

Is parental psychological flexibility a (uni)dimensional construct? A bifactor analysis of the Portuguese version of the Parental Acceptance Questionnaire (6-PAQ)

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Background

Parental psychological flexibility [PPF] is defined as the individual's ability to non-judgmentally accept changes and negative thoughts/emotions in relation to their parenting experience, while also engaging in value-based actions that promote good parenting practices (Burke & Moore, 2015).

The Parental Acceptance Questionnaire (6-PAQ) is a self-report questionnaire developed to measure the six core processes of psychological flexibility applied to the parenting context.

Goals:

- To examine the (uni)dimensionality of the 6-PAQ scale in a sample of Portuguese parents of children within the community using a bifactor model that can test the separate contribution of the dimensions and of the general score of PPF.

- To examine the reliability and the convergent validity of the 6-PAQ scores.

Methods

SAMPLE:

390 parents of children (1-11 years)

- 85.6% ($n = 334$) mothers;
- Mean age: 37.55 ($SD = 5.47$);
- 89.0% ($n = 334$) were currently employed;
- 57.2% ($n = 223$) of parents had more than one child;
- Child's mean age: 5.41 years ($SD = 2.73$)
- Child's gender: 54.9% ($n = 214$) were male

DESIGN and PROCEDURE:

Cross-sectional study

Participants were recruited online (through social networks) and in-person (recruitment at schools).

MEASURES:

- Sociodemographic form
- Parental Acceptance Questionnaire [6-PAQ] | Greene, Field, Fargo, & Twohig, 2015

18 items, answered on a 4-point Likert Scale (from 1= Strongly Disagree/Never to 4 = Strongly Agree/Almost Always)

- Acceptance and Action Questionnaire-II [AAQ-II] | PV: Pinto-Gouveia, Gregório, Dinis & Xavier, 2012

- Interpersonal Mindfulness in Parenting Scale [IMP-P] | PV: Moreira & Canavarro, 2017

- Parenting Stress Scale [PSS] | PV: Mixão, Leal, & Maroco, 2010

- Parenting Styles and Dimensions Questionnaire [PSDQ] | PV: Pedro, Carapito, & Ribeiro, 2015

Discussion

Although the 6-PAQ contains items assessing the six-core processes of PPF defined within the ACT model (Greene et al., 2015), for the Portuguese version of the scale **only the computation of a total score of PPF is currently supported and advised.**

The 6-PAQ scale showed **adequate reliability and convergent validity**, supporting its use in both clinical and research contexts.

Further studies with the Portuguese version of the 6-PAQ should be conducted to:

- Clarify the (uni)dimensional structure of the scale;
- Ascertain its validity and reliability across different population groups;
- Gather evidence that may allow the further refinement of the scale.

Results

1. Construct validity: (Uni)dimensionality of the 6-PAQ

- Tree models were initially tested: the one-factor model, the hierarchical model and the bifactor model. Multicollinearity problems between latent variables were identified in the hierarchical and in the bifactor model: items from the Values and from the Committed Action dimensions were combined into a single factor (Values & Committed action; 6 items), and items pertaining to the dimensions Defusion & Self as Context were also combined into a single factor (Defusion & Self as Context; 6 items). The hierarchical and the bifactor model were rerun.

- The **bifactor model showed a better fit to the data** compared with the unidimensional and the hierarchical models.

Unidimensional model: $X^2_{(135)} = 859.97, p < .001, CFI = .85, RMSEA = .117, 90\% CI [.110, .125], p < .001$

Hierarchical model: $X^2_{(131)} = 476.22, p < .001, CFI = .93, RMSEA = .082, 90\% CI [.074, .090], p < .001$

Bifactor model: $X^2_{(118)} = 382.95, p < .001, CFI = .95, RMSEA = .07, 90\% CI [.067, .084], p < .001$

