

Health and political efficacy in context: What is the role of the welfare state?

International Journal of
Comparative Sociology
2019, Vol. 60(6) 435–457
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DOI: 10.1177/0020715219899969
journals.sagepub.com/home/cos



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Abstract

Health affects nearly all facets of our lives, including the likelihood of getting involved in politics. Focusing on political efficacy, we zoom in on one potential mechanism as to why people in poor health might, for example, stay at home on Election Day. We first look at the ways in which health is related to both people's perceptions of their abilities to take part in politics (internal political efficacy) as well as the extent to which they believe policymakers are responsive to citizen needs (external political efficacy). Second, we examine how the social policy context intervenes in the relationship between health and political efficacy. Multilevel models using 2014 and 2016 European Social Survey data on roughly 57,000 respondents nested in 21 European countries reveal complex results: while good health, rather unsurprisingly, fosters internal and external political efficacy, more generous welfare states, though associated with higher levels of political efficacy, are not a panacea for remedying political inequalities stemming from individual health differences.

Keywords

Multilevel analysis, political efficacy, political inequality, self-rated health, welfare regimes

Introduction

Health affects nearly all facets of our lives. Health status, both physical and mental, can impact the ability to work and personal relationships. It can influence the types of decisions we make and the attitudes we adopt. Poor physical or mental health may limit one's resources, such as education or

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income, and can lower both the motivation and abilities to follow and engage in day-to-day politics. The relationship between health and political involvement has recently received increased attention (Denny and Doyle, 2007a, 2007b; Gollust and Rahn, 2015; Mattila et al., 2013; Pacheco and Fletcher, 2015; Reher, 2018; Söderlund and Rapeli, 2015; Wass et al., 2017). Poor health can, for example, reduce the likelihood of voting in an election by up to 10 percentage points (Mattila et al., 2013; Schur and Kruse, 2000).

But what is it exactly about poor health that is so detrimental to political engagement, even if we consider relatively “low-effort” activities such as voting? Focusing on political efficacy, we zoom in on one potential mechanism as to why people in poor health might, for example, stay at home on Election Day. The concept of political efficacy is central to this decision. It is a more proximate way of studying health’s impact on political behavior (Almond and Verba, 1963); its “absence aptly defines civic disengagement” (Loveless, 2013: 474). To capture the concept in its entirety, we distinguish between *internal political efficacy*, or the ways in which health is related to people’s perceptions of their abilities to take part in politics, and *external political efficacy*, the extent to which they believe policymakers are responsive to citizen needs. Against this background, we first hypothesize a positive relationship between self-rated health and internal and external political efficacy. Second, we are interested in how the relationship between health and political efficacy varies across countries. To do so, we examine the role of the welfare state in shaping health-based political inequalities. Previous research demonstrated that generous welfare state contexts not only exhibit higher levels of political engagement, but can also reduce the turnout gap across socioeconomic groups (Shore, 2019b). We therefore ask whether and how the welfare state context impacts health-based inequalities in political efficacy.

To empirically assess the relationships between self-rated health and political efficacy as well as the potential moderating impact of the welfare state, we rely on 2014 and 2016 European Social Survey (ESS) data. In addressing our two research questions, we add to a growing body of research examining the relationship between health and political engagement in a broad comparative framework (Mattila and Papageorgiou, 2016; Mattila et al., 2013; Wass et al., 2017). The bulk of the literature tends to focus on single countries or small groups of countries, in particular the United States (Hassell and Settle, 2017; Pacheco and Fletcher, 2015; Schur and Kruse, 2000; Schur et al., 2017) or the Northern European countries (Mattila et al., 2018; Söderlund and Rapeli, 2015; Sund et al., 2017). Our broader comparative focus allows us to begin to identify cross-country patterns of health and political outcomes.

Our analyses, based on multilevel models including cross-level interactions, reveal complex results: While good health, rather unsurprisingly, fosters internal and external political efficacy, we find that more generous welfare states, though associated with higher overall levels of political efficacy, are not a panacea for remedying political inequalities stemming from individual health differences. Our findings have two important implications. First, they shed light on the mechanisms underlying the health-turnout relationship. Second, they highlight the limitations of even the most generous social policy contexts in reducing the health gap in political engagement. This finding, moreover, emphasizes the role of health as an important political resource and as a particularly pernicious source of political inequality.

Individual health and political efficacy

Why people participate in politics is a question that continues to attract a great deal of scholarly attention; the same applies to the question of why they do *not* participate. Traditional explanations of political participation center on, for example, socioeconomic resources and demographic factors (Brady et al., 1995; Smets and Van Ham Carolien, 2013; Wolfinger and Rosenstone, 1980)

or feelings of deprivation and unequal treatment (Runciman, 1972; Taylor et al., 1987). Recent studies added to this list by identifying health as a further important factor influencing political involvement, in particular voting (among others, Denny and Doyle, 2007a; Gollust and Rahn, 2015; Mattila et al., 2013, 2018; Pacheco and Fletcher, 2015; Reher, 2018; Stockemer and Rapp, 2019; Wass et al., 2017).

The extant literature largely underscores the negative effects of poor health—ranging from mental to physical to chronic disease—on political participation, especially voting. For example, Söderlund and Rapeli (2015) invoke Brady et al.'s (1995: 271) seminal finding to explain why people in poor health are less likely to be involved in politics: “because they can’t, because they don’t want to, or because nobody asked.” The *can’t* dimension receives the most attention. Most explanations follow the general assumptions of the resource model of political participation (Brady et al., 1995), which simply finds that those with more resources—be it money, education, time, or the combination thereof—are more likely to take part in political action than those with fewer. People who do not participate in politics might lack certain resources, such as motivation, civic skills, or energy. Not only does health frequently influence these resources, but it is also a resource in and of itself. For example, focusing on depression, one of the most pervasive illnesses of the twenty-first century, Ojeda (2015) argues that depression decreases self-esteem, one’s belief in the capacity to affect change, and triggers political distrust. Similarly, Snyder (2002) contends that depression frequently leads to a feeling of hopelessness and decreases one’s perceived capacity to affect change, including political change. Examining poor general health, Mattila et al. (2013), as well as Schur et al. (2002), argue that poor health, regardless of the type of mental or physical ailment, has adverse social and psychological effects. Schur and Kruse (2000) add that poor health simply lowers one’s overall interest in political matters. From these studies it then follows that political efficacy—or the “feeling that political and social change is possible, and that the individual citizen can play a part in bringing about the change” (Campbell et al., 1954: 181)—is one of the core factors why individuals in poor health do not participate in political activities.¹

We examine the influence of poor health on the internal and external dimensions of political efficacy (Lane, 1959). Studying both dimensions allows us to examine two different objects of analysis—citizens’ perceptions of themselves (internal) and of their states (external) (Westholm and Niemi, 1986). *Internal efficacy* captures “an individual’s self-perceptions that they are capable of understanding politics and competent enough to participate in a political act such as voting” (Miller et al., 1980: 253). We see two reasons why health may strongly affect internal political efficacy. First, scholars (Oskooii, 2016; Schwartz, 1973) point out that a lack of financial resources, unemployment, or racial discrimination can be a major source of societal and political alienation. We argue that health problems can have similar effects. Individuals in poor health might “despair of effecting change because of experiencing the world in an unfree state or because of a lack of connections to an increasingly complex social system” (Wallerstein, 1992: 198). These feelings of alienation can then be linked to perceptions of powerlessness (Strandmark, 2004; Wallerstein, 1992); that is, individuals in poor health may not feel capable of effectively taking part in politics. They might also not believe that their actions are meaningful (Loveless, 2013). Second, individuals with health issues may furthermore focus their attention and energy on more immediate concerns, such as getting treatment or maintaining their daily routines. For sick people, the thought of taking part in politics may seem either too complicated, overwhelming, or may be simply something with which they do not want to be bothered or concerned (Pacheco and Fletcher, 2015).

