

Is satisfaction with healthcare indeed satisfaction with healthcare?

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Abstract:

Background: There is a growing need for healthcare services and system performance assessment due to the population ageing and limited resources in Europe. Therefore, it is not surprising that the measurement of the healthcare system performance with public or user satisfaction (Bleich et al., 2009) is considered important. Public satisfaction with a healthcare system is an important dimension of healthcare legitimacy; referring to the citizens' evaluations of how their government has actually implemented healthcare services in regards to what it had promised (Rothstein 2001). It is proposed that in contrast to expert opinion and other objective performance measures, subjective evaluations directly echo the experiences and perceptions of the public (Blendon & Benson, 2001) and provide an assessment of healthcare systems that is often described as more accurate, legitimate, and sensitive (Aharony & Strasser, 1993; Fitzpatrick, 1991; Park, Park, Kwon, Kang, & Noh, 2016). However, previous studies (Bleich et al., 2009; Footman et al., 2013) argue that public satisfaction with the healthcare system might depend more on external factors outside the health system. For example, Footman et al. (2013) have found that trust in political institutions was the strongest determinant of healthcare system satisfaction in former Soviet Union countries. One such factor outside the healthcare system might be general satisfaction with a government's actions and general life satisfaction of people which frame the overall satisfaction level.

Aim: The aim of the paper is to compare public satisfaction with healthcare systems in four types of European healthcare systems and test the hypothesis that healthcare satisfaction is partially a product of the factors outside the healthcare system.

Method: Four countries in our analyses represent four different healthcare systems in Europe. Slovakia presents a low-supply and low-performance mixed system, Germany a supply-and-choice oriented public system, The United Kingdom a regulation-oriented public system and Sweden a performance- and primary care-oriented public system. We used data from the European Social Survey round 6 for analyses of healthcare satisfaction, and link healthcare satisfaction with other institutions in the country and individual level life satisfaction. The European Social Survey meets the high standards of quality of comparative social surveys. The survey is representative of 15+ non-institutionalised populations in the country, and guarantees the best solutions for multi-ethnic data collection. Face to face interviews were used in data collection. In addition to correlation and linear regression analyses, we use structural equation model to distinguish the structure of the satisfaction formation. We investigate mainly the link between satisfaction with healthcare, satisfaction with government, satisfaction with democracy, trust in institutions, overall satisfaction with the individual life, health status and household income situation.

Findings: Among different countries and healthcare systems, public satisfaction with healthcare was lowest in the low-supply, low-performance mixed system represented by Slovakia. The structural equation modelling analysis suggested that in all countries satisfaction with the healthcare system belongs to the same set with other institutional satisfaction and trust indicators, rather than being an independent healthcare indicator. Healthcare satisfaction was strongly influenced by the overall satisfaction with other different institutions in society. A comparison of two alternative models proved that the model fit was much better in the model including the latent

institutional satisfaction variable (Latent Satisfaction) compared to the model with the independent healthcare satisfaction variable. Latent Satisfaction is also associated with individual life satisfaction. In all countries people who were more pleased with the government and democracy in their country and trusted more national institutions were also more satisfied with the healthcare system. Regression analysis revealed that institutional satisfaction with government, democracy and institutional trust influenced the satisfaction with healthcare more than the individual background situation of people, including the economic situation and subjective health in all healthcare systems.

Summary and implications: The structural equation model showed that the overall latent institutional satisfaction component was linked universally with healthcare satisfaction in all countries, regardless of the healthcare system. Moreover, the results demonstrated that latent components of satisfaction with different national institutions was one of the most powerful factors related to formation of satisfaction with the healthcare system. This can be taken into account in the healthcare system assessments in the future.

Key words: Healthcare. Satisfaction. Institutions. Methods.

