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GFP in relation to mental well being and health

Trieste - Trst -Triest 2013

and health

Trieste Trst 2013 -Triest

GFP and its role in mental well being and health

Review of content

- Toward a new structural paradigm of personality
- The concept of GFP
- GFP, well-being, health
- The predictive power of GFP GFP and the quality of life
- Conclusions

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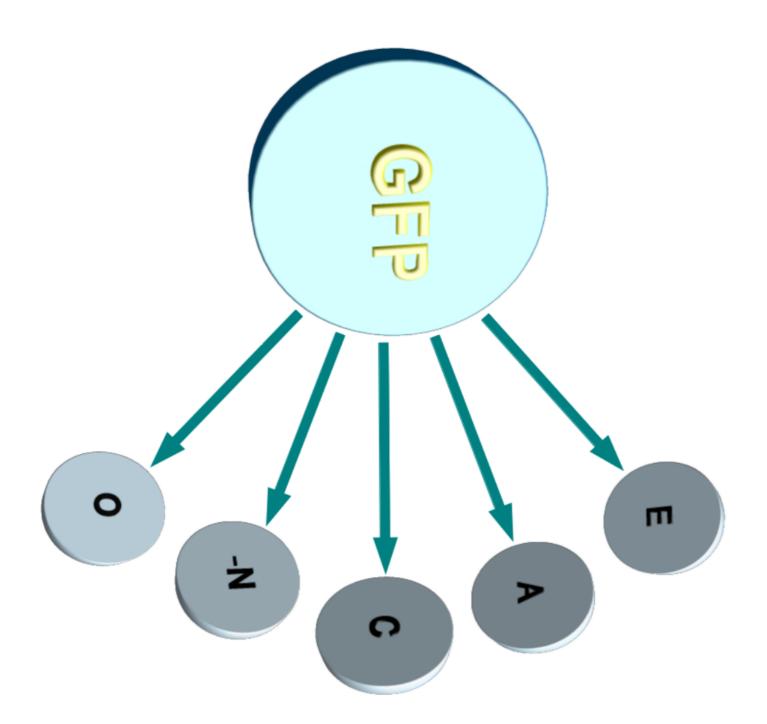
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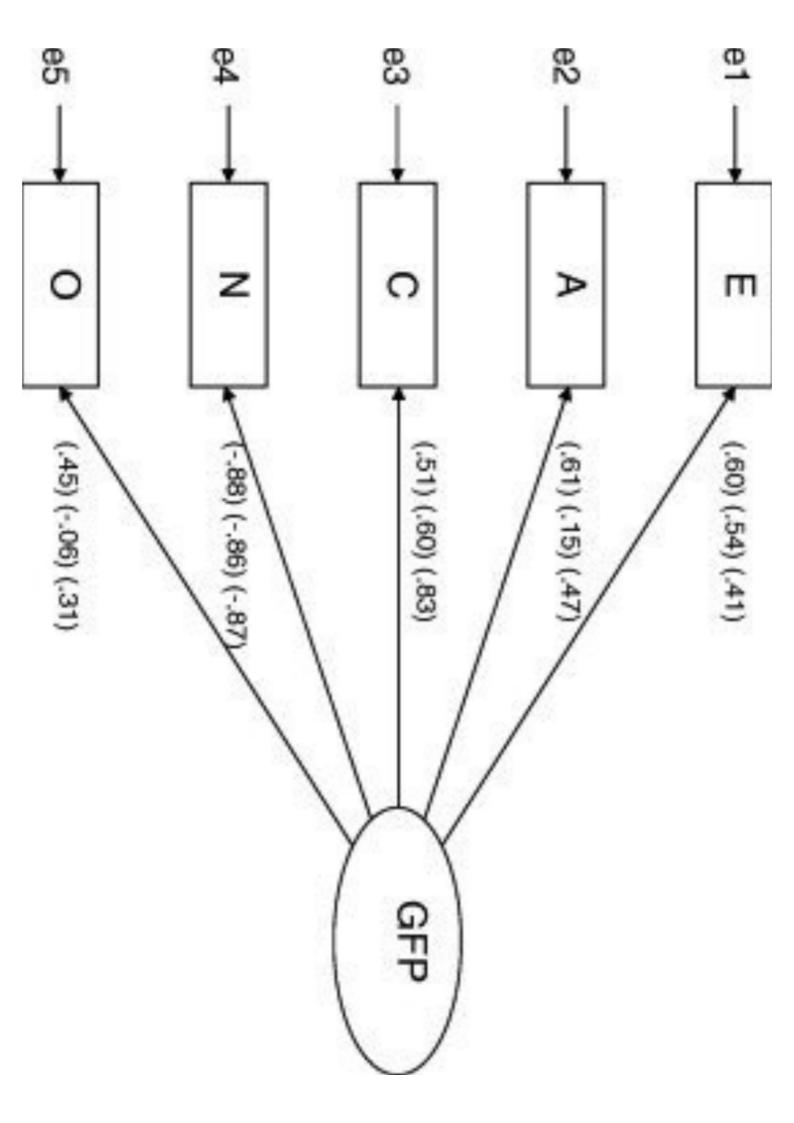
Toward a new structural paradigm of personality

