



# Personal politics? Healthcare policies, personal experiences and government attitudes

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## Abstract

Do personal experiences matter for public attitudes towards the role of the government? In the domain of healthcare, I argue that policies change the salience of personal experiences for government attitudes. Specifically, I expect that personal experiences matter less for government attitudes when healthcare is publicly financed, that is, when there is less emphasis on financing healthcare via market-based choices. Empirically, I link subjective and objective personal experiences from the International Social Survey Programme to macro-level policy indicators. The analysis provides strong support for the expectation and contributes to a growing body of literature interested in the underpinnings of government attitudes in a comparative perspective.

## Keywords

Healthcare, personal experiences, policy feedback, public opinion, welfare attitudes

Public attitudes towards the welfare state is a cornerstone of policy developments in contemporary democracies. Accordingly, a large body of literature is interested in explaining citizens' preferences towards the provision of welfare services (Andreß and Heien, 2001; Blekesaune and Quadagno, 2003; Kikuzawa et al., 2008; Lipsmeyer and Nordstrom, 2003). In the domain of healthcare, one of the most salient and popular domains of the welfare state, an understudied topic is whether people rely on their own personal experiences when forming their attitudes towards the role of the government (hereafter denoted as government attitudes).

The puzzle in the literature is understanding when personal experiences with healthcare policies matter for government attitudes. In brief, the research on

whether healthcare policies matter has provided mixed evidence. In Norway, for example, Martinussen and Magnussen (2019) find that the existence of private health insurance is unrelated to government attitudes. In the United States, Barabas (2009) studies differences in two healthcare programmes and finds that different programmatic experiences matter for individualized healthcare coverage attitudes. These, and other studies reviewed below, illustrate that personal experiences might not translate into government attitudes in a homogeneous and universal manner.

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In this article, I leverage insights from the policy feedback literature to provide one explanation that can, at least partially, explain why personal experiences only matter in some contexts. Building on research on the individual-level dynamics of government attitudes and the comparative policy feedback literature, I theorize how publicly financed healthcare crowds out the relevance of personal experiences. I thereby demonstrate how policies link personal experiences to government attitudes in a predictable manner.

The perspective outlined in this article shows that personal experiences are heterogeneously related to government attitudes across countries with different healthcare policies. Specifically, policies frame how the public should perceive an issue and, accordingly, whether personal experiences are relevant for their government attitudes. When healthcare is privately financed, people will be encouraged to consider different alternatives such as social insurance funds and private health insurance companies and thereby to a greater extent also rely on their individual experiences when forming their government attitudes. Countries that structure the financing of the healthcare system by public means, on the contrary, will make such considerations less salient and frame a logic of universalism that will make people's own experiences disjointed from how they perceive the role of the government.

To examine this empirically, I combine country-level data on healthcare policies with individual-level survey data from 30 countries participating in the 2011 Health and Healthcare survey in the International Social Survey Programme (ISSP). The individual-level data provide multiple measures of personal experiences and the 30 countries provide substantial variation on how healthcare policies are financed, enabling a comparative test on how healthcare policies matter for citizens' support for the government provision of welfare.

The results substantiate that people living in countries with privately financed healthcare rely on their personal experiences to a greater extent than people living in countries with publicly financed healthcare. These findings corroborate the policy feedback argument that policies structure how people link their personal experiences to political topics. In short, the

findings show how policies can contribute substantially to our understanding of when personal experiences are salient for people's government attitudes.

## **Personal experiences and government attitudes**

There are profound reasons to expect that citizens rely on their own personal experiences when thinking about the welfare state. A personal assessment is, as Egan and Mullin (2012) argue, 'directly accessible and requires little in the way of information search' (p. 797). Put simply, personal assessments of welfare policies are crucial for citizens' political attitudes (Calzada and del Pino, 2008; Gevers et al., 2000; van Oorschot and Meuleman, 2012). Previous research shows that personal experiences with political institutions are important drivers of various political outcomes (Calzada and del Pino, 2008; Kumlin, 2004, 2007; Kumlin and Rothstein, 2005; Soss, 1999; van Oorschot and Meuleman, 2012). Kumlin (2004), for example, explains that personal welfare state experiences 'belong to a larger category of independent variables that are labelled government performance' (p. 75).

Government performance matters for a series of outcomes, including how democratically satisfied citizens are (Sirovátka et al., 2019), and such perceptions of government performance can be negative, neutral or positive. In brief, on the basis of personal experiences, citizens gain direct insights into the performance of policies and form specific attitudes towards the role of the government.

Whether or not the government should be responsible for providing healthcare taps into a broader category of welfare state attitudes. Importantly, welfare attitudes are multidimensional in nature (Roosma et al., 2013), and people can have both good and negative evaluations of the actual performance of welfare policies that are unrelated to the role of the government (Roosma et al., 2014). Thus, the focus here will be on understanding how the nature of personal experiences matter for the role of the government.

A stable finding in the literature is that people are less likely to demand government responsibility to areas they are satisfied with (Calzada and del Pino, 2008; Gevers et al., 2000; van Oorschot and

Meuleman, 2012). Specifically, people dissatisfied with welfare services see the current government involvement to be insufficient and prefer more involvement. People prioritize further government action to policies where they are dissatisfied, and the more dissatisfied people are, the more they expect the government to take responsibility. Accordingly, the expectation is that people dissatisfied with their healthcare experiences are more likely to prefer more government healthcare.

Kumlin and Rothstein (2005) show that personal experiences with healthcare policies, measured with perception of policy treatment, are significantly related to people's level of interpersonal trust in Sweden. Bendz (2017) finds that different experiences with healthcare policies shape people's attitudes towards privatization. In China, Im and Meng (2016) find that having health insurance matters for people's attitudes towards government responsibility for the minimum standards of living but not for other issues such as healthcare.

Importantly, we do not know whether the relevance of personal experiences differs across countries and, if so, what might explain such cross-country differences. To better understand the relevance of personal experiences in a comparative perspective, I argue that the policy feedback literature can explain how and when personal experiences matter. In the next section, I outline how taking comparative policy differences into account can shed light on whether, and when, personal experiences are of greater importance for government attitudes.

## **Policy feedback and government attitudes**

Policies are socially and culturally embedded institutions (Jæger, 2009; Larsen, 2008, 2019a), and to understand citizens' government attitudes, a growing body of research has demonstrated how the structure of public policies matters for people's preferences (Campbell, 2011, 2012; Fernandez and Jaime-Castillo, 2013; Fervers, 2019; Garritzmann, 2015; Larsen, 2019b; Mettler and Soss, 2004; Soss and Schram, 2007).

In contemporary welfare states, healthcare is one of the most salient policy areas (Hacker, 2004). As

Jordan (2010) argues, people are likely to have numerous contacts with the healthcare sector across socioeconomic groups, making individuals 'potentially more knowledgeable concerning the structure of the national healthcare system than any other sector of the welfare state' (p. 870). In sum, healthcare policies are, while characterized by a large degree of complexity, visible and proximate (Beckfield et al., 2013).

Studies have examined how healthcare policies have implications for people's government attitudes (Barabas, 2009; Campbell, 2011; Gevers et al., 2000; Jordan, 2010). Jordan (2010), for example, finds that the average support for national healthcare is higher in countries with hierarchically organized national healthcare systems compared to countries with more decentralized healthcare systems. In brief, hierarchically organized healthcare captures universal healthcare financed through general tax revenues, whereas decentralized healthcare builds on private health insurance and other means to ensure health coverage.

Recent studies have further examined how health expenditures directly shape attitudes towards the government responsibility for healthcare (Jordan, 2013; Missinne et al., 2013; Wendt et al., 2010). Wendt et al. (2010), for example, show that there is a high support for government responsibility in healthcare but substantial variation across Europe in the extent to which citizens are satisfied with their healthcare system. Related to this, studies have demonstrated that health expenditures matter for the overall satisfaction with the healthcare system (Popic and Schneider, 2018; Schneider and Popic, 2018). More generally, people have perceptions of the consequences of welfare policies that matter for how they perceive such policies (van Oorschot et al., 2012). This provides initial evidence for the interplay between assessments and attitudes, and thereby the importance of understanding how and when personal experiences with healthcare policies matter for government attitudes. However, while the studies provide evidence on the dynamics between healthcare policies and public opinion outcomes, they do not examine how healthcare policies shape how people's personal experiences matter for their government attitudes.

The aim of the present study is to address the gap in the literature on how policies matter for the

importance of such personal experiences. The focus in this setting will be on one of the most dominant properties that is expected to shape how citizens' personal experiences matter for their government attitudes, namely, the financing (Cammett et al., 2015; Huber and Stephens, 2001; Jordan, 2013; Wendt et al., 2010).

The market plays a crucial role in relation to financing healthcare services (Moran, 2000), and while welfare policies can take a variety of different forms in different countries, the responsibility for the government to finance the healthcare system is a crucial policy design feature. As Cammett et al. (2015) argue, the

share of private financing of healthcare is relatively obvious to individuals: private payments for health insurance premia, unofficial payments to doctors and hospitals in exchange for expedited care in nominally state-run systems, and out of pocket payments for medications and doctor visits are relatively visible to the end user. (p. 943)

Hence, the public share of the total healthcare expenditure serves as a defining feature of healthcare services (Cammett et al., 2015; Huber and Stephens, 2001; Jordan, 2013).

### **The macro-salience of healthcare policies: linking policies to experiences**

People are limited in their abilities to consider more than a certain set of motivations at once. To explain what specific set of motivations people rely on in their government attitudes, and in particular whether personal experiences will be of importance, it is paramount to focus on the macro-salient nature of policies (Rohrschneider and Loveless, 2010). In short, policies emphasize some features with implications for the considerations people make. Rohrschneider and Loveless (2010) show, in the domain of the European Union, how the national contexts shape 'the weight that citizens attach to economic and political considerations when evaluating the EU' (p. 1032). Here, I apply these insights to the role of healthcare policies and thus incorporate the arguments into the policy feedback literature.

To explain the mechanism, these insights are inspired by framing theory (see Chong and Druckman, 2007), and they provide a theoretical framework explaining how specific policies affect the basis upon which citizens evaluate political objects. Two previous studies have utilized the concept of framing in relation to policy feedback effects on public opinion in the domain of healthcare. Jacobs and Mettler (2011), for example, use the concept of 'structural framing', and Zhu and Lipsmeyer (2015) argue that policies can frame individuals' perceptions and thereby indirectly affect their preferences.

People's government attitudes are the weighted sum of a series of evaluative beliefs. For personal experiences, there is a weight that shows the extent to which they relate to government attitudes. The policy, that is, the financing of healthcare, works as the salience weight, which structures the relevance of personal experiences. Thus, if the weight for a personal experience is zero, the personal experience will not matter for government attitudes, independent of how strong that personal experience is. In other words, a person might be completely dissatisfied with his or her experience with the healthcare system in a country, but whether this will be of relevance for the respondents' government attitudes is a feature of the healthcare policy in place.

