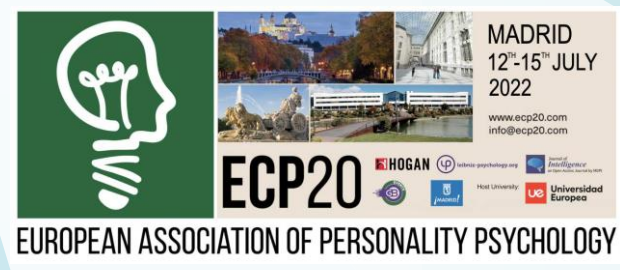


Psychometric properties of the Spanish Reinforcement Sensitivity Theory of Personality Questionnaire (RST-PQ)

European Association of Personality Psychology

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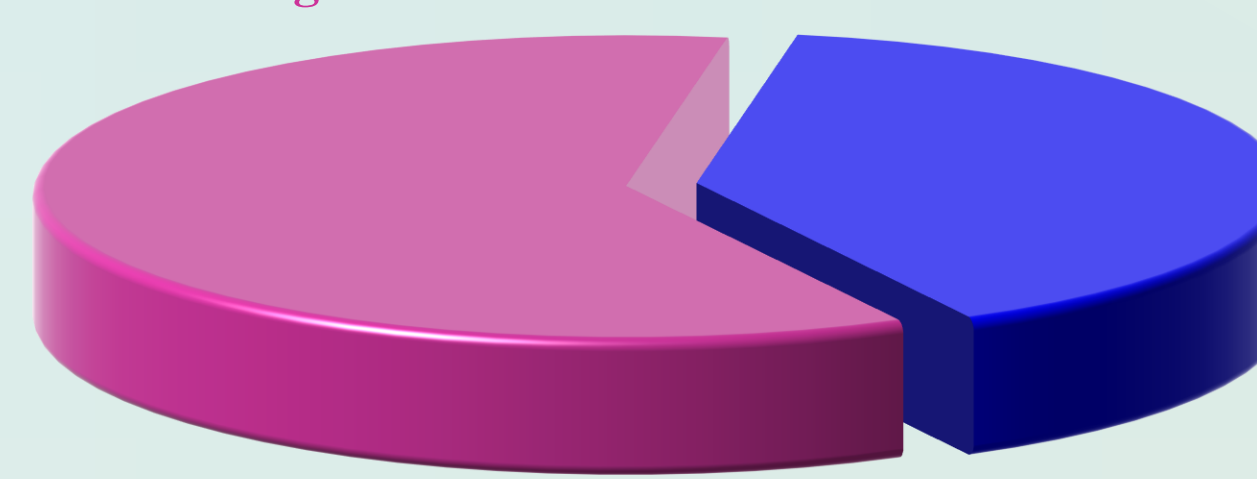


Introduction The revised Reinforcement Sensitivity Theory of Personality (rRST; Gray & McNaughton, 2000) postulates three major neuropsychological motivational systems underlying individual differences in reaction to aversive, appetitive, or conflicting stimuli: The **Fight-Flight-Freeze System** (FFFS, related to fear and defensive responses), the **Behavioral Approach System** (BAS, related to pleasure and approach responses), and the **Behavioral Inhibition System** (BIS, related to anxiety and cautious approach). The most recent instrument to assess the rRST (RST-PQ; Corr & Cooper, 2016) views the BAS as a multidimensional system composed of four distinct but related facets: **Reward Interest** (BAS-RI), **Goal-Drive Persistence** (BAS-GDP), **Reward Reactivity** (BAS-RR), and **Impulsivity** (BAS-I). The RST-PQ comprises 65 items distributed in a six-factor structure: FFFS (10 items), BAS-RI (7), BAS-GDP (7), BAS-RR (10), BAS-I (8), and BIS (23). A separate scale for measuring *Defensive Fighting* (DF, 8) is also included.

Objectives Analyze the psychometric properties of the Spanish RST-PQ through the Factorial Analysis of items (Ferrando et al., 2022).

