

How procedural and economic performance shape political trust: Affective and cognitive foundations of the performance-trust nexus

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Abstract In which ways and under what conditions do the procedural and economic performance of political systems matter for citizens' political trust? While this question has been a recurring theme in research on political support, we still lack a clear understanding of the conditional nature of the performance-trust nexus. In this study, we focus on the affective and cognitive foundations of the performance-trust nexus, arguing that the impact of objective procedural and economic performance on political trust is conditioned by citizens' political allegiances (i.e., status as electoral winner or loser) and political sophistication (i.e., political knowledge and political interest). Our empirical analysis using comparative survey data from two European high-quality surveys (European Election Study 2014 and European Social Survey 2002–2018) shows that procedural and economic performance feature particularly prominently in the trust calculus of politically more knowledgeable and interested citizens as well as electoral losers, while being less relevant for the political trust of less sophisticated citizens and electoral winners. Moreover, the analysis provides evidence that cognitive orientations are overall more important than affective ones in moderating the performance-trust nexus. These findings offer important implications concerning the nature and meaning of feelings of disenchantment and distrust in contemporary democracies.

Keywords Political trust · Distrust · Good governance · Economic performance · Political sophistication · Winner-loser effect

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Wie prozedurale und ökonomische Performanz politisches Vertrauen beeinflussen: Affektive und kognitive Grundlagen des Zusammenhangs zwischen Performanz und Vertrauen

Zusammenfassung Auf welche Weise und unter welchen Bedingungen beeinflussen die prozedurale und ökonomische Performanz politischer Systeme das politische Vertrauen der Bürgerinnen und Bürger? Während dieser Frage in der wissenschaftlichen Debatte zur politischen Unterstützung der Bevölkerung wiederholt Beachtung zuteilwurde, so mangelt es noch immer an einem klaren Verständnis der konditionalen Natur des Zusammenhangs zwischen der objektiven Performanz politischer Systeme und dem individuellen politischen Vertrauen der Bürgerinnen und Bürger. Diese Studie analysiert die affektiven und kognitiven Grundlagen des Zusammenhangs zwischen Performanz und Vertrauen und argumentiert, dass der Einfluss der objektiven prozeduralen und ökonomischen Performanz auf das politische Vertrauen sowohl von politischen Zugehörigkeitsgefühlen (d. h., dem Status als Wahlsieger:in oder -verlierer:in) als auch der politischen Versiertheit (d. h., dem politischen Wissen und Interesse) der Bürgerinnen und Bürger abhängt. Die empirische Analyse auf Grundlage der Daten von zwei hochqualitativen, europäisch-vergleichenden Umfrageprogrammen (EES 2014 und ESS 2002–2018) zeigt, dass die prozedurale und ökonomische Performanz politischer Systeme im Vertrauenskalkül von politisch besser informierten und interessierten Bürgerinnen und Bürgern sowie in jenem von Wahlverlierer:innen eine besonders gewichtige Rolle spielen, während sie für das politische Vertrauen von politisch weniger versierten Bürgerinnen und Bürgern sowie Wahlgewinner:innen weniger relevant sind. Darüber hinaus liefert die Analyse Hinweise darauf, dass kognitive Orientierungen (politisches Wissen und Interesse) als moderierende Größen des Zusammenhangs zwischen Performanz und Vertrauen insgesamt einflussreicher sind als affektive Orientierungen (politische Zugehörigkeitsgefühle). Diese Ergebnisse liefern neue und wichtige Erkenntnisse zu den Ursachen, Hintergründen sowie zur Bedeutung von Politikverdrossenheit und politischem Misstrauen in modernen Demokratien.

Schlüsselwörter Politisches Vertrauen · Politikverdrossenheit · Prozedurale Fairness · Ökonomische Performanz · Politisches Wissen · Winner-Loser-Effekt

1 Introduction

For decades, scholars, politicians, and journalists alike have been concerned about a growing distrust of and disenchantment with politics among citizens of contemporary democracies (Norris 1999; van der Meer and Zmerli 2017). As some observers have noted, a substantial number of citizens are increasingly dissatisfied with the performance of their political systems and the outcomes political institutions and authorities deliver (Dalton 2004). Others have argued that such feelings of distrust and dissatisfaction could even nurture citizens' susceptibility for populist sentiments and protest voting (Hooghe and Dassonneville 2018), thus establishing a direct connection between citizens' political trust and the stability of political systems. In light

of such far-reaching ramifications, any discussion about the long-term functioning of modern democratic systems is almost by definition a discussion about the sources of citizens' trust in politics as well as political institutions and authorities.