The design of a policy promotes certain logics that frame how people perceive and think about the policy. The argument presented here is that when a policy is financed via the market, such a policy will promote a logic where individual experiences are key to understanding people's government attitudes. Specifically, the expectation is that privately financed healthcare policies will put an emphasis on the importance of personal experiences and the choice of alternatives on a market, for example, health insurance companies. Publicly financed healthcare will, on the contrary, promote a logic of universalism that will make the personal experience less entangled in selective services (Larsen, 2008).

Publicly financed healthcare builds on a logic of collective solidarity (Missinne et al., 2013: 234). When healthcare is financed by private means, this will foster questions related to the selection of services, that is, situations where people are more likely and even encouraged to rely on their level of satisfaction with their treatment. Accordingly, people's



personal experiences with the healthcare system will, in privately financed healthcare systems, be salient and thus shape their attitudes towards whether or not the government should provide healthcare services.

## Data and method

The empirical strategy combines individual-level survey data with macro-level data on the share of public healthcare expenditures. The 30 countries included in the analysis are Australia, Belgium, Bulgaria, Chile, China, Croatia, Czech Republic, Denmark, Finland, France, Germany, Israel, Italy, Japan, South Korea, Lithuania, the Netherlands, Norway, Poland, Portugal, Russia, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The Philippines and Taiwan are not included in the analysis.

For the survey data, I rely on the Health and Healthcare survey data from the ISSP (ISSP Research Group, 2013). The ISSP is an annual programme of cross-national collaboration providing comparative survey data from widely different countries. The ISSP covers different topics from religion to gender roles, and the health topic was the focus in the 2011 round. The data were collected in the period from February 2011 to April 2013 (for further information on the data collection period and mode of interview in the individual countries in the ISSP, see Supplemental Appendix A).

For the outcome variable, respondents were asked whether they agree or disagree with the statement that governments should provide only limited healthcare services (for question wording on all variables, see Supplemental Appendix C). The variable is coded on a 5-point scale from 'strongly disagree' to 'strongly agree', where greater values indicate more positive attitudes towards the provision of healthcare services by the government. It is notable that the question wording is not similar to government attitudes in other ISSP surveys and, accordingly, it is not possible to examine how closely this measure correlates with other measures of government attitudes and thereby the degree of government involvement in healthcare.

For the main independent variables, that is, personal experiences with the healthcare system, the

main challenge is to ensure measures of evaluations of personal experiences rather than generic evaluations of the healthcare system. Specifically, an overall satisfaction with the healthcare system reflects more than personal experiences (Busse, 2013; Busse et al., 2012). To accommodate this, I rely on subjective and objective measures of personal experiences.

For subjective personal experiences, respondents are asked to evaluate their most recent treatment by both the hospital and the doctor. For example, for the doctor evaluation, the question wording is as follows: 'How satisfied or dissatisfied were you with the treatment you received when you last visited a doctor?' Both of the subjective evaluations are measured on a 7-point scale (from 'completely satisfied' to 'completely dissatisfied'), where greater values indicate a negative personal experience with the healthcare system.

For the objective personal experience, I use measures of whether the respondent was able to receive medical treatment during the past 12 months (from the date of the interview). Here, respondents are able to indicate that they did not receive medical treatment because the waiting list was too long, the treatment was not available in the area of the respondent, that they could not pay for it or that they could not take time off. I consider these reasons for not receiving medical treatment a negative personal experience. For example, previous research demonstrates that waiting times correlate significantly with hospital service satisfaction (Rönnerstrand and Oskarson, 2018).

In addition to the main individual-level variables of interest, I use a series of variables as covariates to take socio-demographic and socioeconomic characteristics of the respondent into account. First, I use information on gender, age, marital status, employment status and income (in quartiles to standardize across countries). Second, I use education, International Standard Classification of Occupations (ISCO-88) and healthcare insurance information to include as fixed effects in the models. For education, this is the highest completed education level. For ISCO-88, I use any category with more than 50 respondents in the full dataset and group the remaining categories into one (205 categories in total). For healthcare insurance, I control for nine categories

from no health insurance to various combinations of public, private and employer/union-based health insurance (see Supplemental Appendix C for information on all variables).

To capture variation in healthcare policies, I leverage cross-national variation across the 30 countries in the financing of the healthcare system. Specifically, I use data on the public share of total health expenditure (public health expenditure (PHE)) for each country as used in the literature to measure salient policy differences in healthcare (Huber and Stephens, 2001; Jordan, 2013). While this measure does not fully capture all relevant characteristics of the public–private mix in healthcare, it is a reliable and valid measure of healthcare policies. Jordan (2013) uses this measure to capture differences between hierarchical and decentralized healthcare systems, and more specifically, this measure ‘distinguishes between highly centralized systems in which direct government spending dominates the healthcare market and decentralized systems where multiple payers including social insurance funds and private health insurance companies are more significant’ (p. 139).

The macro-level data stem from the World Development Indicators. To take into account that countries participate in the ISSP in different years and that respondents within the same country are not in all cases interviewed in the same year, I match each respondent to the relevant country-year PHE data. PHE ranges from 48.5 percent in the United States to 84.8 percent in Norway. The mean is 71.7 percent (standard deviation (*SD*)=11.11) and the median is 72.2 percent (all values are available in Supplemental Appendix D).

Due to the limited number of countries, I rely on health expenditures as a percentage of gross domestic product (GDP) as the main macro-level covariate. This variable addresses the fact that a country might spend a lot on healthcare without saying anything meaningful on the public–private mix. In robustness tests, I further include hospital beds (per 1000 people), out-of-pocket healthcare expenditure as well as absolute (GDP) and relative (inequality, Gini) wealth.

I present the evidence both in the form of aggregate correlations between countries and in a series of

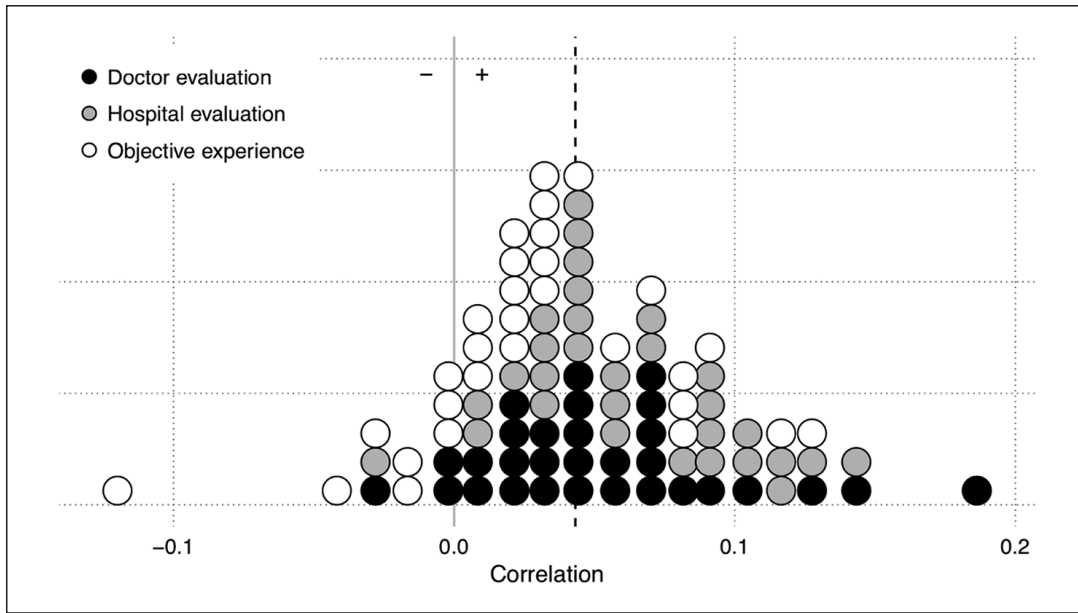
hierarchical models with individuals nested within countries. Specifically, for the latter step, I estimate varying intercepts hierarchical models with cross-level interactions between personal experiences and PHE with the Level 1 variables group mean centred (Enders and Tofghi, 2007). All models include the covariates outlined above. To ensure an identical number of cases across the different models, I conducted multiple imputations with multivariate imputation by chained equations. All analyses were conducted in R 3.5.2.

## Results

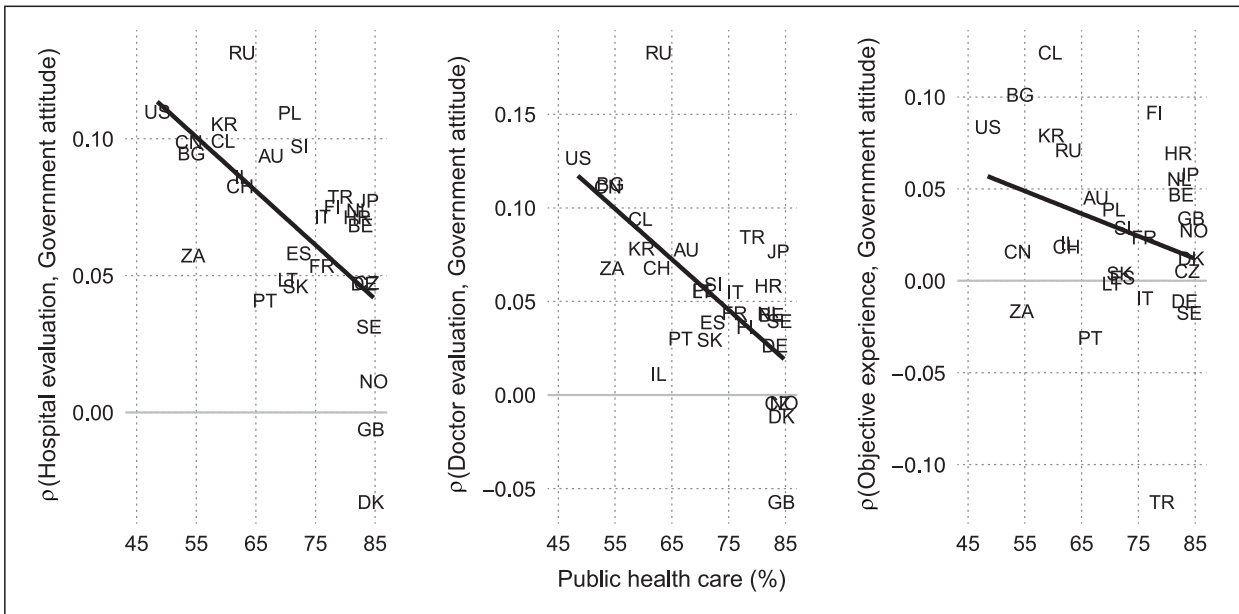
I begin by examining the degree to which citizens’ personal experiences are related to their government attitudes in the 30 countries. If the political context is irrelevant for the impact of personal experiences on government attitudes, we should find no variation across different countries in the extent to which personal experiences matter for government attitudes.

