

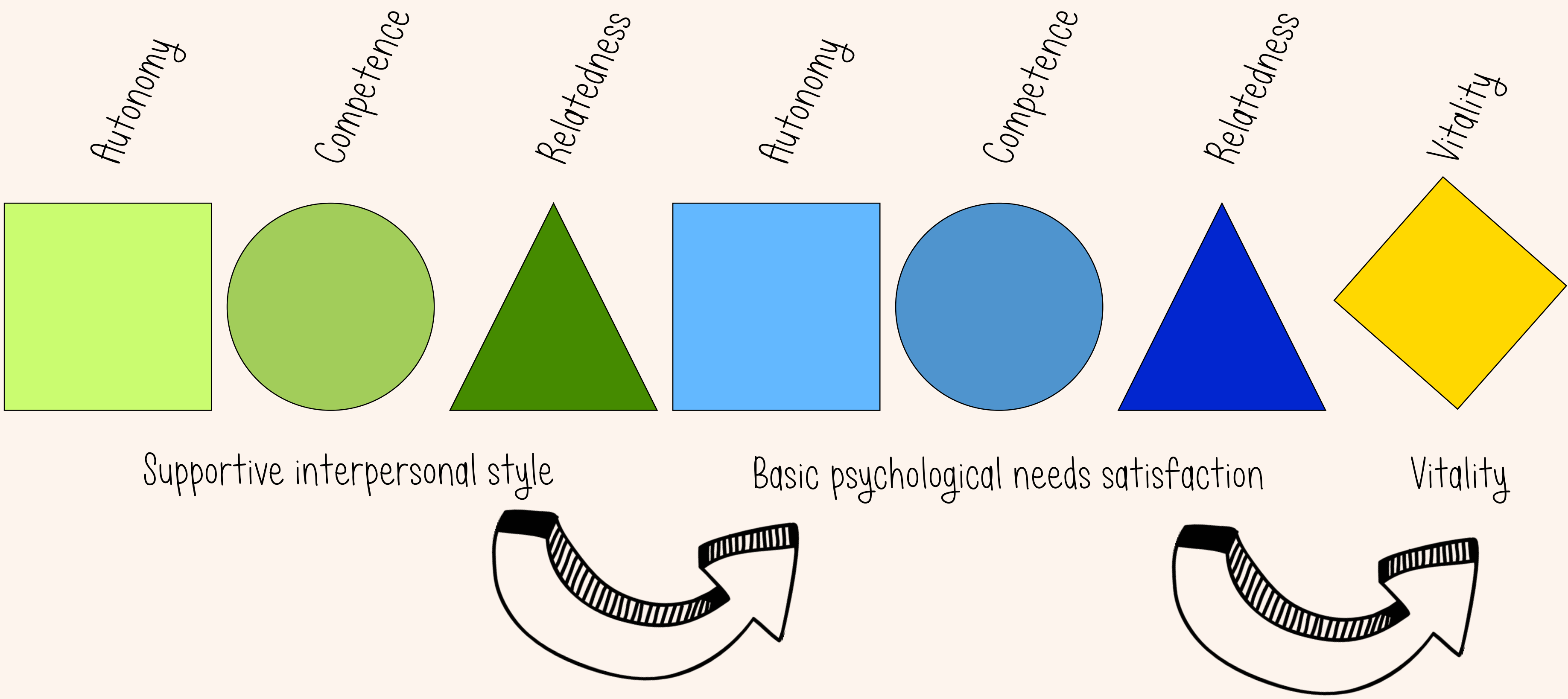
VALIDITY OF SINGLE-ITEM MEASURES TO ASSESS SELF-DETERMINATION THEORY CONSTRUCTS IN THE ELDERLY

Ariadna Angulo-Brunet, Carme Viladrich, Susana Pallares, Yago Ramis and Marta Borrueco