External political efficacy refers to people’s perceptions that institutions and decision-makers are responsive to the preferences and participation of citizens. We expect that external political efficacy should also be lower among people in poor health. As mentioned above, poor health is often accompanied by feelings of alienation and isolation, both of which are harmful to political

efficacy (Almond and Verba, 1963). More specifically, experiencing health problems may lead to the perception that a person's needs are not being met and their preferences ignored. Since bureaucratic hurdles, out-of-pocket costs, and feelings of powerlessness often accompany health struggles, people experiencing these difficulties may be more likely to feel the system has failed them in providing the care and support they need. For example, the absence of adequate treatments, high costs associated with health care, long waiting times, or dissatisfaction with services might negatively impact external political efficacy as well as trust in higher level political institutions (Christensen and Laegreid, 2005; Moynihan and Soss, 2014). Moreover, many health conditions are associated with experiences and perceptions of institutionalized discrimination and stigma, which are strongly linked to lower external political efficacy (Soss, 1999). In sum, because it affects citizens' capability to participate in political life, political efficacy can be considered a "quality of life" indicator (Campbell and Converse, 1972). We hypothesize that, compared to people in good health, people who perceive their overall health to be bad will exhibit lower levels of internal political efficacy (H1) and external political efficacy (H2).²

The welfare state context

We assume that the relationship between health and political efficacy is not independent from institutional settings, social norms, or existing policies within a country (Books and Prysby, 1988). In other words, citizens' interactions with their political and social context matter for political outcomes (Anderson, 2010). The contextual setting also influences how many resources citizens have at their disposal to participate in the political and social world. In terms of macro-level factors that can influence both the levels of and socioeconomic gradients in political engagement, the welfare state is a logical starting point. Simply stated, the purpose of a welfare state is to reduce social risks and economic inequality, by, for example, supporting the less well-off, the unemployed, the incapable, or incurably sick.

Generous welfare states are a proxy cause for higher turnout; they decrease income inequality, which, in turn, is associated with lower and less equal turnout (Anderson and Beramendi, 2008; Solt, 2008). Differences in welfare states—in terms of, for example, type, generosity, or redistributive capacity—also account for cross-national differences in (in)equality of various types of political attitudes and behaviors (Alber and Kohler, 2009; Marx and Nguyen, 2018; Shore, 2016, 2019b; Stadelmann-Steffen, 2012). If generous welfare states foster political engagement, it should only be logical that they do so through internal and external political efficacy. In the second half of this article, we examine the degree to which this is the case.

Drawing on the findings of previous works, we expect that overall levels of political efficacy are higher in more encompassing welfare systems, as generous social policy offerings can foster the political engagement of vulnerable groups (Bruch et al., 2010; Marx and Nguyen, 2016; Mettler and Stonecash, 2008). Adding to these findings, generous welfare states also tend to exhibit better overall health outcomes (Bambra, 2011; Bambra and Eikemo, 2009), which would predict higher overall levels of political efficacy. At the same time, however, there is the so-called "Scandinavian Paradox" in terms of health inequalities; that is, though population health tends to be among the best in the world in these countries, a socioeconomic gradient in health persists. Mackenbach (2012: 767) sees one reason for this paradox in the fact that health inequalities evolve not only from material but also immaterial factors (e.g. lifestyle and consumption behaviors). Although the universal social programs contribute to the reduction of socioeconomic gradients in many societies (Mackenbach, 2017b), there is a substantial body of literature pointing to the persistence of health inequalities as "one of the great disappointments of public health" (Reeves and Mackenbach, 2019: 1). The evidence is, however, mixed, with recent umbrella reviews finding inclusive results about

the impact of social policy on health inequalities (Hillier-Brown et al., 2019; Kim, 2019). We outline our line of thought leading to our research hypothesis below.

Given the growing body of research on the ways in which the welfare state can foster political equality, our hypotheses about the role of the welfare state posits a positive relationship between the scope of the welfare system and both dimensions of political efficacy. We expect that the political efficacy gap between those in good and poor health will be smaller in generous welfare states. There are at least two mechanisms through which the welfare state may moderate the relationship between health and political efficacy (Campbell, 2012). The first has to do with the provision of social support and services, such as health care or incapacity benefits in particular, but also the overall social policy offerings. We assume that the *resources* and benefits people receive from the state may improve overall perceptions of health and may also serve to lessen the perception that health is an impediment to political involvement. Social services and programs can be particularly beneficial for the political integration of vulnerable groups (Marx and Nguyen, 2018; Shore, 2019a); in other words, people in poor health may benefit even more from social welfare provision than the healthy. We therefore expect that the positive relationship between good health and *internal political efficacy* to be the weakest in generous welfare states (H1a).

The resources—whether healthcare or other social benefits—can also enhance external political efficacy. We assume that the mechanism involved is an *interpretive effect*. When people experience that their health concerns and needs are adequately addressed, citizens are more likely to feel that politicians are responsive to the needs of everyday citizens. In other words, by providing the care and services people in poor health need, we expect generous welfare states to weaken the influence poor health has on low *external political efficacy*.

In addition, we expect that the interpretive effects that generous resources can convey depend on the design of welfare policy (Pierson, 1993). For example, Mettler and Stonecash (2008) show that the greater the number of universal programs used by citizens, the greater their involvement with politics due to enhanced political efficacy. Similarly, Watson (2015) argues that participation in rights-based programs, which are principally in place in universal welfare states, increase political participation. Means-tested programs or conditional programs, however, appear to be most harmful for political interest and political efficacy, because individuals might feel left behind, as second-class citizens, if they do not have access to the services they need and feel entitled to (Schneider and Ingram, 1993; Soss, 1999). In contrast, experiences with universal programs may signal to recipients that policymakers value their concerns and needs, thereby enhancing external political efficacy. We therefore hypothesize that the relationship between health and *external political efficacy* will be the weakest in universal welfare state contexts (H2a).

Data and methods

To test our hypotheses, we rely on data from two recent rounds of the ESS: ESS Round 7 (2014) and ESS Round 8 (2016). Unlike the earlier rounds of the ESS, these two rounds include questions on both internal and external political efficacy.³ We combine these two rounds into one dataset, consisting of roughly 56,780 respondents nested in 21 European countries.