Figure 1 shows that there is substantial variation in the correlations between the 30 countries. First, the results replicate the main finding in the literature, that is, that people more dissatisfied in their personal experiences on average have stronger preferences for the government to provide healthcare. Second, in some countries, we find notable correlations between personal experiences and government attitudes (with correlations between close to .2), whereas in other countries we find no correlation between personal experiences and government attitudes. Third, the correlations are slightly stronger for the subjective evaluations (doctor evaluation and hospital evaluation) than the objective experience measure.

Overall, we find that there is substantial variation across countries and the next step is to shed light on whether the relevance of personal experiences varies in a systematic manner according to the healthcare system. Figure 2 shows the correlations between the personal experience measures and attitudes towards government healthcare at different levels of PHE. Across the three measures of personal experiences, we see that there is a stronger impact of personal experiences in countries with lower PHE. In most of the countries where healthcare is primarily financed



**Figure 1.** Correlations between personal experiences and government attitudes, 30 countries. The figure shows the distribution of 90 zero-order correlations (three personal experience measures for 30 countries), with positive correlation values indicating a positive correlation between a negative experience and a preference for more government involvement in healthcare. The dashed line indicates the median correlation ( $r = .05$ ).



**Figure 2.** Personal experiences, public healthcare and government attitudes, macro-level evidence. The figure shows the zero-order correlations between personal experiences and government attitudes for the 30 countries at their level of public healthcare.

by the government the correlations are statistically insignificant. For the United States, the correlations are around .1, whereas the countries with high PHE

values, such as the Scandinavian countries, depict correlations not statistically or substantially different from zero.

**Table 1.** Personal experiences and government attitudes, hierarchical models.

	(1)	(2)	(3)	(4)
Male	−0.09*** (.01)	−0.09*** (.01)	−0.09*** (.01)	−0.08*** (.01)
Age	0.01*** (.002)	0.01*** (.002)	0.01*** (.002)	0.01*** (.002)
Age-squared	−0.01*** (.002)	−0.01*** (.002)	−0.01*** (.002)	−0.01*** (.002)
Married	−0.02 (.01)	−0.01 (.01)	−0.01 (.01)	−0.02 (.01)
Employed	−0.004 (.01)	−0.01 (.01)	−0.01 (.01)	−0.01 (.01)
Income	−0.004 (.01)	−0.003 (.01)	−0.002 (.01)	−0.003 (.01)
Subjective health	−0.07*** (.01)	−0.06*** (.01)	−0.06*** (.01)	−0.07*** (.01)
Health expenditures (% GDP)	0.01 (.02)	0.01 (.02)	0.01 (.02)	0.01 (.02)
PHE (%)	1.42*** (.40)	1.42*** (.40)	1.41*** (.40)	1.42*** (.40)
Hospital evaluation		0.20*** (.03)		
Hospital Evaluation × PHE		−0.20*** (.04)		
Doctor evaluation			0.26*** (.03)	
Doctor Evaluation × PHE			−0.30*** (.04)	
Objective experience				0.09** (.03)
Objective Experience × PHE				−0.11** (.04)
Education FE	Yes	Yes	Yes	Yes
Occupation FE	Yes	Yes	Yes	Yes
Healthcare insurance FE	Yes	Yes	Yes	Yes
ICC	.0426	.0427	.0428	.0427
Within-country variance	1.2195	1.2153	1.216	1.2192
Between-country variance	0.0543	0.0543	0.0544	0.0544
Countries	30	30	30	30
Observations	51,675	51,675	51,675	51,675
Log likelihood	−78,771.86	−78,689.76	−78,703.56	−78,771.60
Akaike information criterion	158,011.70	157,851.50	157,879.10	158,015.20
Bayesian information criterion	160,083.30	159,940.80	159,968.40	160,104.40

GDP: gross domestic product; PHE: public health expenditure (public share of total health expenditure); ICC: intraclass correlation coefficient; FE: fixed effects. Hierarchical models with individuals nested within countries. Unstandardized regression coefficients with standard errors in parentheses. The personal experience variables are mean centred within the individual countries. \*\* $p < .01$ . \*\*\* $p < .001$ .

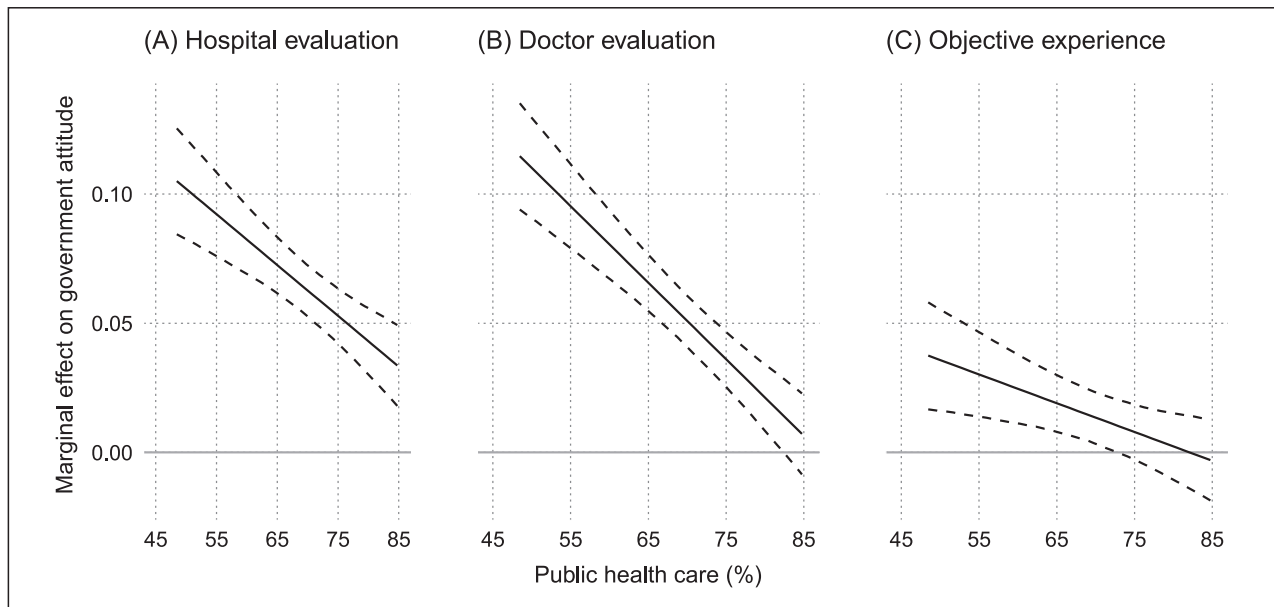
In sum, there is a negative trend in the correlations between personal experiences and government attitudes, indicating that this correlation is smaller in countries where the healthcare system is publicly funded. In other words, the trend suggests that there are systematic differences in the relation between personal healthcare evaluations and government attitudes in line with the theoretical expectations derived above.

To test this in a systematic manner, Table 1 shows four models. The first model provides a model with all the covariates to examine the direct effect of PHE on government attitudes. Here, we can see, in line with findings from the policy feedback literature,

that people living in countries with greater PHE are more supportive of the government providing healthcare.

Model 2 in Table 1 shows the results for government attitudes regressed on the cross-level interaction between hospital evaluations and PHE. Here, we see a significant cross-level interaction, indicating that the effect of the personal experience differs systematically conditional upon the public share of total health expenditure. In brief, personal experiences in the form of hospital evaluations matter less at greater values of PHE. Model 3 shows the same results for doctor evaluations. Here, results are identical to the hospital evaluations. Last, Model 4





**Figure 3.** Marginal effects of personal experiences on government attitudes.

Marginal effects of the personal experience measures on government attitudes at different levels of public healthcare. The dashed lines indicate 95 percent confidence intervals. The effects are calculated on the basis of Model 2 (Panel A), Model 3 (Panel B) and Model 4 (Panel C) in Table I.

shows the results for the objective experiences. While the results are statistically significant, as in Figure 2, they are not as strong as for the subjective experiences.

The models show, as expected from the theory above, that citizens' personal experiences with the healthcare system are related to their attitudes towards government provision of healthcare to a significantly larger extent in countries where healthcare is financed by private means. To visually evaluate the effects of the personal experiences at different levels of healthcare expenditures, I calculated the marginal effects of each of the personal experience measures. Figure 3 shows the marginal effects that, substantially, mimic the findings in Figure 2, that is, that public healthcare crowds out the relevance of personal experiences in explaining government attitudes towards healthcare. Thus, the marginal effect shows that the impact of personal experiences is greater in countries with privately financed healthcare.

This lends support to the idea that how people's experiences matter for their government attitudes is not consistent across policy contexts. Personal experiences with the healthcare system are significant predictors of government attitudes in a variety of

countries, but mostly in countries where healthcare is financed by private means.

To further assess the robustness of the results, I estimated a series of additional models. First, the models were estimated with a series of extra macro-level covariates (available in Supplemental Appendix F). Second, the models were estimated with the removal of outliers and with the omission of individual countries (available in Supplemental Appendix G). Third, I replicated the models with the share of the population that are covered by public healthcare (available in Supplemental Appendix H). This policy measure shows the extent of general access provided by the public healthcare system (Bambra, 2005). Overall, the results from these tests do not affect the results or the interpretations presented here.

## Discussion and concluding remarks

This article integrates insights from institutional and individual-level theories on political behaviour to study the joint role that healthcare policies and personal experiences play in shaping support for the government provision of healthcare. While citizens

make assessments in relation to public policies that matter for their government attitudes, there is no reason to believe that the importance of such factors is homogeneous across different countries. On the contrary, the impact of personal experiences can be conditional upon specific policy features of salient policies.

While there is growing empirical evidence that the political context matters for the impact of individual-level characteristics on social welfare attitudes (e.g. Gingrich, 2014; Gingrich and Ansell, 2012), surprisingly limited attention has been devoted to empirically demonstrate how differences in the structure of policies matter for the importance of personal experiences. Zhu and Lipsmeyer's (2015) study is a noteworthy exception as they study the impact of healthcare policies in shaping how people's risk of unemployment matter for preferences towards government provision of healthcare. While the study provides important insights to how risk profiles matter for political attitudes, it cannot inform us on when and how personal experiences matter. This has been the primary goal of this study.

The argument tested in this article is that policies make specific features of the political environment salient with implications for how citizens' personal experiences with healthcare policies are related to their government attitudes. More specifically, the findings are consistent with the expectation that policies condition how people align their personal experiences with their government attitudes.