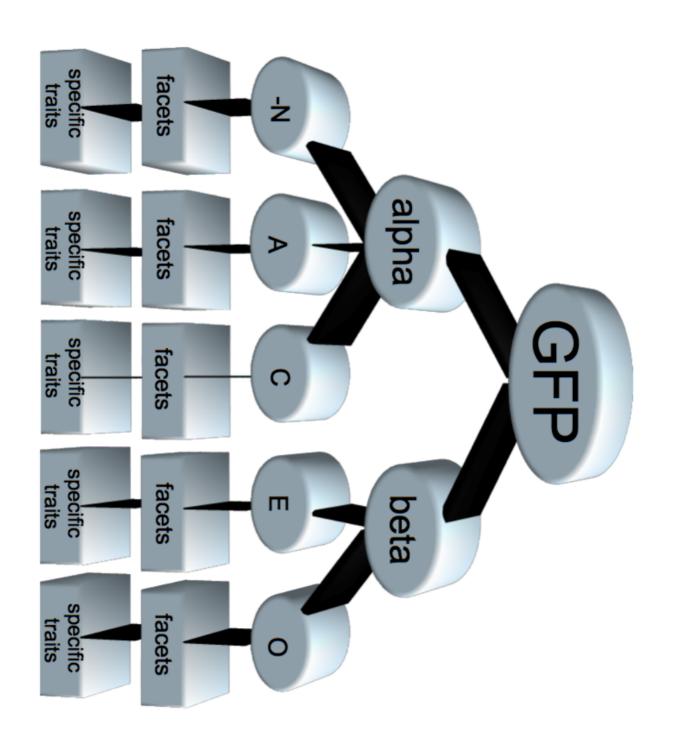
- The structure of personality is a leading theme of personality research since the times of Hippocrates
- · Several theoretical models were developed in the scientific analysis of personality structure John, 1990; McCrae & Costa, 1987, 1998). in the last six decades including the models of Cattell (Cattell, 1946, 1950, 1957) and Eysenck position among them in the past thirty years or more (Digman, 1990; Goldberg, 1981, 1990; (Eysenck, 1952, 1970, 1986, 1991), yet the Five Factor Model (FFM) attained dominant
- · According to FFM, the structure of personality can be described by five dimensions, labeled the Big Five: extraversion, agreeableness, conscientiousness, neuroticism and openness.
- ullet However, the Big Five are correlated in a stable and typical manner (Musek, 2007, 2010).
- Thus, the question can be raised, whether the correlations between the Big Five are indicating the higher-order dimensions of personality structure.
- Musek (2007) hypothesized and confirmed the existence of the general factor of personality structure of personality. (GFP) and proposed a new structural model with the GFP at the apex of the hierarchical