 ariadna.angulo@uab.cat

 /AnguloBrunet

SELF-DETERMINATION
THEORY
causal chain



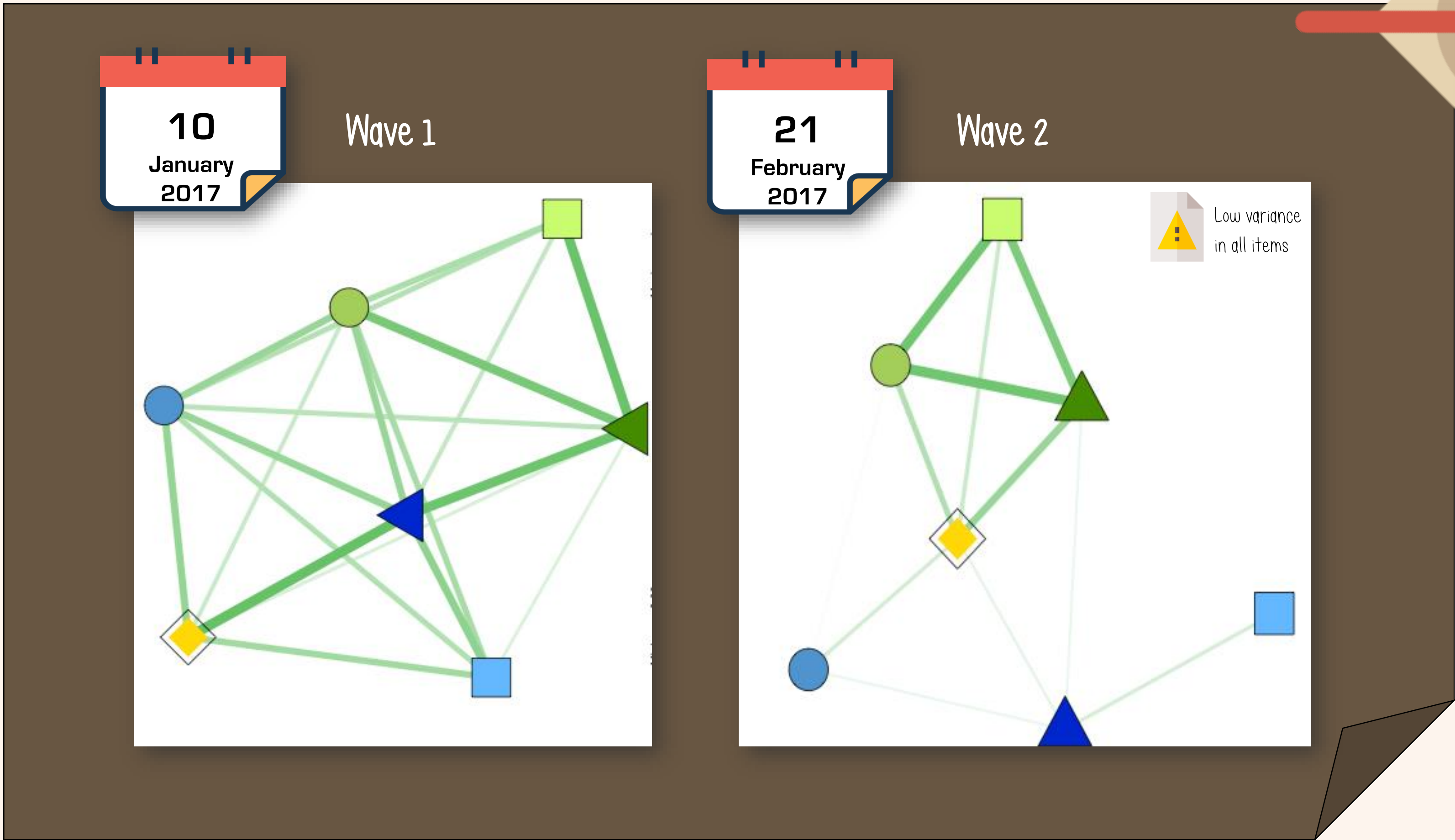
THE
PROBLEM

Data collection feasibility due to the questionnaire-length in the elderly

THE AIM

To provide validity evidence for single-item measures based on the replicability of the self-determination theory chain