In privately financed healthcare systems, features related to private choices and experiences are made salient at the macro level, and thus people will rely on such considerations and experiences when they form attitudes towards the role of the government. In a comparative perspective, this relation becomes weaker as the healthcare is financed by public means.

Overall, the findings presented here speak to the existing literature in different ways. First, it provides evidence on how healthcare policies matter for the impact of personal experiences on government attitudes in contemporary societies. Second, the theoretical and methodological implications are that we cannot solely understand people's support towards welfare policies without taking the political context into account. In other words, an inherent limitation

in looking at personal experiences in one context is that it is not sufficient to establish whether personal experiences might be of relevance or not outside this context.

Third, and most importantly, the findings contribute to a growing body of literature interested in policy feedback effects on political attitudes in a comparative perspective utilizing cross-national variation in public policies (Larsen, 2019b). More specifically, the findings stress the importance of integrating the political context with citizens' experiences with policies. To fully understand the dynamics between public opinion and public policies, one needs to understand how existing policies frame how citizens link their personal experiences to concrete attitudes.

Future research on policy feedback effects should therefore devote close attention to how the policy context can shape the relevance of personal experiences. The correlations between 0 and .15 observed here in the different countries are representative for the effects normally observed in policy feedback studies on mass publics, and to explain the different effect sizes, the findings suggest that the political context is one important factor to take into account.

Beyond the direct implications, there are three noteworthy limitations in the present study that should guide future research as well. First, the empirical strategy does not allow for the study of time dynamics and is thus not a strong test of the causal arrows between personal experiences, government preferences and healthcare policies. While the results suggest that policies and personal experiences jointly shape government attitudes, the question of causality has yet to be answered. In sum, one should be cautious in drawing causal inferences based on the reported results.

Second, the countries studied here provide important variation in healthcare policies in different countries, but the extent to which the findings are generalizable to other countries not included in the analysis remains an important topic for future research. Most research on policy feedback dynamics has a Western bias in general and a US bias in particular, and while the study includes countries such as China and South Africa, additional evidence is needed in order to establish the external validity.

Third, as noted above, the measure of government attitudes is not identical to that available in other rounds of ISSP or other comparative surveys such as the European Social Survey and the World Values Survey. The advantage of the data used here is the data on personal experiences with healthcare policies, but replications with other measures tapping into other measures of government attitudes are encouraged. Furthermore, healthcare policies are complex in modern welfare states, and while focusing on the financing ensures the comparability across several different countries, the financing is only one measurable aspect related to the design of the healthcare system, and publicly funded healthcare can be used for private healthcare (Hacker, 2004; Jensen, 2011). Such dynamics might have implications for the experiences citizens have with the healthcare system and, consequently, their attitudes beyond what has been assessed here.

On a concluding note, as existing policies have implications for how the public perceive political issues, policies are important study objects if we are to understand basic political processes at the level of mass attitudes. The findings presented here emphasize that to fully understand the relevance of personal experiences for government attitudes, we need to take existing policy arrangements into account.

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### Supplemental material

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### References

- Andreß, H. and Heien, T. (2001) 'Four Worlds of Welfare State Attitudes? A Comparison of Germany, Norway, and the United States', *European Sociological Review* 17(4): 337–56.
- Bambra, C. (2005) 'Worlds of Welfare and the Health Care Discrepancy', *Social Policy and Society* 4(1): 31–41.
- Barabas, J. (2009) 'Not the Next IRA: How Health Savings Accounts Shape Public Opinion', *Journal of Health Politics, Policy and Law* 34(2): 181–217.
- Beckfield, J., Olafsdottir, S. and Sosnaud, B. (2013) 'Healthcare Systems in Comparative Perspective: Classification, Convergence, Institutions, Inequalities, and Five Missed Turns', *Annual Review of Sociology* 39: 127–46.
- Bendz, A. (2017) 'Empowering the People: Public Responses to Welfare Policy Change', *Social Policy and Administration* 51(1): 1–19.
- Blekesaune, M. and Quadagno, J. (2003) 'Public Attitudes toward Welfare State Policies: A Comparative Analysis of 24 Nations', *European Sociological Review* 19(5): 415–27.
- Busse, R. (2013) 'Understanding Satisfaction, Responsiveness and Experience with the Health System', in I. Papanicolas and P.C. Smith (eds) *Health System Performance Comparison: An Agenda for Policy, Information and Research*, pp. 255–79. New York: Open University Press.
- Busse, R., Valentine, N., Lessof, S., Prasad, A. and van Ginneken, E. (2012) 'Being Responsive to Citizens' Expectations: The Role of Health Services in Responsiveness and Satisfaction', in J. Figueras and M. McKee (eds) *Health Systems: Health, Wealth and Societal Well-being: Assessing the Case for Investing in Health Systems*, pp. 175–208. New York: Open University Press.
- Calzada, I. and del Pino, E. (2008) 'Perceived Efficacy and Citizens' Attitudes toward Welfare State Reform', *International Review of Administrative Sciences* 74(4): 555–74.
- Cammett, M., Lynch, J. and Bilev, G. (2015) 'The Influence of Private Health Care Financing on Citizen Trust in Government', *Perspectives on Politics* 13(4): 938–57.
- Campbell, A.L. (2011) 'Policy Feedbacks and the Impact of Policy Designs on Public Opinion', *Journal of Health Politics, Policy and Law* 36(6): 961–73.
- Campbell, A.L. (2012) 'Policy Makes Mass Politics', *Annual Review of Political Science* 15(1): 333–51.
- Chong, D. and Druckman, J.N. (2007) 'Framing Theory', *Annual Review of Political Science* 10: 103–26.
- Egan, P. and Mullin, M. (2012) 'Turning Personal Experience into Political Attitudes: The Effect of Local Weather on Americans' Perceptions about Global Warming', *Journal of Politics* 74(3): 796–809.
- Enders, C.K. and Tofighi, D. (2007) 'Centering Predictor Variables in Cross-Sectional Multilevel Models: A

- New Look at an Old Issue', *Psychological Methods* 12(2): 121–38.
- Fernandez, J.J. and Jaime-Castillo, A.M. (2013) 'Positive or Negative Policy Feedbacks? Explaining Popular Attitudes towards Pragmatic Pension Policy Reforms', *European Sociological Review* 29(4): 803–15.
- Fervers, L. (2019) 'Economic Miracle, Political Disaster? Political Consequences of Hartz IV', *Journal of European Social Policy* 29(3): 411–27.
- Garrizmann, J.L. (2015) 'Attitudes Towards Student Support: How Positive Feedback-Effects Prevent Change in the Four Worlds of Student Finance', *Journal of European Social Policy* 25(2): 139–58.
- Gevers, J., Gelissen, J., Arts, W. and Muffels, R. (2000) 'Public Health Care in the Balance: Exploring Popular Support for Health Care Systems in the European Union', *International Journal of Social Welfare* 9(4): 301–21.
- Gingrich, J. (2014) 'Visibility, Values, and Voters: The Informational Role of the Welfare State', *Journal of Politics* 76(2): 565–80.
- Gingrich, J. and Ansell, B. (2012) 'Preferences in Context: Micro Preferences, Macro Contexts, and the Demand for Social Policy', *Comparative Political Studies* 45(12): 1624–54.
- Hacker, J.S. (2004) 'Dismantling the Health Care State? Political Institutions, Public Policies and the Comparative Politics of Health Reform', *British Journal of Political Science* 34(4): 693–724.
- Huber, E. and Stephens, J.D. (2001) *Development and Crisis of the Welfare State: Parties and Policies in Global Markets*. Chicago, IL: University of Chicago Press.
- Im, D. and Meng, T. (2016) 'The Policy–Opinion Nexus: The Impact of Social Protection Programs on Welfare Policy Preferences in China', *International Journal of Public Opinion Research* 28(2): 241–68.
- ISSP Research Group (2013) *International Social Survey Programme: Health and Health Care – ISSP 2011*. Mannheim: GESIS.
- Jacobs, L.R. and Mettler, S. (2011) 'Why Public Opinion Changes: The Implications for Health and Health Policy', *Journal of Health Politics, Policy and Law* 36(6): 917–33.
- Jæger, M.M. (2009) 'United but Divided: Welfare Regimes and the Level and Variance in Public Support for Redistribution', *European Sociological Review* 25(6): 723–37.
- Jensen, C. (2011) 'Marketization via Compensation: Health Care and the Politics of the Right in Advanced Industrialized Nations', *British Journal of Political Science* 41(4): 907–26.
- Jordan, J. (2010) 'Institutional Feedback and Support for the Welfare State: The Case of National Health Care', *Comparative Political Studies* 43(7): 862–85.
- Jordan, J. (2013) 'Policy Feedback and Support for the Welfare State', *Journal of European Social Policy* 23(2): 134–48.
- Kikuzawa, S., Olafsdottir, S. and Pescosolido, B.A. (2008) 'Similar Pressures, Different Contexts: Public Attitudes toward Government Intervention for Health Care in 21 Nations', *Journal of Health and Social Behavior* 49(4): 385–99.
- Kumlin, S. (2004) *The Personal and the Political: How Personal Welfare State Experiences Affect Political Trust and Ideology*. New York: Palgrave Macmillan.
- Kumlin, S. (2007) 'The Welfare State Values, Policy Preferences, and Performance Evaluations', in R.J. Dalton and H. Klingemann (eds) *The Oxford Handbook of Political Behavior*, pp. 362–82. Oxford: Oxford University Press.
- Kumlin, S. and Rothstein, B. (2005) 'Making and Breaking Social Capital: The Impact of Welfare-State Institutions', *Comparative Political Studies* 38(4): 339–65.
- Larsen, C.A. (2008) 'The Institutional Logic of Welfare Attitudes: How Welfare Regimes Influence Public Support', *Comparative Political Studies* 41(2): 145–68.
- Larsen, C.A. (2019a) 'The Institutional Logic of Giving Migrants Access to Social Benefits and Services', *Journal of European Social Policy*. Epub ahead of print 25 November 2019. DOI: 10.1177/0958928719868443.
- Larsen, E.G. (2019b) 'Policy Feedback Effects on Mass Publics: A Quantitative Review', *Policy Studies Journal* 47(2): 372–94.
- Lipsmeyer, C. and Nordstrom, T. (2003) 'East versus West: Comparing Political Attitudes and Welfare Preferences across European Societies', *Journal of European Public Policy* 10(3): 339–64.
- Martinussen, P.E. and Magnussen, J. (2019) 'Is Having Private Health Insurance Associated with Less Support for Public Healthcare? Evidence from the Norwegian NHS', *Health Policy* 123(7): 675–80.
- Mettler, S. and Soss, J. (2004) 'The Consequences of Public Policy for Democratic Citizenship: Bridging Policy Studies and Mass Politics', *Perspectives on Politics* 2(1): 55–73.
- Missinne, S., Meuleman, B. and Bracke, P. (2013) 'The Popular Legitimacy of European Healthcare Systems: A Multilevel Analysis of 24 Countries', *Journal of European Social Policy* 23(3): 231–47.



