

INVESTIGATING THE RELATION OF FUNCTIONING AS A DETERMINANT OF WELLBEING TO POLITICAL AND SOCIAL TRUST IN THREE BALKAN COUNTRIES

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Abstract

The measurement of wellbeing, political trust in institutions and social trust provide important indicators of the welfare of nations, political legitimacy and the stability of democratic political systems, and a country's political culture, respectively. In this paper, the relation of functioning as a determinant of wellbeing to political and social trust was investigated using 2012 European Social Survey (ESS) datasets of three Balkan countries: Albania, Bulgaria and Kosovo. This involves first examining the structure of functioning and assess the psychometric properties of the resulting scale (or subscales). Preliminary tests explored the statistically significant relations of functioning to the political and social trust items as well as the socio-demographic variables and the left/right self-placement scale. Only in the case of the Bulgarian dataset, EFA and CFA resulted in a unidimensional valid and reliable scale measuring functioning scale comprised of all the initial eight items. Although the analysis did not result in the same structure of functioning for the three Balkan countries, it did provide a reliable and valid scale in the cases of Bulgaria and Kosovo. This work could be extended to cover all participating countries of this Round of the ESS.

Key words: exploratory factor analysis, confirmatory factor analysis, reliability, validity, European social survey

JEL: C18, I31

Introduction

The measurement of wellbeing, political trust in institutions and social trust provide important indicators of the welfare of nations, political legitimacy and the stability of democratic political systems, and a country's political culture, respectively. Researchers generally consider wellbeing as a multidimensional concept. In this respect, a module on personal and social wellbeing was introduced

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in 2006 (Round 3) and was repeated with certain changes in 2012 (Round 6) of the European Social Survey (ESS). Based on a combination of theoretical models and statistical analyses, the 2012 ESS measurement of personal and social wellbeing (European Social Survey, 2013, 2015; Jeffrey, Abdallah, & Quick, 2015; New Economics Foundation, 2009) is comprised of 35 items defined in six key dimensions: evaluative wellbeing (two items), emotional wellbeing (six items), functioning (14 items), vitality (four items), community wellbeing (five items) and supportive relationships (four items). Functioning is described by “feelings of autonomy, competence, engagement, meaning and purpose, self-esteem, optimism and resilience” (Jeffrey et al., 2015, p. 4) and Panek (2015) describe positive functioning as comprised of competence, autonomy, engagement, meaning and purpose of life.

The concept of trust has been conceptualized in a rather diverging than converging manner (Bauer, 2014, 2015; Rousseau et al., 1998; Uslander, 2018) since not all scientists necessarily agree on its meaning (Bacharach & Gambetta, 2001; Gambetta, 1988; Hardin, 2002; Misztal, 2013; Nooteboom, 2002; Seligman, 2000; Uslander, 2002; Warren, 1999). In our present study, we limit ourselves to Putnam’s (2000) views on social and political trust as aspects of social capital with an emphasis on the dimensions of interpersonal (social) trust and the trust/confidence in political institutions. In the ESS questionnaire five and three items are included for the measurement of political trust in five national institutions (parliament, legal system, police, politicians and political parties) and social trust, respectively.

Research has shown linkages between interpersonal differences in measures of subjective wellbeing to trust in workplace, trust in police, and trust in neighbors, in addition to the standard measure of social trust (Helliwell & Putnam, 2004). Data suggest benefits from trust in three key aspects of the institutional environment: the legal system, parliament, and politicians (Helliwell, Huang, & Wang, 2018, p. 426). Research data also offer a potential for making direct comparisons between expected trust and actual trustworthiness (Helliwell et al., 2018). A portion of relevant literature is linking social trust to a range of health outcomes both within and among countries (as reviewed by Kawachi, 2016). In this line research studies are linking social trust to subjective wellbeing (as in Yip, Subramanian, Mitchell, Lee, Wang, & Kawachi, 2007). Studies have shown that trust and a sense of belonging contribute to subjective wellbeing (Helliwell & Wang, 2011). A less studied issue on the relation of social trust and wellbeing resides in the resilience that enables high-trust communities to respond more successfully to natural disasters or economic shocks (Yamamura, Tsutsui, Yamane, Yamane, & Powdthavee, 2015; Uchida, Takahashi, & Kawahara, 2014). Research has also shown that “the resilience-increasing feature of social trust, which channels its

benefits especially to those subject to adversity, thereby reduces the inequality of well-being as well as raising its average value” (Helliwell et al., 2018, p. 426). Other studies based on ESS results confirm a strong positive relation between social trust and life evaluations. As argued “these linkages are strong over time within countries as well as between countries. This in turn suggests that social trust, sometimes thought to be culturally fixed, can in fact change within policy-relevant time horizons, and that these changes in social trust are linked to significant changes in national levels of subjective wellbeing” (Helliwell et al., 2018, p. 419).

In this paper, the relation of functioning as a determinant of wellbeing to political and social trust is investigated in three Balkan countries. For the analysis, the 2012 ESS datasets for Albania, Bulgaria and Kosovo are used. First, the structure of the functioning construct consisting of eight common items from both Rounds of the ESS is investigated and its psychometric properties are assessed for each country based on current methodology (Charalampi, 2018; Charalampi, Michalopoulou & Richardson, 2019, 2020; Michalopoulou, 2017). This involves splitting randomly a sample of adequate size into two halves and first performing Exploratory Factor Analysis (EFA) on one half-sample in order to assess the construct validity of the scale. Secondly, the structure suggested by EFA is validated by carrying out Confirmatory Factor Analysis (CFA) on the second half. Based on the full sample, the psychometric properties of the resulting scales are assessed. Then, the socio-demographic and political “profile” of the functioning scale is examined and statistically significant relations of functioning to the political and social trust items are explored.