According to the trust-as-evaluation approach (van der Meer and Hakhverdian 2017), the procedural and economic performance of political systems establish two of the most important sources of citizens' political trust. Yet, empirical findings on the performance-trust nexus are mixed. While citizens' subjective performance evaluations are closely and consistently linked to their trust in political institutions and authorities, we still lack a clear understanding of how the relationship between the objective or actual performance of political systems and citizens' political trust operates. In this connection, previous research has provided inconclusive findings, in such a way that some studies were able to discern an impact of objective performance on political trust while other studies found none (van der Meer 2018, p. 604; van der Meer and Hakhverdian 2017, p. 82).

Against this background, the aim of the present study is to shed more light on the conditionality of the performance-trust nexus and to investigate in which ways and under what conditions the objective procedural and economic performance of political systems matter for citizens' political trust. Previous studies have put forward first evidence about the relevance of both affective and cognitive orientations, such as individuals' political allegiances or education, in moderating the impact of objective performance on individuals' political trust (Anderson and Singer 2008; Anderson and Tverdova 2003; Hakhverdian and Mayne 2012; Martini and Quaranta 2019; van der Meer and Hakhverdian 2017). However, these studies have assessed the role of affective and cognitive orientations only in isolation from each other, leaving open the question about their relative importance as moderators of the performance-trust nexus. Moreover, they have relied on formal education as a general and unspecific cognitive moderator that is, in addition, rather distant from the political sphere where the performance-trust nexus is located.

In this study, we contribute to the existing literature on the trust-as-evaluation approach in three distinct ways: First, and most importantly, we provide evidence on the relative importance of affective and cognitive orientations by simultaneously investigating the impact of political allegiances and political sophistication as moderators of the performance-trust nexus. Second, in doing so, we extend the cognitive foundations of the performance-trust nexus beyond formal education by investigating the impact of two indicators of political sophistication (i.e., political knowledge and interest) as more specific measures of cognitive abilities in the political realm. Third, and more generally, we re-assess the impact of objective performance on political trust, making use of two high-quality cross-national data sets and taking into account both the procedural and economic performance of political systems. With the help of this strategy, we do not only provide valuable insights into the underlying nature of the relationship between the objective performance of political systems and citizens' political trust, but also offer much needed empirical evidence on the question of whether feelings of disenchantment and distrust are grounded in rational and cognitive considerations of the politically sophisticated or establish a rather emotional and affective attribute of government opponents and electoral losers.

Our empirical analysis on the affective and cognitive foundations of the performance-trust nexus relies on high-quality comparative survey data from the European Election Study (EES) 2014 (Schmitt et al. 2015) and the European Social Survey (ESS) 2002–2018 (Schnaudt et al. 2014), allowing for an encompassing measurement of affective and cognitive orientations and comprising a wide variety of countries with a heterogeneous performance record on different indicators for procedural and economic performance.

In what follows, we first provide an overview of existing research on the relationship between the objective performance of political systems and individuals' political trust and develop testable hypotheses on the affective and cognitive foundations of the performance-trust nexus. We then illustrate the data sources, operationalizations, and statistical methods to be applied in the empirical analysis. Subsequently, we present the empirical findings and discuss the results in light of the hypotheses specified. Lastly, we summarize the most important insights of our study and conclude with a discussion of their implications concerning the performance-trust nexus and the functioning and viability of modern democratic systems.

2 Theory and hypotheses

2.1 The performance-trust nexus in a nutshell

Political trust as an evaluation “reflects the extent to which political institutions and authorities' code of conduct corresponds with citizens' expectations about legitimate and effective governance” (Schnaudt 2019, p. 37). As such, political trust refers to a vertical relationship between citizens and the core institutions and authorities of the political system that are responsible for the development and implementation of public policies and laws. First and foremost, these include the parliament, the government, political parties, the courts and the police, as well as individual officeholders within these institutions (Denters et al. 2007, p. 67; Schnaudt 2019, pp. 21–37; van der Meer 2018, p. 601). As previous research has shown, citizens' trust in these different institutions and authorities establishes a one-dimensional construct, indicating that political trust reflects a coherent and generalized attitude that is largely independent from the concrete institutions and authorities evaluated (Marien 2017, 2011; but see Schnaudt 2019, 2020).