Political efficacy

Both ESS rounds 7 and 8 have items asking about internal and external political efficacy, however, the 2014 survey (round 7) includes six questions on political efficacy; whereas the 2016 version only includes 4 items. We base our measurement on the four items that are common to both datasets. We capture internal political efficacy with the following two questions: (1) *How*

Table 1. Self-rated health and political efficacy in 21 welfare states.

Welfare state regime	Country	Social expend.	Incapacity	SRH (%) very good + good	Internal political efficacy	External political efficacy	ESS round
Scandinavian	Denmark	30.44	4.71	75.46	0.59	1.18	8
	Finland	26.83	3.69	77.56	0.42	0.45	7, 8
	Norway	23.54	4.15	78.60	0.72	0.52	7, 8
	Sweden	28.59	4.69	82.71	0.57	0.59	7, 8
Conservative	Austria	28.49	2.30	82.65	0.20	0.22	7, 8
	Belgium	28.06	2.42	79.83	-0.03	-0.01	7, 8
	Germany	28.50	1.93	63.89	0.40	0.38	7, 8
	France	31.43	1.65	67.74	-0.06	0.04	7, 8
	Netherlands	27.73	2.93	77.05	0.27	0.04	7, 8
Liberal	Switzerland	24.81	2.47	86.63	0.72	0.47	7, 8
	Ireland	20.19	1.96	87.17	-0.00	0.02	7, 8
Southern	United Kingdom	26.90	2.05	77.90	0.28	0.20	7, 8
	Italy	27.07	1.63	79.59	-0.56	0.00	8
Eastern	Portugal	24.47	2.01	58.44	-0.12	-0.15	7, 8
	Spain	22.30	2.53	69.03	-0.05	0.08	7, 8
	Czech Republic	18.79	2.11	76.70	-0.15	-0.25	7, 8
Average	Estonia	14.74	2.08	61.00	-0.17	-0.18	7, 8
	Hungary	22.17	2.62	74.64	-0.31	-0.43	7, 8
	Lithuania	16.20	1.66	70.73	-0.19	-0.13	7, 8
	Poland	19.44	2.45	72.82	-0.18	-0.23	7, 8
	Slovenia	22.77	2.19	68.42	-0.33	-0.29	7, 8
	Average	24.45	2.58	74.69	0.04	0.03	

SRH: self-rated health; ESS: European Social Survey; GDP: gross domestic product OECD: Organization for Economic Cooperation and Development.

Social expenditure/incapacity = total public expenditures in percentage of GDP (average for 2005–2011); source OECD Social Expenditure Database. Self-rated health: percentage of individuals stating they are in good or very good health; source ESS Round 7 (2014) and ESS Round 8 (2016).

Internal and external political efficacy: standardized scale (higher values indicate greater political efficacy); source ESS Round 7 (2014) and ESS Round 8 (2016); poststratification weights used for ESS variables.

able do you think you are to take an active role in a group involved with political issues? (2) How confident are you in your ability to participate in politics? External political efficacy is based on the following questions: (1) *How much would you say the political system in [country] allows people like you to have a say in what the government does?* (2) *How much would you say that the political system in [country] allows people like you to have an influence on politics?* In 2014, the answer categories ranged from 0 to 10, whereas in 2016 they ranged from 1 to 5. To create an additive index for each efficacy dimension, we first standardized the items to have a mean of 0 and a standard deviation of 1 and then added the two respective items to an internal and external political efficacy scale. Table 1 shows the distribution of our efficacy measures across our analyzed countries. It reveals that both internal and external political efficacy is rather low in Central and Eastern European countries, whereby they are above average in the Scandinavian countries as well as in Germany and Switzerland. Moreover, internal and external political efficacy differ highly within some countries, such as Italy: while internal efficacy is at an average level, external efficacy is particularly low.

Individual health

We capture self-rated health with the question “How is your health in general?” The original answer options include: “very bad,” “bad,” “fair,” “good,” and “very good.” We recoded the variable to have three categories, with the “bad” and “good” responses grouped together (Rapp et al., 2018). In the analyses to follow, the middle option, “fair,” is used as the reference category (Manor et al., 2000). Self-rated health is an umbrella category integrating both physical and mental health issues (McDowell, 2006; Mavaddat et al., 2011) and is “consistently identified as an independent and sustainable predictor of actual health” (Baćak and Ólafsdóttir, 2017: 647). Overall, we can see from Table 1 that the average level of health is rather high, that is, most respondents report that they are in good or very good health.

The welfare context

In operationalizing the welfare state and against the background of the resource versus interpretive effects on the two dimensions of political efficacy, there are numerous measures of “welfare state-ness” or generosity we can consider. We follow Dahl and Van der Wel’s (2013) threefold approach to examining the impact of the welfare state on inequalities in self-rated health, namely, the regime approach, the expenditures approach, and the institutional approach (see also Bergqvist et al., 2013).

In terms of the *regime approach*, we follow Bambra and Eikemo (2009) as well as Rathmann et al. (2015), who distinguish five welfare regimes—building on the insights of Esping-Andersen (1990) as well as Ferrera (1996): (1) Scandinavian, (2) Conservative, (3) Liberal, (4) Southern European, and (5) Eastern European. The universalism of the welfare state, that is, the extent to which benefits are distributed universally among the population compared to status-differentiating or means-tested welfare programs (Eikemo et al., 2008), is the main criteria of distinction between the different types (Esping-Andersen, 1990; Ferrera, 1996). While there have been many efforts over the past decade to classify healthcare regimes, there is little consensus in terms of how countries group together, which types of healthcare regimes exist, or which health outcomes are of relevance (Beckfield et al., 2013; Kikuzawa et al., 2008; Marmor and Wendt, 2012; Quadagno, 2010). Although not primarily focused on health, the main strength of the regime approach is “the opportunity it gives to assess the totality and the interconnected nature of social structures and welfare regimes” (Dahl and Van der Wel, 2013: 61). Moreover, welfare regimes are arguably best suited to examining disparities in health and their consequences (Beckfield et al., 2013). The distribution of the countries in our dataset is presented in Table 1.

The *expenditure approach* captures the total public social spending as a percentage of gross domestic product (GDP) and taps welfare efforts and generosity, though it is not without its critics (Esping-Andersen, 1990). Studies find that higher public social spending is associated with health gains for vulnerable groups (Dahl and Van der Wel, 2013; Gesthuizen et al., 2012; Van den Heuvel and Olaroiu, 2017) and has the potential to reduce the strength of the relationship between health and political efficacy. We do not take overall health spending into account, as this category of public expenditures is arguably not strongly tied to overall welfare state effort or generosity. Much of the cross-country variation in health spending is in fact driven by the *costs* of health care (Anderson et al., 2003), and not generosity or even health outcomes (Bradley et al., 2011). Others show that higher health expenditures are often the result of a greater disease burden (Kikuzawa et al., 2008: 396) and are thus not necessarily indicative of a greater commitment to public health. A recent study, moreover, finds that public health expenditures are not strongly linked to outcomes such as life expectancy, whereas social protection expenditures are associated with fewer unmet health needs (Van den Heuvel and Olaroiu, 2017).

