

The relationship between personality and value dimensions: Towards a comprehensive personality paradigm

Musek, J. and Avsec, A.
University of Ljubljana

Abstract

The dimensional approach has been adopted as a paradigmatic one in almost all areas of personality. The objective of the present study was the investigation of the relationship between basic dimensions of personality and basic dimensions of values. The results of the multivariate analyses confirmed predicted connection between both sets of variables.

Consequently, we can assume that both personality traits and values share common basic structural components. Considering the extracted "superdimensions", which explain a very comprehensive range of personal and behavioural variability, we proposed and explicated new, more integrative dimensional model of personality.

Introduction

The hierarchical dimensional approach has been adopted as a paradigmatic one in almost all areas of personality. Increasing research in past decades showed that an essential amount of individual differences could be attributed to the relatively small number of general personality dimensions. The theoretical models developed by outstanding personality theorists achieved remarkable convergence if not even consensus. We may put on the list the model of Cattell (secondary factors of personality: Cattell, 1957a, 1957b, 1975; Cattell, Eber & Tatsuoka, 1970), Eysenck's PEN model (Eysenck, 1954, 1967, 1990a, 1990b, 1991a, 1991b, 1991c, 1992a, 1992b, 1992c, 1997; Eysenck & Eysenck, 1985; Revelle, 1995; Revelle, Anderson & Humphreys, 1987; Revelle, Humphreys, Simon & Gilliland, 1980), five-factor or B5 model (Costa & McCrae, 1992a, 1992b; McCrae & Costa, 1989; Musek, 1993b, 1999; Revelle, 1995, 1997), and some others, including circumplex model of personality structure (Acton & Revelle, 1995, 1998; Hofstee, de Raad & Goldberg, 1992; McCrae & Costa, 1989; Revelle, 1995, 1997; Wiggins, J. S., Trapnell, P., & Phillips, N., 1988), and Brand's model of six comprehensive personality factors (Brand, 1998).

On the other hand, the interindividual differences in the value orientations could also be contributed to a definite number of general value dimensions. According to our model of hierarchical taxonomy of values, the universe of values can be classified into a number of categories occupying different levels in the hierarchical structure (Musek, 1993a, b; Musek, 2000). Numerous categories of values at different levels of hierarchy have been identified in the theoretical and empirical investigations. In our own research, a clear hierarchy of the categories of values emerged as a result of performed factor-, cluster- and other multivariate analyses (Musek, 1993a; Musek, 1993b; Musek, 1994; Musek, 2000). The categories or dimensions of values in our model resemble well the dimensions or facets of values reported elsewhere (Bond, 1988, 1991; Bond, Leung & Schwartz, 1992; Chinese Culture Connection, 1987; Fiske, 1991, 1992; Hofstede, 1980, 1983; Hofstede & Bond, 1988; Kagitçibasi, 1970; Leung & Bond, 1989; Leung, Bond & Schwartz, 1995; Sagiv & Schwartz, 1995; Schwartz, 1991, 1994; Schwartz & Bilsky, 1987, 1990; Smith & Schwartz, 1997; Smith, Trompenaars & Dugan, 1993; Triandis, 1990, 1995; Triandis et al., 1972).

As we can see from the Figure 1, the entire structure of the value universe could be well established through all four levels of hierarchical model, from the most general at the top to the most specific in the bottom. This structure extends from single, specific values, to the more and more complex categories of values. Higher range categories are based of course on the correlations between the values on the lower degree of generality.

----- Insert Figure 1 about here

Figure 1. Hierarchical structure of value universe. The categories of values drawn from our empirical studies occupy all four levels of the hierarchical model. The details see in the text.

The question might be raised therefore, whether and how are the basic dimensions of personality structure related to the basic dimensions of values. The accumulated research evidence is suggesting that at least some of the basic dimensions from both areas of investigation (personality structure and the structure of the values) could be significantly interrelated.

