



Emotional regulation as a predictive index of performance in the competency-based assessment of firefighter candidates in Catalonia

Mireia Cano, Jordi Niñerola, Anna Roca, Anna Figueras

Institute for Public Security of Catalonia, Barcelona, Spain (ispc-seleccio@gencat.cat)

BACKGROUND

Emotional Regulation is one of the most important professional competencies in the training of aspiring firefighters. As indicated by Rhys (2019) [1] the intense demands that are imposed on Fire Service staff in conjunction with the benefits and risks associated with the emotions experienced and the strategies used to manage them, suppose a real challenge in this profession. In this line, Assunção (2013) [2] affirmed that firefighters and other professional collectives related to medical emergencies or rescue operations, live with an exposure to stressful situations that increase the risk of developing different psychopathological disorders.

An important psychometric evaluation of the emotional regulation at the cognitive level was the Cognitive Emotion Regulation Questionnaire (CERQ). This instrument has been extensively used by the scientific community, and has been translated and psychometrically adapted to a large number of culturally diverse languages such as Persian, Chinese or Japanese.

In Spanish there are different validations of their psychometric properties, both in Latin America and Spanish populations .

CERQ has been used in a wide range of cohorts such as: people with fibromyalgia (Reche, 2019) [3], patients with different psychopathological disorders (Potthoff et al, 2016) [4], different age cohorts (Navarro-Loli, 2020) [5] and university students (Domínguez y Medrano, 2016) [6].

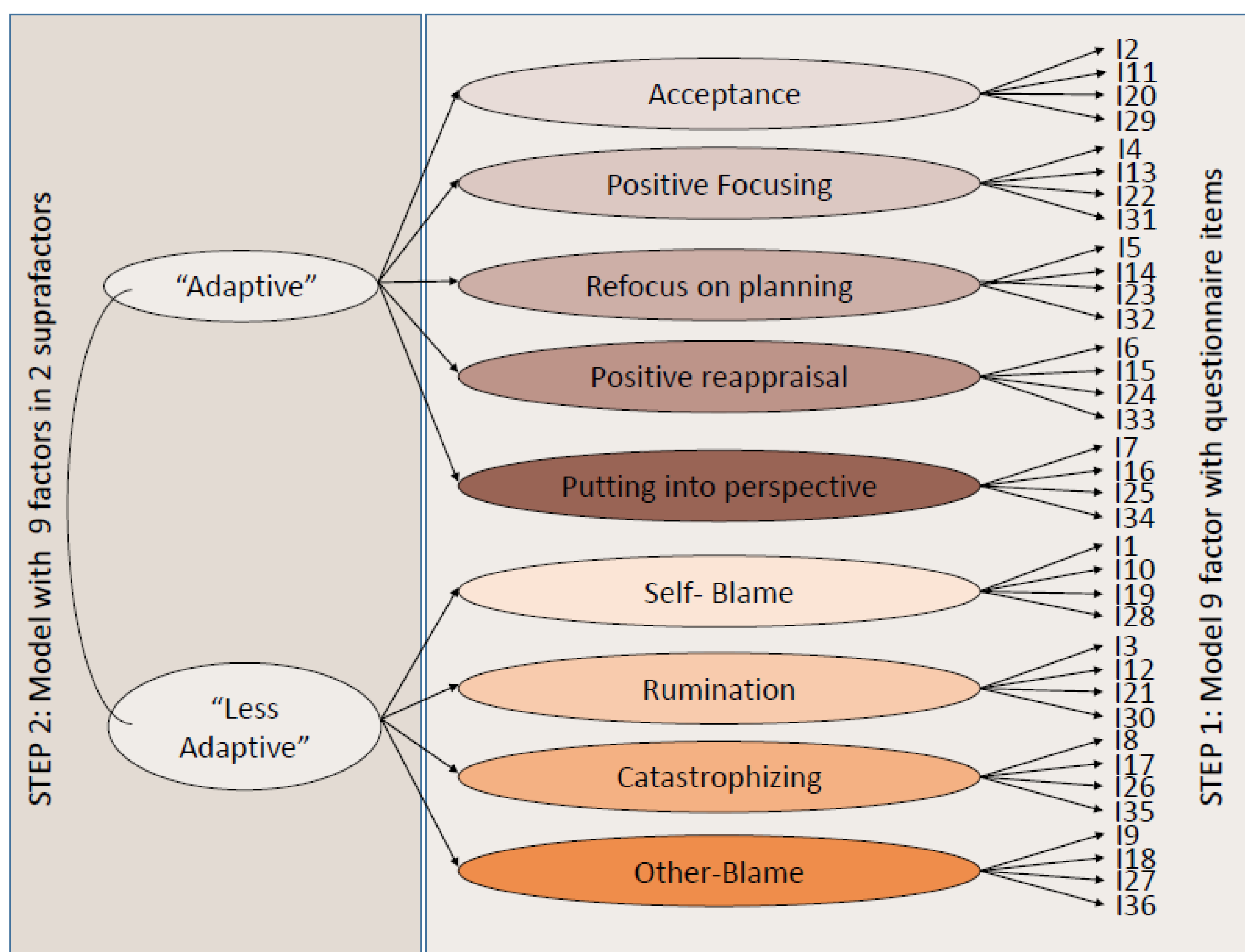
AIMS

The main aim of this study is to establishing a relationship between the academic mark on the Key Competences (K.C) and the factor scores of CERQ.

