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Does Variation in the Extent of Generalized Trust, Does Variation in the Extent of Generalized Trust, Individual Education and Extensiveness of Social Security Policies Matter for Maximization of Subjective Well-Being?

Rania F. Valeeva*

Abstract

In this paper, I examine whether generalized trust and education, as well as social security policies of welfare state institutions matter for cross-national differences in subjective well-being (SWB), because knowledge on this issue is still lacking. For this purpose I integrated the insights of two sociological theories: Social Function Production theory and Actor-Centred Institutionalism. Based on these theoretical notions we derived several hypotheses, which I tested using multilevel analysis of the data from the European Social Survey (2006), in a sample of 37,237 respondents from 22 European countries. My findings indicate that various extensiveness of social security policies matter for the level of SWB, and for the impact of education on SWB. I found negative impact of low education on SWB in all countries, except in Northern and Western European countries. This might suggest that social security policies of the latter countries have diminished the negative impact of low education on SWB. Moreover, my findings indicate positive relationship between individual education and generalized trust; as well as between generalized trust and SWB in countries with all five types of social security polices.

Key words: Subjective well-being; Education; Generalized trust; Social security policies; Multi-level analysis

Introduction

The attainment of good life is the ultimate goal of everyone, and it could be viewed as a broad concept which concerns subjective well-being (SWB) that includes people's affective and cognitive evaluations of own well-being in terms of life satisfaction and happiness (Diener et al., 1999; Veenhoven, 2013). Previous empirical research shows an unequal distribution of SWB across the general population of Western societies (Diener et al., 1999; Helliwell et al. 2010). It suggests that differing levels of SWB are related to differing levels of individual resources and characteristics (Diener et al., 1999; Diener, 2009; Ormel et al., 1999). I view trust in generalized others as an important individual resource because it enables people to deal with strangers in situations of uncertainty (Nannestad, 2008; Yamagishi, 2011).

Previous research indicates that greater trust in strangers facilitates participation in voluntary associations and in other forms of social interactions and exchanges of material and non-material resources, which are found to have favourable effects on SWB (Diener & Seligman, 2004). Generalized trust becomes more important for maximization of SWB the less it is subjected to constraints (Helliwell & Putnam, 2004). A range of factors in supporting or constraining the development of generalized trust is recognized (Nannestad, 2008; Yamagishi, 2011). Among different factors, individual education is found to facilitate development of trust in generalized others. Previous empirical research indicates that the better educated people are likely to have higher levels of generalized trust than the less educated (Nannestad, 2008; Hooghe et al., 2009, 2012). According to Hooghe et al. (2012), most of this association is due to social and cognitive skills (such as reasoning) which are obtained through education.

Education is also found to contribute to differences in maximization of SWB (Kapteyn et al., 2010; Witter et al., 1984). Several studies showed that in the United States, people with more years of education are more likely to have higher levels of SWB than their counterparts with less years of education (Kapteyn et al., 2010; Witter et

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al., 1984). However, no clear relationship between extent of education and SWB was found in several European countries (Helliwell, 2003). Such inconsistency in empirical findings might be due to the differing levels of social security policies across countries, since extensive social security policies are able to compensate a lack of individual resources (Pacek & Radcliff, 2008a, 2008b; Requena, 2010). Social security policies of European countries may refer to redistribution of financial resources, but also to redistribution of care tasks and jobs due to which people from disadvantaged groups (i.e., the less educated women) get more opportunities for education and development of additional individual resources (Paxton et al., 2007). However, only few empirical studies analyse the impact of social policies on the relationship between individual resources (such as generalized trust or individual education) and SWB (Helliwell & Putnam, 2004; Pacek & Radcliff, 2008a, 2008b). Yet, more understanding of such impact is needed because it could contribute to development of specific social policies directed at reducing differences in SWB.