Toward a new structural paradigm of personality

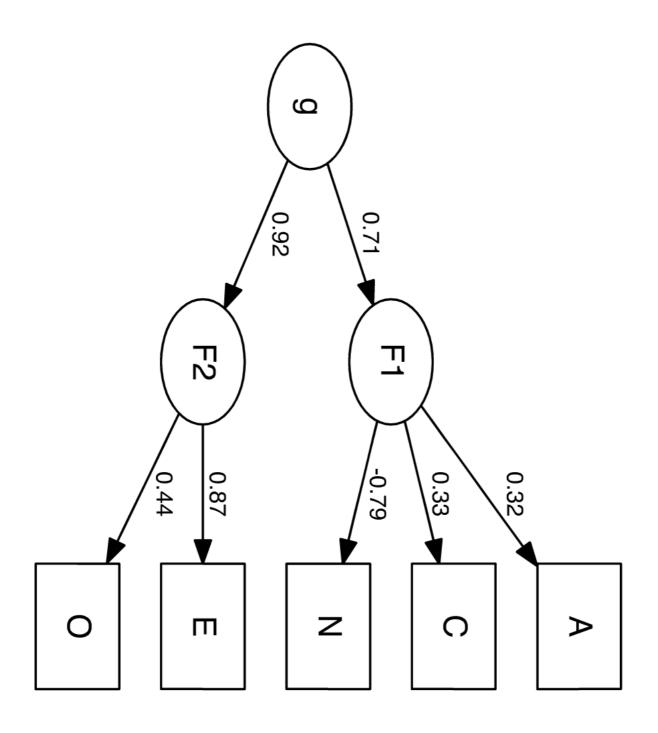
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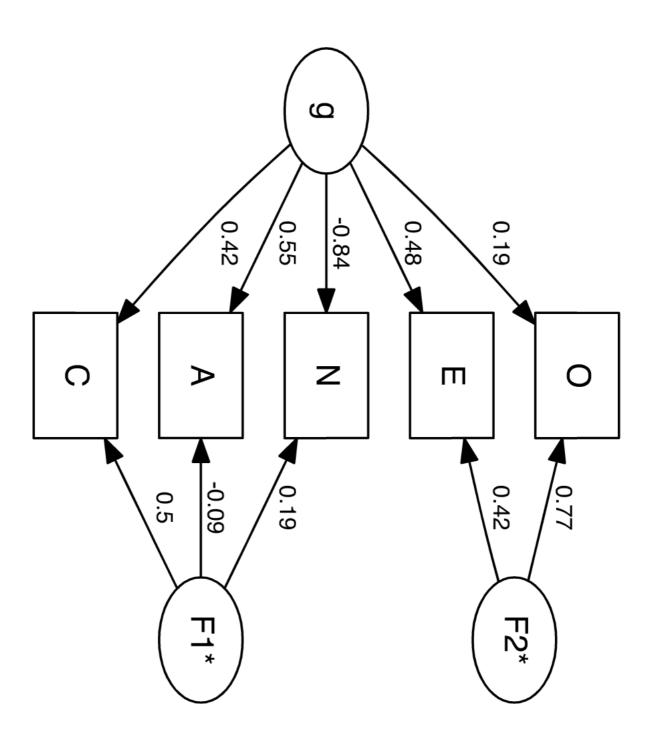












Personality structure?

- classical hierarchical
- Or
- bifactor

solution being maybe even slightly better are approximately equally acceptable, the bifactor accumulation of data demonstrated that both solutions Indeed, our research done on an extensive

of 21 source data clearly resulted in the following especially confirmatory SEM analyses were made. Fit samples from meta-analytic studies with more than obtained by large samples (including also very large conclusions: 200000 participants). Several multivariate analyses, indices for the six models of the confirmative analyses We analyzed 21 matrices of Big Five correlations

- classical hierarchical and bifactor models yielded in only two-factor solutions) the rule the best fit (better than only one-factor or
- both hierarchical and bifactor solutions were approximately matched:
- bifactor solutions were in majority even slightly better, yet
- classical hierarchical solutions are by definition more parsimonious
- thus, the decision is rather difficult and contextually dependent

- A tremendous amount of research evidence could be interpreted as a general factor extracted from the Big Five correlation matrices convincingly demonstrated that the first factor
- When analyzing a number of studies in this respect confirmed strength of the first extracted factor is clearly (including the results on data aggregated on 56 national samples and other very large data), the

Table 2

Indicators of the strength of the 1st factor extracted from the Big Five dimensions