A definite clarification of the possible connection between basic dimensions of personality structure and basic dimensions of the universe of values would significantly improve our existing scientific knowledge of personality. In the case of confirming such connection it would lead to the new, more comprehensive and integrated model of personality. The objective of this study was to examine the relationship between top-level dimensions of both domains, the personality domain and the domain of values. Thus, a correlational and multivariate investigation has been carried out in order to accomplish this aim.

Method

Participants

388 subjects of both sexes and different ages participated in the study. The mean age of the participants was about 21 years (year of study 3 & 4).

Materials

Musek Survey of Values (MSV) has been used in the study as the instrument for measuring the importance of different values. The survey contains a list of 54 different values. The complete list of values is shown in English (see Appendix A).

The data from the MSV could be arranged to represent the scores for the following four levels of value structure:

1. Single values.
2. Middle-range categories of values
3. Value types
4. Macro categories of values

Consequently, the scores from the MSV could be interpreted on respective level of categorisation.

Personality dimensions have been measured by three different personality questionnaires: Cattell's 16PF (16 primary factors of personality, so called stylistic traits of personality, according to the Cattell's model of personality), EPQ (three basic personality dimensions according to Eysenck's PEN model: extroversion, neuroticism and psychoticism) and BFQ (measure of "big five" dimensions of personality, according to B5 model of personality).

For the moment, only the data, obtained by Cattell's 16PF are available. Consequently, the results reported here are limited to these data.

Procedure

The investigation was designed as a correlational and multivariate study of values and personality traits. Each subject rated first the MLV containing 54 values, one value after another on a 1 to 100 graded importance-rating scale. Subjects received the lists of values with detailed instructions how to complete them. The

values were listed in the same order. The subjects rated them one after another using a rating scale continuum from the minimum importance (grade 1) to the maximum importance (grade 100). They were asked to rate the importance of the values presented in the list as they personally felt.

After that, the participants answered the three before mentioned personality questionnaires (16PF, EPQ, and BFQ).

All data of participants were collected, correlated and entered into the correlation matrix disposed for further statistical analysis. Various multivariate analyses, especially cluster and factor analyses were then performed in order to reveal the structure of relationships between different values.

Results and discussion

We will focus now briefly on the results dealing with corresponding top levels of taxonomic hierarchies in both domains of personality, in trait domain and in the value domain. More precisely, we can examine the relationship between basic personality dimensions, obtained by factor analysis of Cattell's primary factors, and four higher-order categories of values or value types.

Factor analysis of 16 primary factors (including intelligence) yielded six latent dimensions. They can be viewed as an approximation of Cattell's second-order factors, and they also resemble very well three basic dimensions of Eysenck PEN model (extroversion, neuroticism, and psychoticism) and five robust dimensions of personality in B5 model. The extracted dimensions (Table 1) could be interpreted in sequential order as stability (neuroticism), extroversion, open-mindedness, dominance, projection, and intelligence.

Table 1.
Basic latent dimensions of personality extracted from 16 primary personality factors.

	Factors					
	1	2	3	4	5	6
O	-.758		.106			-.117
Q4	-.754				.250	
C	.706	.157			-.211	
Q3	.456			-.343	-.425	
F	.121	.733		.147		.151
A	-.173	.679		.383	-.191	
Q2		-.672		.167		.197
H	.477	.545		.430	-.111	
I	-.187		.684	-.145	-.220	
Q1	.120	.122	.676	-.141	.259	.105
M		-.174	.668		-.119	-.141
G				-.753		
E	.176	.285	-.164	.690	.167	
L	-.190			.178	.741	
N	-.200	-.193	-.220	-.231	.672	
B						.955

As we can see from Table 2, factor analysis of six basic personality dimensions and four value types yielded common factors that accounted essentially for the variance in both domains of personality structure, in trait as well as in the value domain. The first

common dimension connects hedonic and potency (that means dionysian) values with extroversion. The second common factor loads most heavily on fulfilment type, open-mindedness and introversion. The third factor is high on stability and low on projection, and is also somewhat connected with moral and fulfilment (apollonian) values. Finally, the fourth factor could be interpreted as bipolar dimension between dominance and moral value type.