- Moran, M. (2000) 'Understanding the Welfare State: The Case of Health Care', *British Journal of Politics and International Relations* 2(2): 135–60.
- Popic, T. and Schneider, S.M. (2018) 'An East–West Comparison of Healthcare Evaluations in Europe: Do Institutions Matter?', *Journal of European Social Policy* 28(5): 517–34.
- Rohrschneider, R. and Loveless, M. (2010) 'Macro Salience: How Economic and Political Contexts Mediate Popular Evaluations of the Democracy Deficit in the European Union', *Journal of Politics* 72(4): 1029–45.
- Rönnerstrand, B. and Oskarson, M. (2018) 'Standing in Line When Queues Are on the Decline: Services Satisfaction Following the Swedish Health Care Waiting Time Guarantee', *Policy Studies Journal*. Epub ahead of print 15 October 2018. DOI: 10.1111/psj.12277.
- Roosma, F., Gelissen, J. and van Oorschot, W. (2013) 'The Multidimensionality of Welfare State Attitudes: A European Cross-National Study', *Social Indicators Research* 113(1): 235–55.
- Roosma, F., van Oorschot, W. and Gelissen, J. (2014) 'The Preferred Role and Perceived Performance of the Welfare State: European Welfare Attitudes from a Multidimensional Perspective', *Social Science Research* 44: 200–10.
- Schneider, S.M. and Popic, T. (2018) 'Cognitive Determinants of Healthcare Evaluations: A Comparison of Eastern and Western European Countries', *Health Policy* 122(3): 269–78.
- Sirovátka, T., Guzi, M. and Saxonberg, S. (2019) 'Satisfaction with Democracy and Perceived Performance of the Welfare State in Europe', *Journal of European Social Policy* 29(2): 241–56.
- Soss, J. (1999) 'Lessons of Welfare: Policy Design, Political Learning, and Political Action', *American Political Science Review* 93(2): 363–80.
- Soss, J. and Schram, S.F. (2007) 'A Public Transformed? Welfare Reform as Policy Feedback', *American Political Science Review* 101(1): 111–27.
- van Oorschot, W. and Meuleman, B. (2012) 'Welfare Performance and Welfare Support' in S. Svallfors (ed.) *Contested Welfare States: Welfare Attitudes in Europe and Beyond*, pp. 25–57. Stanford, CA: Stanford University Press.
- van Oorschot, W., Reeskens, T. and Meuleman, B. (2012) 'Popular Perceptions of Welfare State Consequences: A Multilevel, Cross-National Analysis of 25 European Countries', *Journal of European Social Policy* 22(2): 181–97.
- Wendt, C., Kohl, J., Mischke, M. and Pfeifer, M. (2010) 'How Do Europeans Perceive Their Healthcare System? Patterns of Satisfaction and Preference for State Involvement in the Field of Healthcare', *European Sociological Review* 26(2): 177–92.
- Zhu, L. and Lipsmeyer, C.S. (2015) 'Policy Feedback and Economic Risk: The Influence of Privatization on Social Policy Preferences', *Journal of European Public Policy* 22(10): 1489–511.



## APPENDIX:

Personal politics? Health care policies, personal experiences and government attitudes

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## A. International Social Survey Programme data information

Country	Data collection period	Interview method
Australia	01.05.2012 - 08.08.2012	Paper and pencil
Bulgaria	16.08.2011 - 20.09.2011	Face-to-face
Switzerland	07.03.2011 - 17.11.2011	CAPI
Chile	11.11.2011 - 11.12.2011	Face-to-face
Czech Republic	24.02.2012 - 30.03.2012	Face-to-face
Finland	28.08.2011 - 09.12.2011	Online, Paper and pencil by mail
France	03.2011 - 09.2011	Mail
Great Britain	01.07.2011 - 07.11.2011	Face-to-face
Croatia	20.05.2011 - 20.06.2011	Face-to-face
Israel	19.11.2011 - 26.04.2012	Face-to-face
Japan	26.11.2011 - 04.12.2011	Self-completion
South Korea	26.06.2011 - 31.08.2011	Face-to-face
Norway	07.03.2012 - 04.05.2012	Combined mail and web survey
Philippines	04.09.2011 - 07.09.2011	Face-to-face
Russia	05.12.2011 - 23.12.2011	Face-to-face
Slovenia	09.03.2011 - 15.06.2011	Paper and pencil
Taiwan	1st wave: 17.07.2011 - 10.11.2011 2nd wave: 28.02.2012 - 07.04.2012	Face-to-face
Belgium	Flanders: 02.04.2011 - 16.08.2011 Wallonia: 24.09.2012 - 24.12.2012	Flanders: Drop-off questionnaire Wallonia: Postal survey
Germany	23.04.2012 - 30.09.2012	CASI
Denmark	08.01.2013 - 01.03.2013	Online
Lithuania	22.11.2011 - 19.12.2011	Face-to-face
Poland	13.04.2013 - 25.04.2013	CAPI
Portugal	03.11.2012 - 03.04.2013	CAPI
Sweden	28.02.2011 - 16.05.2011	Postal survey
Slovakia	25.10.2012 - 10.12.2012	CAPI
Turkey	26.11.2011 - 22.01.2012	Face-to-face
United States	19.03.2012 - 05.09.2012	Face-to-face
South Africa	20.09.2011 - 30.10.2011	Face-to-face
Netherlands	08.03.2011 - 01.12.2011	N/A
China	15.11.2011 - 19.12.2011	Face-to-face
Italy	18.10.2012 - 04.02.2013	Paper and pencil
Spain	23.05.2012 - 23.07.2012	Face-to-face

## B. World Development Indicators data information

**Table B.1:** Variables and definitions

Variable	Indicator name	Definition
Public health expenditure (PHE)	Domestic general government health expenditure (% of current health expenditure)	Share of current health expenditures funded from domestic public sources for health. Domestic public sources include domestic revenue as internal transfers and grants, transfers, subsidies to voluntary health insurance beneficiaries, non-profit institutions serving households (NPISH) or enterprise financing schemes as well as compulsory prepayment and social health insurance contributions. They do not include external resources spent by governments on health.
Total health expenditure (THE)	Current health expenditure (% of GDP)	Level of current health expenditure expressed as a percentage of GDP. Estimates of current health expenditures include healthcare goods and services consumed during each year. This indicator does not include capital health expenditures such as buildings, machinery, IT and stocks of vaccines for emergency or outbreaks.
Hospital beds	Hospital beds (per 1,000 people)	Hospital beds include inpatient beds available in public, private, general, and specialized hospitals and rehabilitation centers. In most cases beds for both acute and chronic care are included.
Out-of-pocket expenditure (OOP)	Out-of-pocket expenditure (% of current health expenditure)	Share of out-of-pocket payments of total current health expenditures. Out-of-pocket payments are spending on health directly out-of-pocket by households.
GDP	GDP per capita (current US\$)	GDP per capita is gross domestic product divided by midyear population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current U.S. dollars.
Inequality	GINI index (World Bank estimate)	Gini index measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus a Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality.

### C. Question wording and coding

**Table C.1:** Question wording and coding

	ISSP variable	Question	Coding
Government attitudes	V13	How much do you agree or disagree with the following statements? The government should provide only limited health care services.	Strongly disagree (5), Disagree (4), Neither agree nor disagree (3), Agree (4), Strongly agree (5)
Hospital evaluation	V54	How satisfied or dissatisfied were you with the treatment you received when you were last in hospital?	Completely satisfied (1), Very satisfied (2), Fairly satisfied (3), Neither satisfied nor dissatisfied (4), Fairly dissatisfied (5), Very dissatisfied (6), Completely dissatisfied (7).
Doctor evaluation	V52	How satisfied or dissatisfied were you with the treatment you received when you last visited a doctor?	Completely satisfied (1), Very satisfied (2), Fairly satisfied (3), Neither satisfied nor dissatisfied (4), Fairly dissatisfied (5), Very dissatisfied (6), Completely dissatisfied (7).
Objective experience	V45, V46, V47, V48	<p>During the past 12 months did it ever happen that you did not get the medical treatment you needed because...</p> <ul style="list-style-type: none"> <li>- you could not pay for it?</li> <li>- you could not take the time off work or had other commitments?</li> <li>- the treatment you needed was not available where you live or nearby?</li> <li>- the waiting list was too long</li> </ul>	No (0), Yes (1)
Male	SEX	Gender of respondent	Female (0), Male (1)

Age	AGE	Age of respondent	In years
Education	DEGREE	Highest completed education level (Categories for international comparison)	No formal education (0), Primary school (1), Lower secondary (2), Upper secondary (3), Post secondary, non-tertiary (4), Lower level tertiary, first stage (5), Upper level tertiary (6).
Married	MARITAL	Legal partnership status	Married (1), Civil partnership, separated from spouse, divorced from spouse, widowed, never married, refused, don't know and no answer (0).
Employed	MAINSTAT	Main status	In paid work (1), unemployed and looking for a job, in education, apprentice or trainee, permanently sick or disabled, retired, domestic work, military service, other and no answer (0)
Subjective health	V59	In general, would you say your health is?	Excellent (5), Very good (4), Good (3), Fair (2), Poor (1)
Occupation	ISCO88	Occupation ISCO / ILO 1988	205 categories
Income	ISO2_INC, e.g. DE_INC	Country specific household income	Country-dependent values recoded into quartiles
Health care insurance	V63	What kind of health insurance do you have?	Have no health insurance (1), National/public health insurance (including coverage by public welfare) (2), Private insurance (3), Employer/union based insurance (4), National/public health insurance and private/complementary insurance (5), Public/national and employer/union based insurance (6), Employer/union based and private/complementary insurance (7), Employer/union based, private/complementary and national/public health insurance (8), Other (9)

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## D. Descriptive statistics