Method

Participants

The analysis was based on the ESS Round 6 Data (2012) for Albania, Bulgaria and Kosovo. The ESS implements all the strict methodological prerequisites for comparability over time and cross-nationally (Kish, 1994; Carey, 2000) by applying probability sampling, minimum effective achieved sample sizes in all participating countries and a maximum target non-response rate of 30% (The ESS Sampling Expert Panel, 2016). The standardized questionnaire is designed in British English and then translated by each national team applying the Translation, review, adjudication, presenting and documentation (TRAPD) methodology (Harkness, 2003; Harkness et al., 2010). Face-to-face interviewing is used for data collection.

Applying the same definition to all rounds, the ESS defines the survey population as all individuals aged 15+ residing within private households in each

country, regardless of their nationality, citizenship or language. The demographic and social characteristics of the participants are presented in Table 1. As shown, in all samples women were more than men. In the Albanian and Kosovar samples similar characteristics were observed with mean age close to 43 years. More than 62.5% of the participants were married, more than 84.8% had completed secondary education or lower and at least 26.1% were in paid work. In the Bulgarian sample, the mean age was 54 years, 53.4% of the participants were married, 77.0% had completed secondary education and 41.5% were in paid work.

Table 1: Participants' demographic and social characteristics based on the number of cases included in the analysis

		Men	Women	Age	Married	Secondary education or lower	In paid work
Country	<i>N</i>	(%)	(%)	Mean (SD)	(%)	(%)	(%)
Albania	1,201	45.7	54.3	43.8 (18.46)	66.8	84.8	26.1
Bulgaria	2,260	42.4	57.6	54.0 (16.97)	52.4	77.0	41.5
Kosovo	1,295	47.7	52.3	43.2 (17.09)	62.5	86.9	26.7

Note. The reference period for the respondent's main activity was defined as during the last 7 days.

Source: European Social Survey (2012).

Instrument

The structure of the functioning dimension consisting of eight common items from both Rounds is investigated for three Balkan countries of Round 6 (Table 2). The response categories range from 1 to 5 and are defined as follows: 1 (agree strongly); 2 (agree); 3 (neither agree nor disagree); 4 (disagree); 5 (disagree strongly). Therefore, the items' level of measurement is pseudo-interval. The scale is comprised of five positively (F1 and F3-F6) and three negatively (F2, F7 and F8) worded items. The scoring of positively worded items was reversed before the analysis in order to achieve correspondence between the ordering of the response categories.

Table 2: The 2012 European Social Survey (ESS) measurement of functioning

Functioning items	ESS questionnaire	Aligned scale	Item label
Free to decide how to live my life	D16	1-5 (R)	F1
Little chance to show how capable I am	D17	1-5	F2
Feel accomplishment from what I do	D18	1-5 (R)	F3
Feel what I do in life is valuable	D23	1-5 (R)	F4
Always optimistic about my future	D2	1-5 (R)	F5
Feel very positive about myself	D3	1-5 (R)	F6
At times I feel as if I am a failure	D4	1-5	F7
When things go wrong in my life it takes a long time to get back to normal	D19	1-5	F8

R = these items were reversed before analysis. The response categories are defined as follows: 1 = agree strongly; 2 = agree; 3 = neither agree nor disagree; 4 = disagree; 5 = disagree strongly. The grouping of items into the functioning dimension is based on Jeffrey et al. (2015).

Source: European Social Survey (2012).

For the measurement of political trust in national institutions (parliament, legal system, police, politicians and political parties), five items are included in the ESS core questionnaire. Each item is assigned a scale ranging from 0 (no trust at all) to 10 (complete trust). Accordingly, for the measurement of social trust, three items are included in the ESS core questionnaire: most people can be trusted (10) or you can't be too careful (0); most people would try to take advantage of me (0)/try to be fair (10); most of the time people try to be helpful (10) or look out for themselves (0). Also, the left/right self-placement scale is used. In the ESS core questionnaire, respondents are asked to place themselves on a scale ranging from 0 (Left) to 10 (Right).

Statistical analyses

In the first step of the analysis, the sample in each country was randomly split into two halves, following the methodological process of a theory testing case (Thompson, 2005). EFA was performed on the first half in order to assess the construct validity of the scale and then the structured was validated by carrying

out CFA on the second half. Based on the full sample and the CFA results, the psychometric properties of the scale were assessed. Statistical analyses were performed using the Mplus Version 8.6 and the IBM SPSS Statistics Version 20.

Sample sizes of Albania, Bulgaria and Kosovo were 1,201, 2,260 and 1,295 cases, respectively. Therefore, the samples were considered large enough (>300) for carrying out factor analyses separately in each country (Tabachnick & Fidell, 2007).

Initially, missing data analysis and data screening for outliers and unengaged responses was performed for both half-samples. Only cases with missing values on all items were excluded automatically from the analysis (Muthén & Muthén, 1998 – 2017). In addition, cases were eliminated if they exhibited low standard deviation (< 0.5), i.e. no variance in the responses. Data screening for outliers was based on background variables e.g., gender (dichotomy), age (ratio) and education (pseudo-interval). Cases were eliminated if they were shown in the boxplots as outliers (Brown, 2015; Tabachnick & Fidell, 2007; Thompson, 2005).