Introduction

There is a growing need for healthcare services and system performance assessment due to the population ageing and limited resources in Europe. Therefore it is not surprising that measurement of the healthcare system performance with public or user satisfaction (Bleich et al., 2009) is considered important. Public satisfaction with a healthcare system is an important dimension of healthcare legitimacy; referring to citizens evaluations of how their government has actually implemented healthcare services in regards to what it had promised (Rothstein 2001). We expect that satisfaction refers to people's evaluation of the performance of an existing healthcare system (Wendt et al., 2009). It is proposed that in contrast to expert opinion and other objective performance measures, subjective evaluations directly echo the experiences and perceptions of the public (Blendon & Benson 2001) and provide an assessment of healthcare systems that is often described as more accurate, legitimate, and sensitive (Aharony & Strasser 1993; Fitzpatrick, 1991; Park et al., 2016).

However, public satisfaction with healthcare studies include users as well as non-users of healthcare. Previous studies (Bleich et al., 2009; Footman et al., 2013) argue that people's satisfaction with the healthcare system might depend more on external factors outside the health system. Bleich et al. (2009) found that patient experience was an important factor influencing satisfaction with the healthcare system; explaining about 10% of its variance. For example, Footman et al. (2013) have found that trust in political institutions was the strongest determinant of healthcare system satisfaction in former Soviet Union countries. One such factor outside the health system might be general satisfaction with a government's actions and general life satisfaction of people which frame the overall satisfaction level. Thus, most of the variation is explained by factors that are unrelated to patient experience. The most frequently reported are socio-demographic factors, supposedly influencing satisfaction by shaping people's expectations (Munro & Duckett, 2016; Bleich et al., 2009; Footman et al., 2013; Missinne et al., 2013). There is some evidence that men (Missinne, Meuleman, & Bracke, 2013), older people (Bleich, Özaltın, & Murray, 2009; Munro & Duckett, 2016), people with lower education (Bleich, Özaltın, & Murray, 2009; Footman et al., 2013; Missinne, Meuleman, & Bracke, 2013) and people living in rural areas (Footman et al., 2013) are, in some countries, more satisfied with healthcare systems, because they might have lower expectations of healthcare. People's health status and economic factors are also commonly reported factors influencing public satisfaction with healthcare. In several studies (Ainsaar & Nahkur, 2017; Bleich et al., 2009; Missinne et al., 2013; Wendt et al., 2010) it has been found that people with poor self-reported health status tend to be less satisfied than those who report good health. Evidence by Ainsaar and Nahkur (2017) suggests that in Estonia and Belgium people with

worse health conditions are less satisfied with the healthcare system mainly because they have less economic resources, and in Austria, Sweden and Slovenia because they are less satisfied with their country's government. Several studies have found that economic factors are related to public satisfaction with healthcare systems. People who are less satisfied with their household economic situation (Footman et al., 2013) or for whom it is difficult to live from their household income (Wendt et al., 2010), those who have below average income (Blendon et al., 2002), and those who do not have health insurance (Munro & Duckett, 2016) tend to be less satisfied with healthcare systems.

But also the media can influence people's satisfaction with healthcare, as in the case of China, where Munro and Duckett (2016) found that social media use was negatively related to the satisfaction. It confirms the claim that the tone of the media can play an important role in people's evaluations about their healthcare system, and probably the role of media is more important in the case of people who have not had direct or indirect experience with healthcare system. There is some more evidence suggesting that public satisfaction with healthcare may not always directly mean satisfaction with the 'healthcare system'. According to Bleich et al. (2009), people's personalities can influence their evaluation regarding healthcare satisfaction. Thus, more pessimistic people can be more negative toward a healthcare system. In 14 European countries, Ainsaar and Nahkur (2017) have found that the most powerful factor related to satisfaction with the healthcare system is general satisfaction with the government. Similarly, Footman et al. (2013) wrote that in former Soviet Union countries trust in political institutions was the strongest determinant of healthcare system satisfaction. Popic and Schneider (2018) explain regional differences in healthcare evaluations with different level of financial resources for healthcare, higher out-of-pocket payments, and the supply of primary healthcare services in Eastern compared to Western European countries.