A long-standing (and still unresolved) debate within the scholarly literature concerns the conceptual status of political trust as a specific or diffuse expression of political support (see Citrin and Luks 2001, pp. 9–12; Schnaudt 2019, pp. 35–37). Given its focus on political institutions and authorities which are located towards the ‘specific’ end of the political support spectrum, political trust has been considered a relatively flexible, short-term expression of political support—at least when compared to other objects of support, such as the regime or the political community (Anderson et al. 2005, pp. 36–37; Norris 1999, p. 10). In his seminal works, Easton (1975, pp. 447–450) as well acknowledged the experiential roots of trust consisting in the constant evaluation of political institutions and authorities' outputs over time,

thus rendering trust responsive to the (short- and long-term) performance of political institutions and authorities.

Accordingly, as a direct reflection of the code of conduct and actual workings of political institutions and authorities, the performance of political systems establishes a key source and antecedent of citizens' political trust. The underlying logic of this performance-trust nexus is appealing, mostly because it is rather intuitive and straightforward: The better the performance of political systems (or the more positive citizens' evaluations thereof), the higher citizens' political trust (Schnaudt 2019, p. 118; van der Meer and Hakhverdian 2017, p. 83).

When it comes to the concrete nature of the performance-trust nexus, the distinction between the *objective or actual performance* of political systems, such as the rate of economic growth, unemployment or corruption, and citizens' *subjective evaluations* of that performance is of particular importance (Schnaudt 2019, pp. 119–120). This distinction is important as citizens' subjective evaluations do not necessarily correspond with objective measures of performance (Bok 1997; Pétry and Duval 2017, p. 118). While there is by now a large body of research showing a strong and consistent relationship between citizens' subjective performance evaluations (such as satisfaction with the economy, the government, public services, etc.) and their political trust (Catterberg and Moreno 2005; Kornberg and Clarke 1992; Schnaudt 2019, pp. 117–133; Weatherford 1987), the same observation does not hold true for the performance-trust nexus based on measures of objective or actual performance. Rather, previous research has provided inconsistent findings in this regard, in such a way that some studies were able to provide evidence for an empirical connection between objective performance and political trust while others concluded there is none (see van der Meer 2018, p. 604; van Erkel and van der Meer 2016, p. 177). Our focus in this study therefore concerns the impact of the objective procedural and economic performance of political systems on individual citizens' political trust, with the aim of shedding fresh light on the conditionality of the performance-trust nexus as a function of citizens' political allegiances and sophistication.

A crucial question concerns how citizens arrive at an evaluation of system performance and which criteria they apply when doing so (Kayser and Peress 2012, p. 662). While some studies argue that citizens may rely on past performance as a benchmark for evaluating the current and future performance of their political system (van der Meer and Hakhverdian 2017, p. 99; van Erkel and van der Meer 2016), cross-national interdependencies and exogenous shocks may “invalidate historical comparisons” and make it “increasingly relevant to compare all types of performance across national borders” (Hansen et al. 2015, p. 771). Following yardstick and social comparison theory, cross-national comparisons provide individuals with concrete reference points that enable them to draw meaningful inferences about how well their own political system fares in comparison with other countries (Hansen et al. 2015, p. 771). In line with these assertions, the studies by Kayser and Peress (2012) and Hansen et al. (2015) provide evidence that individuals primarily make use of cross-national rather than longitudinal comparisons when evaluating their political system's performance.

