VALIDITAS KONSTRAK

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Validitas Konstrak

- Adalah tipe validitas yang menunjukkan sejauh mana tes mengungkap suatu trait atau konstrak psikologis yang hendak diukur
- Pengujian validitas konstrak terus berlanjut sesuai dengan perkembangan konsepnya

Validitas Konstrak

Cara mencapai Validitas Konstrak

1. Studi mengenai perbedaan diantara kelompok yang menurut teori harus berbeda

Skala Religiusitas (Likert, 10 aitem)

Subjek	Rerata Skor (1-40)
Santri/biarawan	35
Preman	5

VALID

Skala Kenakalan Remaja (Likert, 10 aitem)

Subjek	Rerata Skor (1-40)
Siswa Teladan	20
Penderita Gangguan Delinkuen	5

TDK VALID

Secara teoritik, santri/biarawan memiliki tingkat religiusitas yang lebih tinggi dibanding dengan preman. Asumsi teoritik ini dibuktikan oleh Skala Religiusitas. Disimpulkan bahwa skala tersebut VALID

Validitas Konstrak

Cara mencapai Validitas Konstrak

2. Studi mengenai pengaruh perubahan yang terjadi dalam diri individu atau lingkungannya terhadap hasil tes

Skala Kematangan Emosi

Usia 5 tahun Rerata Skor (1-40)	Usia 10 tahun Rerata Skor (1-40)
25	40

VALID

Secara teoritik, pertambahan usia menyebabkan peningkatan kematangan emosi. Hasil di atas SESUAI dengan teori tersebut maka skala tersebut VALID.

Skala Tingkat Kekenyangan

Sebelum Makan Rerata Skor (1-40)	Setelah Makan Rerata Skor (1-40)
25	12

TDK VALID

Secara teoritik, makan menyebabkan kenyang. Hasil di atas TIDAK SESUAI dengan teori tersebut, maka skala tersebut TIDAK VALID.

Validitas Konstrak

Cara mencapai Validitas Konstrak

3. Studi mengenai korelasi diantara berbagai variabel yang menurut teori mengukur aspek yang sama

MATRIKS KORELASI

	A_1	B_1	A_2	B_2
A_1	+	-	+	-
B_1		+	-	+
A_2			+	-
B_2				+

A : Tes Penalaran
B : Tes Aritmatika

\+ : Korelasi Tinggi
\- : Korelasi Rendah

Korelasi antara tes yang mengukur hal yang sama, tinggi
Korelasi antara tes yang mengukur hal yang berbeda, rendah

Validitas Konstrak

Cara mencapai Validitas Konstrak

4. Studi mengenai korelasi diantara berbagai variabel yang menurut teori mengukur aspek yang sama

MATRIKS KORELASI ANTAR AITEM

	Item1	Item 2	Item 3	Item 4
Item1	1.00	0.78	0.89	0.96
Item 2		1.00	0.95	0.92
Item 3			1.00	0.96
Item 4				1.00

Terlihat bahwa korelasi antar aitem rata-rata tinggi, sehingga tes tersebut terbukti mengukur satu variabel satuan (*unitary variable*)

Validitas Konstrak

Cara Mengestimasi

- Validitas Multitrait-Multimethod
  - Matriks Validasi
- Validitas Faktorial
  - Analisis Faktor

Validitas Konstrak :
Multitrait-Multimethod

- **Tujuan MTMM**
  a) Validitas Konvergen – tingginya korelasi antar skala yang mengukur trait yang sama
  b) Validitas Diskriminan - rendahnya korelasi antar skala yang mengukur trait yang berbeda
- **Komponen MTMM**
  a) Sifat sama diukur dengan alat yang sama (*monotrait-monomethod*)
  b) Sifat sama diukur dengan alat berbeda (*monotrait-heteromethod*)
  c) Sifat berbeda diukur dengan alat sama (*heterotrait-monomethod*)
  d) Sifat berbeda diukur dengan alat berbeda (*heterotrait-heteromethod*)