**Table D.1:** Summary statistics, 30 countries, ISSP

Country	N	Government attitudes		Hospital evaluation		Doctor evaluation		Objective experience		PHE
		Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	
Australia	1946	3.83	0.99	2.49	1.25	2.33	1.13	0.18	0.38	67.54
Belgium	3083	3.89	1.11	2.61	1.16	2.42	1.05	0.17	0.37	82.53
Bulgaria	1003	3.60	1.08	3.21	1.34	3.13	1.30	0.11	0.32	54.14
Chile	1559	3.85	0.94	3.45	1.29	3.41	1.30	0.23	0.42	59.46
China	5620	2.97	1.10	3.32	1.14	3.24	1.02	0.27	0.45	53.72
Croatia	1210	3.76	1.00	3.02	1.25	2.93	1.18	0.19	0.39	81.97
Czech Republic	1804	3.75	1.32	2.98	1.33	2.75	1.18	0.16	0.37	83.54
Denmark	1388	4.08	1.19	2.42	1.25	2.33	1.21	0.13	0.34	84.26
Finland	1340	3.72	1.14	2.53	1.20	2.63	1.26	0.18	0.39	77.81
France	3319	4.00	1.14	2.76	1.28	2.63	1.15	0.14	0.35	76.01
Germany	1681	3.83	1.19	2.79	1.27	2.63	1.14	0.15	0.36	83.13
Israel	1220	3.71	1.25	2.86	1.37	2.67	1.22	0.29	0.45	62.68
Italy	1180	3.96	0.92	2.98	1.16	2.99	1.06	0.21	0.41	76.13
Japan	1306	3.60	1.25	2.88	1.28	2.97	1.18	0.15	0.36	83.74
Korea, Rep.	1535	3.21	1.23	3.15	1.23	3.05	1.13	0.26	0.44	59.64
Lithuania	1187	3.59	0.98	3.41	1.11	3.32	1.05	0.19	0.40	70.33
Netherlands	1471	3.67	1.04	2.58	1.10	2.59	0.99	0.06	0.23	82.19
Norway	1834	3.99	1.01	2.56	1.17	2.55	1.10	0.14	0.35	84.76
Poland	1115	3.46	1.19	3.10	1.29	3.09	1.19	0.28	0.45	70.67
Portugal	1022	3.68	0.97	2.90	1.07	2.96	1.00	0.15	0.36	66.49
Russian Federation	1511	3.64	1.20	3.57	1.36	3.61	1.37	0.36	0.48	62.65
Slovak Republic	1128	4.02	1.04	3.14	1.25	3.05	1.17	0.20	0.40	71.64
Slovenia	1082	3.79	0.87	2.70	1.12	2.70	1.13	0.11	0.32	72.27
South Africa	3004	3.43	1.22	2.76	1.25	2.45	1.13	0.24	0.42	54.44
Spain	2712	4.11	0.94	2.48	1.21	2.48	1.20	0.05	0.22	72.18
Sweden	1158	3.76	1.15	2.59	1.24	2.67	1.27	0.14	0.35	83.97
Switzerland	1212	2.99	1.16	2.41	1.08	2.36	1.01	0.05	0.21	62.31
Turkey	1559	3.49	1.23	2.90	1.31	2.80	1.33	0.43	0.50	79.14
United Kingdom	936	3.92	0.94	2.65	1.32	2.49	1.17	0.15	0.35	84.26
United States	1550	3.34	1.18	2.49	1.30	2.47	1.28	0.18	0.38	48.46

**Table D.2:** Summary statistics, ISSP

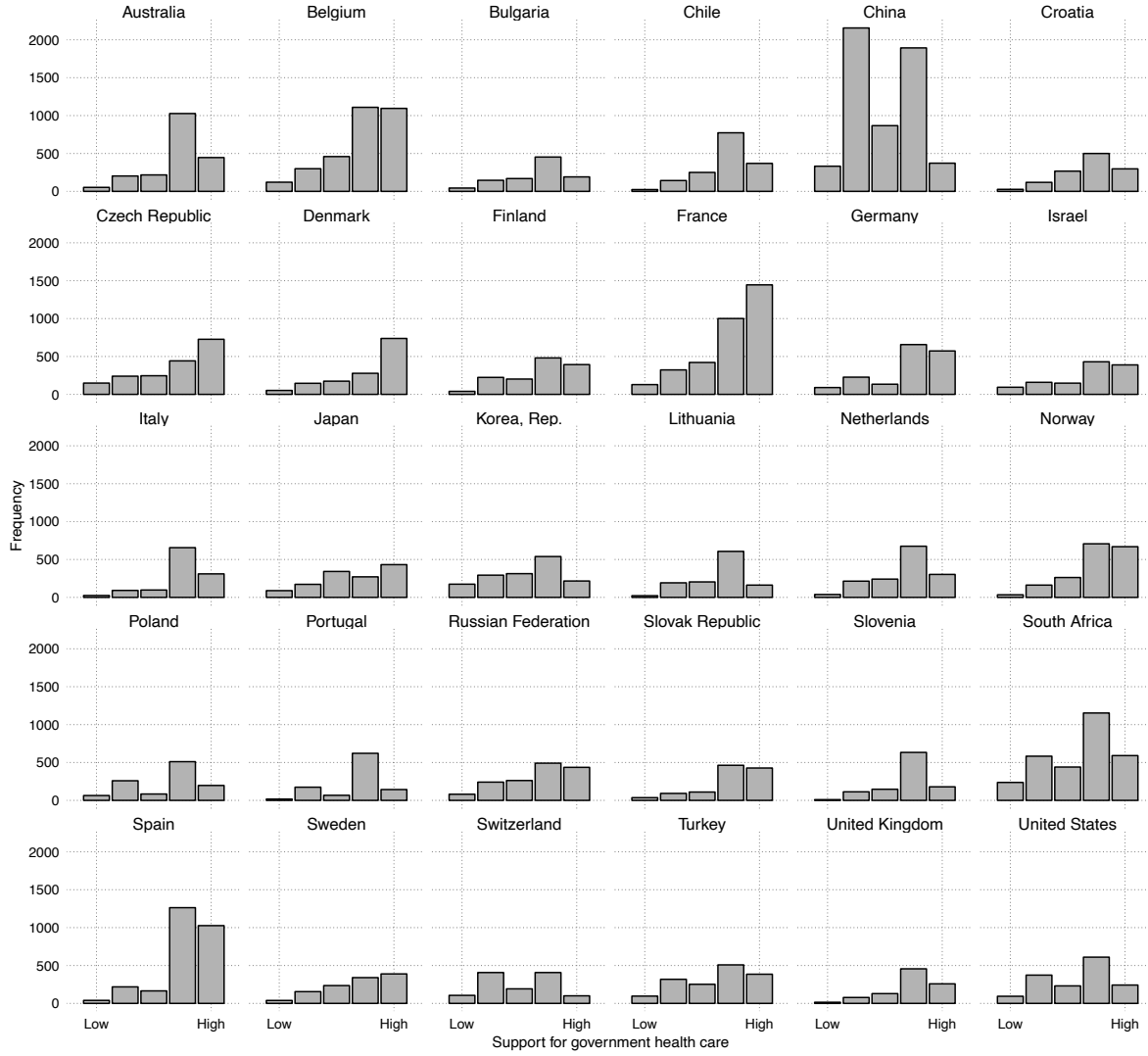
Statistic	N	Mean	St. Dev.	Min	Pctl(25)	Median	Pctl(75)	Max
Government attitudes	51,675	3.65	1.16	1	3	4	5	5
Hospital evaluation	51,675	2.87	1.27	1	2	3	3	7
Doctor evaluation	51,675	2.78	1.20	1	2	3	3	7
Objective experience	51,675	0.19	0.39	0	0	0	0	1
Male	51,675	0.45	0.50	0	0	0	1	1
Age	51,675	48.48	17.33	15	35	48	62	99
Married	51,675	0.56	0.50	0	0	1	1	1
Employed	51,675	0.53	0.50	0	0	1	1	1
Income	51,675	2.40	1.11	1	1	2	3	4
Subjective health	51,675	3.04	1.02	1	2	3	4	5
Health exp. (%GDP)	51,675	8.32	2.57	4.33	6.77	8.69	10.17	16.37
PHE	51,675	70.34	11.64	48.46	59.64	72.18	82.32	84.76
Inequality	51,675	34.42	6.58	24.90	27.70	33.30	41.40	47.60
Hospital beds	51,675	4.68	1.87	1.00	3.10	3.80	6.40	8.60
OOP	51,675	21.26	10.44	8.40	13.12	17.65	28.22	44.46
GDP (log)	51,675	10.12	0.84	8.64	9.57	10.26	10.78	11.53