Source		Schmitt	MIDUS	Musek	SAPA	EapAS	EapEU	XIX.	CLUES	Aziz	MiKyoung	BoUS	BoEU	MountMeta	Cook250	Cook325	Hartman	DigmanMeta	Biesanz	Hogan	Vanderlinden	Buchanan
OmegaH	3	0.61	0.63	0.61	0.61	0.48	0.55	0.55	0.73	0.64	0.51	0.57	0.50	0.59	0.71	0.76	0.60	0.33	0.51	0.52	0.52	0.40
gaH	2	0.40	0.50	0.51	0.36	0.37	0.37	0.49	0.65	0.32	0.25	0.31	0.26	0.40	0.66	0.67	0.48	0.23	0.46	0.28	0.47	0.07
ECV	3	0.45	0.62	0.68	0.58	0.49	0.48	0.45	0.75	0.67	0.51	0.65	0.47	0.63	0.67	0.75	0.60	0.28	0.52	0.48	0.54	0.39
A.C.	2	0.35	0.54	0.56	0.35	0.35	0.36	0.42	0.70	0.30	0.24	0.39	0.25	0.38	0.65	0.65	0.54	0.23	0.48	0.23	0.46	0.06
KMO		0.655	0.714	0.691	0.689	0.677	0.668	0.689	0.804	0.723	0.577	0.690	0.673	0.675	0.812	0.791	0.678	0.655	0.695	0.623	0.714	0.604
	<u>20</u>	1	1	1	1	1	1	2	1	1	2	2	1	2	1	1	1	2	1	2	1	1
N	аf	1	1	1	1	1	1	1	1	1	2	1	1	2	1	1	1	2	1	1	1	1
NFE	pa	1	1	1	1	1	1	2	1	1	2	2	1	2	1	1	1	2	1	2	1	2
	ķа	1	1	1	1	1	1	2	1	1	2	2	1	2	1	1	1	2	1	2	1	2
PVR	PC	0.71	0.70	0.70	0.71	0.69	0.69	0.73	0.77	0.71	0.61	0.66	0.64	0.65	0.82	0.79	0.69	0.63	0.70	0.71	0.69	0.64
R	MR	0.76	0.81	0.64	0.84	0.75	0.76	0.77	0.88	0.85	0.71	0.79	0.80	0.66	0.92	0.78	0.78	0.68	0.81	0.75	0.75	0.72

NOTE: OmegaH = McDonald omega hierarchical coefficient, 3 (1st subcolumm: value for 3 primary factors), 2 (2nd subcolumn: value for 2 primary factors), ECV = Explained Common Variance coefficient, 3 (1st subcolumn: value for 3 primary factors), 2 (2nd subcolumn: value for 2 primary factors), ECV = Explained Common Variance coefficient, 3 (1st subcolumn: value for 3 primary factors), 2 (2nd subcolumn: value for 2 primary factors), KMO = Kaiser-Meyer-Olkin measure of sampling adequacy; NFE = suggested number of factors to be extracted according to the following criteria: optimal coordinates (oc; 1st subcolumn), acceleration factor (af, 2nd subcolumn), Parallel analysis; test (pa; 3rd subcolumn), Kaiser criterion (ka; 4th subcolumn), Paralle of the %6 variance explained by the first factor to the sum of the % of variance explained by the first and second factor (values for the PC /PC/solution in the 1st subcolumn and for the MINRES /MR/solution in the 2nd subcolumn).

Important theoretical issues concerning GFP

- The existence of GFP was further replicated in several studies using Irwing, 2008, 2009a,b; Veselka et al., 2009). different samples of participants and different measures (Hirschi, 2008; Musek, 2007; Rushton, Bons & Hur, 2008, Rushton et al., 2009; Rushton &
- Until now, a more than hundred scientific articles throughout the world addressed the issues concerning the GFP (for the review, see Just, 2011; Musek, 2011; Rushton & Irwing, 2012; Chamorro-Premuzic et al., 2013).
- Several important problems have been discussed in the literature tocusing on GFP, including
- the nature and psychological interpretation of GFP,
- the heritability and bioevolutionary aspects of GFP
- the generality of GFP and possible extensions beyond the realm of
- the connections of GFP to other prominent psychological and demographic variables
- the cross-cultural consistency of GFP,
- not to mention others