Table 2.
Common factor loadings of basic personality and value dimensions (value types are printed in cursive).

	Factors			
	1	2	3	4
<i>HEDONIC TYPE</i>	.836			.123
<i>POTENCY TYPE</i>	.613	.305	-.213	-.207
EXTROVERSION	.517	-.376	.308	.137
OPENMINDEDNESS	-.453	.416	.361	
<i>FULFILMENT TYPE</i>	.172	.782	.296	-.250
INTELLIGENCE		-.566	.230	
PROJECTION	.118		-.653	.160
STABILITY			.635	.119
DOMINANCE	.356	.108	.156	.734
<i>MORAL TYPE</i>	.368	.203	.213	-.726

The results of other multivariate analyses (cluster analyses and multidimensional scaling) of the same data have been quite concordant to the results of factor analysis. The results of canonical analyses are of particular interest for the reason that they stress the common variance of both domains of personality. Table 3 presents the results of canonical analysis of both sets of variables, basic personality dimensions and higher-range categories of values. The canonical correlation between both sets is 0.64, indicating thus an essential part of shared variance. The redundancy between both sets of variables was not high but nevertheless very significant. Personality dimensions explained 13.21 percent of variance in the value set, and values explained 10.62 percent of variance in the personality traits. Canonical variates obtained in our analysis still resemble somehow the well-known basic dimensions of personality from the Eysenck's PEN model or E5 (big five) model of personality. This is especially valid for the extroversion, which is clearly connected with dionysian, particularly hedonistic values (in positive manner) and with fulfilment values (in negative direction). The second clear connection is between dominance and hedonistic values on the one hand and the moral values on the other. The corresponding canonical dimension (the second variate) could be interpreted as close to the Eysenck's dimension of psychoticism or to the agreeableness and conscientiousness factors in the big-five model.

Table 3.
Loadings of canonical variates (roots) on basic personality dimensions (first set) and value types (second set).

Variables	Canonical variates (roots)			
	1	2	3	4
First set				

stability	-.229	.295	.138	-.229
extroversion	.633	-.069	-.131	-.428
open-mindedness	-.711	.078	-.219	-.092
dominance	.288	.821	-.485	.049
projection	.216	.258	.630	.584
intelligence	.097	-.303	-.467	.673
Second set				
hedonistic	.729	.515	-.134	-.430
potency	.293	.173	.851	-.401
moral	.082	-.508	-.098	-.852
fulfilment	-.511	.439	-.012	-.739

The results of other analyses at the level of middle-range categories of values and the single values only confirmed the above mentioned findings. We can conclude therefore that the values and personality traits although representing rather independent segments of our personality are also sharing some common dimensions. The shared dimensions could be interpreted as close to both basic personality dimensions and basic categories of values (see Table 4). Therefore, it is possible that the common dimensions of personality and value universe emerged in our studies as overall personality dimensions (“the biggest” factors of entire personality domain outside the intellect).

Table 4.

Assumed overall personality dimensions with corresponding dimensions of (narrower) personality domain and domain of values.

OVERALL	PERSONALITY DOMAIN			VALUE DOMAIN	
	Cattell	Eysenck	B5		
I.	exvia (F1)	extroversion	extroversion	hedonic potency	dionysian
II.	anxiety (F2)	neuroticism	neuroticism	moral (-) fulfilment (-)	apollonian
III.	dominance (+E, -G)	psychoticism	agreeableness (-) conscientiousness	moral (-)	
IV.	I, M, Q1		openness	fulfilment	