For its development we use correlation analysis in order to which elements are identified with adaptive or maladaptive behavior.

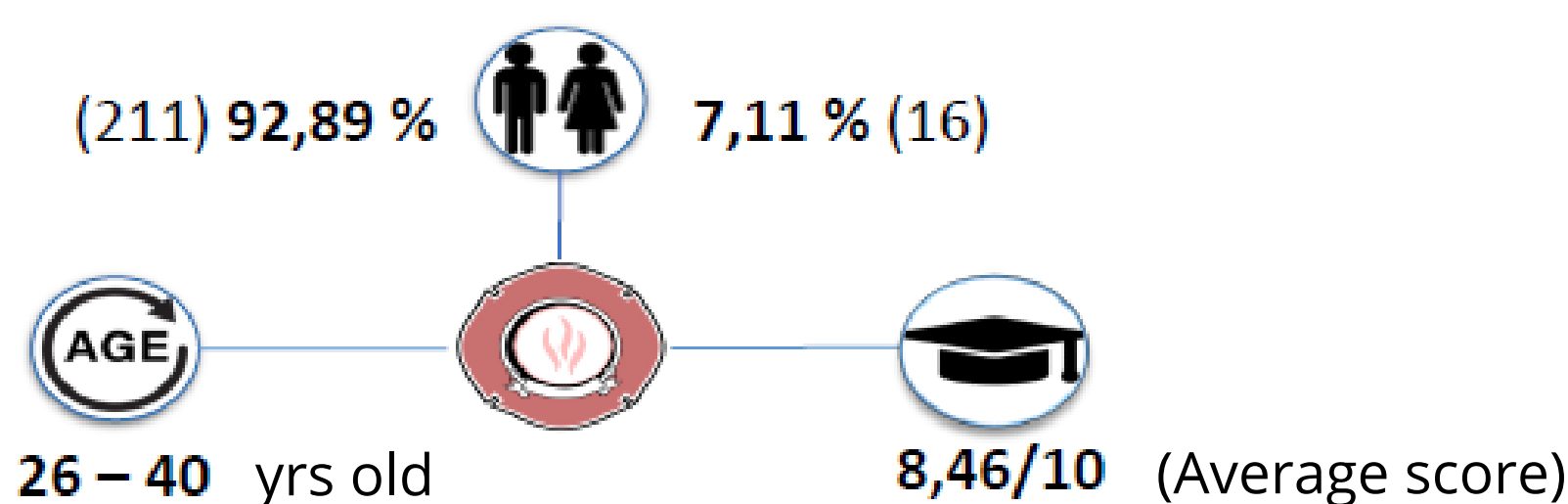
The second aim of this project is to develop a preliminary validation study and an adaptation of the Spanish version of CERQ in a sample of aspiring firefighters of the Generalitat de Catalunya, who are taking the Basic Training Course for Firefighters, based on the analysis of the factor structure, reliability and internal consistency.

The third objective was to analyse the factor structure /dimensionality of the Spanish version of CERQ to aspiring firefighters, using the confirmatory factor analysis technique.



METHODS

SAMPLE DESCRIPTION



	N	%
First administration CERQ	227	94,98 %
Second administration CERQ	137	57,32 %

CONCLUSIONS

- The candidates who obtain better qualification in the Basic Training Course for Firefighters show a more perfectionist and self-demanding profile with the tasks associated to workplace. But they have a certain ability to make the blame more flexible about their own mistakes.
- It is observed that errors (self-blame) are experienced worst in more protocolised environments (e.g. urban fires) than in more flexible areas of action (e.g. Psychological Attendance).
- The confirmatory analysis points to the possibility of creating a specific model of emotional regulation evaluation for the firefighter collective.
- The confirmatory analysis does not show a concrete profile of adaptive or maladaptive because the profile of our candidates it seems to be identically.