The aim of the paper is to compare public satisfaction with healthcare systems in European countries and analyse the sources of healthcare satisfaction formation. We test the hypothesis that healthcare satisfaction is linked to the factors outside the health system, such as general level satisfaction with institutions in the country and individual life satisfaction.

What is satisfaction?

According to Jagodzinski (2010), an individual's life satisfaction is primarily a cognitive, enduring, and encompassing state of mind directly related to the goals, wishes, or desires of a person, and the expectation of a person to reach or fulfil them. In the theory of relative deprivation (Gurr, 1970, 1980), the former are called aspirations and the latter expectations. If aspirations are our wishes and desires for today and for the future, then expectations are the perceived chances to realize these wishes. Therefore, Jagodzinski (2010) proposes that an individual's life satisfaction is a function of his/her aspirations and expectations. Expectations are influenced by resources (e.g. money, social support, education) and opportunities, but also restrictions (e.g. formal and informal norms). Also, personal traits can affect the expectations of a person, e.g. optimists have higher expectations than pessimists. Following a more empirical approach, Frey and Stutzer (2002) differentiate five types of determinants of an individual's life satisfaction/happiness: personality, socio-demographic, economic, contextual and situational (e.g. working conditions and interpersonal relations with important others), and institutional factors.

According to Bjørnskov et al. (2008), there is a fairly broad consensus on the main determinants of life satisfaction at the individual level. Moreover, they are remarkably similar across

countries (see e.g. Oswald, 1997; Diener & Seligman, 2004; Hayo, 2004). More specifically, higher socio-economic status or relative income, levels of education and being married increase an individual's life satisfaction; while being unemployed has a strongly negative influence on an individual's life satisfaction (Bjørnskov et al., 2008). Life satisfaction has a relationship with age, social capital (Helliwell, 2003; Bjørnskov, 2003) and religiosity or spirituality (e.g. Clark & Lelkes, 2005).

Previous research has found that people's satisfaction with welfare institutions depends in part on their perceptions of how well these institutions protect them from course-of-life risks, such as disability or unemployment (Cammatt et al., 2015). Moreover, there is some evidence that public satisfaction with different welfare institutions have similar influencing factors. For example, according to Bratton (2009) across both health and education services, what matters most is whether public services are considered as being open to all types of clients and are uncomplicated to operate. It has also been established that people's personal experience with the public service of the welfare state is associated with their trust in politicians and their satisfaction with how democracy works (Kumlin, 2002, 155–162).

Trust is therefore considered to be an important component of institutional satisfaction. According to Grönlund and Setälä (2007), institutional trust refers to the fulfilment of an individual's normative expectations towards institutions; satisfaction with institutions also pertain to the satisfaction with policy outputs. For example, satisfaction with democracy can be interpreted as a perception that the political process actually works according to generally accepted democratic norms and principles, but it also may reflect the level of satisfaction with regime performance, that is to say, policy outputs (Grönlund & Setälä, 2007). However, satisfaction with the government may more reflect attitudes towards policy outputs and not necessarily normative expectations (Grönlund & Setälä, 2007).

Also, a link between institutional and life satisfaction has been found. There is some evidence that institutions and good governance can increase an individual's life satisfaction or happiness (Frey & Stutzer 2012; Kim & Kim, 2012; Ott, 2011). According to the neoclassical economics theory, the failure on the part of the government to discharge its duty will adversely affect the quality of life of the citizens. The government's role is to solve the market failures such as externalities through the provision of public goods in order to improve welfare and people's quality of life and enhance their life satisfaction (Besley & Coate, 1997).

Method

For analysis, we select countries from different European health systems according to a new classification published by Reibling, Ariaans, and Wendt (2019) recently. We take one country to represent the situation from every country group.

Slovakia presents the low-supply and low-performance mixed systems. This system type stands out with its low level of resources (both expenditures and doctors) and is the leader in out-of-pocket payments for healthcare. This system has the lowest performance in terms of both prevention and quality-of-care indicators.