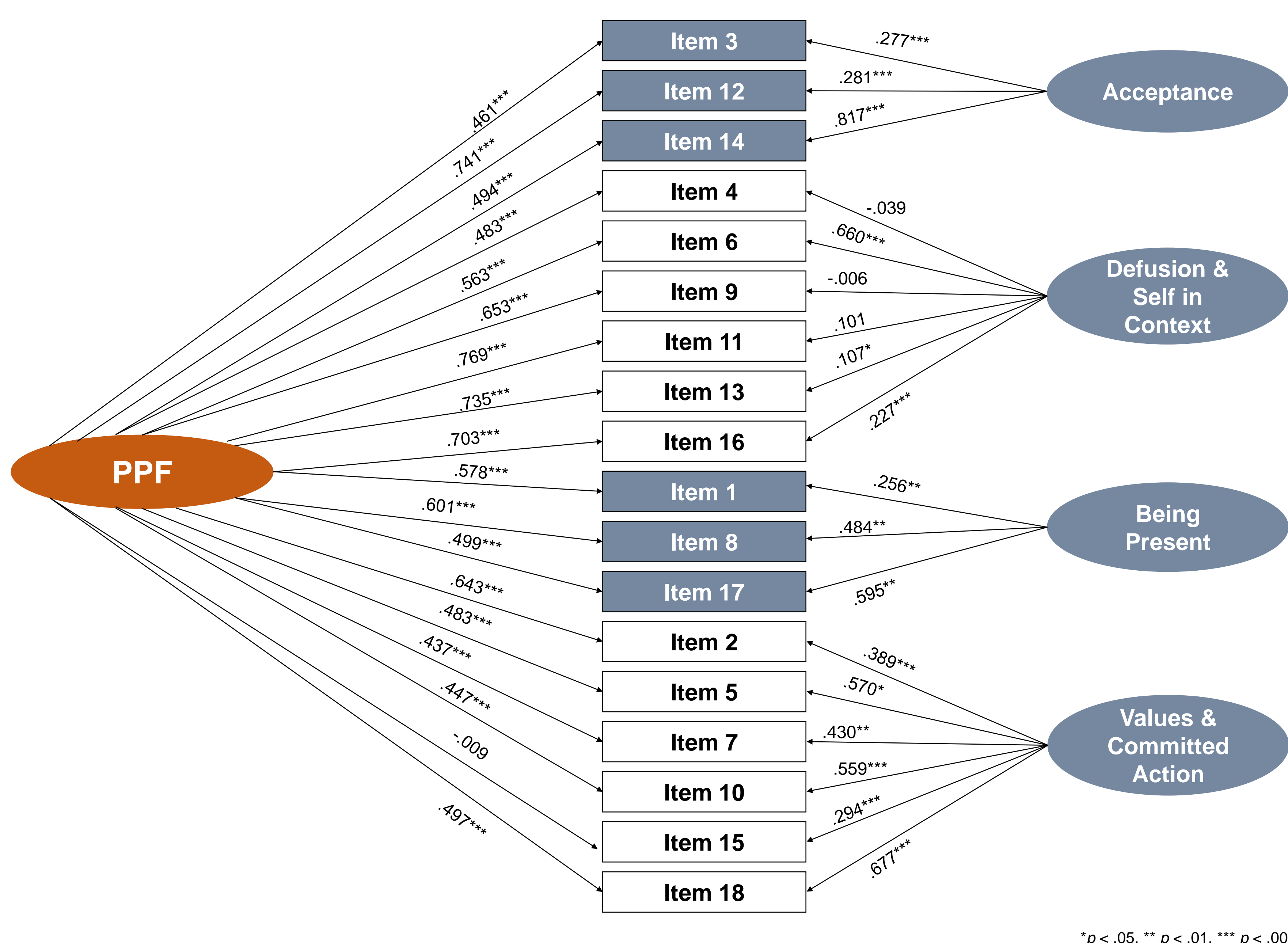


Figure 1. Bifactor model of the 6-PAQ: Standardized loadings

- Most of the items loaded strongly on the general factor than on the domain-specific factor – a significant part of the shared variance of the items may be explained by the general factor of PPF.
- The index of the degree of unidimensionality (ECV) of the general factor was .59 and the PUC was .77 – **the general factor explains a relatively large proportion of the variance** of the items (approximately 60% of the common variance), suggesting **unidimensionality**.

2. Reliability indices for the bifactor model

Table 1. Reliability indices

	Omega	omegaH	Relative Omega
General factor [PPF]	.93	.81	.870
Acceptance	.80	.32	.397
Defusion & Self-in-context	.88	.11	.120
Being Present	.77	.30	.384
Values & Committed Action	.82	.47	.577

- The general factor accounted for **87.0% of the reliable variance** in the total score;
- The OmegaH values for the domain-specific factors were all below the threshold of .50;
- These results are suggestive of the **strength of the general factor of PPF**;

3. Convergent validity

Table 2. Pearson bivariate correlations between 6-PAQ scores and other related measures

	[6-PAQ] Total score
General Psychological Inflexibility [AAQ-II]	-.46***
Mindful parenting [IMP-P]	.75***
Parenting Stress [PSS]	-.56***
Parenting styles [PSDQ] – Authoritative	.49***
Parenting style [PSDQ] – Authoritarian	-.44***

*** $p < .001$

- Higher PPF was **significantly and moderately** associated with lower general psychological inflexibility and with less frequent authoritative and more frequent authoritarian parenting styles;
- Higher PPF was **largely and significantly** associated with lower levels of parenting stress and higher levels of mindful parenting;