Finally, in line with the *institutional approach*, we include a measure of incapacity expenditures. Although also a measure of social spending, it has a clear target group—people in poor health. This type of *decommodifying* expenditure aimed at working-age populations includes cash payments and welfare services for disabled and socially excluded groups and “can also be considered as capacitating policies in this life-stage” (Kuitto, 2016: 446). Both total social spending and public incapacity expenditures (as percentages of GDP) are averaged for the years 2005–2011 and come from the Organisation for Economic Cooperation and Development (OECD) Social Expenditure Database.⁴ Table 1 provides an overview of all welfare measures along with descriptive statistics of self-rated health and both dimensions of political efficacy. We see that, on average, the Scandinavian welfare states have higher spending on incapacity benefits compared to the other welfare state types.

Social spending and incapacity expenditures tap into the resource mechanism of social welfare provision. Interpretive effects, however, are admittedly trickier to capture. The regime typologies may be more appropriate for interpretive effects, as countries are grouped together according to programmatic elements of their welfare states. It is, however, important to note that regime type and social spending are highly correlated. In other words, universalism tends to be associated with greater social spending. We may also be capturing interpretive effects of policy through spending measures as well. We therefore exercise caution with regard to the precise mechanisms underlying the various approaches to operationalizing the welfare state.

Apart from our main variables of interest, we include factors that may confound the relationship between self-rated health and both efficacy measures. First, we control for socioeconomic factors known to influence both political efficacy and individual health: older respondents (age) may feel more efficacious due to their life experience; at the same time, they are known to report more health issues. We limit our focus to working-age populations (15–64), as older individuals not only tend to have more health issues, but policies and programs aimed at the working-age segment of the population are most closely aligned with the theoretical core behind welfare state regime classifications (Esping-Andersen, 1990). Females (gender) tend to report fewer health issues as well as feel less efficacious (Stockemer and Rapp, 2019). Highly educated individuals (educational level low, middle, and high) are known to feel more efficacious (Hayes and Bean, 1993; Sullivan and Riedel, 2001) and report fewer health issues (Cutler and Lleras-Muney, 2010). Additional confounders are whether a person is married or not (support and discussion network). We further include whether respondents are currently employed: even though unemployment could be an outcome of severe health issues, the literature shows that both efficacy and health are driven by labor market attachment (Marx and Nguyen, 2016; Reher, 2018; Shore and Tosun, 2019). Moreover, we include whether the respondent is a citizen of the country of residence as well as migration background (none, one parent migrant, both parents migrants) as controls in the models. Finally, we further control for the ESS round, that is, 2014 and 2016, to account for the time differences when the respondents were surveyed. An overview of all variables, their operationalizations, and sources is available in Table A1 in the Supplemental appendix.

Statistical modeling

Following the data structure of individuals nested in 21 European countries and our metric measures of internal and external political efficacy, we use linear hierarchical models to estimate the direct relationship between health and both efficacy measures as well as the relationship between our three welfare state measures and our political efficacy measure. As we are further interested in how welfare regime types and expenditures moderate the relationship between individual health and political efficacy, we estimate, in a second step, linear hierarchical models with cross-level

interactions, including varying slopes⁵ for our health measure (Heisig and Schaeffer, 2019). Since we are dealing with a limited number of countries (21), we refrain from adding additional context-level controls to the models to keep them as parsimonious as possible. As a robustness check, we additionally estimate all models with a fixed-effects approach, as there are arguably further confounding country-specific factors not captured by the regime and policy variables (Quaranta, 2018). These results show that our findings remain stable and even improve in a fixed-effects setting (see Table A2 in the Supplemental appendix).

Results

In a first step, in Table 2 we estimate eight models testing the baseline conditions, that is, the direct influence of health on external and internal political efficacy (models 1 and 2) as well as the direct relationship between our three welfare regime measures and efficacy (models 3–8). The estimation of the intraclass correlation revealed that 13 percent of the variance in external political efficacy is due to differences between countries and roughly 6.6 percent of the variance in internal efficacy could be explained by country differences. In line with our first set of hypotheses, we see that both dimensions of political efficacy are positively linked to self-rated health: compared to individuals who reported fair health (the reference category), individuals in good health hold higher levels of political efficacy and individuals in poor health lower levels of political efficacy.

Table 2 further reveals the relationship between welfare states, in terms of regime types, social spending as well as incapacity spending (models 3–8), and both efficacy measures. Compared to Scandinavian welfare regimes, all other regime types show an increasingly negative influence on external and internal political efficacy. The welfare regime models explain roughly 76 percent and 81 percent, respectively, of the overall contextual variance as indicated by the Snijders and Bosker R^2 in Table 2. In a similar way, the positive coefficient of total social spending indicates that greater overall social expenditures are related to higher levels of internal and external political efficacy. In other words, the more generous a regime is, the more individuals perceive themselves to be able to partake in politics and that the system is responsive to their needs. Finally, we see the same picture with the more specific welfare measure, spending on incapability benefits: Greater expenditures for these benefits are positively and significantly related to increased feelings of both internal and external political efficacy. The estimated coefficients in models 7 and 8 thereby indicate a stronger relationship between incapability spending and efficacy than between the overall social spending and our efficacy measures. This is supported by the higher explained variance in models 7 and 8 compared to models 5 and 6.

In a second step, we estimate six models testing the moderating relationship between self-rated health and the welfare state on individuals' internal and external political efficacy (see Table 3). The first two models in Table 3, models 9 and 10, show the results of the interaction between the five types of welfare regimes—with the Scandinavian regime type as the reference category—and self-rated health. First, we mainly see negative interaction coefficients for all four welfare regime types. This result indicates that the positive relationship of good health on external political efficacy—which we observed in Table 2—is diminished for those living in any of these four welfare state types compared to individuals in Scandinavian welfare regimes. Yet, the differences between these categories are not always statistically significant, meaning that the effect of health on external political efficacy is only dependent on certain types of welfare regimes compared to the Scandinavian one, that is, liberal, Southern, Eastern. More importantly, we only see distinguishable effects for the interactions with being in good/very good health. Living in a less generous welfare regime than the Scandinavian one, thus, does not make a difference if you are in bad or very bad health (compared to those indicating fair health). This is further supported by the

Table 2. Regression results—direct influences on external and internal political efficacy.