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GFP, well being, health

- The question how GFP is related to the mental wellbeing and health is one of the most important issues in the research of GFP.
- Our own research has been focused on three major topics:
- In the first line, we examined how GFP is related to or involved in the already mentioned fields, namely well-being (both hedonic as well as eudaimonic or psychological well-being) and mental health.
- The second part of our research has been devoted to the determination of the predictive power of GFP in regard of several important criteria related to the mental and physical health including the self- and other-assessed status of physical health, generativity, wisdom, coping, stress management, burnout, symptoms of mental disorder, and other.
- The third part of our research was addressed to the connections of GFP to the all important aspects of the quality of life, including physical, mental, social and spiritual aspect.

In our studies, a rather strong relationship between GFP and the measures of well-being and mental health was found. GFP very substantially correlated with all dimensions of well-beine, including the

GFP very substantially correlated with all dimensions of well-being, including the bedonic or subjective emotional well being (statisfaction with life, positive affect and negative affect) and also with all basic dimensions of so-called endaimonic or psychological well-being (autonomy, feeling of psychological well-being (autonomy, feeling of mastery, positive relations to others, personal growth, purpose in life, self-acceptance). Moreover, the correlations between both general factors, GFP and the General Factor of soften account.

Ki notesious for resental well-being and meetal health are closely associated.

Associated with the second meetal in the results of our studies, below a confirmed in the results of our studies. Which, a seath of this was confirmed in the Second section and the second second with modely observable has all below as setting the procedure with modely observable has been second to the second discussions of the first critical section which we observe the observable has deed to reduce the second discussions of the price price of the confirmed discussions of the price price of the confirmed discussions of the price price of the confirmed discussions of the of the con

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- Moreover, the correlations between both Wellbeing (GFWb) were very high, about .8 to general factors, GFP and the General Factor of .6 in most cases

- It is notorious that mental well-being and mental health are closely associated.
- · Indeed, exactly this was confirmed in the results of our studies.
- GFP is strongly correlated with anxiety, depression and loneliness as the major components of our mental health.
- In other studies, we discovered that GFP is considerably psychopathology. connected to the general dimensions of psychological health and

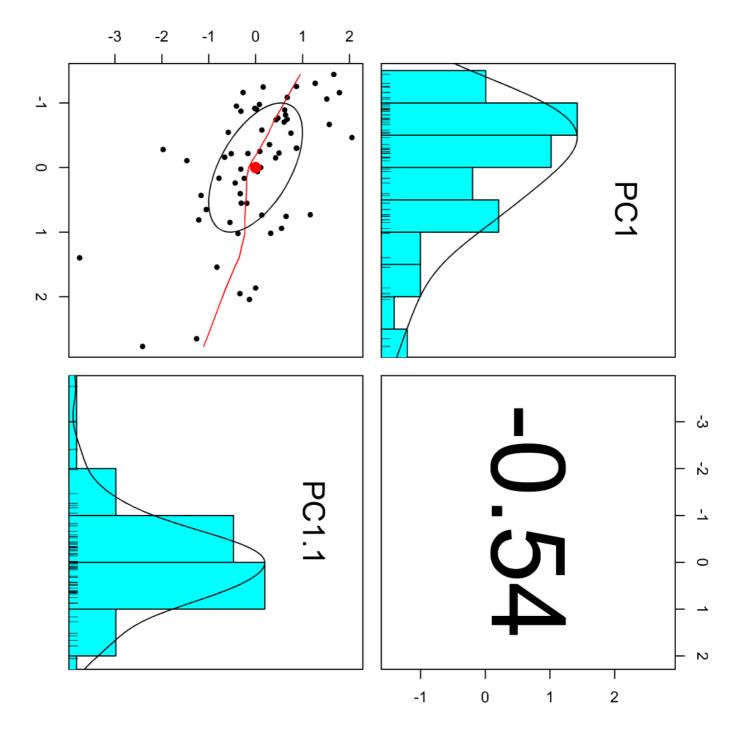
For the sake of sparing time, I will focus only briefly on the results of two studies