With regard to different facets or attributes of a political system's objective or actual performance, extant research has mostly relied on a distinction between *procedural* (input/throughput) and *policy* (output) performance (Hakhverdian and Mayne 2012, p. 741). Concerning the procedural performance of political systems, previous studies have referred to various aspects that concern the quality of the democratic process and that are usually subsumed under the label of 'good governance'. First and foremost, these aspects include the rule of law, institutional impartiality, government effectiveness, electoral integrity, the fight against crime and corruption as well as the guarantee of basic civil liberties and human rights (Rothstein and Teorell 2008; Dahlberg and Holmberg 2014, pp. 521–522). Empirical studies on the performance-trust nexus have been restricted to corruption as the most widely used indicator for the procedural performance of political systems, thus limiting their findings to only one (crucial) aspect of good governance. Whereas most of these studies conclude that citizens' trust in political institutions and authorities is lower in countries that are plagued by corrupt practices (Anderson and Tverdova 2003; Hakhverdian and Mayne 2012; van der Meer and Dekker 2011; van der Meer and Hakhverdian 2017; Schnaudt et al. 2021), others are not able to find such an effect (Criado and Herreros 2007).

When it comes to the concrete nature of a political system's policy performance, in particular the economic performance of a political system serves as a straightforward criterion for citizens to judge the competence and responsiveness of political institutions and authorities, rendering it one of the most crucial sources of citizens' political support (Lewis-Beck and Stegmaier 2000; van Erkel and van der Meer 2016, p. 179). Over the years, numerous studies have investigated the role of the economy as antecedent of citizens' trust in politics. Whereas some studies show that citizens' political trust is indeed fostered when the political system's economic performance is positive (Anderson 2009; Kotzian 2011), others conclude that political trust is largely unaffected by indicators of objective economic performance (Hakhverdian and Mayne 2012; van der Meer and Dekker 2011; van der Meer and Hakhverdian 2017). The reasons for these inconclusive findings are twofold: First, objective economic performance seems to matter more for political trust when modeled within countries over time rather than across countries (van Erkel and van der Meer 2016). Second, in cross-national studies, objective economic performance only exerts an influence on political trust when the procedural performance of political systems is not taken into account (van der Meer and Hakhverdian 2017, p. 92). In particular for studies focusing on cross-national rather than longitudinal differences, previous studies thus suggest that the procedural performance of political systems is more relevant for an explanation of political trust than economic performance.

Against this background, a first building stone and empirical goal of this study is to re-assess the importance of objective procedural and economic performance for citizens' political trust by testing the following two hypotheses:

H1a: The more positive the *procedural* performance of a political system, the higher individuals' political trust.

H1b: The more positive the *economic* performance of a political system, the higher individuals' political trust.

2.2 Affective and cognitive foundations of the performance-trust nexus

A central implication of the trust-as-evaluation approach is that individuals connect the performance of the political system to their trust in political institutions and authorities. Yet, it seems likely that the general relationship between objective performance and political trust does not operate in the same way for all citizens alike. Rather, the macro-micro linkage implied by the performance-trust nexus can be expected to depend on (at least) two crucial parameters, namely the *ability* of individuals to evaluate the procedural and economic performance of their political system and the *accuracy* with which they do so. Below, we elaborate on the role of individuals' affective and cognitive orientations in influencing both ability and accuracy.

2.2.1 Affective orientations

With regard to the affective foundations of the performance-trust nexus, *political allegiances* can be expected to influence individuals' ability to accurately evaluate the policy and procedural performance of the political system. As previous studies have shown, individuals who have voted for government parties in the previous election judge the performance of the political system more favorably and are more trustful of politics in general (Anderson et al. 2005; Anderson and Tverdova 2003; Criado and Herreros 2007).

The underlying logic of this so called 'winner-loser effect' rests on a psychological mechanism according to which individuals exhibit an inherent motivation to maintain consistency in their attitudes and behaviors and thus tend to judge the performance of political objects in such a way that it corresponds with their preexisting political predispositions and behaviors (Anderson et al. 2005, pp. 26–29; Schnaudt 2023; Zaller 1992, p. 44). In that regard, political allegiances towards governing parties serve as a heuristic on which individuals rely when searching and interpreting information about the performance of the political system. Electoral winners are likely to disregard information that contradicts their benign views of the incumbent government or to interpret any new information about the performance of the political system negatively (Anderson and Tverdova 2003, p. 94; James and Van Ryzin 2017, pp. 198–199; Pétry and Duval 2017, p. 117). Political allegiances as a perceptual screen thus hamper the ability of electoral winners to accurately evaluate the performance of their political system, in particular when objective performance is poor (Pétry and Duval 2017, p. 122).