Therefore, in this paper, I examine whether extensive social security policies have a more favourable impact on SWB maximization than the less extensive social policies. For this study, I have used the insights of two theoretical approaches: Social Function Production theory (Lindenberg, 1990, 1991), and the notion of Actor-Centred Institutionalism (Scharpf, 1997), which both focus on the notions of goals, constraints and behaviour. According to Social Function Production theory, the extent of SWB maximization is affected by the extent of individual resources. However, according to Actor-Centred Institutionalism, people's choices are influenced by institutional policies, because people's decisions are made within constraints that are set by the state institutions. I have integrated the insights of Social Function Production theory and Actor-Centred Institutionalism for a comprehensive approach of cross-national SWB differences. Accordingly, I presume that people strive to maximize their SWB using available resources within the institutional context in which they live (Becker, 1976; Layard, 2005; Lindenberg, 1990). In short, I propose that cross-national differences in SWB are explained by variation in the extent of generalized trust and education, as well as by variation in the extensiveness of social security policies. In particular, I have hypothesized that relationship between generalized trust and SWB, as well as relationship between individual education and SWB varies across countries with different extensiveness of social security policies. More specifically, I have expected that in countries with extensive social security policies the negative impact of scarce individual resources on SWB is reduced.

Method

Data

I have used the cross-national data from the European Social Survey (2006), which is based on the random sampling in each European country. Respondents were interviewed in their homes in their respective national languages by professional interviewers. The mean response rate exceeds 61.2% with a range from 46.0% in France up to 73.2% in Slovakia. The detailed information on the survey data collection is presented in the accessible sources of the European Social Survey (Billiet & Pleysier, 2007; European Social Survey, 2006). For the present study, I have limited the number of the country samples to 22: Austria, Belgium, Bulgaria, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, the Netherlands, Norway, Poland, Portugal, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, and the United Kingdom. Moreover, I restricted the dataset to respondents aged 20 to 80 in order to assess comparability with previous research. I have substituted the variables with missing values by the mean values of each variable on the level of each included country. The final dataset consists of 37,237 respondents.

Variables

Subjective well-being (SWB) was measured on the basis of life satisfaction and happiness, because these concepts together adequately represent people's subjective well-being (Diener & Fujita, 1995; Haller & Hadler, 2006). In particular, life satisfaction refers to cognitive or long-term evaluation of SWB; and happiness refers to emotions or short-term evaluation of SWB. Regarding life satisfaction, respondents were asked 'All things considered, how satisfied are you with your life as a whole nowadays?' with answers ranging from 0 (*extremely dissatisfied*) to 10 (*extremely satisfied*) on an ascending scale. With regard to happiness, respondents were asked 'Taking all things together, how happy would you say you are?' with answers ranging from 0 (*extremely unhappy*) to 10 (*extremely happy*) on an ascending scale. Strictly speaking, these dependent variables have an ordinal scale. However, we approached life satisfaction and happiness as variables from an interval scale, since it has been suggested that 'various scales for measuring SWB tend to yield similar results across countries' (Diener & Ryan, 2009).

Education is the first main independent variable and it was measured by asking 'How many years of full-time education have you completed?' Answers were offered in full-time equivalents, including compulsory years of schooling. The answers obtained present total number of years of full-time education.

Generalized trust is the next main independent variable and it was constructed using answers to three questions: 'Generally speaking, would you say that most people can be trusted, or would you say that you cannot be too careful in dealing with people?' 'Do you think that most people would try to take advantage of you if they had the chance, or would they try to be fair?' and 'Would you say that most of the time people try to be helpful, or that they mostly look out for themselves?' For each question, 11 answers (on an ascending scale from 0 to 10) were offered. The scale of the constructed variable ranged from 0 (no trust) to 33, indicating the extent of respondents' trust in generalized others.

Respondents' sex, age, marital status, work status were included in the present data analysis as control variables, because they are found to be associated with life satisfaction, happiness, generalized trust and education (Diener & Ryan, 2009; Hooghe et al., 2009, 2012; Mirowsky & Ross, 2003). Additionally, the respondents' problems with daily activities due to health conditions and urbanization level of residence were included as control variables, because they have also been found to be associated with life satisfaction, happiness and education (Diener & Seligman, 2004; Hooghe & Vanhoutte, 2001). Descriptive statistics of all study variables with indications of reference categories used in the data analysis are presented in Table 1.