Germany presents the groups of countries with a medium to high level of financial resources in healthcare and a high level of human resources, which come primarily from public financing. Access to these resources is not strongly regulated. Despite generous supply, this type has a low performance in terms of both prevention and care quality.

Sweden is a representative of the group of countries characterised as the performance and primary-care-oriented public systems. It is mostly financed by public sources and spends less money and uses stronger gatekeeping elements. It focuses on primary care, with relatively high spending in the outpatient sector.

The last group of countries in our analyses is presented by Great Britain. It is called by Reibling, Ariaans, and Wendt (2019) the regulation-oriented public systems. It has a medium level of resources that come primarily through public funding, but this type has the highest level of access regulation and also it limits choice to providers. The system is also characterized by the lowest level of out-of-pocket expenditures, and a lower level of primary care orientation.

We used data from the European Social Survey (ESS) round 6 (2012). This is the last ESS round covering all countries in our study sample. The survey provides data on 15+ non-institutionalised populations, and it is representative of the country's relevant population. Face to face interviews were used in data collection. We introduce three institutional level variables (institutional trust, satisfaction with government, satisfaction with democracy in a country) and three individual level variables (satisfaction with life, evaluation of income, evaluation of health) into the analyses. For the measurement of institutional trust we form an index from trust in parliament, the police, and the legal system in the country. Post-stratification and design weights are used in analyses.

We use the structural equation model to distinguish the structure of the satisfaction formation, and analyse the independence of the evaluation of the healthcare system satisfaction from the rest of societal satisfaction.

The Structural equation models allows us to investigate the complicated interaction structures of factors influencing satisfaction with healthcare. During the working process, two models according to theoretical assumptions were tested – a model of independent satisfaction with healthcare and a model with overall satisfaction. The best model was selected according to the traditional structural equation model parameters – Chi-square, NFI, RMSEA, AIC (Moss 2016; Hooper, Coughlan, Mullen 2008). The model with the best indicators reflects the most relevant structure for empirical data. Amos from the SPSS programme is used to implement the analyses. Hooper, Coughlan and Mullen (2008) suggest using instead the Chi-Square relative/normed chi-square (χ^2/df). Although there is no consensus regarding an acceptable ratio for this statistic, recommendations range from as 2.0 to 5.0. NFI takes into account also the sample size, and performs well even when the sample size is small. RMSEA is an old and traditional indicator in evaluation of goodness of structural equation models. The range of 0.05 to 0.10 was considered an indication of fair fit and values above 0.10 indicated a poor fit, but many authors support the cut-off value close to 0.07 as a good ceiling. AIC statistics is generally used when comparing non-nested or non-hierarchical models estimated with the same data, and indicates to the researcher which of the models is the most parsimonious. There is no norm for a good fit, but smaller values suggest a better fitting.

Structural equation modelling does not allow missing values. Therefore we took respondents with missing values out of the analyses and use a reduced sample of the original data (Table 1). Table 1 also presents the means of variables in the analyses in four countries.

Table 1: Number of respondents and means of variables used in the analyses in four countries

	Germany	Sweden	United Kingdom	Slovakia
Number of respondents in the analyses	2,781	1,685	2,009	1,731
Satisfaction with healthcare (0 extremely dissatisfied, 10 extremely satisfied)	5.7	6.2	6.3	3.9
Satisfaction with government (0 extremely dissatisfied, 10 extremely satisfied)	4.8	4.1	5.6	3.9
Satisfaction with democracy (0 extremely dissatisfied, 10 extremely satisfied)	6.1	5.6	7.0	4.9
Trust in institutions (0 = no trust, 10 highest trust)	5.9	5.5	6.3	3.5
Satisfaction with life (0 extremely dissatisfied, 10 extremely satisfied)	7.5	7.3	7.9	6.6
Health (1 very good, 5 very bad)	2.4	2.0	1.9	2.2
Income (1 living comfortably, 5 very difficult coping with present income)	1.8	1.8	1.6	2.5

Sweden is the country with the highest life satisfaction and the best health self-evaluation. Health self-evaluation is the most critical in Germany, but this can partially explained by the older population structure. Although Slovakia has the lowest life satisfaction, household income level, institutional trust and other satisfaction indicators, self-evaluated health is only a bit worse than in Sweden and the United Kingdom.