In performing EFA, the following sequence of decisions was required:

1. Initially, the items' frequency distributions were inspected for floor and ceiling effects, bearing in mind that the percentages of responses less than 15 are normally deemed acceptable (Terwee et al., 2007). The appropriate univariate statistics were computed for each item and their distributional properties were inspected (testing for normality) to decide on the appropriateness of the methods to be used. The criterion of corrected item-total correlations < .30 (Nunnally & Bernstein, 1994) was used to decide which items to exclude from the analysis.
2. The covariance matrix was employed as the appropriate matrix of associations (Brown, 2015).
3. Maximum likelihood was applied as the appropriate method of factor extraction (Brown, 2015).
4. Geomin rotation was used as the appropriate oblique factor rotation method (Brown, 2015)
5. Considering the factor analytic theory, "factors that are represented by two or three indicators may be underdetermined [...] and highly unstable across replications" (Brown, 2015, p. 21), only one to two factors could be tested for each country.
6. Items were considered salient if their factor loadings were > .30 and therefore the meaning of the dimension was inferred from these items (Fabrigar et al., 1999; Thompson, 2005). Items with loadings > .30 on one factor and > .22 on another factor were considered as "cross-loading" items

(Stevens, 2002). Items with loadings $< .30$ (i.e., low communalities) were excluded from the analysis (Brown, 2015).

In performing CFA, the following sequence of decisions was required:

1. The decision on the inclusion of items in the analysis was based on the results of the item analysis and EFA carried out on the first half-sample.
2. CFA was performed using the covariance matrix of associations and maximum likelihood estimation.
3. The model fit was considered adequate if $\chi^2/df < 3$, the standardized root-mean-square residual (SRMR) $< .05$, the comparative fit index (CFI) and Tucker-Lewis index (TLI) values were greater than or close to .95 and the root-mean-square error approximation (RMSEA) $\leq .06$ with the 90% confidence interval (CI) upper limit $\leq .06$ (Bollen, 1989; Brown, 2015; Hu & Bentler, 1999; Schmitt, 2011; Tabachnick & Fidell, 2007; Thompson, 2005). The model fit was considered acceptable if $\chi^2/df < 3$, SRMR $< .08$, the CFI and TLI values were $> .90$ and the RMSEA $< .08$ with the 90% CI upper limit $< .08$ (Hu & Bentler, 1999; Marsh, Hau & Wan, 2004).
4. Searches for modification indices and further specifications were performed. Where necessary, correlations between error variances were introduced (Brown, 2015; Thompson, 2005).

The functioning scale was constructed for the full sample of all three countries by averaging the defining items so that low and high scores would indicate low and high levels of functioning and descriptive statistics were computed. Based on the CFA results for the full sample, the average variance extracted (AVE) was computed for each scale. Convergent validity was considered adequate if the AVE was above or around .50 (Fornell & Larcker, 1981). The average inter-item correlations in the recommended range of .15-.5 that cluster near their mean value were used as an indication of the unidimensionality of the scale (Clark & Watson, 1995). Evidence of discriminant validity was considered adequate if the squared correlations between subscales were less than their AVE estimates (Fornell & Larcker, 1981). Moreover, based on the CFA results for the full sample, a scale was considered reliable if the composite reliability coefficient (Raykov, 2007) was above or around .70, i.e. using the same Nunnally and Bernstein (1994) criterion as for Cronbach's alpha coefficients. However, if AVE is less than 0.5, but composite reliability is higher than 0.6, the convergent validity of the construct is still adequate (Fornell & Larcker, 1981).

In order to obtain a more meaningful representation of the respondents' scores and for better interpretation, k-means clustering ($k = 5$) was performed in order to transform the raw scores into a 1-5 scale (Michalopoulou & Symeonaki, 2017). Cross-tabulations between the subscales' raw scores and the resulting clusters were performed so as to indicate the cut-off points for recoding the subscale scores.

Cross-tabulations and chi-square tests were performed in order to obtain the functioning scale's socio-demographic "profile" and investigate its association to the political trust and social trust items and the left/right self-placement scale. Statistical significance at $p < 0.05$ was used as a criterion for presenting the results.

Results

The full sample screening of the datasets identified no unengaged responses (standard deviation = .000) and no outlying cases. Three, five and four cases in the Albanian, Bulgarian and Kosovar samples, respectively, were rejected from the analysis because of missing values on all items.

The construct of (positive) functioning: EFA and CFA results

In every country of the ESS datasets, respondents had used the full range of possible responses for all functioning items (Table 3). The majority of the responses were clustered closer to the higher end of their respective scales. Strong ceiling effects were detected for four items (F1, F4, F5 and F6) in the Albanian and Kosovar samples. The lowest mean responses were detected for two items (F2 and F8) in all three datasets. Based on the criterion of corrected item-total correlations $< .30$, four (F2, F4, F7 and F8) and three (F2, F7 and F8) items of the Albania and Kosovar samples, respectively, were rejected from further analysis. Only in the case of the Bulgarian dataset, the analysis proceeded with all the initial eight items. Non-normality was not severe for any item (skewness > 2 ; kurtosis > 7). As shown, the proportion of missing values was negligible exceeding 3.5% only for two items of the Kosovar sample (F7 and F8).

EFA was performed on the first half-samples with the maximum likelihood of the covariance matrix of associations resulting in a unidimensional solution. Table 4 shows the factorial structure of the one-factor solutions. All items exhibited strong factor loadings ($\geq .40$) with the exception of one item (F2) in the Bulgarian sample.

