

# GFP across the cultures

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## Most basic personality dimension

- In psychology, all important personality dimensions have been "translated" into scientific terms (for example, the Big Five)
- Except one!
- Yet, historically - this is the most basic one.
- What is one - that is the question.
- It is the GFP, the General Factor of Personality

## The concept of the GFP

- The concept of the GFP means, in fact, the breaking with almost dogmatic belief, that in the personality domain (in contrast to the cognitive abilities) more than only one basic dimension exist (5, 3, maybe 6, 2, or even 16)
- Yet, the correlations between so-called basic dimensions are substantial
- The existence of a common denominator of all major personality dimensions cannot be ignored
- Thus, the concept of the GFP emerged in the article introducing the concept and coining the term (Musek, 2007).

## Research of the GFP in past ten years

- According to the empirical and theoretical research in past ten years, the GFP was interpreted as the highest-order (most general) personality dimension, which occupies the apex of the hierarchical structure of personality
- Thus, the GFP is the central concept in the new structural paradigm of personality (the Pyramidal Model of Personality).
- In the majority of the studies, the GFP was characterized as a general factor of personality, which is related to a wide range of behavioral or effectiveness. The alternative explanations of such use of other issues.
- The research of the GFP has been focused on many important issues, including the nature, the biological bases, the strength and stability, the cultural differences, the genetic and other prominent psychological variables, and its predictive power and practical importance.

# Most basic personality dimension

- In psychology, all important personality dimensions have been "translated" into scientific terms (for example, the Big Five).
- Except one!
- Yet paradoxically - this is the most basic one.
- Which one - that is the question.
- It is the GFP, the General Factor of Personality

- The GFP and new structural paradigm of personality also fit very well the culturally widespread common sense notion of personality. This notion is extremely general, yet basically mono-dimensional. Everybody knows the expressions like "he/she is basically a good person", "he is a good fellow", "she is a wicked person" and similar. The terms denoting this dimensions are common in all cultures and languages.
- The General Factor of Personality is a basic scientifically defined dimension that integrates core characteristics of the people with socially adapted and effective positive, "good" personality versus the characteristics of socially less acceptable non-pleasant, "difficult" personality. Thus, the GFP is the scientific counterpart of the common sense concept of "good" versus "difficult" personality. Consequently, it is the most general and basic dimension of personality that we know.

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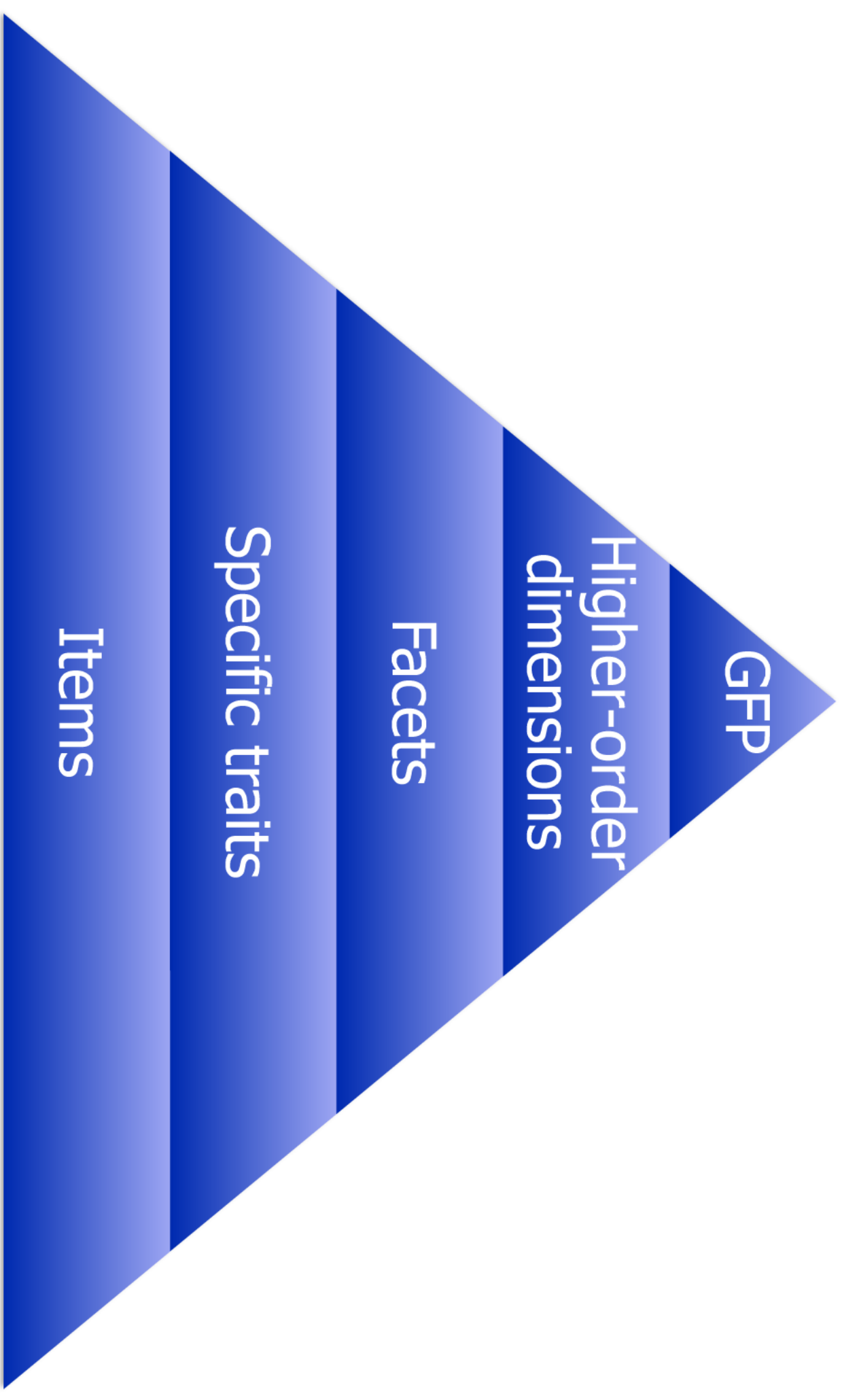
Something is missing

