

# Measurement: Validity

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# OBJECTIVE

**Enhance understanding of key principles  
of validity for clinical research**



## **Performance**

- Time
- Distance
- Speed
- Calories

# CONSTRUCT

- A theoretical concept

# MEASUREMENT

- A system of defining the level of a construct
  - **Operational Definition**
    - The method used for examining some domain

# Examples

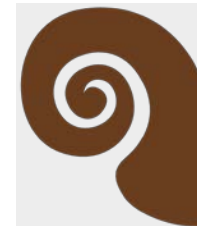
## 1. Depression

- A. Hamilton Depression Rating Scale
- B. Beck Depression Inventory



## 2. Tremor

- A. Judge rated spirals
- B. Computer evaluated spirals



## 3. Heart Disease

- A. Cholesterol
- B. C-Reactive Protein

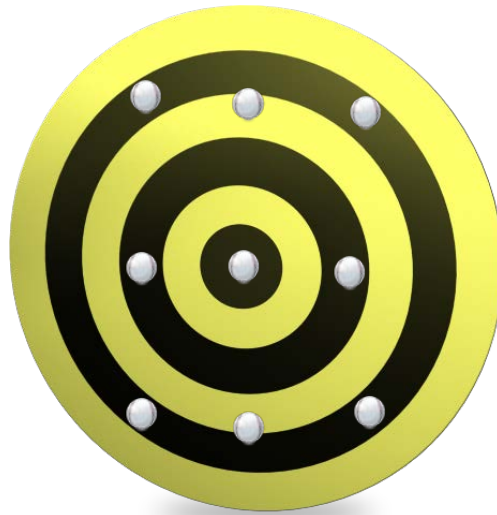


# VALIDITY

How well does the measure reflect the construct?



# VALIDITY



# VALIDITY: *Types*

## **1. Construct**

A. Face

B. Content

## **2. Criterion-related**

A. Convergent

B. Divergent



# RELIABILITY and VALIDITY

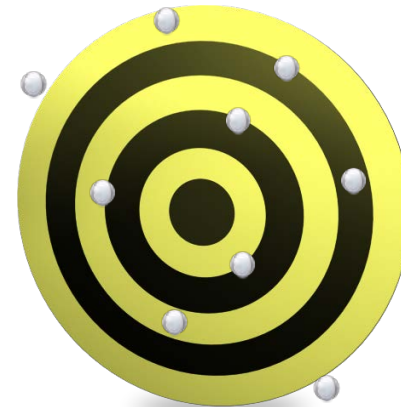
Valid

Not Valid

Reliable



Not Reliable



## VALIDITY: **Summary**

1. Having validity means you are measuring what you want to measure
2. Measures can be reliable but not valid
3. When two measures examining the same construct are highly related, you likely have convergent validity

## VALIDITY: Questions

1. Does validity mean that you measure the construct you want to measure?
2. When two measures examining the same construct, should they be related to each other?