References

- Anderson, K. J., & Revelle, W. (1994). Impulsivity and time of day: Is rate of change in arousal a function of impulsivity? *Journal of Personality and Social Psychology*, 67, 334-344.
- Blake, M. S. F. (1967). Relationship between circadian rhythm of body temperature and introversion-extraversion. *Nature*, 215, 896-897.
- Bond, M. H. (1988) Finding universal dimensions of individual variation in multicultural studies of values: The Rokeach and Chinese Value Surveys. *Journal of Personality and Social Psychology*, 55, 6, 1009-1015.
- Bond, M. H. (1991) Chinese values and health: A cross-cultural examination. *Psychology and Health*, 5, 137-152.
- Bond, M. H., Leung, K. and Schwartz, S. H. (1992) Explaining choices in procedural and distributive justice across cultures. *International Journal of Psychology*, 5, 27, 211-225
- Carver, C. S., & White, T. L. (1994). Behavioral inhibition, behavioral activation, and affective responses to impending reward and punishment: The BIS/BAS Scales. *Journal of Personality and Social Psychology*, 67, 319-333.
- Chinese Culture Connection (1987) Chinese values and the search for culture-free dimensions of culture. *Journal of Cross-Cultural Psychology*, 18, 143-164.
- Costa, P. T., & McCrae, R. R. (1992a). Four ways five factors are basic. *Personality and Individual Differences*, 13, 653-665.
- Costa, P. T., & McCrae, R. R. (1992a). Four ways five factors are basic. *Personality and Individual Differences*, 13, 653-665.
- Costa, P. T., & McCrae, R. R. (1992b). Reply to Eysenck. *Personality and Individual Differences*, 13, 861-865.
- Costa, P. T., & McCrae, R. R. (1992b). Reply to Eysenck. *Personality and Individual Differences*, 13, 861-865.
- Davidson, R. J., & Tomarken, A. J. (1989). Laterality and emotion: An electrophysiological approach. In F. Boller and J. Grafman (Eds.), *Handbook of neuropsychology* (pp. 419-441). Amsterdam: Elsevier.
- Eysenck, H. J. (1957). *The dynamics of anxiety and hysteria: An experimental application of modern learning theory to psychiatry*. London: Routledge & Kegan Paul.
- Eysenck, H. J. (1967). *The biological basis of personality*. Springfield, IL: Charles C. Thomas.
- Eysenck, H. J. (1990). Biological dimensions of personality. In L. A. Pervin (Ed.), *Handbook of personality: Theory and research* (pp. 244-276). New York: Guilford.
- Eysenck, H. J. (1991). Dimensions of personality: 16, 5, or 3?--Criteria for a taxonomic paradigm. *Personality and Individual Differences*, 12, 773-790.
- Eysenck, H. J. (1992a). The definition and measurement of psychoticism. *Personality and Individual Differences*, 13, 757-785.
- Eysenck, H. J. (1992b). Four ways five factors are not basic. *Personality and Individual Differences*, 13, 667-673.
- Eysenck, H. J. (1992c). A reply to Costa and McCrae. P or A and C--The role of theory. *Personality and Individual Differences*, 13, 867-868.
- Eysenck, H. J. (1997). Personality and experimental psychology: The unification of psychology and the possibility of a paradigm. *Journal of Personality and Social Psychology*, 73, 1224-1237.
- Eysenck, H. J., & Eysenck, M. W. (1985). *Personality and individual differences: A natural science approach*. New York: Plenum.
- Eysenck, HJ. (1991). Dimensions of personality: 16: 5 or 3? criteria for a taxonomic paradigm. *Personality and Individual Differences*, 12, 773-90.
- Fowles, D. C. (1987). Application of a behavioral theory of motivation to the concepts of anxiety and impulsivity. *Journal of Research in Personality*, 21, 417-435.
- Geen, R. G. (1984). Preferred stimulation levels in introverts and extraverts: Effects on arousal and performance. *Journal of Personality and Social Psychology*, 46, 1303-1312.