Table 3: Item analysis of the functioning for Albania, Bulgaria and Kosovo based on the first half samples: European Social Survey, 2012

Country/ Item	Mean	SD	95% CI	Frequency percent of response categories													Kurt.	Skew.	CC
				1	2	3	4	5	6	7	8	9	10	11	12	13			
Albania (n = 600)																			
F1	4.10	0.890	4.03-4.18	1.0	7.2	7.8	48.7	33.8	1.5	-1.180	1.377	.318							
F2	2.61	1.089	2.52-2.70	11.7	45.0	11.8	25.0	3.0	3.5	0.399	-0.956	.151							
F3	3.86	0.789	3.80-3.93	1.2	8.7	10.2	63.8	13.5	2.7	-1.123	1.633	.364							
F4	4.14	0.651	4.08-4.19	0.3	2.3	5.3	66.2	24.5	1.3	-1.015	3.250	.259							
F5	4.08	0.856	4.01-4.15	1.8	5.2	7.0	55.5	29.5	1.0	-1.284	2.200	.377							
F6	4.04	0.747	3.98-4.11	1.2	4.0	6.5	65.2	21.5	1.7	-1.296	3.228	.409							
F7	3.25	1.116	3.15-3.34	2.0	33.7	16.0	33.5	13.2	1.7	0.006	-1.250	.211							
F8	2.40	1.101	2.31-2.49	16.8	51.5	8.2	17.3	4.0	2.2	0.759	-0.357	.212							
Bulgaria (n = 1,130)																			
F1	3.90	1.028	3.84-3.96	2.3	10.0	16.5	39.1	31.4	0.6	-0.80	-0.02	.403							
F2	3.06	1.077	3.00-3.13	6.5	28.0	25.5	30.4	7.2	2.6	-0.07	-0.87	.328							
F3	3.72	0.991	3.66-3.78	3.1	12.0	17.5	47.2	19.5	0.7	-0.72	0.01	.626							
F4	3.75	0.897	3.69-3.80	3.0	6.5	22.5	49.1	16.9	1.9	-0.80	0.76	.593							
F5	3.47	1.091	3.41-3.54	6.5	14.8	22.1	40.4	15.5	0.7	-0.54	-0.44	.619							
F6	3.82	0.917	3.77-3.88	2.7	6.3	19.4	50.0	20.2	1.4	-0.88	0.85	.619							
F7	3.62	1.045	3.56-3.68	2.7	15.0	21.3	39.1	19.7	2.2	-0.48	-0.52	.510							

Continued

	1	2	3	4	5	6	7	8	9	10	11	12	13
F8		2.84	1.002	2.78-2.90	9.1	30.9	30.5	23.4	3.4	2.7	0.50	-0.72	.403
Kosovo (n = 647)													
F1		4.18	0.871	4.11-4.25	1.1	4.5	13.6	39.6	40.2	1.1	-1.012	0.761	.323
F2		2.55	1.089	2.46-2.64	14.8	39.3	21.8	16.4	4.3	3.4	0.451	-0.578	.040
F3		3.81	0.880	3.74-3.88	1.2	7.6	20.6	47.9	19.5	3.2	-0.598	0.132	.392
F4		4.20	0.741	4.14-4.26	0.8	2.9	9.1	53.0	32.1	2.0	-1.092	2.447	.403
F5		4.23	0.833	4.17-4.30	0.6	4.5	9.3	43.4	40.5	1.7	-1.139	1.255	.458
F6		4.16	0.828	4.09-4.23	0.6	4.0	13.8	43.1	36.0	2.5	-0.928	0.786	.531
F7		3.09	1.082	3.00-3.17	4.5	28.7	28.3	23.0	10.7	4.8	0.164	-0.856	.268
F8		2.70	1.085	2.61-2.79	11.6	36.6	25.2	17.6	5.4	3.6	0.327	-0.646	.206

SD = standard deviation; CI = confidence interval; NA = no answer (missing values); Skew. = skewness; Kurt. = kurtosis; CC = corrected item-total correlation. Standard errors for skewness and kurtosis of the Albanian items were 0.104 and 0.207, respectively; standard errors for skewness and kurtosis of the Bulgarian items were 0.076 and 0.151, respectively; standard errors for skewness and kurtosis of the Kosovar items were 0.101 and 0.202, respectively.