Four worlds of the healthcare satisfaction

A comparison of satisfaction with the healthcare system (Figure 1) shows, that people in Sweden and the United Kingdom have a similar satisfaction level with healthcare, despite the fact that countries represent different healthcare systems. In Germany, people are considerably less satisfied with healthcare and Slovakia has the lowest satisfaction level. In Slovakia the satisfaction with healthcare remains below the average scale point (on a scale of 1-10). Thus, we can conclude that people in Slovakia were generally more dissatisfied than satisfied with the healthcare system.



Figure 1: Average satisfaction with healthcare and 95% confidence intervals in four countries (Data: ESS round 6, 1 = not at all, 10 = very satisfied)

A correlation analysis (Table 2) with healthcare satisfaction characteristics shows a strong correlation between the trust of the institutions and other satisfaction indicators. The link is strong, but not strong enough to be collinearity. In all countries people who are more pleased with the government and democracy in their country and trust national institutions more are also more satisfied with their healthcare system. We also checked the relationship of healthcare satisfaction with areas less connected to healthcare, like education, and saw also a strong link between satisfaction levels. This implies that satisfaction with healthcare may have, at least partially, the same roots as the satisfaction with other public institutions.

Additionally, as expected, people living in poorer economic circumstances were also more dissatisfied with the healthcare system. This link was somewhat stronger in Germany and Sweden, and weaker, but still important, in Slovakia and United Kingdom. Poor assessment of a healthcare system was associated with poor subjective health in three countries out of the four. The healthcare system evaluation did not depend on the health status of people only in Sweden. This shows that health does not differentiate access to healthcare and treatment in Sweden. In Slovakia, the relationship between health and the healthcare system was weaker than in Germany and England.

Tables 2: Correlations of satisfaction with healthcare with some variables

	Germany	Sweden	United Kingdom	Slovakia
How satisfied with the national government	.391**	.307**	.358**	.387**
How satisfied with the way democracy works in country	.415**	.309**	.391**	.345**
How satisfied with the education system in general	.457**	.427*	.541**	.598**
Trust in institutions	.374**	.337**	.392**	.370**
How satisfied with life as a whole	.186**	.246**	.213**	.217**
Feeling about household's current income	-.155**	-.124**	-.063**	-.062*
Subjective general health	-.121**	-0.026	-.202**	-.058*

Next, we examine the links of variables with linear regression (Table 3), before the final analyses with the structural equation model. Regression models are able to take into account the interaction between the variables. We add also the age of people to the model to control for the population age effect, but leave satisfaction with the educational system out of the model.

In total, the regression models accounted for 16–22% of the variability of healthcare satisfaction in different countries, which is a relatively good result (Table 3). The link of healthcare satisfaction variable with other indicators was surprisingly similar in all four countries, regardless of different healthcare systems. Standardised coefficients show that the satisfaction with healthcare had a strong link with trust of institutions, but also satisfaction with democracy and government. The only deviation from the quite similar pattern was the prevailing impact of satisfaction with democracy to the healthcare satisfaction in Germany. However, the three variables with institutional satisfaction and trust seems to influence the satisfaction with healthcare even more than the individual background situation of people, including health, in all healthcare systems.