We can think of two different ways in which political allegiances as affective orientations influence electoral winners' ability and accuracy with regard to evaluations of their political system. First, electoral winners might generally care less about performance. As a direct consequence of the positive emotions that arise from winning in an electoral contest, performance evaluations as rather rational considerations might in general feature less prominently in their trust calculus (cf. Anderson

et al. 2005, pp. 24–26; van Elsas 2015). Second, electoral winners' perceptions of performance are likely to be biased by their affective attachment to government parties, i.e., their perceptions of performance lack accuracy as they see it through rose-colored glasses (James and Van Ryzin 2017; Pétry and Duval 2017). Such group-serving biases also imply possible “attribution errors”, including the tendency of electoral winners to absolve political institutions of “any responsibility for poor performance, even in instances where they are to blame” (Hobolt and Tilley 2014, p. 810).

Overall, these arguments suggest that the strength of the performance-trust nexus will be conditional on citizens' political allegiances. Specifically, it should be stronger for electoral losers while being attenuated for electoral winners. While previous studies have provided first insights on these affective foundations of the performance-trust nexus, they have been largely restricted to corruption as only one (crucial) facet regarding the procedural performance of political systems (Anderson and Tverdova 2003). In this study, we provide evidence for the general applicability of such arguments by analyzing the conditional impact of (different facets of) both procedural and economic performance on political trust as a function of political allegiances (see also Martini and Quaranta 2019). The following hypotheses on the affective foundations of the performance-trust nexus will be tested:

H2a: The impact of a political system's *procedural* performance on political trust is attenuated for electoral winners.

H2b: The impact of a political system's *economic* performance on political trust is attenuated for electoral winners.

2.2.2 Cognitive orientations

Concerning the cognitive foundations of the performance-trust nexus, we focus on *political knowledge* and *political interest* as two hitherto neglected factors in influencing individuals' ability to accurately evaluate the performance of their political system. Both knowledge and interest are constitutive sub-facets of the more general concept political sophistication (Coffé and von Schoultz 2021; Popa 2015; Zaller 1990), according to which a person can be characterized as politically sophisticated if ‘his or her political cognitions are numerous, cut a wide substantive swath, and are highly organized, or constrained’ (Luskin 1990, p. 332). Previous research highlights that political knowledge and interest help citizens to develop objective evaluations of political objects, such as distinguishing between real and fictitious issues (Sturgis and Smith 2010) or correctly placing political parties on the ideological spectrum (Vegetti et al. 2017). What is more, they facilitate responsibility attribution to political institutions and authorities (de Vries and Nathalie Giger 2013, p. 348; Delli Carpini and Keeter 1996, pp. 55–61; Schnaudt 2020, pp. 134–135). Overall, politically knowledgeable and interested individuals are characterized by an increased proficiency to understand the political system and are generally better equipped to act in the political realm (Delli Carpini and Keeter 1996, p. 223).

According to de Vries and Giger (2013, p. 349), politically knowledgeable and interested individuals “have greater access to political information and a larger ability to digest it.” What is more, they “can tap more easily into an existing store of political information,” which not only reduces the opportunity costs of becoming informed about the performance of political systems, but also increases the likelihood and motivation to use this information when evaluating political objects. Being knowledgeable and informed about politics and political actors also increases the accuracy with which individuals can access the objective performance of their political system (Hakhverdian and Mayne 2012, pp. 741–742; Pétry and Duval 2017, p. 123). Political knowledge and interest, as facilitators of rational decision making (Jacoby 1995; Weissberg 2001), can thus be expected to function as a means enabling citizens to reach an elaborate and accurate evaluation concerning the performance of political systems.

This is not to say that less knowledgeable or less interested citizens cannot accurately evaluate whether or not their country’s political system is running well. In fact, it has been argued that individuals can employ cognitive heuristics to compensate for low levels of political sophistication, and hence act as if they were informed (Brady and Sniderman 1985; Lupia 1994; Popkin 1994; Zaller 1992). Therefore, politically less knowledgeable or interested individuals might have an intuition of whether their country’s political system is running well, but it is first and foremost those with higher knowledge and interest who can be expected to have an increased ability to accurately evaluate the objective performance of their political system.