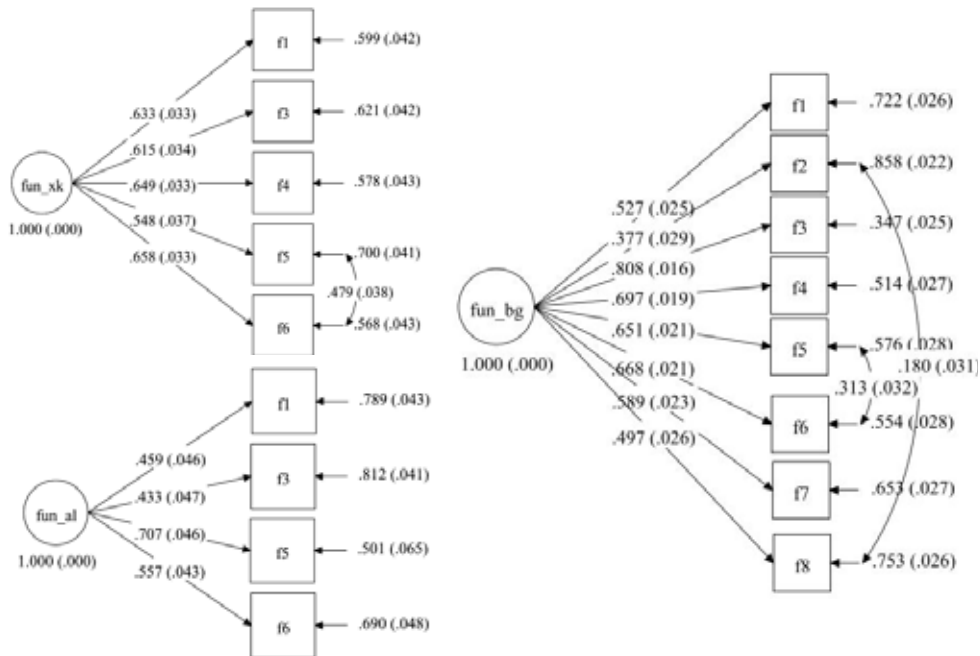
Source: Own calculations

Table 4: Exploratory factor analysis of the 2012 European Social Survey Functioning scale performed with maximum likelihood of the covariance matrix on the first half-sample of each country: Factor loadings of the one-factor model

Country	<i>n</i>	F1	F2	F3	F4	F5	F6	F7	F8
Albania	599	.512	–	.439	–	.627	.736	–	–
Bulgaria	1,129	.476	.346	.710	.704	.747	.749	.587	.427
Kosovo	646	.494	–	.530	.515	.752	.827	–	–

Source: Based on Social Survey (2012).

The one first-order factor model indicated by the EFA results was tested by performing CFA on the second half-samples. Modification searches were conducted and, where necessary, correlations between error variances were introduced. The CFA results (Figure 1) for the Albanian sample were $\chi^2/df = 5.98$, SRMR = .030, CFI = .961, TLI = .882, RMSEA (90% CI) = .091 (.046-.144) suggesting an inadequate model fit. The CFA results for the Bulgarian sample were $\chi^2/df = 2.88$, SRMR = .021, CFI = .987, TLI = .980, RMSEA (90% CI) = .041 (.028-.054) suggesting an adequate model fit. Bearing in mind that RMSEA tends to improve whereas the CFI and TLI tend to worsen as the number of items in the model increases (Kenny & McCoach, 2003) and relying on the SRMR, CFI and TLI values, the Kosovar model ($\chi^2/df = 0.69$, SRMR = .010, CFI = 1.000, TLI = 1.000, RMSEA = .000 with the 90% CI = .000-.050) provided an almost perfect model fit.

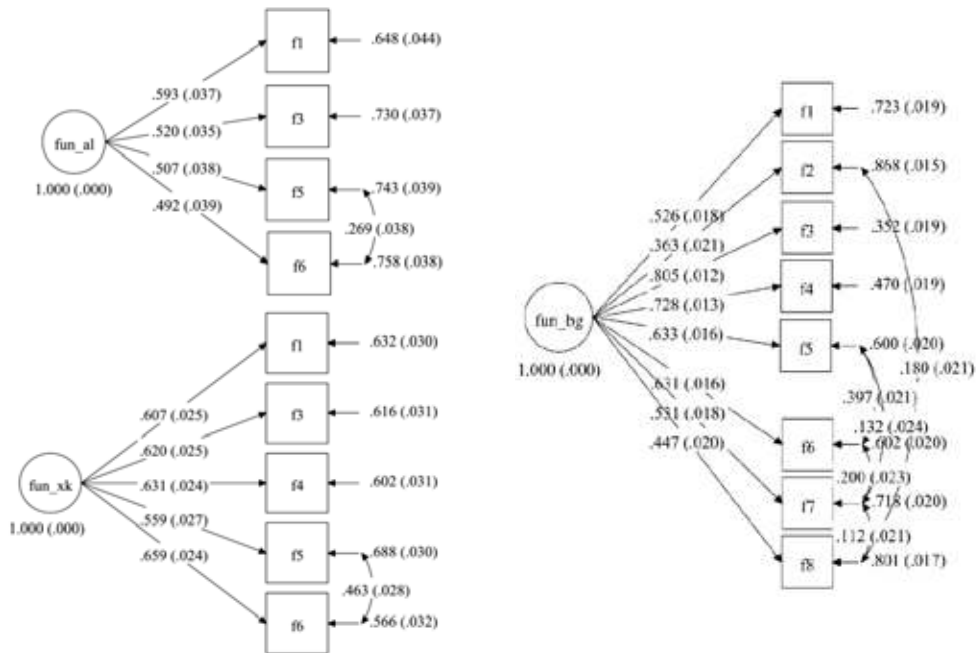


Source: Based on Social Survey (2012).

Figure 1: Standardized solution for the model with one first-order factor based on CFA analysis performed on the second half-samples of Albania ($n = 599$), Bulgaria ($n = 1,126$) and Kosovo ($n = 645$). Observed variables are represented by squares and the latent variable by a circle.

Psychometric properties of the (positive) functioning scale

Scales were constructed by averaging their defining items. In Table 5, descriptive statistics, the convergent validity and composite reliability are presented for the three countries. CFA analysis repeated for the full samples (Figure 2) of Bulgaria ($\chi^2/df = 3.52$, SRMR = .015, CFI = .993, TLI = .986 and RMSEA = .033 with the 90% CI = .024-.043) provided an adequate model fit. Based on the argument presented for the half-samples CFA results, the Albanian ($\chi^2/df = 0.33$, SRMR = .003, CFI = 1.000, TLI = 1.000 and RMSEA = .000 with the 90% CI = .000-.063) and the Kosovar models ($\chi^2/df = 0.58$, SRMR = .006, CFI = 1.000, TLI = 1.000 and RMSEA = .000 with the 90% CI = .000-.032) provided an almost perfect model fit.