Higher-order dimensions (e.g. Big Five)

Facets

Specific traits

Items



*Means, standard deviations, and correlations (Mussek, 2010)*

Variable	E	A	C	N
1. E				
2. A	.34**			
3. C	.34**	.31**		
4. N	-.53**	-.54**	-.44**	
5. O	.44*	.29**	.21**	-.29**

*Note.* \* indicates  $p < .05$ ; \*\* indicates  $p < .01$ . *M* and *SD* are used to represent mean and standard deviation, respectively.

# GFP

Alpha  
(Stability)

-N

facets

items

specific  
units

C

facets

items

specific  
units

A

facets

items

specific  
units

Beta  
(Plasticity)

E

facets

items

specific  
units

O

facets

items

specific  
units



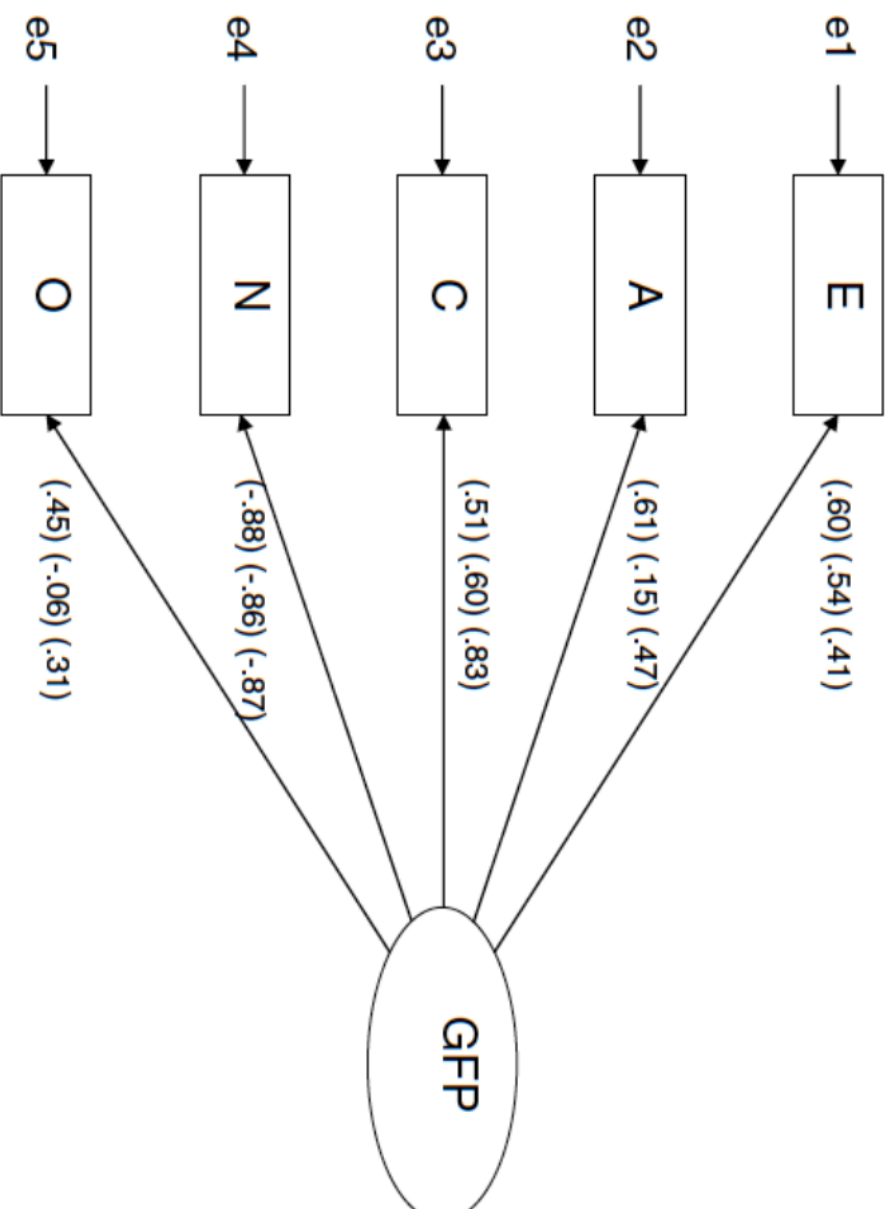
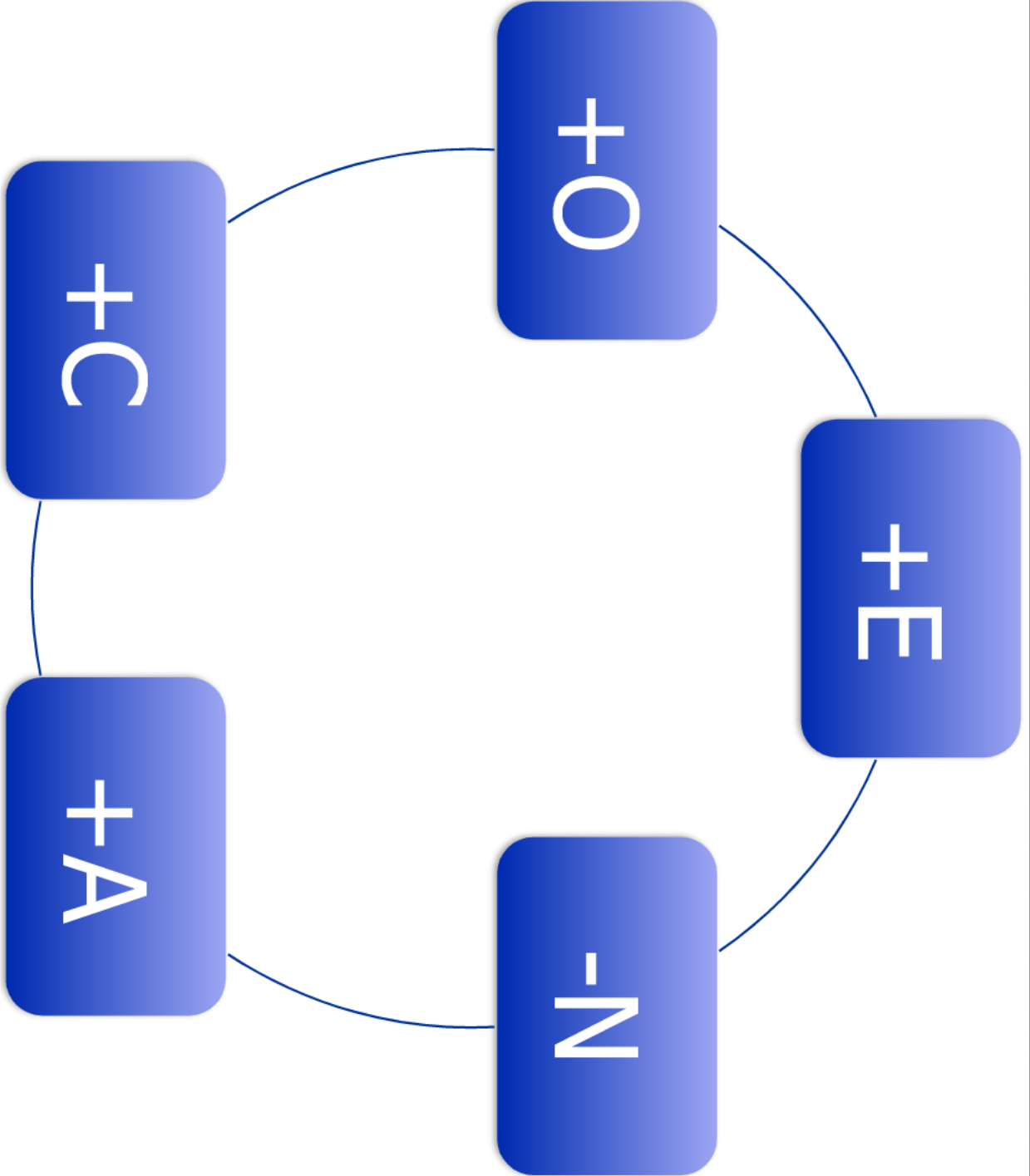