In essence, our argument implies that the performance-trust nexus is conditioned by individuals’ level of political knowledge and interest (for similar arguments based on formal education, see Hakhverdian and Mayne 2012; Mayne and Hakhverdian 2017). We expect both factors to work as catalysts for the relationship between objective procedural and economic performance and political trust—in such a way that the performance-trust nexus will be stronger for citizens with comparatively higher levels of political knowledge and interest.

While previous studies put forward similar arguments regarding the cognitive foundations of the performance-trust nexus, these studies only considered interactions at the individual level (Schnaudt 2020) or relied on citizens’ level of education as possible moderator of the relationship between objective performance and political trust (see Hakhverdian and Mayne 2012; van der Meer and Hakhverdian 2017; van Erkel and van der Meer 2016). Considering that formal education constitutes a rather broad and general measure of individuals’ cognitive competencies that, most importantly, does not bear any obvious or immediate connection to the political world where the performance-trust nexus is located, our focus on political knowledge and interest provides a more suitable and direct test of our argument about the conditional effects of objective procedural and economic performance on political trust (see also Hyllygus 2005, p. 28). Accordingly, we test the following hypotheses on the cognitive foundations of the performance-trust nexus:

H3a: The impact of a political system’s *procedural* performance on political trust is stronger for politically more knowledgeable/more interested individuals.

H3b: The impact of a political system's *economic* performance on political trust is stronger for politically more knowledgeable/more interested individuals.

3 Data, operationalization, and methods

In order to test our arguments about the affective and cognitive foundations of the performance-trust nexus, appropriate data sources for all relevant concepts are needed. In addition, the nature of our hypotheses requires that we cover a broad range of countries that differ with regard to their procedural and economic performance. A cursory glance at available cross-national comparative data sets suggests that the list of possible data sources providing information on political trust, political allegiances, and political sophistication is relatively scarce. We identified the European Election Study (EES) 2014 Voter Study (Schmitt et al. 2015) and the European Social Survey (ESS) 2002–2018 (Schnaudt et al. 2014) as providing suitable variables for the test of our hypotheses. The EES 2014 Voter Study data covers the (back then) 28 EU member countries and was collected after the 2014 European Parliament Elections. Our analysis for the ESS includes a total of 30 countries over the time span from 2002 to 2018. The concrete number and composition of countries varies between different rounds of the ESS, so that our analysis builds on a total of 211 country-rounds.¹ Both data sources offer the possibility for operationalizing our main concepts while covering a large array of countries, thus providing an opportunity to assess the general applicability of our main arguments across a diverse set of European democracies.

3.1 Political trust

For the operationalization of this study's dependent variable, *political trust*, we rely on two different measurements for the EES and ESS data. In the EES data, due to data availability, political trust is operationalized via a single item asking respondents about their trust in the national legislature. Specifically, the EES captures the degree to which the statement “You trust the [lower house of national legislative]” corresponds with the opinion of the respondents. Responses could vary on a four-point scale ranging from “1 Yes definitely” to “4 Not at all”. While a more encompassing measurement including trust in different political institutions and authorities would be desirable from a conceptual point of view, the focus on trust in the national parliament is nonetheless informative: The national parliament is the most prominent and visible political institution in European political systems and, together with the government, it is held most accountable for the performance of the political system (van Erkel and van der Meer 2016, p. 179). In comparison, the ESS data provides for a conceptually more comprehensive operationalization of political trust, including trust in the core representative institutions and authorities of contemporary democracies: the national parliament, political parties, and politicians. More

¹ For details, see https://www.europeansocialsurvey.org/about/participating_countries.html [last accessed 2023-05-23] as well as Table A1 in the Supplementary Materials.

specifically, the ESS contains several questions on how much respondents personally trust each of these institutions and authorities. Respondents could indicate their answer using an 11-point scale ranging from “0 No trust at all” to “10 Complete trust”. According to the results of an exploratory factor analysis, and in line with previous research (Marien 2011; Schnaudt 2019; Schnaudt et al. 2021), citizens’ trust in these different representative institutions and authorities constitutes a one-dimensional construct, rendering citizens’ trust judgements concerning the parliament, political parties, and politicians (or any other representative institution and authority) an expression of a single, coherent, and generalized attitude or trait.² Accordingly, in our analysis based on the ESS data, we rely on an additive scale of political trust in these three representative institutions and authorities, ranging from 0–10 (Cronbach’s $\alpha=0.91$).³ In both the EES and ESS variants, the dependent variables are coded in such a way that higher values indicate higher levels of political trust.