Source: Based on Social Survey (2012).

Figure 2: Standardized solution for the model with one first-order factor based on CFA analysis performed on the full samples of Albania ($N = 1,198$), Bulgaria ($N = 2,255$) and Kosovo ($N = 1,291$). Observed variables are represented by squares and the latent variable by a circle.

The AVE of the (positive) functioning scale was below the 0.5 limit in all cases (Table 5). However, composite reliability was higher than 0.6 providing therefore evidence of adequate convergent validity. The average inter-item correlations were within the recommended range for unidimensionality (.15-.5) in all countries. In the Bulgarian and Kosovar samples, the (positive) functioning scale was reliable with composite reliability values .809 and .753 ($\geq .70$), respectively. However, in the Albanian sample, composite reliability value was less than the necessary limit.

Socio-demographic “profile” of the functioning scale

In the case of the Bulgarian sample (Figure 3), 9.7% of men scored higher on the higher end of the functioning scale (5) as compared to 5.6% of the women. Younger participants scored higher on the higher end of the scale than older

ones: 18-24 (8.0%); 25-34 (14.2%); 35-44 (7.9%); 45-54 (8.8%); 55-64 (6.7%); 65+ (4.6%). Moreover, 9.7% of the unmarried participants scored higher on the higher end of the scale (5) as compared to the 8.0% of the married ones. Those with a higher level of educational attainment scored higher on the higher end of the scale (5) than those having less than lower secondary education: tertiary (11.8%); upper secondary (7.1%); lower secondary (6.5%); less than lower secondary (1.8%). In accordance with the employment status, 12.0% and 4.5% of the employed and unemployed, respectively, scored higher on the higher end of the scale (5) as compared to the 3.9% of the inactive.

Table 5: Descriptive statistics, convergent validity, composite and internal consistencies of the Functioning scale based on the full sample of each country: European Social Survey, 2012

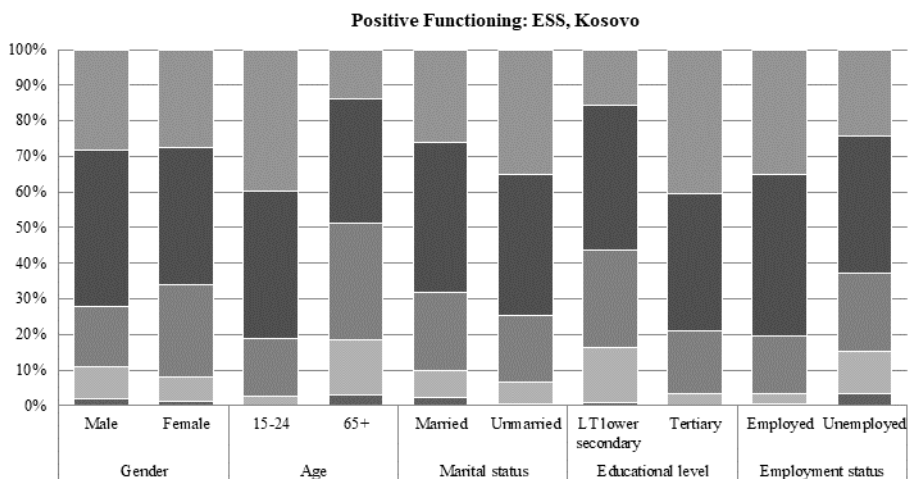
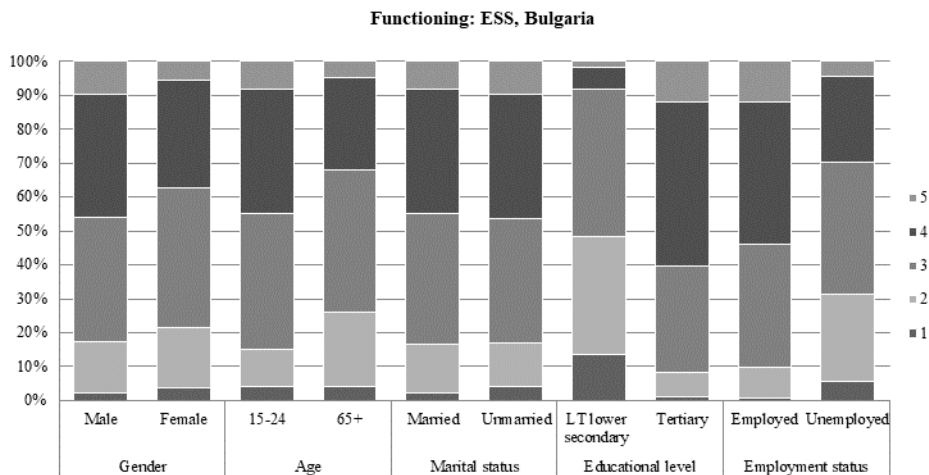
	Unidimensional scale*		
	Albania (N = 1,198)	Bulgaria (N = 2,255)	Kosovo (N = 1,291)
Number of items	4	8	5
Mean (standard error)	3.99 (0.017)	3.26 (0.020)	4.11 (0.017)
95% Confidence interval	3.96-4.02	3.22-3.30	4.07-4.14
Standard deviation	0.577	0.925	0.598
Skewness (standard error)	-1.016 (0.072)	-0.199 (0.054)	-0.721 (0.070)
Kurtosis (standard error)	2.200 (0.144)	-0.272 (0.108)	0.663 (0.140)
Convergent validity	.280	.358	.380
Composite reliability	.608	.809	.753
Average inter-item correl.	.309	.348	.397
Min.-max. correlations	.247-.449	.159-.629	.303-.654
Range of correlations	.201	.470	.350

* The four and five items (Albania and Kosovo, respectively) of the scale are measuring positive functioning and the eight (Bulgaria) items of the scale are measuring positive functioning.