Table 1. Descriptive statistics of the dataset

Variables	*N*	*%*
Sex		
Female	16994	45.6
Male (ref. [(a)])	20243	54.4
Marital status		
Married (ref.)	21671	58.2
Separated divorced	4077	10.9
Widowed	3269	8.8
Never married	8220	22.1
Work status		
Paid work (ref.)	20621	55.4
Studying	1327	3.6
Unemployed	1928	5.2
Disabled/ill	985	2.6
Retired	8318	22.3
Housewives/husbands	348	0.9
Others	3710	10.0
Urbanization grade		
A big city	7133	19.2
Suburbs or outskirts of big city	4447	11.9
Town or small city (ref.)	11845	31.8
Country village	11511	30.9
Farm or home in country side	2301	6.2
Hampered in daily activities		
A lot	2370	6.4
To some extent	7447	20.0
Not hampered (ref.)	27420	73.6
	Mean	SD
Age	47.81	16.04
Education	12.42	3.91
Life satisfaction	6.71	2.08
Happiness	7. 10	1.87
Generalized trust	15.47	5.37

[(a)] ref.= Reference category used in the analysis.
Source: European Social Survey 2006 (N = 37,237)

In this paper, I used a country's welfare state (WS) type as a proxy for the social security policies of a country. I have employed the welfare state (WS) typology of Ferrera (1996) which emphasizes cash transfers and the actual delivery of services (such as health care, education and social services), and which reduces complexity of social security policies of several countries for comparative purposes (Bambra, 2007; Bonoli, 1997). Ferrera's

typology concerns WS composition of Central, Northern, Western and Southern European countries, which are categorized respectively into Scandinavian, Bismarckian, Anglo-Saxon and Southern WS types. I view countries with the Scandinavian WS type to have the most extensive social security policies, because they are characterized by a universal coverage of the risks of life: universal benefits, large social public expenditure including health care, extensive welfare provisions including public provision of social services and redistribution via the tax and transfer system. Moreover, I view countries with the Bismarckian and Anglo-Saxon WS types to have social security policies which are less extensive than that in countries with the Scandinavian WS type, because the social policies of Bismarckian WS type are characterized by generous entitlements based mainly on transfers, by almost full social insurance coverage through own or derived rights, and by fund cash benefits which are preferred to welfare services), while the social policies of Anglo-Saxon WS type are characterized by a minimal state's role and responsibilities for individual risks, by promotion of market solutions for the risks of life, by full universal risk coverage only for health care, and by public social expenditures only for very needy people. Besides, I consider countries with the Southern WS type to have limited social security policies, because they are characterized by a fragmented social benefits provision, by a healthcare system that provides only limited and partial coverage, by traditional familialism, and by the high level of particularism (i.e., clientelism) concerning cash benefits and financing (Ferrera, 1996). Finally, I have also examined the extensiveness of social security policies of Eastern European countries (such as Bulgaria, Estonia, Hungary, Poland, Russian Federation, Slovakia, Slovenia and Ukraine), which are described in previous research as post-socialist countries, and which are found to have limited health service provisions, high poverty rates, high social insecurity (e.g. unemployment and retirement pensions), and poor overall population health (Eikemo et al., 2008; Levecque et al., 2014). The WS composition of these countries is categorized as Eastern WS type (Eikemo et al., 2008).

Using the mentioned categorization of WS types, I approach countries with the Scandinavian WS type to have the most extensive social security policies, followed by the social policies of countries with the Bismarckian, Anglo-Saxon, Southern, and Eastern WS types. I view Eastern European countries to have least extensive social security policies.