**Table D.3: Summary statistics, WDI**

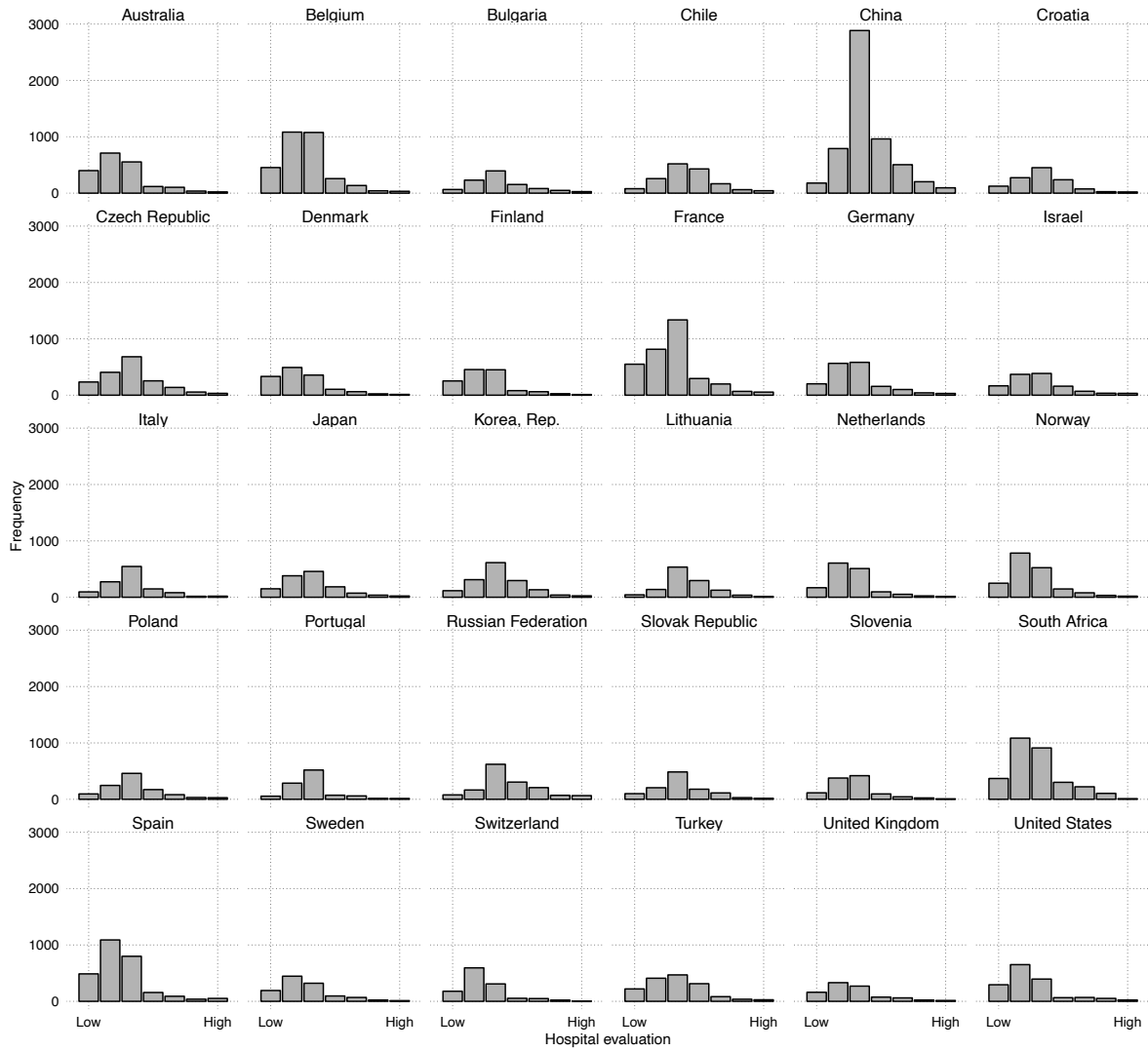
Country	PHE	Health exp.	Inequality	Hospital beds	OOP	GDP (log)
Australia	67.54	8.69	34.77	3.14	19.93	11.13
Belgium	82.53	10.07	27.74	6.34	17.44	10.74
Bulgaria	54.14	7.13	34.30	6.40	44.46	8.96
Chile	59.46	6.77	47.60	2.10	34.50	9.60
China	53.72	4.33	42.40	3.80	40.27	8.64
Croatia	81.97	7.79	32.30	5.70	12.05	9.59
Czech Republic	83.54	7.03	26.10	6.70	15.29	9.89
Denmark	84.26	10.17	28.50	3.10	13.81	11.02
Finland	77.81	8.95	27.60	5.50	19.36	10.84
France	76.01	11.19	33.30	6.60	10.21	10.69
Germany	83.13	10.77	27.67	8.20	13.90	10.69
Israel	62.68	7.07	41.02	3.10	23.52	10.41
Italy	76.13	8.96	35.19	3.43	21.68	10.46
Japan	83.74	10.62	27.97	5.88	13.12	10.78
Korea, Rep.	59.64	6.30	42.41	3.51	34.64	10.09
Lithuania	70.33	6.50	32.50	7.40	28.22	9.57
Netherlands	82.19	10.52	27.70	6.09	9.94	10.90
Norway	84.76	8.77	25.70	4.00	14.80	11.53
Poland	70.67	6.38	32.50	6.50	23.65	9.53
Portugal	66.49	9.17	36.14	3.40	27.36	9.97
Russian Federation	62.65	4.78	39.70	8.60	34.19	9.57
Slovak Republic	71.64	7.63	26.10	5.90	23.23	9.76
Slovenia	72.27	8.57	24.90	4.60	12.20	10.13
South Africa	54.44	7.50	42.40	2.81	8.40	8.98
Spain	72.18	9.08	35.40	3.00	22.84	10.26
Sweden	83.97	10.68	27.60	2.70	15.04	11.00
Switzerland	62.31	10.77	31.70	4.90	28.52	11.39
Turkey	79.14	4.65	40.04	2.54	15.90	9.34
United Kingdom	84.26	8.42	33.20	2.90	9.89	10.64
United States	48.46	16.37	45.58	2.90	12.04	10.85