Source: own calculations

In the case of the Kosovar sample (Figure 3), 28.3% of men scored higher on the higher end of the positive functioning scale (5) as compared to 27.5% of women. Younger participants scored higher on the higher end of the scale than older ones: 18-24 (39.7%); 25-34 (30.4%); 35-44 (28.7%); 45-54 (27.1%); 55-64 (20.5%); 65+ (13.7%). In accordance with marital status, 35.0% of the unmarried participants scored higher on the higher end of the scale (5) as compared to the 26.0% of the married ones. Those with higher level of educational attainment

scored higher on the higher end of the scale (5) than those having less than lower secondary education: tertiary (40.3%); upper secondary (30.6%); lower secondary (28.1%); less than lower secondary (15.6%). In addition, 35.2% and 25.7% of the employed and inactive, respectively, scored higher on the higher end of the scale (5) as compared to the 24.4% of the unemployed.

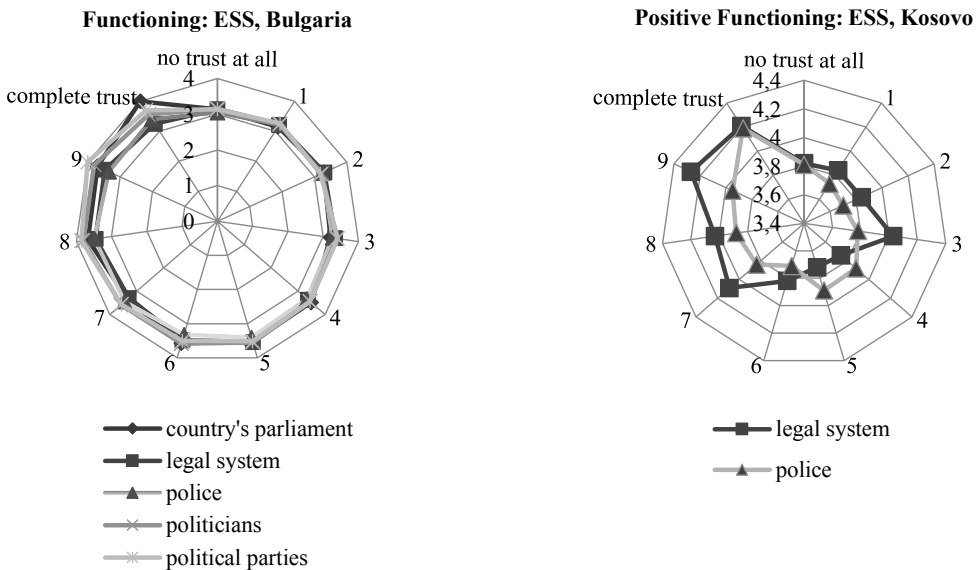


Source: Based on Social Survey (2012).

Figure 3: The demographic and social “profile” of the (positive) functioning scale for Bulgaria and Kosovo: European Social Survey, 2012

Political and social “profile” of the (positive) functioning scale: Mean scores comparisons

In the Bulgarian sample (Figure 4), lower levels (5) of functioning were obtained for trust in the parliament, the legal system, the police, the politicians and the political parties with mean scores 4.00, 3.25, 3.40, 3.56 and 3.70, respectively, as compared to the higher (1) levels of functioning (mean scores 3.14, 3.14, 3.05, 3.16 and 3.14). In the Kosovar sample (Figure 4), lower levels (5) of positive functioning were obtained for trust in the legal system and the police with mean scores 4.21 and 4.19, respectively, as compared to the higher (1) levels of positive functioning (mean scores 3.82 and 3.81).



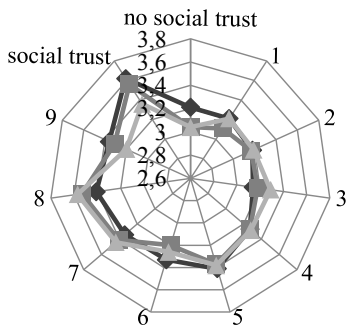
Source: Based on Social Survey (2012).

Figure 4: The mean scores of the (positive) functioning scale on political trust in national institutions for Bulgaria and Kosovo

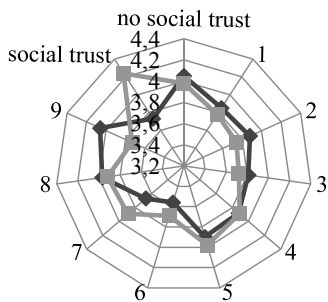
In the Bulgarian sample (Figure 5), lower levels (5) of functioning were obtained for the three social trust items (“most people can be trusted or you can’t be too careful”, “most people would try to take advantage of me/try to be fair”, “most of the time people try to be helpful or look out for themselves”) with mean scores 3.62, 3.56, and 3.36, respectively, as compared to the higher (1) levels of functioning (mean scores 3.21, 3.04 and 3.04). In the Kosovar sample (Figure 5), lower levels (5) of positive functioning were obtained for the one of the social trust items (“most people would try to take advantage of me/try to be fair”) with

a mean score 4.24 as compared to the higher (1) levels of positive functioning (mean scores 3.98). The reverse holds true for the second social trust item (“most people would try to take advantage of me/ try to be fair”).