	Model 1 ext. efficacy	Model 2 int. efficacy	Model 3 ext. efficacy	Model 4 int. efficacy	Model 5 ext. efficacy	Model 6 int. efficacy	Model 7 ext. efficacy	Model 8 int. efficacy
Self-rated health ^a								
Very bad/bad	-0.13 ^{***} (0.02)	-0.07 ^{**} (0.03)	-0.13 ^{***} (0.02)	-0.07 ^{**} (0.03)	-0.13 ^{***} (0.02)	-0.07 ^{**} (0.03)	-0.13 ^{***} (0.02)	-0.07 ^{**} (0.03)
Good/very good	0.10 ^{***} (0.01)	0.11 ^{***} (0.01)	0.10 ^{***} (0.01)	0.11 ^{***} (0.01)	0.10 ^{***} (0.01)	0.11 ^{***} (0.01)	0.10 ^{***} (0.01)	0.11 ^{***} (0.01)
Welfare regime type ^b								
Conservative			-0.30 ^{***} (0.12)	-0.45 ^{***} (0.11)				
Liberal			-0.43 ^{**} (0.16)	-0.55 ^{***} (0.15)				
Southern European			-0.74 ^{***} (0.14)	-0.59 ^{***} (0.13)				
Eastern European			-0.79 ^{***} (0.12)	-0.92 ^{***} (0.11)				
Total social expenditures					0.04 [*] (0.01)	0.05 ^{***} (0.01)		
Incapacity spending							0.26 ^{***} (0.06)	0.27 ^{***} (0.06)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Intercept	-0.40 ^{***} (0.08)	-0.19 [*] (0.09)	0.06 (0.10)	0.34 ^{***} (0.10)	-1.29 ^{***} (0.37)	-1.41 ^{***} (0.34)	-1.07 ^{***} (0.17)	-0.89 ^{***} (0.18)
Individual-level var	-1.05 ^{***} (0.15)	-1.02 ^{***} (0.16)	-1.70 ^{***} (0.16)	-1.75 ^{***} (0.16)	-1.17 ^{***} (0.15)	-1.27 ^{***} (0.16)	-1.35 ^{***} (0.16)	-1.33 ^{***} (0.16)
Contextual-level var	-0.13 ^{***} (0.00)	0.25 ^{***} (0.00)	-0.13 ^{***} (0.00)	0.25 ^{***} (0.00)	-0.13 ^{***} (0.00)	0.25 ^{***} (0.00)	-0.13 ^{***} (0.00)	0.25 ^{***} (0.00)
N (indiv./context)	56787/21	56787/21	56787/21	56787/21	56787/21	56787/21	56787/21	56787/21
Snijders/Boskers R ² (indiv./context)	0.07/0.11	0.06/0.19	0.17/0.76	0.11/0.81	0.11/0.30	0.09/0.50	0.14/0.51	0.09/0.56

Standard errors in parentheses. Full results are available in Table A3 in the Supplemental appendix.

^aReference = fair.

^bReference = Scandinavian regime.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Table 3. Regression results—moderated influences on external and internal political efficacy.

	Model 9 ext. efficacy	Model 10 int. efficacy	Model 11 ext. efficacy	Model 12 int. efficacy	Model 13 ext. efficacy	Model 14 int. efficacy
Self-rated health ^a						
Very bad /bad	-0.05 (0.06)	-0.01 (0.08)	-0.20 (0.11)	-0.28 (0.18)	-0.21 ^{**} (0.07)	-0.13 (0.10)
Good/very good	0.18 ^{**} (0.03)	0.28 ^{***} (0.05)	-0.02 (0.07)	-0.05 (0.13)	0.00 (0.04)	-0.09 (0.07)
Welfare regime type ^b						
Conservative	-0.24 [*] (0.12)	-0.32 ^{**} (0.11)				
Liberal	-0.27 (0.16)	-0.31 [*] (0.15)				
Southern European	-0.66 ^{***} (0.14)	-0.40 ^{**} (0.13)				
Eastern European	-0.70 ^{***} (0.12)	-0.78 ^{***} (0.11)				
Total social expenditures			0.03 [*] (0.01)	0.04 ^{***} (0.01)		
Incapacity spending					0.23 ^{***} (0.06)	0.20 ^{**} (0.07)
Interaction effects						
Welfare regime interactions ^b						
conservative*bad srh	-0.08 (0.07)	0.00 (0.10)				
Conservative*good srh	-0.07 (0.04)	-0.17 ^{**} (0.06)				
Liberal*bad srh	-0.17 [*] (0.09)	-0.20 (0.13)				
Liberal*good srh	-0.18 ^{***} (0.05)	-0.29 ^{***} (0.09)				
Southern*bad srh	0.02 (0.08)	-0.05 (0.12)				
Southern*good srh	-0.10 [*] (0.05)	-0.25 ^{**} (0.08)				

(Continued)

Table 3. (Continued)

	Model 9 ext. efficacy	Model 10 int. efficacy	Model 11 ext. efficacy	Model 12 int. efficacy	Model 13 ext. efficacy	Model 14 int. efficacy
Eastern*bad srh	-0.09 (0.07)	-0.10 (0.10)				
Eastern*good srh	-0.11** (0.04)	-0.17** (0.06)				
Social exp.*bad srh			0.00 (0.00)	0.01 (0.01)		
Social exp.*good srh			0.00 (0.00)	0.01 (0.01)		
Incapacity spending*bad srh					0.04 (0.03)	0.03 (0.04)
Incapacity spending*good srh					0.04* (0.02)	0.08** (0.03)
controls	Yes	Yes	Yes	Yes	Yes	Yes
Intercept	0.11 (0.09)	0.28** (0.10)	-1.07** (0.36)	-1.19*** (0.32)	-0.86*** (0.17)	-0.65*** (0.19)
Individual-level var	-3.33** (0.25)	-2.64*** (0.21)	-3.13** (0.22)	-2.39*** (0.20)	-3.17*** (0.22)	-2.59*** (0.21)
Contextual-level var	-1.77*** (0.17)	-1.92*** (0.20)	-1.24*** (0.16)	-1.41*** (0.17)	-1.42*** (0.16)	-1.34*** (0.17)
Varying slope—srh	-0.13** (0.00)	0.25*** (0.00)	-0.13** (0.00)	0.25*** (0.00)	-0.13*** (0.00)	0.25*** (0.00)
N (individ./context)	56787/21	56787/21	56787/21	56787/21	56787/21	56787/21
Snijders/Boskers R ² (individ./context)	0.17/0.76	0.11/0.81	0.11/0.30	0.09/0.51	0.14/0.51	0.09/0.56

srh: self-rated health.

Standard errors in parentheses. Full results are available in Table A4 in the Supplemental appendix.

*Reference = fair.