3.2 Political allegiances

In order to capture the possible moderating role of *political allegiances* on the performance-trust nexus, we follow previous work on the ‘winner-loser gap’ (Anderson et al. 2005, pp. 34–36) and compute a dichotomous variable that takes the value 1 for those who voted for one of the government parties in the last elections (‘electoral winners’) and 0 for those who did not vote or voted for an opposition party (‘electoral losers’) (see also Anderson and Tverdova 2003; Criado and Herreros 2007; Schnaudt 2023).⁴

3.3 Political knowledge and interest

To provide a comprehensive picture on the cognitive foundations of the performance-trust nexus beyond the focus on formal education as evident in previous research, we employ different indicators across the two data sets. For the EES, we rely on factual political knowledge. We make use of a widely employed index based on the aggregation of correct answers to factual questions (see also Barabas et al. 2014; Delli Carpini and Keeter 1996; Moosdorf et al. 2020). Four ‘true/false’ questions are available for building this index: “Switzerland is a member of the EU” (‘false’); “Each Member State elects the same number of representatives to the European Parliament” (‘false’); “There are [150% of actual number] members in the [lower house of national legislative]” (‘false’); and “[name of prime minister] belongs to the [correct party]” (‘true’). “Don’t know” answers are coded as incorrect answers (cf. Luskin and Bullock 2011; Moosdorf et al. 2020). The final five-point scale takes values between 0 and 4. For the ESS, we make use of political interest,

² The single extracted factor has an Eigenvalue of 2.37, accounting for 79% in the items’ variance.

³ The correlation between this one-dimensional political trust scale and the single item for trust in parliament is $r=0.91$.

⁴ For the EES, we take as a benchmark the reported voting behavior in the 2014 EP elections, while for the ESS we use reported voting behavior in the last national elections for the lower house.

reflecting the degree of attention people pay to politics (Coffé and von Schoultz 2021). Political interest is measured on a four-point scale running from “1 Not at all interested” to “4 Very interested”. Although the two operationalizations differ, they both capture the degree to which individuals are capable of making complex political cognitions (Luskin 1990) or the degree to which individuals pay attention to and understand political events (Zaller 1990). What is more, political knowledge and political interest have been shown to belong to one unidimensional construct and used to operationalize the broader concept of political sophistication in previous studies (Coffé and von Schoultz 2021; Popa 2015).

3.4 System performance: economic and procedural

We operationalize the objective performance of political systems by means of two different country-level indicators for economic and procedural performance. To measure *economic performance*, we rely on a country’s GDP per capita (see also McAlister 1999). For *procedural performance*, we rely on an additive index of five good governance measures compiled by The Worldwide Governance Indicators (WGI) project.⁵ This index covers the aspects (1) voice and accountability, (2) political stability and absence of violence, (3) government effectiveness, (4) regulatory quality, and (5) rule of law (Kaufmann et al. 2011).⁶ The reliability of this index as indicated by Cronbach’s alpha in the EES and ESS country samples is 0.95 and 0.91, respectively. In comparison to the exclusive focus on corruption in previous studies, this operationalization represents a (conceptually) more encompassing indicator of procedural performance.

3.5 Controls

We control for a number of variables that were shown to have an impact on individuals’ trust in political institutions and authorities (see Denters et al. 2007; Schnaudt 2019) and that are likely to affect the performance-trust nexus. The list includes interpersonal trust (ESS only), government approval (EES only), partisanship, as well as age, gender, and education. As we are primarily interested in the (conditional) effects of political systems’ objective procedural and economic performance, we do not control for citizens’ subjective performance evaluations in our main analysis.⁷ Overall, the specifications of our statistical models for both the EES and ESS data

⁵ For more information, see <http://info.worldbank.org/governance/wgi/Home/Documents> [last accessed 2023-05-23].

⁶ We exclude the WGI’s dimension “control of corruption” as it entails trust in politicians as one sub-facet, rendering this dimension of the WGI endogenous to this study’s dependent variable.