Functioning: ESS, Bulgaria



Positive Functioning: ESS, Kosovo



- ◆ most people can be trusted (10) or you can't be too careful (0)
- most people would try to take advantage of me (0) or try to be fair (10)
- ▲ most of the time people try to be helpful (10) or look out for themselves (0)

- ◆ most people can be trusted (10) or you can't be too careful (0)
- most people would try to take advantage of me (0) or try to be fair (10)

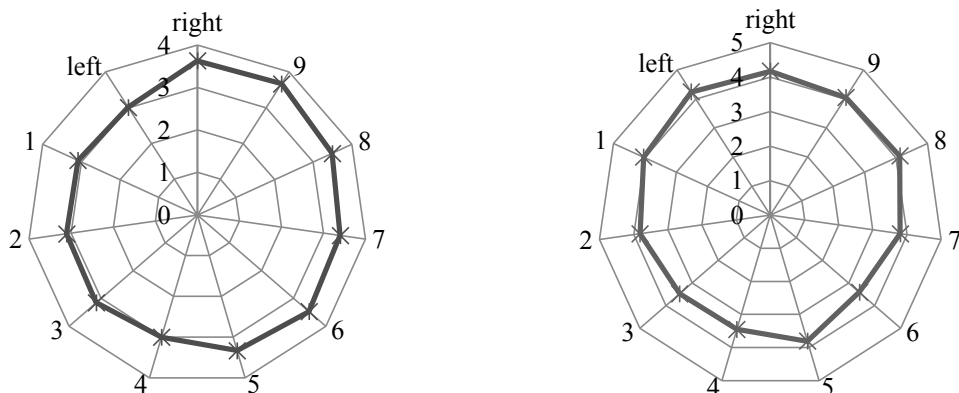
Source: Based on Social Survey (2012).

Figure 5: The mean scores of the (positive) functioning scale measurement of social trust for Bulgaria and Kosovo

In the Bulgarian sample (Figure 6), lower levels of functioning (mean score 3.63) were detected for those inclined to the right end (10) of the left/right self-placement scale as compared to those on the left (0) end (mean score 3.01). In the Kosovar sample (Figure 6), lower levels of functioning (mean score 4.24) were detected for those inclined to the left end (0) of the left/right self-placement scale as compare to those on the right (0) end (mean score 4.17).

Functioning: ESS, Bulgaria

Positive Functioning: ESS, Kosovo



Source: Based on Social Survey (2012).

Figure 6: The mean scores of the (positive) functioning scale on the left/right self-placement scale for Bulgaria and Kosovo

Conclusions

This study investigated the relation of functioning as a determinant of wellbeing to political and social trust in three Balkan countries based on the 2012 ESS datasets for Albania, Bulgaria and Kosovo.

The investigation of the structure (dimensionality) of the 2012 measurement of functioning by applying the traditional approaches of EFA and CFA to randomly split half-samples resulted in all countries in a unidimensional structure consisting of different items in each case. Only in the case of the Bulgarian dataset the functioning scale comprised by all the initial eight items as four and three in the Albanian and Kosovar samples, respectively, were rejected based on the criterion of corrected item-total correlations $<.30$. The CFA results of the second half samples suggested an inadequate, an adequate and an almost perfect fit for a unidimensional solution measuring (positive) functioning for Albania, Bulgaria and Kosovo, respectively. The relevant CFA results of the full samples suggested an adequate model fit for the functioning scale of Bulgaria and an almost perfect fit for the (positive) functioning scale of Albania and Kosovo. The analysis provided reliable and valid scales of (positive) functioning for Bulgaria and Kosovo.

The analysis of the functioning scale's socio-demographic "profile" in the case of the Bulgarian sample resulted in younger men participants, unmarried with a higher level of educational attainment and economically active (employed and unemployed) having lower levels of functioning. The analysis of the positive functioning scale's socio-demographic "profile" in the case of the Kosovar sample resulted in younger men participants, unmarried, employed with higher level of educational attainment having lower levels of functioning.

In the Bulgarian dataset, the mean scores of functioning increased as the levels of political and social trust were getting higher and moving closer to the self-placement scale's right end. In the Kosovar dataset, the mean scores of positive functioning increased as the levels of political and social trust were getting higher and moving closer to the self-placement scale's left end. Although these findings are not comparable between countries, the difference in the direction of these trends should be noted. However, we are not in a position to provide a sound interpretation based on our data analyses and we may hypothesize only that they are due to the specific socio-political, cultural and historical circumstances prevalent in each country, an issue that is excluded from the scope of the present study.

All in all, although the analysis did not result in the same structure of functioning for the three Balkan countries, it did provide a reliable and valid scale for Bulgaria and Kosovo. Because of the different structures, the socio-demographic and political "profiles" are not comparable. Further analysis is necessary to render them comparable and cover all participating countries of this Round of the ESS. Moreover, our analysis has indicated a strong positive relation between trust and the - less studied - functioning as an aspect of wellbeing. To this respect it has offered a base for the verification of the hypothesis that the linkage between trust and well-being is both culturally fixed but also prone to change, as changes in the levels of trust seem to lead to "changes in national levels of subjective well-being" (Helliwell et al., 2018, p. 419).

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