Analysis

Since I have aimed to analyse the dataset from individual-, country- and cross-level levels simultaneously, I used hierarchical multilevel analysis with the MLwiN 2.01 package (Rasbash, et al., 2004). In particular, I have made use of linear multilevel regression analysis because I have approached two indicators of SWB as variables from an interval scale (Hox, 2002).

In the first step of my data analysis, I have examined whether the variation in the extent of individual education and generalized trust is correlated with the differences in SWB. In the second step of the analysis, I have focused on the extensiveness of social security policies of a country which are able to constrain or to facilitate people with limited individual education or with a lack of generalized trust. In particular, I have analysed whether relationship between SWB and individual education, as well as between SWB and generalized trust is conditioned by the various extensiveness of social security policies. I performed the data analyses using the design weights provided by the European Social Survey (2006).

Results

Table 2 shows the mean scores concerning happiness, life satisfaction, education and generalized trust in 22 European countries. When comparing these scores, I observe that the mean scores on life satisfaction range from 5.60 in Eastern European countries (with the lowest mean score in Ukraine) to 7.99 in the Northern European countries (with the highest mean score in Denmark). Moreover, the mean scores on happiness range from 6.25 in the Eastern European countries (with the lowest mean score in Bulgaria) to 8.03 in the Northern European countries (with the highest mean score in Denmark). Thus, the level of happiness and life satisfaction varies across countries with different social security policies. In particular, people living in countries with the Scandinavian WS type have the highest mean scores on happiness and life satisfaction; while their counterparts living in countries with Eastern WS type have the lowest mean scores on these dimensions.

Besides, Table 2 indicates that the mean educational level across 22 European countries is 12.42 years (SD = 3.91), with the lowest mean level in Portugal, and the highest mean level in Norway. Finally, the mean scores on

generalized trust range from 12.96 in East European countries (with the lowest mean score in Bulgaria) to 20.51 in Northern European countries (with the highest mean score in Denmark).

Table 2. Descriptive statistics of the main study variables in 22 European countries

Geographical clusters of countries in welfare state types[(a)]	Country samples	Life satisfaction		Happiness		Education		Generalized trust	
	N	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Central European countries									
Austria	2101	7.54	2.06	7.42	1.99	12.75	3.09	16.05	5.94
Belgium	1577	7.37	1.87	7.64	1.58	12.36	3.74	15.25	5.16
France	1816	6.26	2.49	7.13	1.76	12.63	4.10	14.68	4.88
Germany	2573	6.69	2.25	7.01	1.95	13.45	3.37	15.36	5.17
Netherlands	1738	7.49	1.60	7.65	1.42	13.40	4.54	17.28	4.59
Switzerland	1634	8.03	1.68	8.07	1.45	13.61	3.73	17.86	4.63
Bismarckian welfare state		*7.23*	*1.99*	*7.49*	*1.69*	*13.03*	*3.76*	*16.08*	*5.06*
Northern European countries									
Denmark	1365	8.46	1.50	8.32	1.38	13.51	5.02	20.51	4.68
Finland	1674	7.97	1.53	8.01	1.41	12.87	4.21	19.23	4.44
Norway	1550	7.75	1.67	7.92	1.55	13.73	3.76	19.97	4.40
Sweden	1692	7.78	1.77	7.87	1.53	12.98	3.54	18.94	4.67
Scandinavian welfare state		*7.99*	*1.62*	*8.03*	*1.47*	*13.48*	*4.13*	*19.66*	*4.55*
Southern European countries									
Portugal	1999	5.47	2.12	6.47	1.82	7.33	4.93	12.77	5.58
Spain	1650	7.42	1.81	7.61	1.66	11.95	5.26	14.99	4.48
Southern welfare state		*6.45*	*1.97*	*7.04*	*1.74*	*9.64*	*5.10*	*13.88*	*5.03*
Western European countries									
Ireland	1524	7.47	2.03	7.69	1.86	12.86	3.57	17.10	5.56
UK	2102	7.08	2.05	7.40	1.98	13.72	4.05	16.76	4.96
Anglo-Saxon welfare state		*7.28*	*2.04*	*7.55*	*1.92*	*13.29*	*3.81*	*16.93*	*5.26*
Eastern European countries									
Bulgaria	1278	4.59	2.62	5.16	2.46	11.30	3.42	11.21	6.58
Estonia	1328	6.25	2.22	6.71	1.93	12.56	3.13	16.05	5.94
Hungary	1368	5.25	2.54	6.20	2.51	11.94	3.78	13.28	6.31
Poland	1500	6.53	2.43	6.83	2.16	11.79	4.93	12.18	5.44
Russian Federation	2142	5.07	2.51	5.82	2.25	12.25	3.29	12.36	6.34
Slovakia	1522	6.01	2.29	6.47	2.01	12.70	3.26	13.03	5.84
Slovenia	1282	6.89	2.20	7.18	1.99	11.86	3.72	13.33	6.01
Ukraine	1822	4.22	2.54	5.60	2.42	11.74	3.56	12.20	6.44
Eastern welfare state		*5.60*	*2.42*	*6.25*	*2.22*	*12.02*	*3.64*	*12.96*	*6.11*
Total	37237	6.71	2.08	7.10	1.87	12.42	3.91	15.47	5.37