Fig. 1. Integrated confirmatory factor analysis model for Big Five scales showing standardized values for Sample 1 (first coefficient), Sample 2 (second coefficient), and Sample 3 (third coefficient). Note. e1–e5, error variances.



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- Thus, the GFP is the central concept in the new structural paradigm of personality (the Pyramidal Model of Personality).
- In the majority of the studies, the GFP was conceptualized as a general factor with substantial psychological (cognitive and behavioral) content reflecting the general social and personal adjustment or effectiveness. The alternative explanations of the GFP emphasize the role of the semantic factors, response styles and other biases.
- The research of the GFP has been focused on many important issues, including the nature, the biological bases, the strength and cultural universality of GFP, its relations to intelligence and other prominent psychological variables, and its predictive power and practical importance.

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# Problem

- Among the important questions is the cross-cultural stability or even universality of the GFP
- The aim of this presentation is to reveal some empirical data that could suggest the basic answers to this question

## Hypothesis

- In the literature, we can find a great number of cross-cultural studies on Big Five.
- The results demonstrated a considerable cross-cultural validity of the Five Factor Model.
- The GFP is derived from the Big Five correlations and we can expect substantial transcultural stability of GFP also.

## Objectives

- In this study, I intend to analyze and test the dimensional structure of B5 both on:
  - individual-samples-level data (analyzing the data on different national samples) and
  - on grouped-samples-level data (analyzing the data aggregated across many national samples).

## What the results will bring

- If the GFP is cross-culturally stable, similar dimensional structure of B5 could be expected in different national (cultural) samples of representative individuals
- Cross-cultural stability could be a considerable indicator of psychological validity and psychological meaningfulness of GFP
- Thus, the results of the study can contribute to the further clarification of the nature and psychological meaning of the GFP

# Method

- Analyses focused on: different cultures/nations, different levels of data, different instruments.
- Aggregated data on 56 national samples from the study of Schmitt et al. (2007).
- 11 samples from different national or cultural origin.
- BFI, NEO-FFI, NEO-PI, IPIP, MIDI personality scales, CLUES, adjective descriptors.

Table A  
The codes for the sources of data, references of respective studies, number of participants and personality measures used in the studies

Source of data	Reference	N	Measures
Schmitt data	Schmitt et al. (2007)	17837 (56)	BFI
MIDUS data	Ryff et al. (2007)	4032	MIDI
Musck data	Musck (2009, 2010)	916	BFI
SAPA data	Revelle & Luan (2004), Revelle et al. (2009)	51410	IPIP
EppAS data	Epp et al. (2008)	320	BFI
EppLU data	Epp et al. (2008)	242	BFI
Yrk data	Yrk & Bond (1993)	686	Adjective descriptors
CLUES data	Lanyon & Goodstein (2007)	1419	Clues
Aziz data	Aziz & Jackson (2001)	135	BFI
MiKyoung data	Mi Kyoung Jn (2005)	212	NEO-PI
BaUS data	Boudreau, Boswell & Judge (1999)	1885	NEO-FFI
BaEU data	Boudreau, Boswell & Judge (1999)	1871	NEO-FFI