Table 3: Determinants of satisfaction with healthcare in four countries (linear regression, standardised coefficients)

	Germany	Sweden	United Kingdom	Slovakia
How satisfied with the way democracy works in country	0.216**	0.076**	0.176**	0.148**
How satisfied with the national government	0.175**	0.122**	0.133**	0.205**
Institutional trust	0.148**	0.193**	0.207**	0.198**
How satisfied with life as a whole	0.025	0.143**	0.072**	0.075**
Subjective general health	-0.019	0.072**	-0.079**	-0.037
Feeling about household's current income	-0.01	-0.005	0.051**	0.009
Age of respondent	-0.041**	0.012	0.049**	0.02
R ²	0.224	0.16	0.225	0,223

Next, we investigate the links between different satisfaction indicators using structural equation models. We want to know whether the satisfaction with the healthcare system is either an independent indicator (people assess only healthcare) or belongs to the general latent set of societal satisfaction, and is it influenced by attitudes towards all state institutions (the latent satisfaction model). To do this, we run different models and choose the best model according to the accuracy of fit indices described in the methods part.

Table 4: Quality of fit for different models with pooled data and countries separately (the structural equation model) with following variables in the model: latent satisfaction (LS), satisfaction with healthcare, with government, with democracy, trust of institutions, satisfaction with life, income, health

	Chi-square/ degrees of freedom	NFI	RMSEA	AIC
Independent healthcare (all countries pooled)	175.6	.870	.146	1965.3
Latent satisfaction (all countries pooled)	45.6	.969	.070	493.4
Only for Germany	9.9	.977	.057	142.9
Only for Sweden	15.1	.935	.091	199.7
Only for Great Britain	7.0	.976	.055	111.4
Only for Slovakia	5.2	.976	.049	91.1

A comparison of the models shows (Table 4) that the latent satisfaction model has much better quality than the independent healthcare model. The Latent satisfaction model had an even better fit at country level, compared to the pooled sample. The quality of fit of the model is best for Slovakia, and the model fit criteria is a bit weak only for Sweden.

Table 5: Standardised coefficients for links between variables in the latent satisfaction model, pooled data and separate models for countries (Latent satisfaction = Latent St)

Interaction			Pooled	Germany	Sweden	United Kingdom	Slovakia
Income	<---	Health	0,24	0,26	0,121	0,21	0,279
St with life	<---	Health	-0,22	-0,208	-0,33	-0,196	-0,205
St with life	<---	Income	-0,378	-0,388	-0,308	-0,353	-0,292
Latent St	<---	St with life	0,469	0,421	0,382	0,456	0,422
Trust	<---	Latent St	0,766	0,706	0,669	0,734	0,658
St democracy	<---	Latent St	0,761	0,773	0,696	0,769	0,8
St government	<---	Latent St	0,681	0,73	0,708	0,717	0,754
St healthcare	<---	Latent St	0,578	0,535	0,538	0,445	0,519

Figure 2 presents the patterns of the best model. The result refers to the fact that healthcare satisfaction is significantly influenced by external factors of healthcare. The factor, which we call “Latent Satisfaction” (LS), is an important common component of evaluation of the various national institutions, including healthcare. Although the satisfaction with healthcare is associated somewhat weaker with LS than satisfaction with government, democracy and trust, the healthcare satisfaction model including this latent variable performs significantly better than without the latent LS variable. The relationship between the elements is logical in all countries, is statistically valid, and is presented in Table 5.