- in the first study I analysed the personality and sample MIDUS II (almost 5000 participants) well-being data in the large USA representative
- in the second study, the data from Slovenian depression and loneliness) sample (about 350 participants) were analyzed, the variables representing mental health (anxiety, personality data again and the data for three major

substantially associated both with the measures of the measures of mental health well-being (hedonic and eudaimonic) as well as with In these studies, the GFP turned out to be very

	blsneuro	blsextra	blsagree	- 1	b1scons2	MR1
blssatis	-0.28	0.25	0.16		0.23	0.28
b1snegpa	0.56	-0.21	-0.10		-0.22	-0.27
b1spospa	-0.40	0.47	0.26		0.34	0.52
b1spwba2	-0.34	0.33	0.10		0.29	0.41
b1spwbe2	-0.52	0.40	0.20		0.39	0.47
b1spwbg2	-0.33	0.45	0.29	0.51	0.38	0.57
b1spwbr2	-0.35	0.50	0.47		0.31	0.57
b1spwbu2	-0.32	0.38	0.23		0.40	0.46
b1spwbs2	-0.46	0.43	0.23		0.35	0.50
MR1	-0.52	0.51	0.30		0.43	0.60

-0.62	-0.58	-0.47	-0.58	GFP
	-0.52	-0.44	-0.56	Plast
	-0.35	-0.26	-0.29	Stab
	-0.22	-0.26	-0.27	0
	-0.23	-0.14	-0.15	Α
	-0.27	-0.22	-0.21	Q
	-0.48	-0.49	-0.65	S
	-0.49	-0.29	-0.42	Ŧ
	Lon	Depr	Anx	



psychopathology, obtained on two clinical measures, PAI and DAPS (Musek & Ožura, unpubl.) GFP correlates -.54 with the general factor of

The predictive power of GFP

- According to the results of our studies, GFP is and well-being. among the best predictors of general mental health
- It is also a major predictor of:
- global self-concept,
- self-esteem,
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GFP as predictor

GFP

1spifa	b1spihom	1spiwo	1smndf	1sgene	1semco	1sprco	1sagen	1sinde	1seste	1smast	1sinta	1smpqw	1sposp	1snegp	1shloc	1ssati	1sorie
1.2	-0.24	ω	ω	5	. 2	5	. 4	ω	5	. 4	ω	5	5	-ω	W	W	. 4

GFP as predictor

GFP

1spifa	1spiho	1spiwo	1smndf	1sgene	1semco	1sprco	1sagen	1sinde	1seste	1smast	1sinta	1smpqw	1sposp	b1snegpa	1shloc	1ssati	1sorie
0.2	0.2	0.3		0.5	0.2	U	0.4	0.3	0.5	0.4	0.3	0.5	0.5	-0.33			

GFP and the quality of life

- GFP is essentially associated with all general dimensions of the quality of life, including:
- mental,
- spiritual, social,
- economic
- and somatic wellness.

GFP and the quality of life

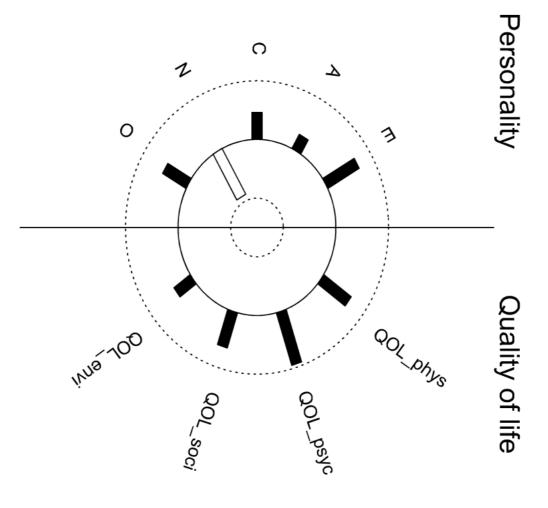
- GFP is essentially associated with all general dimensions of the quality of life, including:
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- In regard of this issue, we can briefly inspect the results of our studies.
- In some of them, conducted by my colleague Rutar detailed fashion. between the quality of life and personality and me (Rutar, 2017; Musek, 2012) the relations dimensions were put under scrutiny in more
- In this studies, the data were collected on the questionnaire (WHOQOL BREF, WHO, 1998). quality of life were measured by the QOL sample of 124 participants. The personality Donahue & Kentle, 1991) and the dimensions of the dimensions were measured by the BFI (John,