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# Results

- The list of results is enormously long, I will shorten it radically.
- First, we will inspect examples of the Big Five correlation matrices (the GFP was extracted from them)
- Then we will focus on the indices of Factor Analysis viability for the data in research model and the summarized results of the analyses being performed (exploratory and confirmatory)
- Finally, two possible models of the higher-order factors relationships should be considered
  - we should not forget that (Digman's) big two can be extracted from the data additionally to the GFP
  - the question is, how the relations between the GFP and the Big Two can be modeled
  - according to the classical hierarchical model, or
  - according to the bifactor model



Table 1

*Means, standard deviations, and correlations of the Big Five (aggregated data, Schmitt, 2007)*

Variable	E	A	C	N
1. E				
2. A	.20			
3. C	.25	.65**		
4. N	-.49**	-.48**	-.57**	
5. O	.27*	.26	.20	-.09

*Note.* \* indicates  $p < .05$ ; \*\* indicates  $p < .01$ . *M* and *SD* are used to represent mean and standard deviation, respectively.

Table 2

*Means, standard deviations, and correlations (Mussek, 2010)*

Variable	E	A	C	N
1. E				
2. A	.30**			
3. C	.25**	.23**		
4. N	-.45**	-.50**	-.32**	
5. O	.42*	.18**	.13**	-.20**

*Note.* \* indicates  $p < .05$ ; \*\* indicates  $p < .01$ . *M* and *SD* are used to represent mean and standard deviation, respectively.

Table 3

*Means, standard deviations, and correlations (CLUES)*

Variable	E	A	C	N
1. E				
2. A	.41**			
3. C	.47**	.49**		
4. N	-.55**	-.48**	-.45**	
5. O	.46*	.31**	.26**	-.43**

*Note.* \* indicates  $p < .05$ ; \*\* indicates  $p < .01$ . *M* and *SD* are used to represent mean and standard deviation, respectively.

Table 4.

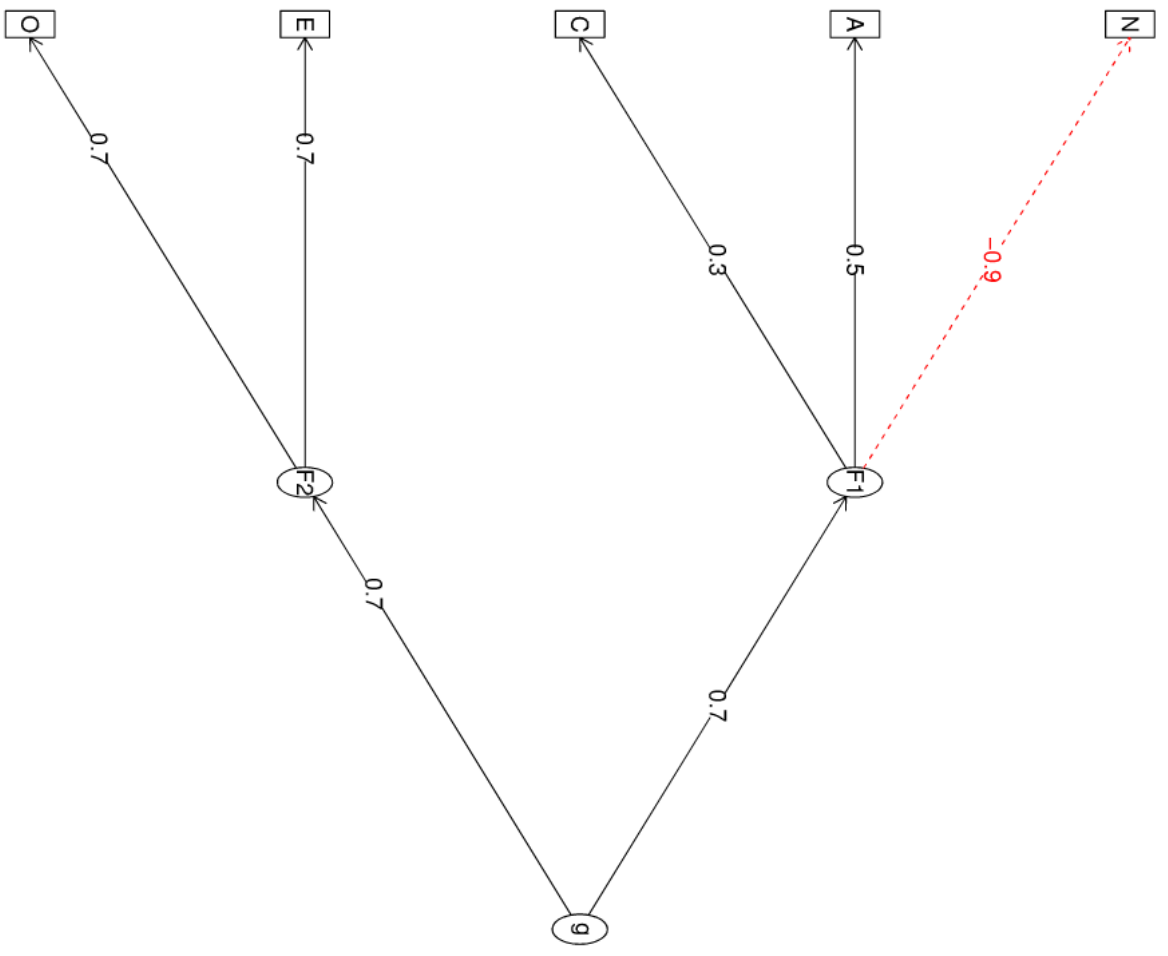
*Indices of factor analysis suitability (KMO, Extraction Criteria, Percent of explained variance, McDonald Omega Hierarchical)*

