

PSYCHOMETRIC PROPERTIES OF THE FLOURISHING SCALE IN A SAMPLE OF SPANISH EMERGING ADULTS

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Backgrounds

The Flourishing Scale (FS), created by Diener, Wirtz, Tov, et al., (2010), is a brief subjective perception measurement which assesses flourishing and provides a single score across 8 items.

Flourishing refers to the individual's perceived feeling that their life is going well. It is the combination of feeling good and functioning effectively in one's life (Huppert & So, 2013; Huppert & So 2009; Huppert, 2009).

An individual who "flourishes" feels that their life is going well, learns effectively, works productively, is more likely to contribute to their community, is healthier and has a longer life expectancy and better social relations.

The aim of this study is to validate a Spanish language translation of the Flourishing Scale in a Spanish population (Spanish being the second-most widely spoken language in the world, according to Ethnologue, 2016), using a factor invariance analysis. We analyze configural invariance, metric invariance and strict factor invariance, as well as both convergent and discriminant validity.

Methods

Participants:

The sample was composed by 1502 university students. This number was achieved through collecting two samples.

•**Sample I:** Students from the University of Basque Country, N= 747 (65.2% females, average age = 19.95, SD age = 1.97, age range 18-29)

•**Sample II:** Students from the University of Seville, N= 755 (55.1% females; average age = 20.69, SD age = 2.21, age range 18-29).

Instruments:

-*Flourishing Scale, FS* (Diener et al., 2010). This scale is an 8-item. Total scores range between 8 and 56. High scores on the scale indicate a high level of flourishing.

-*Scales of Psychological Well-being, SPWB* (Ryff et al., 1994). The Spanish adaptation of the reduced scale was administered (Díaz et al., 2006). High scores on this scale indicate a high level of psychological well-being ($\alpha=.86$).

-*Depression Anxiety Stress Scales, DASS* (Lovibond & Lovibond, 1995). The Spanish version of the reduced DASS-21 was administered (Bados, Solanas, & Andrés, 2005). High scores on the three sub-scales or for the general psychological distress factor indicate the presence of symptoms ($\alpha=.89$).

Results

1. A multigroup confirmatory factor analysis (CFA) was performed to assess the factor invariance of the FS in the two subsamples (University of Seville and University of the Basque Country). Due to the ordinal scaling of all indicators, the estimation method chosen was the Robust Maximum Likelihood estimation implemented in the Lisrel 8.80 program. The fit of four nested models was analyzed, with constraints being added as the parameters to be compared between samples were increased.

Table 1 Fit indexes for Invariance Factor Models

Nested Models	$SB - X^2 (gl), p$ ($p > .05$)	CFI ($\geq .95$)	GFI ($\geq .95$)	$RMSEA$ ($\leq .08$)
Configural Invariance	168.09 (40), $p < .001$	.98	.96	.06
Metric Invariance	173.53 (48), $p < .001$	.98	.96	.06
Scale Invariance	212.74 (55), $p < .001$	.97	.96	.06
Residual Invariance	241.99 (63), $p < .001$	.97	.95	.06

$N = 1502$, $SB-X^2$ = Satorra-Bentler Scaled Chi-squared test, CFI = Comparative Fit Index, GFI = Goodness of Fit Index, $RMSEA$ = Root Mean Square Error of Approximation

2. The internal consistency of the scales was analyzed with the SPSS 23.0 statistical package, using Cronbach's Alpha coefficient. Sample I ($\alpha = .81$) and sample II ($\alpha = .82$).

3. Convergent validity was tested through correlations with six psychological well-being (SPWB) sub-scales (see table 2). Discriminant validity was tested through correlations with measures of depression, anxiety, stress and general affective distress (DASS-21) (table 3)

Table 2 Correlations between SPWB and FS

Flourishing	SPWB					
	Self-acceptance	Relationship	Autonomy	Mastery	Growth	Purpose
	.55***	.29***	.12***	.38***	.38***	.56***

Note: *** $p < .001$

Table 3 Correlations between DASS-21 and FS

Flourishing	DASS-21			
	Depression	Anxiety	Stress	General affective distress
	-.43***	-.25***	-.21***	-.34***

Note: *** $p < .001$

Conclusions

The factor analysis confirmed the unidimensionality of the FS and provided evidence of its invariant structure across the two subsamples. These results are consistent with those reported by the original study (Diener et al., 2010), which were in turn corroborated in subsequent studies with different social-cultural samples.

The results therefore verify both the convergent and discriminant validity of the FS. We consider the scale to be an adequate instrument for evaluating well-being, with the added advantage of being a brief scale comprising only 8 items.

The FS was found to be apt for use in evaluating general well-being in the Spanish population, and may be considered a reliable measure in future well-being studies. It can also be used as an instrument for planning, executing and/or assessing practical interventions in social, care and health-related programs.

References

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