- Goldberg, LR (1993a). The structure of phenotypic personality traits. *Am. Psychol.*, 48, 26-34.
- Goldberg, LR. (1992). The development of markers for the big-five factor structure. *Psychol. Assessment*, 4, 26-42.
- Goldberg, LR. (1993b). The structure of personality traits: vertical and horizontal aspects. In DC Funder, RD Parke, C Tomlinson-Keasey, & K Widaman (Eds.), *Studying lives through time: personality and development* (pp. 169-88). Washington, D.C.: American Psychological Association.
- Gray, J. A. (1981). A critique of Eysenck's theory of personality. In H. J. Eysenck (Ed.), *A model for personality* (pp. 246-277). Berlin: Springer.
- Hofstede, G. (1980) *Culture's consequences: International differences in work-related values*. Beverly-Hills: Sage.
- Hofstede, G. (1983) Dimensions of national cultures in fifty countries and three regions. In J. Derogowski, S. Dzuirawiec and R. Annis (eds.), *Expiscations in cross-cultural psychology*. Lisse, Netherlands: Swets and Zeitlinger.
- Hofstede, G. and Bond, M. H. (1988) The Confucius connection: From cultural roots to economic growth. *Organization Dynamics*, 16, 4-21..
- Hui, C.H., & Triandis, H. (1986) Individualism-collectivism: A study of cross-cultural researchers. *Journal of Cross-Cultural Psychology*, 17, 222-248.
- John, OP. (1990). The "Big Five" factor taxonomy: Dimensions of personality in the natural language and in questionnaires. In LA Pervin (Ed.), *Handbook of personality: Theory and research*. New York: Guilford.
- Kagitçibasi, C. (1970). Social norms and authoritarianism: A Turkish-American comparison. *Journal of Cross-Cultural Psychology*, 4, 157-174.
- Kagitçibasi, C. (1996). The autonomous-relational self: A new synthesis. *European Psychologist*, 1, 180-186
- Kashima, Y., and Callan, V. (1994) The Japanese work group. In H. C. Triandis (ed.) *Handbook of industrial/organizational psychology*, 2nd ed, Vol 4, pp. 609-646. Palo Alto, CA: Consulting Psychology Press.
- Kim, M. S., Hunter, J. E, Miyahara, A., Horvath, A. M., Bresnahan, M. and Yoon, H. J. (1996) Individual versus culture-level dimensions of individualism and collectivism: Effects on preferred conversational styles. *Communication Monographs*, 63, 29-49.
- Leung, K. and Bond, M. H. (1989) On the empirical identification of dimensions for cross-cultural comparison. *Journal of Cross-Cultural Psychology*, 20, 133-151.
- Leung, K., Bond, M. H. and Schwartz, S. H. (1995) How to explain cross-cultural differences: Values, valences and expectancies? *Asian Journal of Psychology*, 1, 70-75.
- Markus, H. and Kitayama, S. (1991). Culture and the self: Implication for cognition, emotion and motivation. *Psychological Review*, 98, 224-253.
- Markus, H. and Kitayama, S. (1994). A collective fear of the collective: Implications for selves and theories of selves. *Personality and Social Psychology Bulletin*, 20, 568-579.
- Musek, J. (1993a) Personality and values. Ljubljana, Educy, (in Slovene).
- Musek, J. (1995) The changes in mentality and value orientation of Slovenian people during the transition period. In V. Rus (Ed.) *Slovenia after 1995* (pp 87-106). Ljubljana, Faculty of Social Sciences, (in Slovene).
- Musek, J. (1997a) The impact of transitional change on value-system in Post-communist Europe. *Foreign Psychology/Innostrannaya Psykhologia* (Moscow), 1997, 8, 17-22.
- Musek, J. (1997b) The impact of transitional changes on value systems in Post-communist Europe: The implications for the higher education reform processes. *Perspectives in Higher Education Reform*, , Vol. 6, 15-22.
- Musek, J. Political and religious adherence in relation to individual values. *Studia Psychologica* (Bratislava), 1998, 40, 1-2, 47-59.
- Musek, J. The universe of human values: a structural and developmental hierarchy. *Studia Psychologica* (Bratislava), 1993b, 35, 4-5, 321-326.
- Nakagawa, M., Lamb, M. E. and Miyaki, K. (1992) Antecedents and correlates of the strange situation behavior of Japanese infants. *Journal of Cross-Cultural Psychology*, 41, 132-178.