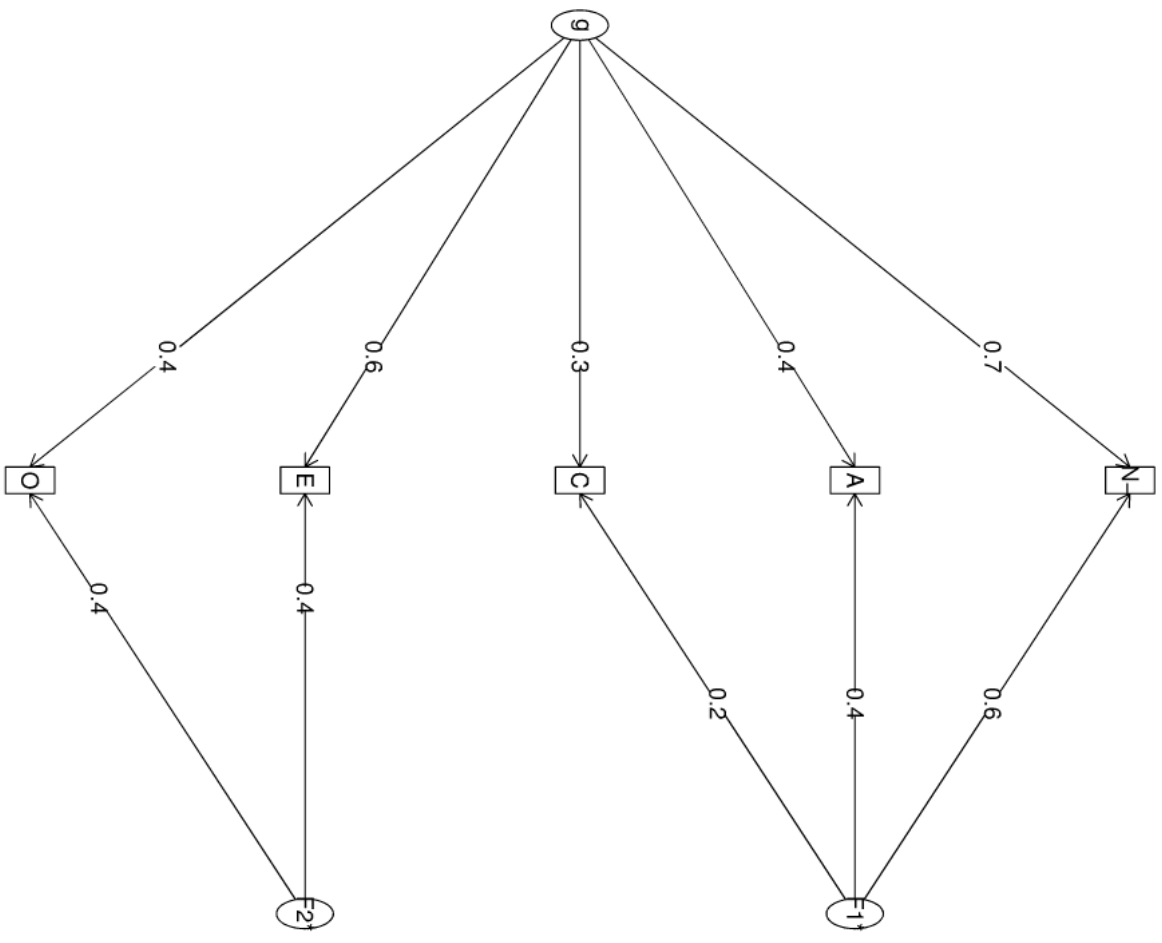
Source	KMO	Kaiser	Soree	Parallel	OptCoord	Accel	1-factor % var	2-factor % var	Omega-h
Schmitt et al. (2008)	0.655	1	1	1	1	1	0.49	0.70	0.73
MIDUS	0.714	1	1	1	1	1	0.45	0.66	0.68
Musek (2010)	0.691	1	1	1	1	1	0.44	0.62	0.68
SAPA	0.689	1	1	1	1	1	0.42	0.59	0.64
Eap et al., AsAm	0.647	1	1	1	1	1	0.43	0.69	0.65
Eap et al., EuAm	0.668	1	1	1	1	1	0.44	0.63	0.67
Yik & Bond (1993)	0.689	2	1	2	2	1	0.54	0.75	0.79
CLUES	0.804	1	1	1	1	1	0.55	0.66	0.79
Aziz & Jackson (2001)	0.732	1	1	1	1	1	0.44	0.63	0.68
Mi Kyoung Jin (2005)	0.577	2	2	2	2	2	0.37	0.61	0.55
Boudreau et al. (1999), (USA)	0.690	2	1	2	2	1	0.40	0.60	0.60
Boudreau et al. (1999), EU	0.673	2	1	1	1	1	0.38	0.57	0.57

