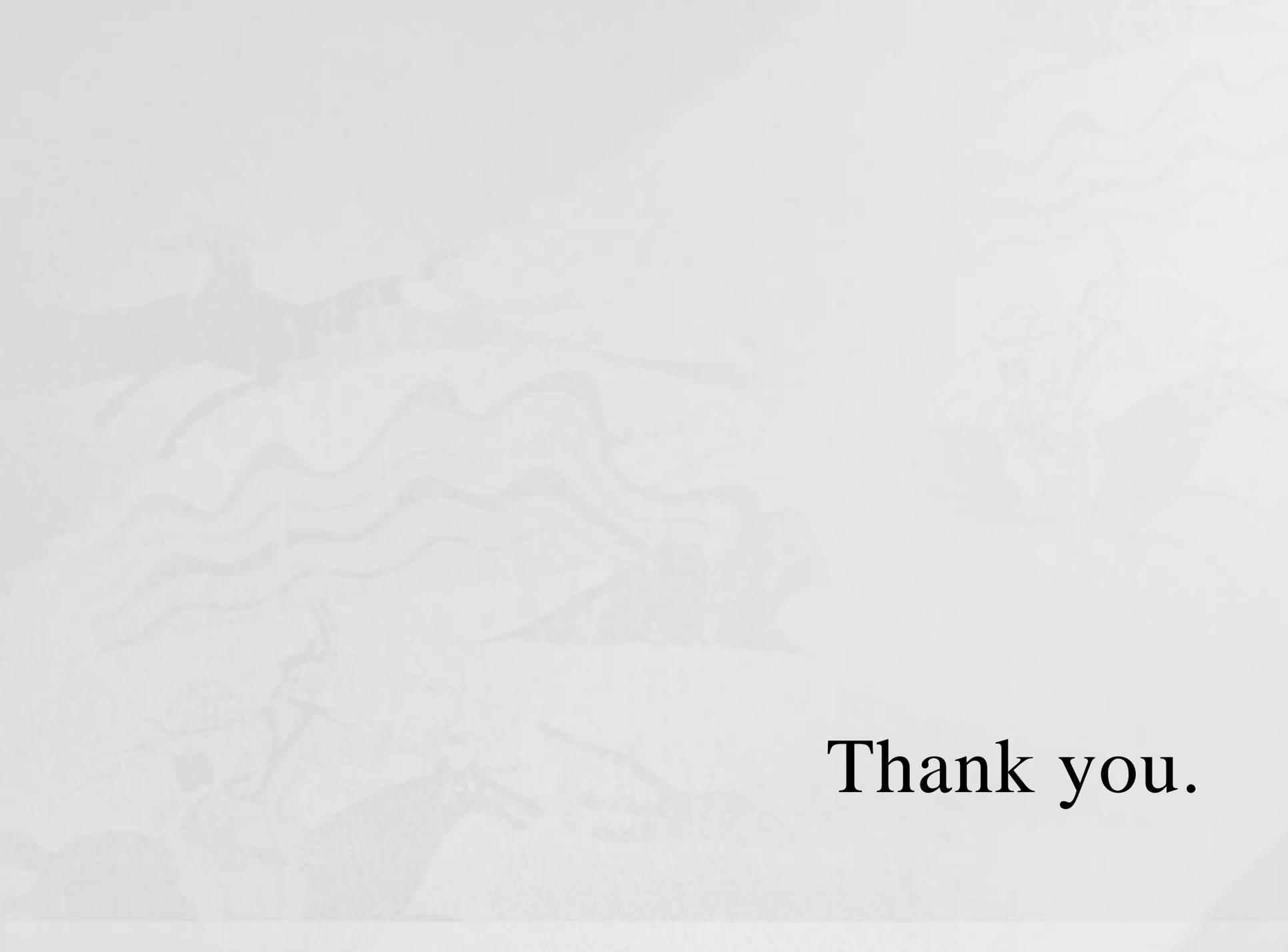
# Construct-Related Evidence of Validity

## 1) Construct-Validation Strategies

- **Intervention Studies** : students will respond differently to the measure after receiving some sort of treatment.
- **Differential-Population Studies** : individuals representing distinct populations score differently on the measure.
- **Related-Measures Studies** : Correlations between students' scores on the test and their scores on other measures.

# Consequential Validity

- focus on the appropriateness of a test's social consequence
- the consideration of a test's consequences should remain separate from validity
- Educational leaders should not employ the consequential validity of tests

A faint, light-colored illustration of a landscape with mountains and a figure, possibly a person or a creature, is visible in the background. The style is reminiscent of a woodcut or a traditional print. The figure appears to be standing on a path or a ledge, looking towards the mountains. The overall tone is soft and artistic.

**Thank you.**