## E. Distribution of main variables

**Figure E.1:** Distribution of government attitudes

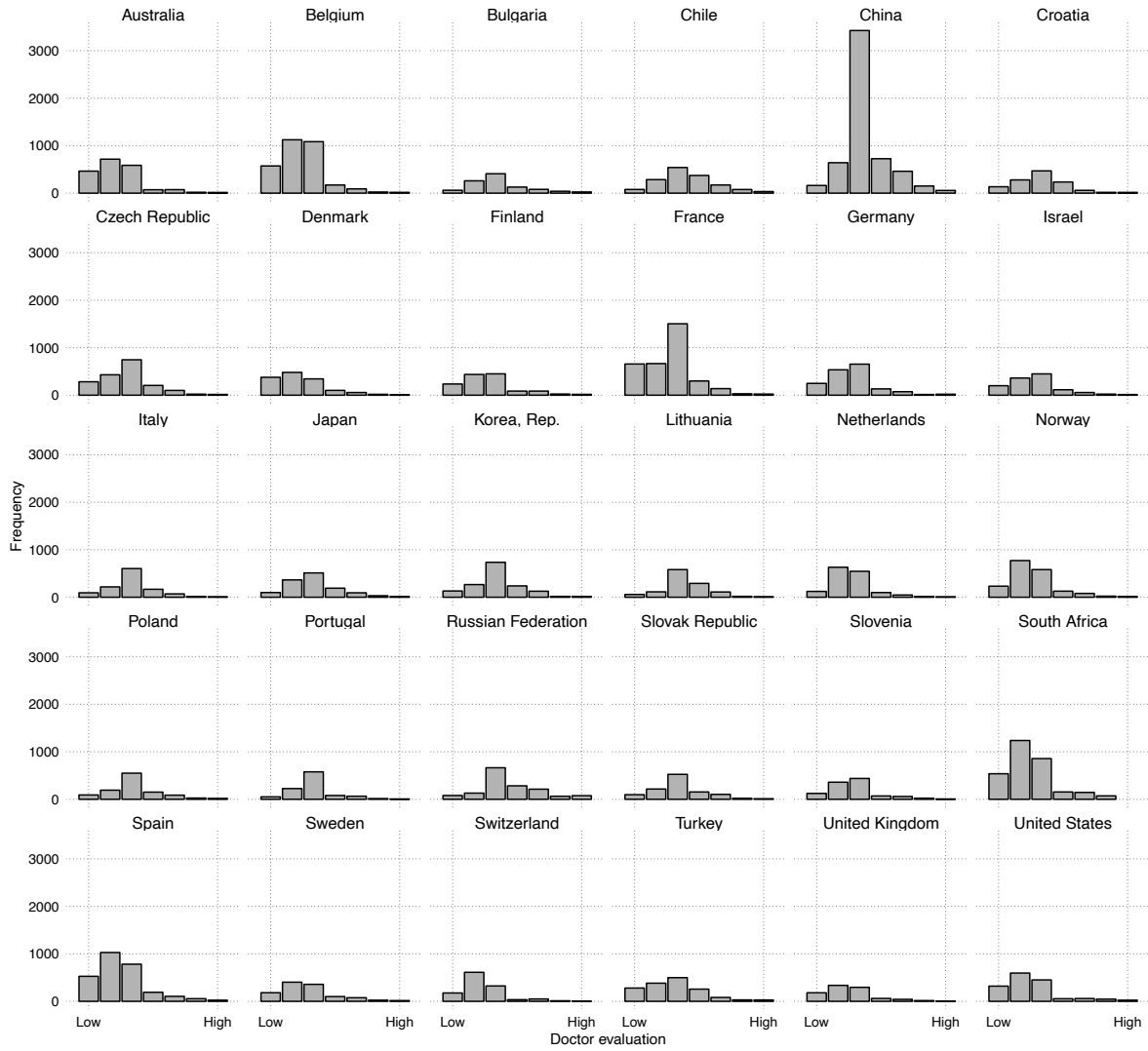


**Figure E.2: Distribution of hospital evaluations**

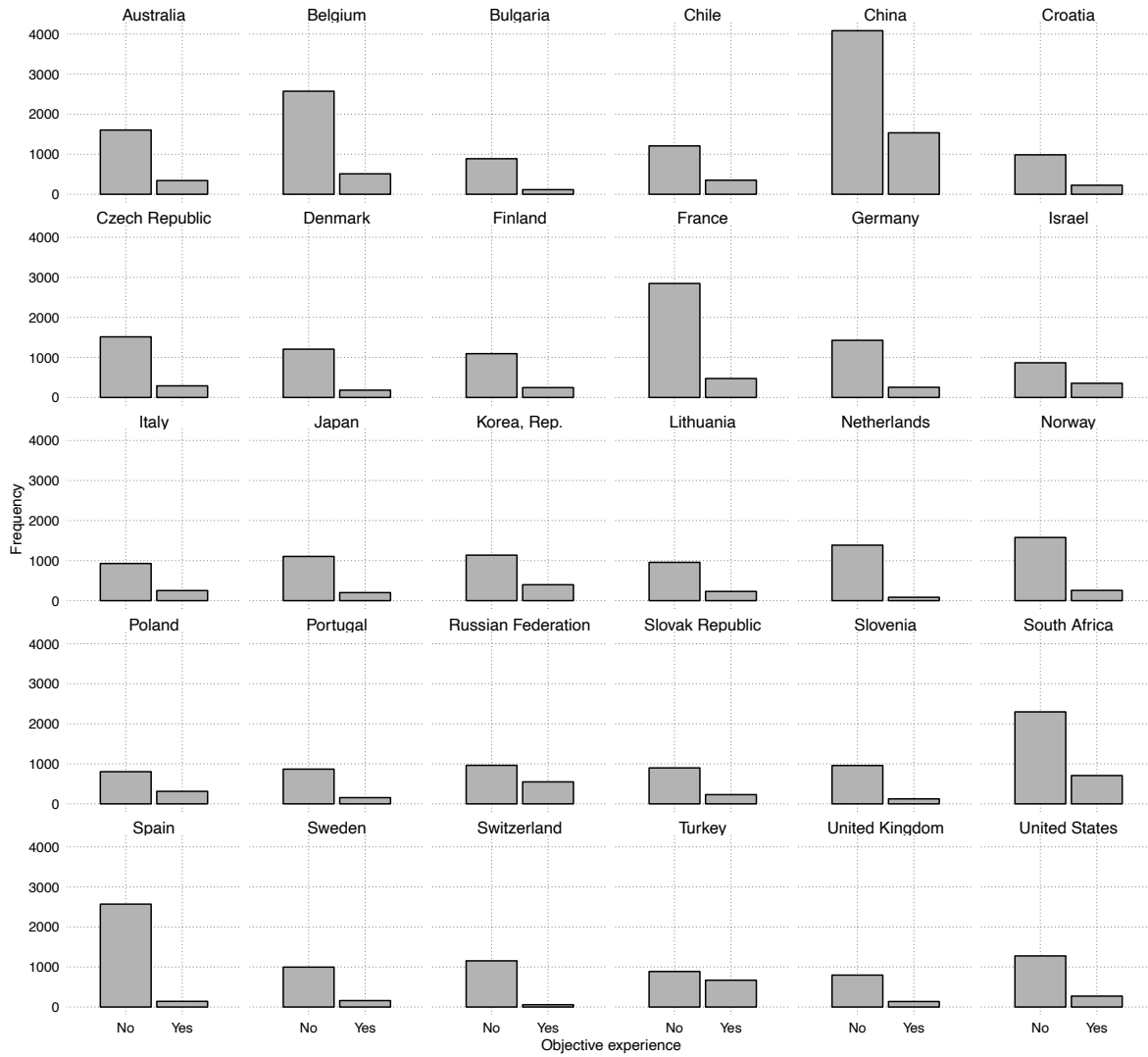




**Figure E.3: Distribution of doctor evaluations**



**Figure E.4:** Distribution of objective experiences



## F. Robustness test: Macro-level covariates

**Table F.1:** Personal experiences and government attitudes, additional macro-level covariates

	(1)	(2)	(3)	(4)
Male	-0.08*** (0.01)	-0.08*** (0.01)	-0.09*** (0.01)	-0.08*** (0.01)
Age	0.01*** (0.002)	0.01*** (0.002)	0.01*** (0.002)	0.01*** (0.002)
Age (sq)	-0.01*** (0.002)	-0.01*** (0.002)	-0.01*** (0.002)	-0.01*** (0.002)
Married	-0.02 (0.01)	-0.01 (0.01)	-0.02 (0.01)	-0.02 (0.01)
Employed	-0.004 (0.01)	-0.01 (0.01)	-0.005 (0.01)	-0.004 (0.01)
Income	-0.004 (0.01)	-0.002 (0.01)	-0.002 (0.01)	-0.003 (0.01)
Subjective health	-0.07*** (0.01)	-0.06*** (0.01)	-0.06*** (0.01)	-0.07*** (0.01)
Health exp. (%GDP)	0.01 (0.03)	0.01 (0.03)	0.01 (0.03)	0.01 (0.03)
Inequality	0.004 (0.004)	0.004 (0.004)	0.004 (0.004)	0.004 (0.004)
GDP (log)	-0.01 (0.10)	-0.02 (0.10)	-0.02 (0.10)	-0.01 (0.10)
Hospital beds	-0.03*** (0.01)	-0.03*** (0.01)	-0.03*** (0.01)	-0.03*** (0.01)
OOP	0.0004 (0.01)	0.001 (0.01)	0.001 (0.01)	0.0004 (0.01)
PHE (%)	1.76** (0.64)	1.79** (0.64)	1.81** (0.64)	1.75** (0.64)
Hospital evaluation		0.20*** (0.03)		
Hospital evaluation × PHE		-0.20*** (0.04)		
Doctor evaluation			0.26*** (0.03)	
Doctor evaluation × PHE			-0.30*** (0.04)	
Objective experience				0.09** (0.03)
Objective experience × PHE				-0.11** (0.04)
Education FE	Yes	Yes	Yes	Yes
Occupation FE	Yes	Yes	Yes	Yes
Health care insurance FE	Yes	Yes	Yes	Yes
ICC	0.0434	0.0435	0.0436	0.0435
Within country variance	1.2191	1.2148	1.2155	1.2188
Between country variance	0.0553	0.0552	0.0554	0.0554
Countries	30	30	30	30
Observations	51,675	51,675	51,675	51,675
Log Likelihood	-78,776.05	-78,691.74	-78,705.73	-78,775.95
Akaike Inf. Crit.	158,028.10	157,863.50	157,891.50	158,031.90
Bayesian Inf. Crit.	160,135.10	159,988.10	160,016.10	160,156.60

*Note:* Hierarchical models with individuals nested within countries. Unstandardized regression coefficients with standard errors in parentheses. The personal experience variables are mean centred within the individual countries. PHE denotes public health expenditure (public share of total health expenditure). \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

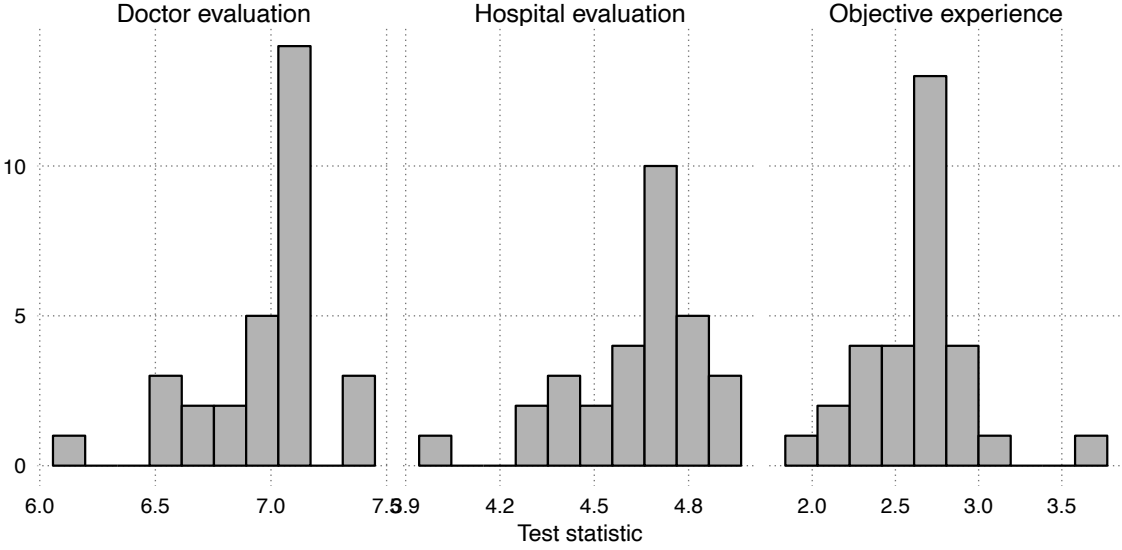
## G. Robustness test: Test for outliers

**Table G.1:** Personal experiences and government attitudes, without outliers

	(1)	(2)	(3)	(4)
Male	-0.09*** (0.01)	-0.09*** (0.01)	-0.09*** (0.01)	-0.08*** (0.01)
Age	0.01*** (0.002)	0.01*** (0.002)	0.01*** (0.002)	0.01*** (0.002)
Age (sq)	-0.01*** (0.002)	-0.01*** (0.002)	-0.01*** (0.002)	-0.01*** (0.002)
Married	-0.02** (0.01)	-0.02* (0.01)	-0.02** (0.01)	-0.02** (0.01)
Employed	-0.001 (0.01)	-0.004 (0.01)	-0.003 (0.01)	-0.003 (0.01)
Income	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Subjective health	-0.08*** (0.01)	-0.07*** (0.01)	-0.07*** (0.01)	-0.08*** (0.01)
Health exp. (%GDP)	0.01 (0.02)	0.01 (0.02)	0.01 (0.02)	0.01 (0.02)
PHE (%)	1.54*** (0.43)	1.53*** (0.43)	1.53*** (0.43)	1.55*** (0.43)
Hospital evaluation		0.22*** (0.03)		
Hospital evaluation × PHE		-0.21*** (0.04)		
Doctor evaluation			0.28*** (0.03)	
Doctor evaluation × PHE			-0.31*** (0.04)	
Objective experience				0.07** (0.03)
Objective experience × PHE				-0.07* (0.04)
Education FE	Yes	Yes	Yes	Yes
Occupation FE	Yes	Yes	Yes	Yes
Health care insurance FE	Yes	Yes	Yes	Yes
ICC	0.0544	0.0553	0.055	0.0547
Within country variance	1.1182	1.1108	1.1113	1.1177
Between country variance	0.0643	0.065	0.0646	0.0646
Countries	30	30	30	30
Observations	51,012	50,990	50,988	51,011
Log Likelihood	-75,566.18	-75,371.42	-75,379.58	-75,559.26
Akaike Inf. Crit.	151,600.40	151,214.80	151,231.20	151,590.50
Bayesian Inf. Crit.	153,668.90	153,300.90	153,317.20	153,676.70

*Note:* Hierarchical models with individuals nested within countries. Unstandardized regression coefficients with standard errors in parentheses. The personal experience variables are mean centred within the individual countries. PHE denotes public health expenditure (public share of total health expenditure). \*  $p < 0.1$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ .

**Figure G.1:** Distribution of cross-level interaction test statistics with one country removed





## H. Robustness test: Coverage through public healthcare

The models below use the share of population with total medical coverage through public programs.

The data for this variable stem from the OECD Health Statistics (available at

<http://doi.org/10.1787/health-data-en>).

**Table H.1:** Personal experiences and government attitudes, coverage models

	(1)	(2)	(3)	(4)
Male	-0.10*** (0.01)	-0.10*** (0.01)	-0.10*** (0.01)	-0.10*** (0.01)
Age	0.01*** (0.002)	0.01*** (0.002)	0.01*** (0.002)	0.01*** (0.002)
Age (sq)	-0.01*** (0.002)	-0.01*** (0.002)	-0.01*** (0.002)	-0.01*** (0.002)
Married	-0.03* (0.01)	-0.03 (0.01)	-0.03* (0.01)	-0.03* (0.01)
Employed	-0.005 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)
Income	0.001 (0.01)	0.002 (0.01)	0.002 (0.01)	0.001 (0.01)
Subjective health	-0.08*** (0.01)	-0.07*** (0.01)	-0.07*** (0.01)	-0.07*** (0.01)
Health exp. (%GDP)	0.01 (0.03)	0.01 (0.03)	0.01 (0.03)	0.01 (0.03)
Coverage	0.52 (0.43)	0.51 (0.43)	0.51 (0.43)	0.52 (0.43)
Hospital evaluation		0.14*** (0.04)		
Hospital evaluation × Coverage		-0.09* (0.04)		
Doctor evaluation			0.19*** (0.04)	
Doctor evaluation × Coverage			-0.17*** (0.04)	
Objective experience				0.11** (0.04)
Objective experience × Coverage				-0.11** (0.04)
Education FE	Yes	Yes	Yes	Yes
Occupation FE	Yes	Yes	Yes	Yes
Health care insurance FE	Yes	Yes	Yes	Yes
ICC	0.0478	0.0481	0.0482	0.048
Within country variance	1.2234	1.2211	1.2221	1.2231
Between country variance	0.0615	0.0617	0.0618	0.0617
Countries	24	24	24	24
Observations	36,615	36,615	36,615	36,615
Log Likelihood	-55,911.81	-55,884.25	-55,898.61	-55,913.93
Akaike Inf. Crit.	112,291.60	112,240.50	112,269.20	112,299.90
Bayesian Inf. Crit.	114,282.50	114,248.40	114,277.20	114,307.80

*Note:* Hierarchical models with individuals nested within countries. Unstandardized regression coefficients with standard errors in parentheses. The personal experience variables are mean centred within the individual countries.  
\* p < 0.1, \*\* p < 0.05, \*\*\* p < 0.01.