[(a)] Ferrera typology (1996).

Source: European Social Survey, 2006 (N = 37,237)

The results from the additional data analyses indicate that impact of individual education and generalized trust on happiness and life satisfaction varies across countries. The findings indicate that the extent of generalized trust differs across countries, and that the more educated are likely to have higher levels of generalized trust than the less educated. These findings are in line with the previous research (Nannestad, 2008; Hooghe et al., 2009, 2012).

In the next step (in Table 3), I extended the previous statistical models by adding the WS types and cross-level interaction terms between WS types and education, and between WS types and generalized trust. These additions increased the percentage of the explained between-country variation in the scores of life satisfaction up to 74.2 per cent, and in the scores of happiness up to 84.2 per cent.

Moreover, the findings in Table 3 (Models A and B) support the results from Table 2, indicating that level of happiness and life satisfaction varies significantly across countries with various extensiveness of social security policies. Moreover, the results in Models A and B, suggest that various extensiveness of social security policies condition the extent of relationship between individual education and SWB. More specifically, the findings show that in countries with Bismarckian WS type, educational differences in happiness and life satisfaction are likely to be bigger than in countries with the Scandinavian or Anglo-Saxon WS types.

Table 3. Parameter estimates from multilevel linear regression models on life satisfaction and happiness[(a)]

	Life satisfaction		Happiness	
	Model A		Model B	
Variables	B	SD	B	SD
Intercept	7.459****	(0.220)	7.862****	(0.136)
Education	0.021*	(0.010)	0.009	(0.008)
Generalized trust	0.105****	(0.012)	0.072****	(0.008)
Types of WS:				
Bismarckian (ref.)	–		–	
Scandinavian type	0.540*	(0.252)	0.328*	(0.158)
Anglo-Saxon type	0.134	(0.238)	0.077	(0.142)
Southern type	–0.538	(0.570)	–0.292	(0.285)
Eastern type	–1.274***	(0.374)	–0.949****	(0.230)
Type of WS *education				
Bismarckian*education (ref.)	–		–	
Scandinavian*education	–0.053****	(0.011)	–0.034**	(0.011)
Anglo-Saxon*education	–0.046***	(0.014)	–0.034**	(0.011)
Southern*education	–0.012	(0.012)	0.023	(0.014)
Eastern type*education	0.030*	(0.012)	0.051***	(0.014)
Type of WS *GT:				
Bismarckian*GT (ref.)	–		–	
Scandinavian*GT	–0.011	(0.013)	0.004	(0.010)
Anglo-Saxon*GT	–0.022	(0.019)	0.004	(0.013)
Southern*GT	–0.047**	(0.014)	–0.039***	(0.009)
Eastern type*GT	–0.015	(0.014)	–0.005	(0.010)
Explained variance (%)	12.35		13.76	
Between-country variance (%)	74.22		84.18	

[(a)] Controlled for gender, age, marital status, work status, problems in daily activities, and urbanization grade of residence.
* = significant at $p < 0.05$; ** = significant at $p < 0.01$; *** = significant at $p < 0.001$; **** = significant at $p < 0.0001$ (two-tailed tests).