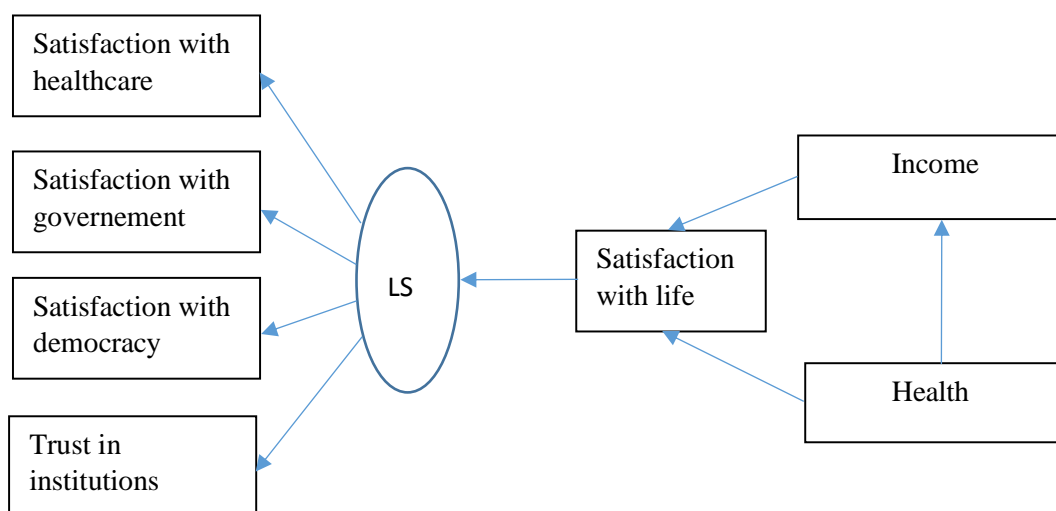


Figure 2: The best model to describe the interaction of individual and institutional level satisfaction with healthcare system assessment. Variables in the model: latent satisfaction (LS), satisfaction with healthcare, with government, with democracy, trust of institutions, satisfaction with life, income and health

Conclusions

Studies about the satisfaction of healthcare systems demonstrate both - the functioning of the system and the subjective perception of people towards it. The investigation of sources of

(dis)satisfaction can provide grounds in shaping policy processes. It is therefore important to know more about the formation of public attitudes and factors affecting satisfaction.

In this paper we tested the hypothesis that healthcare satisfaction is strongly linked to the general satisfaction with the various institutions in society. The data of the European Social Survey provide a good opportunity for this kind of analyses; because of the rich choice of countries and broad data. As an addition to the substantive value of the healthcare system assessment, this article makes also a methodological contribution to the research of satisfaction. A new model gives a better idea of how healthcare satisfaction should be measured and what should be taken into account in analyses.

In order to include countries with different healthcare systems in the analysis we used a new typology of healthcare systems published by Reibling, Ariaans and Wendt (2019). We selected countries representing four different healthcare systems for analysis. Slovakia was selected from the group of low-supply and low-performance systems, Germany as a medium to high resource level country in healthcare, Sweden as a representative of the primary-care-oriented public systems with strong gatekeeping elements and Great Britain as the regulation-oriented public system.

The analysis showed that healthcare satisfaction is strongly influenced by the overall satisfaction with the different institutions in society. We call this central latent feature Latent Satisfaction. At an individual level Latent Satisfaction is also influenced by individual life satisfaction. Life satisfaction, in turn, depends on the economic situation and health of the person. The last result is not novel and has been confirmed by many previous studies. However, the strong link of evaluation of healthcare systems with Latent Satisfaction is surprising. The structural equation model showed that the overall national institutional satisfaction component was linked universally with healthcare satisfaction in all countries, regardless of the healthcare system. It can be taken into account in healthcare system assessments in the future.

It is difficult to explain why such a link prevails, and it needs more investigation. Possible explanations are the effects of the overall national environment, including optimism or pessimism in the evaluation of national level institutions. For example, the impact of the overall optimism in society has been found to play a role in the transition of Slovakia and Estonia to the Euro (Ainsaar et al., 2017). Another possible explanation is technical and related to measurement issues. The effect might be explained with the so-called careless response behaviour; where similar questions following each other and measured on the same scale, tend to produce similar answers from respondents. In this case it is not the similarity of the merits of the assessments, but the technical error.

Nevertheless, the national models were very similar, and with good fit indicators, which somewhat confirms the validity and reliability of the final model.

The analyses have some limitations. The European Social Survey is a cross-sectional study and allows investigating the relationship and structure of attitudes, but does not tell the direction of attitude formation. Interpreting the directions of relationships should therefore be undertaken with caution. We used a limited number of healthcare indicators due to data limitations in this paper, but this probably does not influence the results of the main model.

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