Table 5

*Results of the confirmatory analyses: GFP loadings on the Big Five and fit indices*

	E	A	C	N	O	RMSEA	SRMR	GFI	AGFI	NFI	TLI	CFI
Schmitt et al. (2008)	.59	.79	.82	-.81	.41	.193	.072	.921	.704	.842	.696	.878
MIDUS	.80	.70	.62	-.41	.75	.057	.024	.994	.978	.983	.961	.984
Musek (2009)	.75	.68	.54	-.78	.54	.028	.016	.997	.989	.991	.991	.996
SAPA	.75	.74	.59	-.60	.52	.064	.015	.997	.988	.986	.966	.986
Eap et al. (2008), AsAm	.53	.65	.76	-.69	.61	.106	.041	.979	.921	.916	.829	.932
Eap et al. (2008), EuAm	.67	.79	.59	-.66	.57	.104	.040	.977	.913	.925	.828	.943
Yik & Bond (1993)	.70	.82	.71	-.77	.68	.080	.023	.991	.953	.987	.933	.989
CLUES	.79	.73	.72	-.80	.65	.084	.026	.988	.955	.978	.949	.980
Aziz & Jackson (2001)	.48	.75	.74	-.70	.62	.060	.044	.980	.941	.928	.949	.974
Mi Kyoung Jin (2005)	.63	.61	.60	-.31	.79	.097	.048	.984	.923	.927	.823	.947
Boudreau et al. (1999), USA	.77	.61	.60	-.75	.32	.051	.024	.995	.981	.978	.954	.983
Boudreau et al. (1999), EU	.73	.38	.68	-.76	.43	-.045	.020	.996	.985	.979	.957	.983





# Conclusions

The following conclusions can be drawn from our analyses of the GFP

## Stability across the cultures

The results of our analyses confirmed the stability of the GFP across the cultures

## Substantiality of GFP

- The trans-cultural stability of the GFP corroborates the substantial interpretations.
- It is hard to believe that the universally found trait correlations underlying the GFP can be due to the artifactual factors.
- More probably, they resulted from the variation in the real behavior.

## Evolutionary basis of GFP

- If so, it is also highly probable that the GFP has evolutionary roots, especially provided the undoubted genetic and neurophysiological bases of the GFP.
- We can imagine the evolutionary process favoring the characteristics of socially approved behavior in human species (and that is the GFP as a measure of personal/social effectiveness).





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