Correlation network analysis



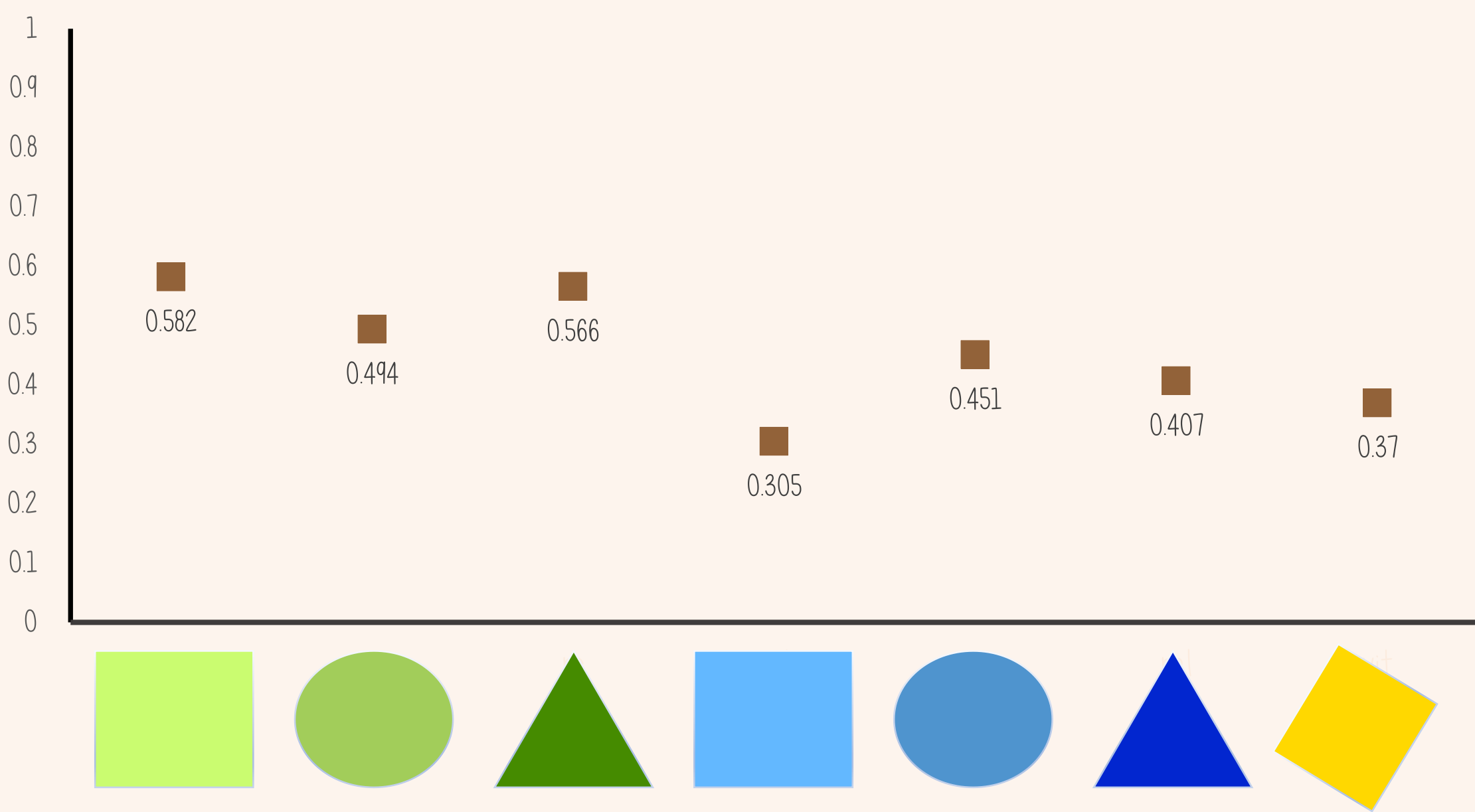
THE PARTICIPANTS

71 elderly adults
91.55% ♀
Age = 72.47
SD age = 6.75
Min = 65.5 Max = 88.5

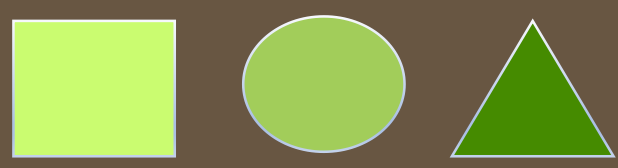
Yoga or maintenance
physical activity

Measures
7 single-item measures
(Angulo-Brunet et al. 2017)
• 5-point Likert scale
• Ceiling effects
Correlation
& test-retest reliability
- polychoric correlations
HOW?

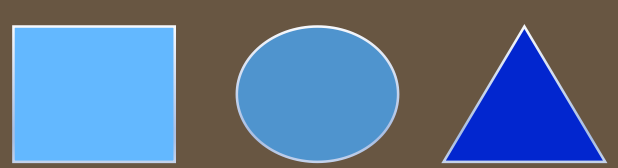
Test-retest reliability



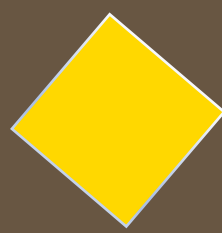
Conclusions



The stability of the structure and test-retest reliability make them promising measures.



Unexpected lack of structure stability between wave 1 and wave 2 and low test-retest reliability encourage us to provide further validity and reliability evidence before using this measures.



Relationship with interpersonal style measures is stable across correlation networks whereas test-retest reliability is compromised.

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Validity of single-item measures to assess self-determination theory constructs in the elderly

**Ariadna Angulo-Brunet, Carme Viladrich, Susana Pallares,
Yago Ramis & Marta Borrueco**

According to Self-determination theory, supportive interpersonal styles are determinant on the satisfaction of basic psychological needs for autonomy, competence and relatedness, which in turn can impact on subjective vitality, forming a three-concept chain. In order to support the use of single-item measures for these concepts, the aim of this study is to provide validity evidence through testing the replicability of the expected chain and also to provide test-retest reliability for each measure. Embedded in a larger study, seventy-one elderly adults who were attending to group physical activities answered the relevant seven single-item questions in a five points Likert scale for two times in a lapse of five weeks. Considering small sample size and floor and ceiling effects, descriptive correlation networks based on polychoric correlations were used to test the expected three-concept chain. Data gathered in wave 1 yielded favorable evidence for the chain showing moderate correlations (.37-.68) between adjacent points and weaker correlations (.26-.41) between distant points. In contrast, mixed evidence was obtained in wave 2, mainly due to unexpectedly low correlations (.13-.43) between basic psychological needs and the other variables in the chain. Regarding test-retest reliability, supportive interpersonal style single-items showed higher values (.50 - .58) than basic psychological need satisfaction (.31 - .45) and vitality (.37).

On the basis of the evidence currently available, single-item measures of supportive interpersonal styles and vitality are promising measures whereas more validity and reliability evidence should be gathered for basic psychological need satisfaction constructs. This research was supported by the Spanish Ministerio de Economía y Competitividad (DEP2014-52481-C3-1R).