Multitrait - Multimethod Matrix (Campbell & Fiske, 1959)

		Method 1		Method 2	
		Trait *a*	Trait *b*	Trait *a*	Trait *b*
Method 1	Trait *a*	b_1			
	Trait *b*	m_1	b_1		
Method 2	Trait *a*	v_a	d	b_2	
	Trait *b*	d	v_b	m_2	b_2

Correlation coefficients

- b_1 = **reliability** for method 1
- v_a = **convergent validity** for both methods wrt trait *a*
- m_1 = **discriminant validity** for method 1
- d = "nonsense"-correlation

Requirements:

- ***v* > 0 and "high enough"**
- ***v* > *d***
- ***v* > *m***
- ***d* low**

Tujuan MTMM

- **Convergence**
  - **Validate with another instrument that measures the same construct**
  - **Correlational analysis used**
- **Divergence**
  - **Validate with instrument measuring an opposite construct**

Validitas Konstrak :
Analisis Faktor

- Uji statistik untuk menentukan jumlah faktor yang direfleksikan dalam satu instrumen ukur
- Apakah satu alat ukur, mengukur konstrak yang sama
- Statistik yang menunjukkan konstrak/domain/klaster yang sama

Threats to ConstructValidity

- **Inadequate Preoperational Explication of Constructs**
  Avoid by
  - Thinking through the concepts better
  - Use methods (e.g., concept mapping) to articulate your concepts
  - Get “experts” to critique your operationalizations
- **Mono-Operation Bias**
- **Mono-Method Bias**
- **Interaction of Different Treatments**
- **Interaction of Testing and Treatment**
- **Restricted Generalizability Across Constructs**
- **Confounding Constructs and Levels of Constructs**

From the discussion in Cook and Campbell (Cook, T.D. and Campbell, D.T. Quasi-Experimentation: Design and Analysis Issues for Field Settings.).

Inadequate Preoperational Explication of Constructs

- You didn't do a good enough job of *defining* (operationally) what you mean by the construct
- Avoid by:
  - Thinking through the concepts better
  - Use methods (e.g., concept mapping) to articulate your concepts
  - Get "experts" to critique your operationalizations

Mono-Operation Bias

- Pertains to the independent variable, cause, program or treatment in your study not to measures or outcomes.
- If you only use a single version of a program in a single place at a single point in time, you may not be capturing the full breadth of the concept of the program.
- Solution: try to implement multiple versions of your program.

Mono-Method Bias

- Refers to your measures or observations.
- With only a single version of a self esteem measure, you can't provide much evidence that you're really measuring self esteem.
- Solution: try to implement multiple measures of key constructs and try to demonstrate (perhaps through a pilot or side study) that the measures you use behave as you theoretically expect them to.

Interaction of Different Treatments

- Changes in the behaviors of interest may not be due to experimental manipulation, but may be due to an interaction of experimental manipulation with other interventions.

Interaction of Testing and Treatment

- Testing or measurement itself may make the groups more sensitive or receptive to treatment.
- If it does, then the testing is in effect a part of the treatment, it's inseparable from the effect of the treatment.
- This is a labeling issue (and, hence, a concern of construct validity) because you want to use the label “treatment" to refer to the treatment alone, but in fact it includes the testing.

Restricted Generalizability Across Constructs

- The "unintended consequences" treat to construct validity
- You do a study and conclude that Treatment X is effective. In fact, Treatment X does cause a reduction in symptoms, but what you failed to anticipate was the drastic negative consequences of the side effects of the treatment.
- When you say that Treatment X is effective, you have defined "effective" as only the directly targeted symptom.

Confounding Constructs and Levels of Constructs

- If your manipulation does not work, it may not be the case that it does not work at all, but only at that level
- For example peer pressure may not work if only 2 people are applying pressure, but may work fine if 4 people are applying pressure.