Methods *Participants:* **N = 1,095 volunteers of the community** (60.5% women) between 17-87 years (M = 44.7, SD = 20.1).

n = 662 (60.5%)
x̄_{Age} = 43.9 (± 19.9)



n = 433 (39.5%)
x̄_{Age} = 45.8 (± 20.5)

Marital status		Educational level	
Single	33.0%	Primary	16.4%
Married	52.5%	Secondary	49.6%
Divorced	8.0%	University	24.5%
Widower	6.5%	Postgrad.	9.5%

Employment status: 60% active

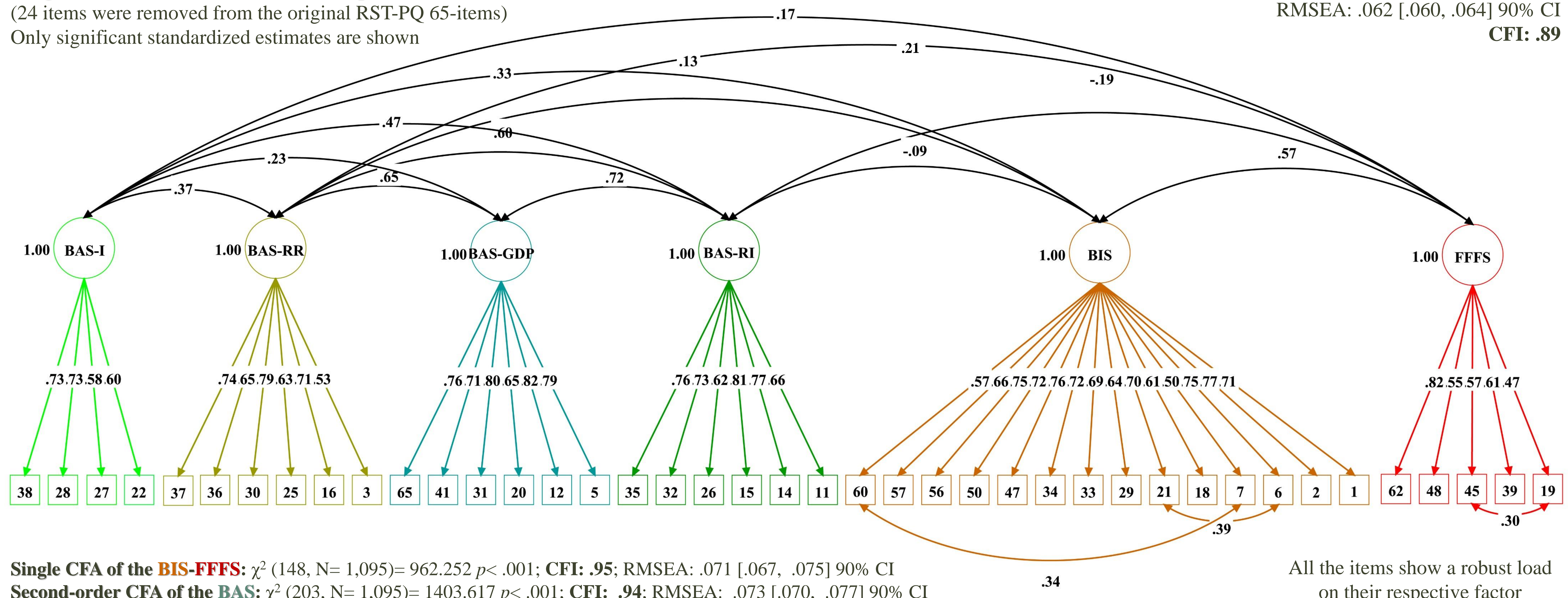
Psychometric Analysis: Confirmatory Factor Analysis (CFA) of the BAS, BIS-FFFS, and the whole RST-PQ using a mean and variance adjusted weighted lead squares estimation (WLSMV) of the sample covariance matrix.

Results In the Spanish version of the RST-PQ, the separate but related FFFS and BIS systems were replicated, as well as the BAS integrated by its four subsystems, with acceptable fit indices, although with fewer items. The basic six-factor structure just fit mildly, as in the English original scale.