- Ormel, J., & Wohlfarth, T. (1991). How neuroticism, long-term difficulties, and life situation change influence psychological distress: A longitudinal model. *Journal of Personality and Social Psychology*, 60, 744-755.
- Pergar Kuščer, M. (1999) Cross-cultural differences in value orientations of students. Doctoral Dissertation. Ljubljana: University of Ljubljana.
- Revelle, W. (1995). Personality Processes, *Annual Review of Psychology*.
- Revelle, W. (1997). Extraversion and impulsivity: The lost dimension? In H. Nyborg (Ed.), *The scientific study of human nature: Tribute to Hans J. Eysenck at eighty* (pp. 189-212). New York: Elsevier.
- Revelle, W., Humphreys, M. S., Simon, L., & Gilliland, K. (1980). The interactive effect of personality, time of day, and caffeine: A test of the arousal model. *Journal of Experimental Psychology: General*, 109, 1-31.
- Sagiv, L. and Schwartz, S. H. (1995) Value priorities and readiness for outgroup social contact. *Journal of Personality and Social Psychology*, 69, 437-448.
- Schwartz, S. H. & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 53, 3, 550-562.
- Schwartz, S. H. & Bilsky, W. (1990). Toward a theory of the universal content and structure of values: Extensions and cross-cultural replications. *Journal of Personality and Social Psychology*, 58, 878-891.
- Schwartz, S. H. (1991) The universal content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25, 1-65.
- Schwartz, S. H. (1994) Beyond individualism-collectivism: new dimensions of values. In U. Kim, H. C. Triandis, C. Kagitçibasi, S. C. Choi and G. Yoon (eds.), *Individualism and collectivism: Theory application and methods*. Newbury Park, CA: Sage.
- Smith, P. B. and Bond, M. H. (1998) *Social psychology across cultures*, 2nd edn. London: Prentice-Hall Europe.
- Smith, P. B. and Schwartz, S. H. (1997) Values. In J. W. Berry, M. H. Segall and C. Kagitçibasi (eds.), *Handbook of cross-cultural psychology*, 2nd edn, Vol 3. Boston: Allyn and Bacon.
- Smith, P. B., Dugan, S. and Trompenaars, F. (1996) National cultures and managerial values: A dimensional analysis across 43 nations. *Journal of Cross-Cultural Psychology*, 27, 231-264.
- Smith, P. B., Dugan, S. and Trompenaars, F. (1997) Locus of control and affectivity by gender nad occupational status: A 14 nation study. *Sex Roles*, 36-51-77.
- Smith, P. B., Trompenaars, F. and Dugan, S. (1995) The Rotter locus of control scale in 43 countries. *International Journal of Psychology*, 30, 377-400.
- Stelmack, R. M. (1990). Biological bases of extraversion: Psychophysiological evidence. *Journal of Personality*, 58, 293-311.
- Stelmack, R. M. (1997). Toward a paradigm in personality: Comment on Eysenck's (1997) view. *Journal of Personality and Social Psychology*, 73, 1238-1241.
- Triandis, H. C. (1990) Cross-cultural studies of individualism and collectivism. In J. J. Berman (ed.), *Nebraska Symposium on Motivation*, 1989. N37, 41-133.
- Triandis, H. C. (1995) *Individualism and collectivism*. Boulder, CO: Westview.
- Triandis, H. C., Kilty, K. M., Shanmugam, A. V., Tanaka, Y. and Vassiliou, V. (1972) Cognitive structures and the analysis of values. In H. C. Triandis (ed.), *The analysis of subjective culture*. New York: Wiley.
- Zinbarg, R., & Revelle, W. (1989). Personality and conditioning: A test of four models. *Journal of Personality and Social Psychology*, 57, 301-314.
- Zuckerman, M. (1991). *Psychobiology of personality*. Cambridge: Cambridge University Press.
- Zuckerman, M. (1994). Impulsive unsocialized sensation seeking: The biological foundations of a basic dimension of personality. In JE Bates & TD Wachs (Eds.), *Temperament: Individual differences at the interface of biology and behavior* (pp. 219-55). Washington, D.C.: American Psychological Association.

