04 – Reliabilitas

Estimating Reliability

Types of Reliability (p.70)

1. test-retest reliability

consistency of test scores over time (stability).

- Prosedur:
    1. sekelompok subjek diukur dgn tes X.
    2. di waktu berbeda, kelompok subjek tsb diukur lagi dgn tes X.
    3. Skor dari 2 pengukuran, dikorelasikan. Korelasi ini menjadi koefisien reliabilitas.
- Sumber error:
    1. memory effects,
    2. true score fluctuation,
    3. guessing,
    4. variability in scoring,
    5. administration procedures
- Apa masalah dari jarak waktu pengukuran? P.71
    If the time period is too short ....
    the time period is longer ....

Estimating Reliability

Types of Reliability:

2. parallel forms reliability

estimate of equivalence of two versions of the same test.
Equivalence/parallel test: must measure the same construct, be composed of the same type of items, and have the same number of items.

- Prosedur:
  1. sekelompok subjek diukur dgn tes X versi 1.
  2. Kemudian kelompok subjek tsb diukur dgn tes X versi 2.
  3. Skor dari 2 pengukuran, dikorelasikan. Korelasi ini menjadi koefisien reliabilitas.
- Sumber error:
  1. degree to which the two forms of the test are equivalent,
  2. true score fluctuation,
  3. guessing,
  4. variability in scoring,
  5. administration procedures.

Estimating Reliability

Types of Reliability:

3. internal consistency

Konsistensi skor di dalam tes.

a. *split-half reliability*

single test as being composed of 2 parallel halves (by dividing a test into 2 halves).

- Prosedur:
    1. sekelompok subjek diukur dgn tes X.
    2. Bagi tes menjadi 2 belahan. (belah-dua, atau ganjil-genap)
    3. Skor masing-masing belahan.
    4. Skor dari 2 belahan dikorelasikan.
    5. Hitung formula Spearman-Brown (p.60).
- Masalah:
    1. Formula Spearman-Brown dpt memberikan prediksi yg keliru.
    2. there are many ways to divide the items.

Estimating Reliability

Types of Reliability:

3. internal consistency

    b. Coefficient alpha (Cronbach's alpha**)**

    The average of all possible split-half reliabilities.

- Prosedur:
    1. sekelompok subjek diukur dgn tes X.
    2. Hitung dengan koefisien Alpha (p.72).

- Masalah:
    1coefficient alpha is but one estimate of reliability that focuses on just one form of measurement error.
    2. indication of internal consistency, not unidimensionality.

Estimating Reliability

Types of Reliability:

4. inter-rater reliability

degree of consistency between the two raters.

- Prosedur:
    1. sekelompok subjek diukur/diobservasi oleh dgn 2 atau lebih penilai.
    2. Korelasi skor dari para penilai.