**Reference = Scandinavian regime.

*** $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

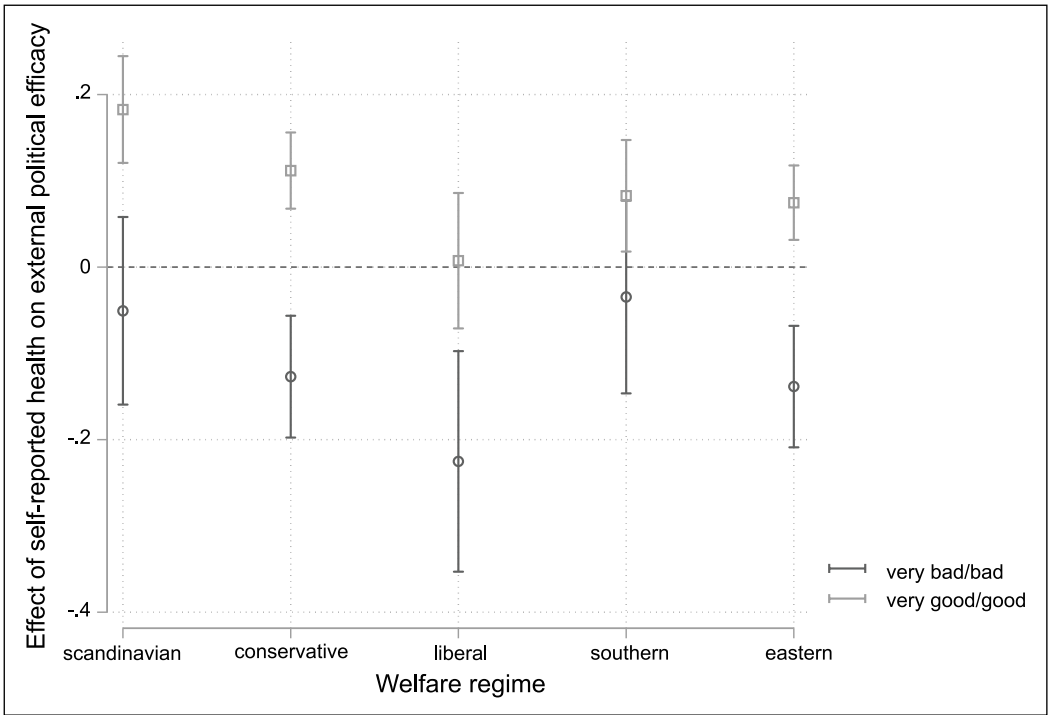


Figure 1. Interaction effects between welfare regimes and self-rated health on external political efficacy.

findings on internal political efficacy, where we find a similar pattern. Again, all four interaction terms between welfare regimes and good health are negative and also statistically significant for all four regime types compared to the Scandinavian one. In other words, the positive effect of good/very good self-reported health on internal political efficacy will be attenuated in all four welfare regimes compared to the Scandinavian regime. This also means that the positive effect of health on internal political efficacy is the largest in Scandinavian regimes, which speaks against the hypothesis that more generous welfare regimes should diminish the health effect by fostering equality between the healthy and the unhealthy. As it appears from our findings, those already in good and very good health profit the most from living in a more generous welfare regime. When looking at the constitutive terms in the models, we find further support: the effect of good health—compared to fair health—on both internal and external political efficacy is positive and significant when the value for welfare regimes is at its lowest. In our case, this means if the welfare regime is Scandinavian, we observe a positive effect of good/very good health on both internal and external political efficacy.

For a better and more straightforward understanding of these interaction estimates, we display the results from models 9 and 10 graphically in Figures 1 and 2. These figures display the marginal effects for each welfare regime category, that is, not in reference to the Scandinavian welfare regime as in models 9 and 10. Figure 1 underscores the diminishing effect of the four less extensive welfare regimes compared to the Scandinavian regime on the effect between being in good health and external political efficacy. While we see that there is a positive interaction between all five regime types and good health on external political efficacy, we also see that this effect is the largest in Scandinavian regimes. In liberal regimes, we do not find a relevant or significant

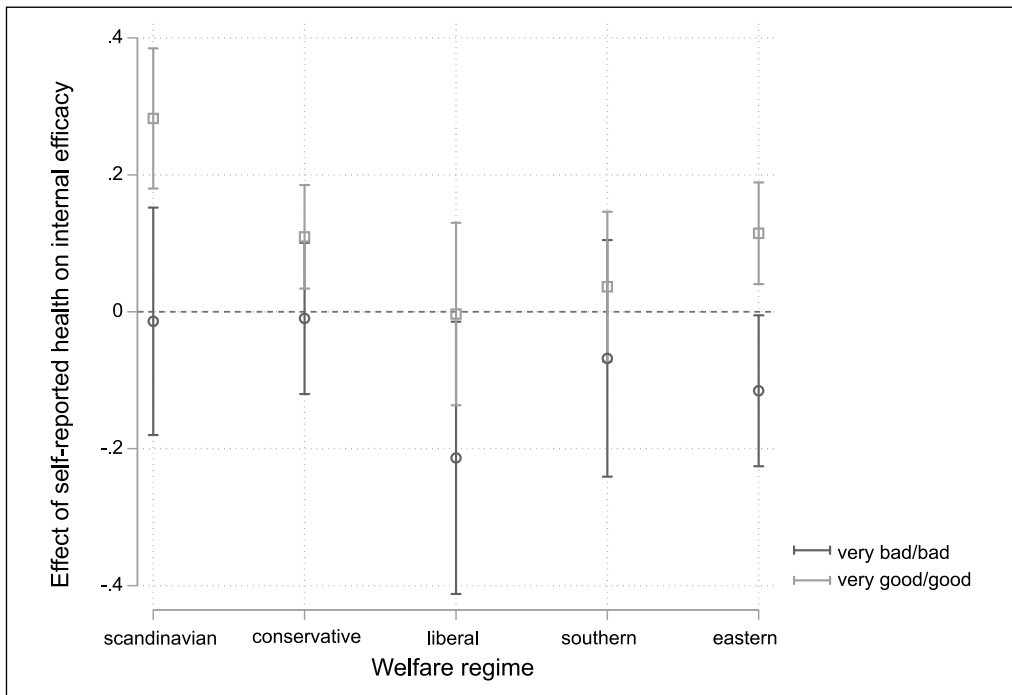


Figure 2. Interaction effects between welfare regimes and self-rated health on internal political efficacy.

interaction. We can also conclude that there is a tendency toward a negative interaction effect between bad health and welfare regimes, which indicates that political efficacy is decreasing for those in bad health living in less generous welfare regimes. These effects, however, are not always statistically significant. Figure 2 shows a similar albeit less clear picture of how the effect of health on internal political efficacy is moderated by the welfare regime. Again, we see the largest positive interaction in Scandinavian regimes. Yet, there is little evidence that this effect is the same in other welfare regimes: Only in Eastern European welfare regimes does good health exhibit a stronger positive effect on internal political efficacy. In the remaining three welfare regimes, we do not find a statistically significant effect. In general, the estimated effects on internal political efficacy are less clear than those on external political efficacy. The welfare state regimes seem to play a more important role in increasing the positive effect of good health on external than on internal political efficacy. All in all, these results speak against our expectation that more generous welfare states should be able to counterbalance the health inequality effect on external and internal political efficacy. Our hypothesis was that the positive relationship between good health and political efficacy should be weakened in more generous welfare states; that is, we expected to find the strongest *negative interaction* in the Scandinavian welfare regime. According to our findings, however, it is the most generous regime that amplifies the positive effect of good health on both internal and external political efficacy.