DIONYSIAN		APOLLONIAN		<i>highest range categories (macrodimensions)</i>
VALUES		VALUES		
HEDONIC	POTENCY	MORAL	FULFILLMENT	<i>higher range categories</i>
TYPE	TYPE	TYPE	TYPE	<i>(value types)</i>
sensual	status	traditional	cultural	<i>middle range categories</i>
health	patriotic	family	aesthetic	
security	legalism	societal	actualization	
			cognitive	
			religious	
joy, entertainment, sociability, exciting life, comfortable life, sexual satisfaction, good food, free movement, freedom	power, reputation, famousness, money, political success, overriding others, longevity	honesty, benevolence, diligence	culture, arts, crativity	<i>specific (single) values</i>
		family happiness, good partnership, love for childre, love, hope	beauty, nature	
health	patriotism, national pride	equity, national equality, peace, concordance, justice, (freedom)	selfactualization, knowledge, progress	
security, rest	order, laws		truth, wisdom	
			faith in God	

Figure 1. Hierarchical structure of value universe. The categories of values drawn from our empirical studies occupy all four levels of the hierarchical model. The details see in the text.

Connections between primary personality factors and middle-range categories of values

The correlations between values and personality traits, obtained in our analyses, are low to moderate. The values and personality traits represent rather independent domains of entire human personality (leaving the intellect as third great domain temporarily aside). Nevertheless, there is a significant common variance between both sets of variables (canonical R = 0,64). The canonical analyses of shared space of values and personality traits yielded a number of common latent dimensions (canonical variates or roots, showed on the table 1).

Table 1.
Canonical analysis of 16 primary personality traits (first set) and 11 middle-range categories of values (second set): loadings for 4 significant canonical variates or roots.

Variables	Variate 1	Variate 2	Variate 3	Variate 4
Personality factors set				
A	.573949	-.054390	.118323	.288644
B	.049936	.309743	-.200881	-.045642
C	-.149944	-.323726	-.000302	-.052496
E	.321229	-.607591	-.109763	.229159
F	.417022	-.278533	-.132229	.001423
G	-.150332	.518281	.582746	-.031272
H	.210319	-.367326	-.009695	.164039
I	-.498505	.176468	-.169008	.312708
L	.237928	-.274642	.377629	.155366
M	-.493813	-.343435	.337407	.231903
N	.212586	-.024768	.164362	-.532523
O	.015241	.270541	-.145843	.269816
Q1	-.317985	-.162119	-.149991	.323974
Q2	-.453745	-.164592	-.019044	-.485577
Q3	-.163160	.145107	.371145	.175201
Q4	.409148	.218729	-.022171	.143002
Value categories set				
sensual	.515416	-.363341	-.441979	.029092
security	.303713	.102748	-.180262	.077143
status	.573753	-.546427	.271674	.026020
patriotic	.314834	-.082850	.492214	.361932
societal	-.067766	.357699	-.191406	.487370
social	.359059	.191577	-.189283	.404662
traditional	-.050703	.264448	.129636	.082622
cultural	-.271812	-.444709	-.286830	.256330
cognitive	-.334457	-.271040	-.101246	.083096
actualisat.	.027433	-.456014	.181458	.362510
religious	-.361178	.169114	.182562	-.353567