PRELIMINARY RESULTS

EXPLORATORY FACTOR ANALYSIS

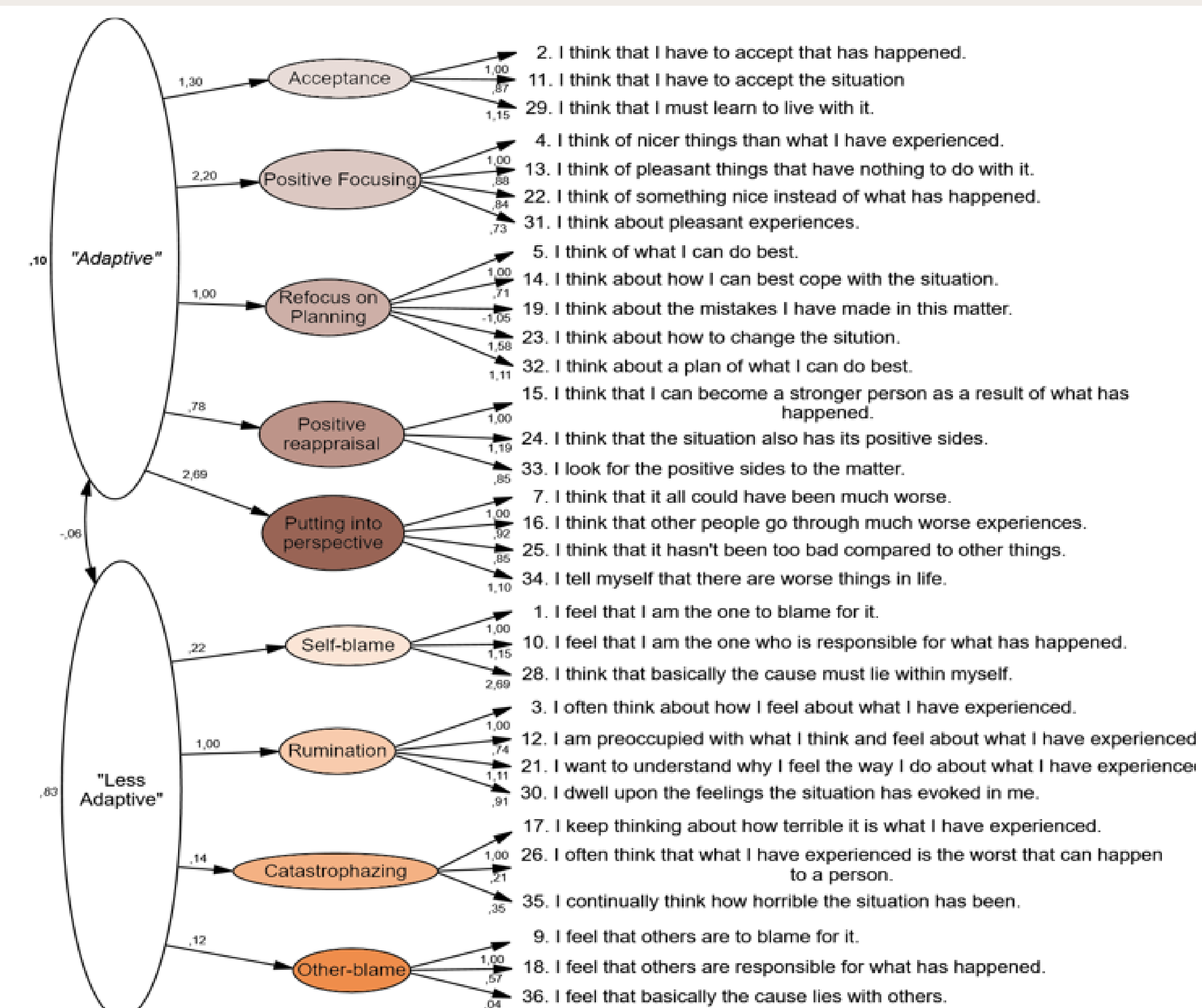
Previously, we conducted an exploratory analysis to evaluate how our model reacts with the data. This first step shows that we can keep the 9 factors and 2 suprafactors as in Grafneski's model [7] , except for item 19 which moves into the self-blame to planning factor. It's remarkable a loss 4 items which have a small factor weight (less than 0.5), precisely these items are 6, 8, 20 and 27.

CORRELATIONS

	K.C 3: Motivation and Organization Identification	K.C 4: Interpersonal Relationship and convivence	K.C 7: Organization of Work and Planning	K.C 9: Team building	K.C 6: Communication	K.C 8: Problem resolution and decision making	K.C 9: Team building	K.C 10: Emotional self-control	K.C 5: Autonomy and adaptation to change	K.C 6: Communication	K.C 7: Organization of Work and Planning	K.C 9: Team building	K.C 10: Emotional self-control
Self-blame				*/.									(-)*/(-)**
Acceptance	(-)**/.	*/.									(-)**/.		(-)*/.
Rumination			*/.	*/.									
Positive Focusing	*/.					(-)*/.	(-)*/.	(-)*/.					
Refocus on planning									./(-)**	./(-)**	(-)*/(-)**		
Positive Reappraisal									(-)**/.				./(-)*
Catastrophizing	*/.						(-)*/.		(-)*/.				

	PAT Results	M8 Psychological Attendance	M7 Health Care	M3 Urban fires	Final mark CFBB	Average final mark /Section	Caption
Self-blame		./*		./(-)*			1 M3 Urban Fire
Acceptance	(-)*/.						2 M7 Health Care
Rumination					./(-)**		3 M8 Psychological Attendance
Positive Focusing			*/.				* Sig. 0.05
Refocus on Planning		./*			./*		** Sig. 0.01
Other-blame		*/.				./**	K.C Key Competence
							/ pre/post

CONFIRMATORY FACTOR ANALYSIS



For more detailed data and references, please check this QR