These results are supported by the findings from the additional data analyses for each welfare state, which present a variation of the relationship between education and two indicators of SWB. In particular, the results indicate that in countries with Southern and Eastern WS types, the better educated are likely to have higher level of happiness than the less educated. However, in countries with Bismarckian, Scandinavian and Anglo-Saxon WS types, there is no negative impact of low education on happiness. Moreover, the findings indicate no negative impact of low education on life satisfaction in countries with Scandinavian and Anglo-Saxon WS types. These findings might suggest that social security policies in these countries have reduced the negative impact of low education on happiness and life satisfaction.

Moreover, the findings in Models A and B (Table 3) show that various extensiveness of social security policies conditioned the relationship between generalized trust and life satisfaction, as well as between generalized trust and happiness. In particular, they show that the extent of these relationships vary across WS types. These results are supported by the findings from the additional data analyses: generalized trust has strong impact on happiness and life satisfaction in countries with all five WS types. Finally, the results indicate that in countries with all five WS types, the better educated people have higher levels of generalized trust than the less educated.

Discussion

This paper provides several interesting findings. In particular, it shows that individual education and generalized trust do matter for SWB, when social security policies are not taken into account. In particular, they indicate that people with more years of education or more generalized trust are likely to have higher levels of SWB than those with less years of education or lack of trust in others. However, when we take the impact of social security policies into account, we observe that in Northern and Western European countries, there is no negative impact of low education on the two indicators of SWB. The results of this paper suggest that social security policies in these countries have a more favourable impact on SWB maximization of the less educated than the less extensive social security policies in the countries with other WS types. Perhaps social security policies of the Northern and Western European countries provide a sufficient amount of social benefits for the less educated in a way that reduces the importance of their limited individual education. However, it is not clear which particular social security policy have reduced the negative impact of low education on SWB, because the typology of Ferrera does not provide specific categorization of these policies. Given this, I suggest that more research is needed to find this.

It is important that several methodological limitations in the present data analysis are taken into account. Firstly, this concerns our approach of the relationship between individual education and SWB. I have assumed that individual education has an impact on SWB. However, when using cross-sectional data it is not possible to exclude the opposite direction of the relationship between these variables. Theoretically, the direction of the relationship between education and SWB seems to be one-way, because an educational degree is obtained early in life. Secondly, the two indicators of SWB - life satisfaction and happiness – could be differently interpreted by persons from different social and ethnical groups, which might result in cross-cultural differences in mean values of SWB (Oishi, 2010). Finally, the possibility of selection bias should also be considered because of low (less than 50%) response rates in the several European countries studied. Previous research shows that nonresponse is larger among lower socioeconomic groups as a result of literacy and language barriers (Van Loon et al., 2003). The implication is that it may be possible to underestimate the influence of education on SWB maximization.

Despite the several methodological data limitations, the results of this study suggest that the use of Ferrera's typology have contributed to the better understanding of cross-national differences in SWB, because its introduction into the statistical models has explained up to 74 per cent of the between-country variation in the scores of life satisfaction, and up to 84 per cent of the between-country variation in the scores of happiness. Moreover, this typology has identified the conditioning role of social security policies for the relationship between individual education and SWB. My results suggest that the extensiveness of social security policies could be viewed as another important determinant of SWB maximization. Furthermore, the findings of this study indicate that analysis of the cross-national data using hierarchical multi-level modelling have unpacked the combined impact of individual education and social security policies on SWB. And finally, my results suggest that a comprehensive approach (based on the integrated insights of Social Function Production theory and Actor-Centred Institutionalism) of cross-national differences in SWB provides more insight in these differences than each theory separately.

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