Welfare regimes are, however, very broad categories and may not sufficiently capture the differences in health policies across countries. Accordingly, we estimate further models testing the moderating role of both total social expenditures and incapacity expenditures on the relationship between individuals' health and their external and internal political efficacy, respectively. As models 11 and 12 reveal, there is no significant or relevant interaction between health and total social

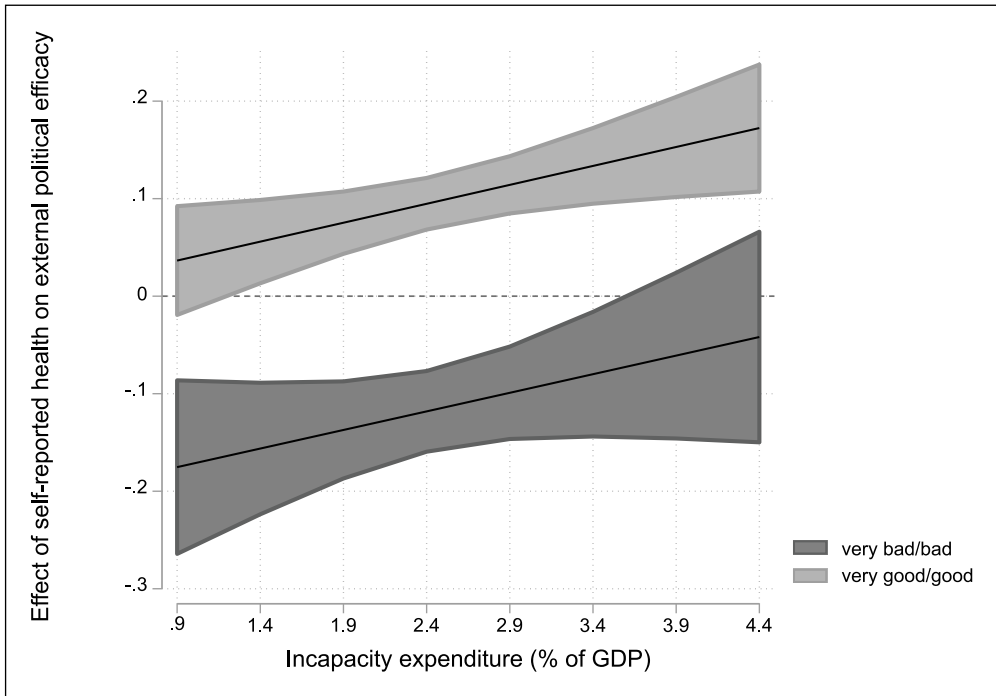


Figure 3. Interaction effects between incapacity expenditures and self-rated health on external political efficacy.

expenditures. This supports the critical discussion about the general usefulness of this broad measure. Accordingly, we estimated additional models (13 and 14) including interactions between incapacity expenditures and individual health. These estimates support the rather counterintuitive finding we discovered in the previous regime type models. Both interaction terms with the very good/good health measure are positive and statistically significant. As before, welfare generosity, here measured as incapacity spending, does not seem to matter for those individuals in very bad or bad health. The interaction effect between good health and incapacity spending shows increasingly positive values with increasing incapacity expenditures (see Figures 3 and 4): The gap between those in good and in poor health continues to exist as we move from a state with low to high incapacity-related spending. This finding mirrors the previous estimates, though we can see an increasingly positive effect of bad health on both internal and external political efficacy when we move from less to more incapacity spending.

Robustness checks

We ran additional models to further investigate the finding that more extensive welfare states widen the efficacy gap between healthy and unhealthy individuals. We substitute our social expenditure measure with a measure of income inequality—the Gini coefficient. The results support the findings reported above: in more equal countries, the effect of good health on both political efficacy dimensions is diminished; yet, we do not find a significant interaction.

We furthermore ran models including an additional country-level variable, namely, the disproportionality of the electoral system, as past studies show that systems which more directly translate

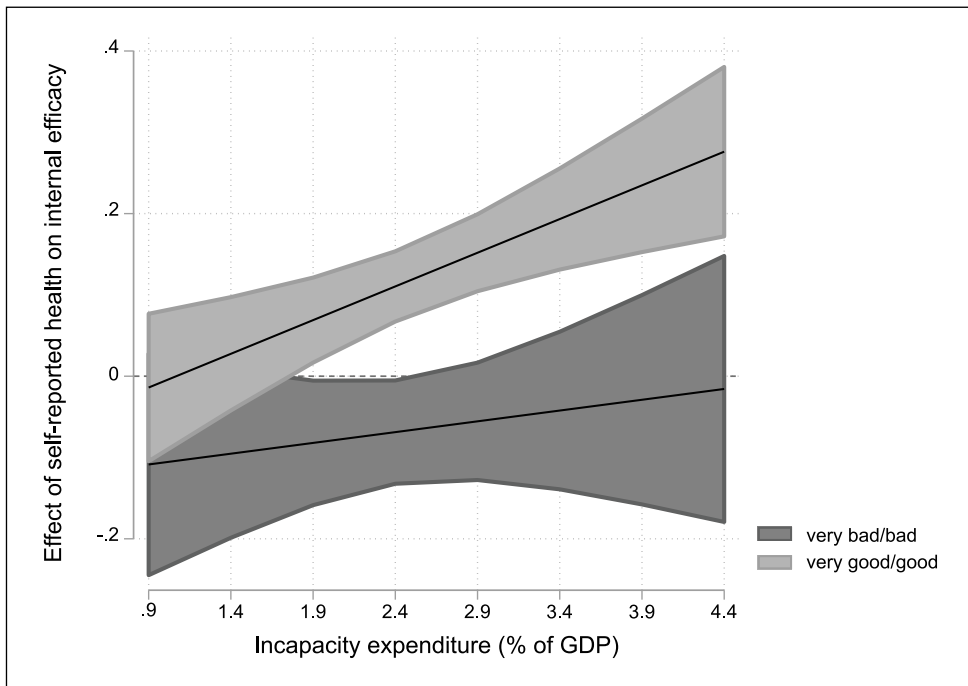


Figure 4. Interaction effects between incapacity expenditures and self-rated health on internal political efficacy.

votes into seats also exhibit higher levels of external political efficacy (Karp and Banducci, 2008). The inclusion of this variable does not absorb the impact of the regime or incapacity variables, that is, it does not play a role, as the coefficient was insignificant. To rule out that specific cases bias our results, we tested for potential outliers with the use of *dfBetas* and *CooksD* (Van der Meer et al., 2010); we could not find any significant outliers. Finally, we estimated all models as linear fixed-effects models, as our low number of level-two cases does not allow for including too many contextual controls. The results of these fixed-effects models (see Table A2 in the Supplemental appendix) yield nearly identical results to the ones presented above:⁶ while the interaction between total social expenditures and health still does not show a significant finding, both interaction coefficients including incapacity spending as welfare state indicator reach statistical significance. Our finding that greater welfare expenditures result in a more pronounced relationship between health and political efficacy is robust.