- Here, we will reveal the results of canonical analysis and PLS analysis of the personality and quality of life relationship.
- First, we can focus on the findings of canonical analysis, by which the and quality of life dimensions) should be obtained. latent dimensions between two sets of variables (personality dimensions
- We can raise a question here: where in this canonical model is the GFP?
- Yet, it is here: the first latent dimensions, the first canonical variate of personality set is practically the same as the GFP (it correlates .91 with the GFP).
- On the other side, the first canonical variate of the quality of life set of variables can easily be interpreted as the general factor of the quality of
- Now, as can be drawn from the results of the study, both variates or canonical roots are strongly correlated:
- canonical correlation of the first variates is .58 and this is even GQOL, which amounts .42 higher than the correlation between both general factors, GFP and
- the first latent dimension of PLS analysis (which can also be canonical variate for quality of life dimensions interpreted as the GFP) also correlates .56 with the above mentioned

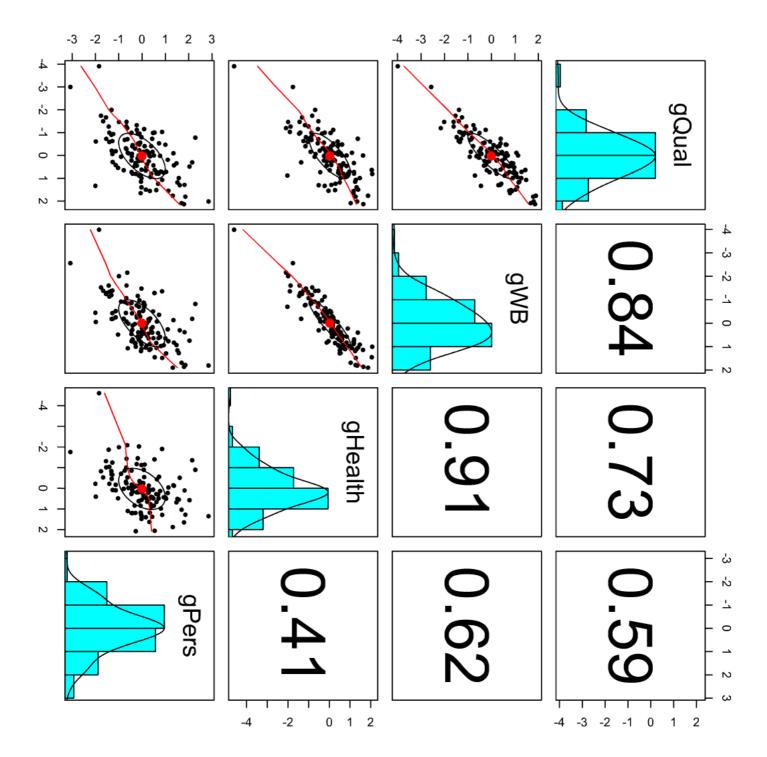
- Thus, the GFP is substantially correlated with the quality in life in general, but how is it related to the particular dimensions of the quality of life?
- We can see these relations from the helioplot of the main results of canonical analysis.
- As expected, the personality dimensions profiled in significantly, with the environmental dimension. and social dimension and finally, yet still the form of GFP (the left side of the helioplot), are dimension of the quality of life, then with physical most connected with the psychological (or mental)

Helio Plot



the following correlations between trom appropriate variables, we can obtain Finally, after computing general dimensions

- general factor of quality of life (gQual)
- general factor of well-being (gWB)
- general factor of global health (gHealth)
- general factor of personality, GFP (gPers)



The conclusions

- In the whole, our studies as well as those of other authors, confirmed the important role of GFP in relation to mental well-being and mental health.
- GFP is very substantially associated with all important general dimensions of mental well-being, health and quality of life.
- Therefore, it could be with all reason interpreted as a measure of general personal adjustment with a strong predictive power in the relation to almost all most important variables concerning the quality and successfulness of our life.

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