



FRIS® Thinking Styles Inventory

Reliability & validity data

FRIS® Thinking Styles Inventory is a 76-item (Likert-scale) online questionnaire. The inventory is psychometrically reliable, valid, normalised and standardised.

The inventory had been validated for 4 groups (adults):

- 1st step: general population (N= 740), the preliminary version,
- 2nd step: general population (N= 1380), the final version,
- 3rd step: homogenic population – business managers and board members (N=767),
- 4th step: homogenic population – school teachers (N=5804).

The reliability and validity data concern the final version of the inventory for general population (N=1380):

- *Internal consistency* reliability for 4 superfactors is 0.82(F), 0.88 (R), 0.88 (I), 0.88 (S) Cronbach's α .
- Bipolar scales discriminating between each pair of superfactors : FR, FI, etc. have internal consistency in range 0.76-0.82 Cronbach's α .
- *Parallel forms* Pearson's correlation for superfactors is in range 0.77-0.79 (N=585).
- *Construct Validity* was estimated by confirmatory Factor Analysis (varimax rotation). 4 factors are related to superfactors: I, R, S, F. Satisfactory correlation (0.41 – 0.73) for 58 of all 76 items (mean 0.48).
- *Face validity*: for users divided in 4 groups, on the basis on their subjective result prediction, level of the corresponding superfactor was 0,78-1,61 of standard deviation higher than remaining superfactors.
- *External validity*: significant mean differences between 14 groups of different inventory results (N=1050) in work preferences profiles (9 criteria of 0.80-0.87 Cronbach's α reliability).

Estimated Thinking Styles distribution (N=1380):

- Female: Fact-based thinking (16%), Relation-based thinking (44%), Idea-based thinking (18%), Structure-based thinking (23%);
- Male: Fact-based thinking (20%), Relation-based thinking (17%), Idea-based thinking (26%), Structure-based thinking (37%).