Discussion

Our study lends further support to a growing body of literature demonstrating the importance of health for democratic political engagement. As hypothesized, we found that poor health depresses both internal and external political efficacy. Moving on to the impact of the macro-context, we observed that efficacy tends to be higher in more encompassing welfare contexts, and this holds regardless of whether we look at differences across regime types, total social spending, or the policy focus on incapacity benefits. Extensive systems of welfare are unable to assuage health inequalities related to external and internal political efficacy. One potential explanation is the

so-called Scandinavian Paradox (Bambra, 2011; Mackenbach, 2012). The Scandinavian Paradox states that welfare regimes have been quite successful in addressing numerous socioeconomic inequalities (particularly in income and education), but less so in addressing health inequalities. These health inequalities, in turn, spill over into political ones. Moreover, as Mackenbach (2017a: 2) points out, the poorest members of society often “benefit less from improvements in medical care and prevention due to a combination of factors including more comorbidity, less health literacy, and less compliance with treatments.” It therefore may not suffice to simply guarantee universal access and equal treatment; more targeted efforts to people in the lower socioeconomic groups may be necessary.

On a more psychological level, our results resemble Mattila and Rapeli’s (2018) findings on political trust, health, and the welfare state. The authors find that political trust levels are relatively similar among citizens in good health as well as among citizens in bad health in social democratic and conservative welfare regimes, with the Scandinavian states displaying the largest gap in political trust between people in good and poor health. To a certain degree, our results corroborate this finding. It could be that the strong commitments to universalism and egalitarianism in Scandinavian welfare states create higher expectations among their citizens about the role of the state. Through their welfare institutions, these states make a commitment to ensure the wellbeing of their citizens; feeling sick, however, constitutes a blow to these expectations, which then might have a further dampening effect on both internal and external efficacy.

More broadly, the Scandinavian Paradox found in this study may be linked to the so-called “Matthew Effect,” which describes “situations in which initial advantages generate further advantage” (Bonoli and Liechti, 2018: 896). As such, our study is in line with prior research (Le Grand, 1982) which finds that social policies and programs can disproportionality benefit relatively well-off groups compared to less advantaged ones.

Conclusion

As is extensively discussed in the policy feedback literature (Campbell, 2012; Larsen, 2018; Ziller, 2019), identifying the precise mechanisms through which policies influence political engagement remains a formidable challenge. While we assume that resource effects are the most relevant for internal political efficacy and interpretive effects matter most for the external dimension, we must admit that the data at hand do not allow us to directly test these assumptions, as we do not have information about respondents’ use of and interactions with health and social welfare programs. This is a drawback of most comparative survey-based studies. Qualitative work is therefore needed to dig deeper into these initial findings. Adding to this challenge, the jury is still out in terms of the “mechanisms through which different aspects of social protection can impact on health and health inequalities” (Hillier-Brown et al., 2019: 662). Future research therefore has the dual task of uncovering which policies and social programs matter for political efficacy as well as which types of health challenges are most harmful to political efficacy. While self-rated health provides a fairly good picture of one’s overall health, we know less about how different types of chronic illnesses or physical disabilities may impact democratic attitudes (Reher, 2018). For example, there are differences in terms of overall public awareness of different diseases, how well they have been researched, and what sorts of therapies or accommodations are available to patients. In other words, we furthermore expect that there may be differences in political attitudes among people in poor health depending both on the type and/or degree of ailment and on how different societies address and treat their needs.

We must also take seriously the intersection of various sources of political disadvantage. As health problems have the potential to result in financial ruin, due to high out-of-pocket costs and lost wages, the effects of poor health on political efficacy may be further compounded. The challenge thus remains to disentangle the complex relationships surrounding social position, health, and political outcomes. If welfare policies leave vulnerable groups behind, the health gap in participation could result in unequal representation in the political system, which could lead to policy outputs that do not adequately address the needs of less healthy individuals. This, however, is a rather speculative assumption that needs further testing. To unveil this complex relationship, additional studies that examine people's direct interactions with the health care system may prove fruitful, for "health policy has the potential to affect their public's health and their political engagement, and both of these will, in turn, influence the trajectory of political actions in response, public beliefs about the role of government, and public demand for new health policies in the future" (Gollust and Haselswerdt, 2019: 343).

A further matter to consider is the provision of private health care (Gingrich and Watson, 2016). While this study focused exclusively on public social welfare and incapacity expenditures, private systems are of course relevant for health outcomes in many societies. For example, we may observe a different dynamic with regard to health inequalities in countries with two-tier health care systems in which the state provides very basic health services and additional, often better-quality private care is available for those able to pay for it. Whether people are even aware of the state's role in the provision of their health care is yet another question to explore, such as in the case of tax-privileged health benefits provided by employers (Mettler, 2018).


In the end, we can confirm what others found: health matters for political attitudes and participation. The issue of the social policy context, however, remains puzzling and requires further attention. Our findings with regard to individuals' health and political efficacy may also have implications for the health of modern democracies, for not only is political efficacy a predictor of democratic political engagement, but its absence has important implications for democratic political culture (Loveless, 2013). Declining levels of political efficacy or when political efficacy is unequally distributed across socioeconomic groups is indeed cause for concern, as it could be indicative of citizen perceptions that the political system lacks legitimacy (Easton, 1975; Scotto and Xena, 2015).

Altogether, health status appears to be linked to the ability to fully participate in society and thereby presents itself as a further line of stratification that may impact both patterns of democratic input but also the representativeness of output. So while the Marshallian (1950; Olafsdottir and Bakhtiari, 2015) conception of rights underscores the need for an encompassing welfare state in order to ensure that political and civil rights are not undermined by a lack of social rights, it appears that even in the most egalitarian of societies more must be done in order to ensure the social and political inclusion of people in poor health.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: The publication of this article was funded by the University of Mannheim.

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Supplemental material

Supplemental material for this article is available online.

Notes

1. A similar argument is made by Marx and Nguyen (2016), who find that internal political efficacy can shed a great deal of light on the link between unemployment and political withdrawal.
2. Theoretically, it is possible to argue that poor health could increase political efficacy. For example, people in poor health could be mobilized to political action (Söderlund and Rapeli, 2015), in particular, if they see (their) health problems as part of a larger societal problem rather than an individual liability (Burden and Wichowsky, 2014). If they further believe that they can change the status quo, improving health care, this could arguably be political mobilization based on increased external efficacy (e.g. Simmons, 2014). We do not engage with this argument considering the relative consensus that poor health, regardless of the definition, is linked to decreased political engagement.
3. Internal political efficacy is addressed in some of the earlier rounds of the European Social Survey (ESS), though the question wording varies among these waves. Rounds 7 and 8 are the only rounds that use the same question wording for internal and external political efficacy.
4. Overall, there is not much variation in the expenditure measures over the years, in particular if we look at the average values over the years.
5. We acknowledge the ongoing debates regarding the inclusion of random slopes in hierarchical models with a limited number of level-two units. While some caution against their inclusion (e.g. Bryan and Jenkins, 2016), we model our approach after Heisig and Schaeffer (2019: 275), who warn against their omission.
6. We followed the approach by Möhring (2012) and estimated fixed-effects models with cross-level interactions for the respective three welfare state variables. Additional models are available in the Supplemental appendix in Table A2.

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