Single CFA 6-Factor Model of the Spanish RST-PQ

(24 items were removed from the original RST-PQ 65-items)

Only significant standardized estimates are shown



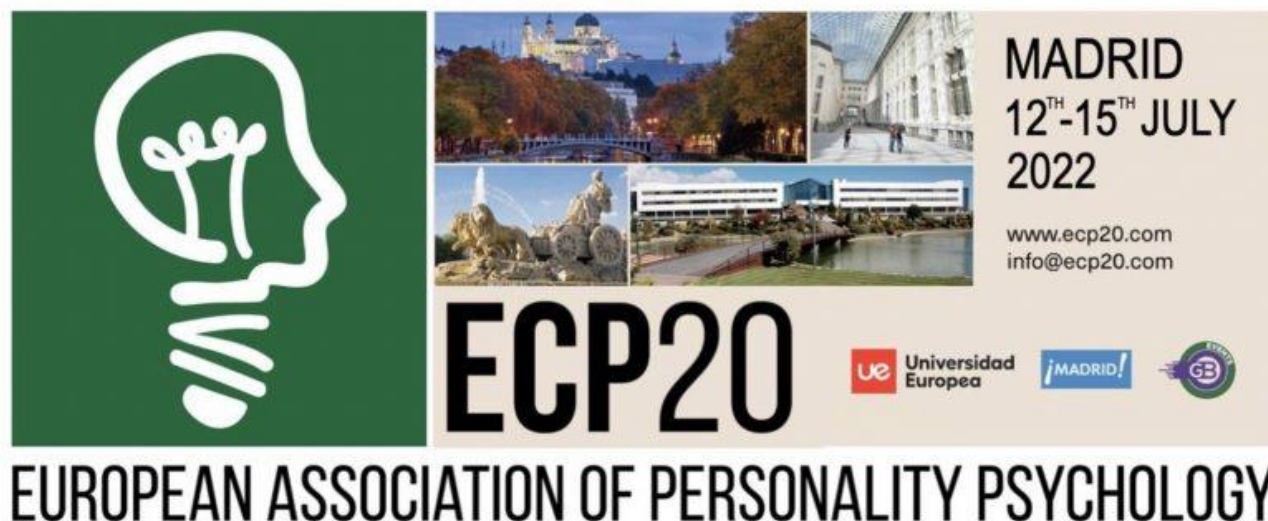
Descriptive statistics, Internal consistency, and Sex Differences for Facets and Motivational Systems of the Spanish RST-PQ (41 items)

RST-PQ		Total sample (N = 1,095)				Males (n = 433)				Females (n = 662)				Sex differences			
Scales	Items	M	SD	α	r_{ii}	M	SD	α	r_{ii}	M	SD	α	r_{ii}	$t_{(1093)}$	p	g	CI (95%)*
FFFS	5	12.56	3.30	.72	.33	10.97	2.98	.67	.29	13.59	3.09	.67	.29	-13.904	< .001	-0.86	[-0.99, -0.73]
BIS	14	30.29	8.49	.90	.40	28.01	7.69	.89	.37	31.77	8.66	.90	.40	-7.524	< .001	-0.45	[-0.58, -0.33]
BAS	22	59.66	10.29	.89	.27	59.33	10.34	.90	.28	59.84	10.27	.89	.27	-0.708	.479	—	—
BAS-RI	6	15.80	3.85	.83	.44	15.99	3.74	.82	.43	15.67	3.92	.83	.45	1.325	.185	—	—
BAS-GDP	6	16.88	3.84	.85	.49	17.11	3.91	.87	.53	16.72	3.79	.84	.47	1.656	.098	—	—
BAS-RR	6	18.58	3.29	.78	.37	17.92	3.30	.78	.37	19.01	3.21	.76	.35	-5.442	< .001	-0.34	[-0.46, -0.21]
BAS-I	4	8.41	2.60	.71	.38	8.37	2.47	.69	.36	8.44	2.69	.73	.40	-0.412	.681	—	—
DF	6	17.02	3.34	.70	.28	17.57	3.23	.73	.31	16.65	3.36	.68	.26	4.473	< .001	0.28	[0.16, 0.40]

Note. M: Mean. SD: Standard Deviation. α : Cronbach's α . r_{ii} : Inter-item average correlation. t: Student's t-test. g: Hedges' g effect size. * CI: Confidence Interval (95%) for Hedges' g.

Taken together, these estimates suggest that the items of the Spanish RST-PQ are relatively homogeneous, while avoiding unnecessary redundancy. Women scored significantly higher than men in FFFS (large effect size), BIS (medium effect size), and BAS-RR (small effect size).

Conclusions The Spanish version of the RST-PQ is comparable to the original English scale, although with roughly one-third fewer items.



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Topic: Personality Assessment, Methods, and Statistics

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