⁷ Appendix B in the Supplementary Materials presents additional models that control for subjective performance evaluations as operationalized by citizens’ satisfaction with the economy (EES data), and their satisfaction with the economy, the education system, and the health system (ESS data). These models show overall smaller effects of objective performance measures but lead to the same substantive conclusions (see Tables B1 and B2).

are therefore as similar as possible in order to allow for meaningful comparisons, while not being completely identical due to differences in data availability.⁸

3.6 Methods

Considering the nature of our arguments specifying a relationship between country-level (i.e., procedural and economic performance) and individual-level variables, an appropriate way to handle the data structure with variables from different levels is to employ hierarchical regression models. For the EES 2014, which provides data for only one point in time, individuals are nested in countries. For the ESS, which contains data for a total of nine rounds (2002–2018), we estimate three-level models with individuals nested in country-rounds nested in countries, and add fixed effects for survey rounds.⁹ In our statistical models, all continuous individual-level independent variables are rescaled to range between 0 and 1. In addition, we group-mean center (continuous) individual-level predictors (i.e., political knowledge) and grand-mean center country-level predictors (i.e., procedural and economic performance) used in interaction terms. Finally, for all models including interaction terms, we estimate random slopes for the moderating variables, i.e., political allegiances and political sophistication (Heisig and Schaeffer 2019).

4 Empirical findings

4.1 Main analysis

We start our empirical analysis by presenting the results based on the EES data (see Table 1). Of particular importance for our analysis are the positive and statistically significant effects of the two country-level indicators for GDP per capita and good governance.

In line with H1a and H1b, the results show that, on average, individuals living in countries with higher levels of procedural and economic performance exhibit higher levels of trust in the national legislature (see Models 1 and 2). These effects are substantial and amount to a maximum difference of approximately 0.5 points (for both good governance and GDP per capita) on the four-point trust scale between individuals living in countries with the highest and lowest observed economic and procedural performance, respectively. When including both objective performance variables in

⁸ Considering that our empirical analysis includes the estimation of several random effects and cross-level interactions with only a relatively low number of higher-level units (countries), we do not include any control variables at the country level.

⁹ As our theoretical arguments and hypotheses do not entail (different) expectations concerning the impact of between- and within-country performance, we refrain from explicitly modeling over-time variance. This point can be further substantiated when considering the relatively low number of time points observed for most countries in the ESS sample (see Table A1 in the Supplementary Materials) and looking at the size of the variance components for our dependent variable, showing that only a negligible proportion of the variance in political trust can be attributed to survey year while a much more substantial proportion of the variance is located between countries, and particularly between individuals (see Table A2).

Table 1 Determinants of political trust and the conditionality of the performance-trust nexus (EES 2014)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	0.618 (0.063)***	0.612 (0.070)***	0.619 (0.063)***	0.618 (0.063)***	0.612 (0.069)***	0.618 (0.063)***
Pol. knowledge	0.001 (0.032)	0.001 (0.032)	0.001 (0.032)	0.004 (0.027)	0.002 (0.029)	0.004 (0.028)
Winner	0.200 (0.030)***	0.199 (0.030)***	0.200 (0.030)***	0.201 (0.028)***	0.201 (0.029)***	0.201 (0.028)***
Pol. interest (1 vs 0)	0.227 (0.014)***	0.228 (0.014)***	0.227 (0.014)***	0.227 (0.014)***	0.228 (0.014)***	0.227 (0.014)***
Pol. interest (2 vs 0)	0.306 (0.014)***	0.307 (0.014)***	0.306 (0.014)***	0.306 (0.014)***	0.306 (0.014)***	0.306 (0.014)***
Pol. interest (3 vs 0)	0.332 (0.018)***	0.333 (0.018)***	0.332 (0.018)***	0.331 (0.018)***	0.331 (0.018)***	0.331 (0.018)***
Partisanship	0.140 (0.011)***	0.139 (0.011)***	0.140 (0.011)***	0.140 (0.011)***	0.139 (0.011)***	0.140 (0.011)***
Government approval	0.662 (0.011)***	0.663 (0.011)***	0.662 (0.011)***	0.662 (0.011)***	0.663 (0.011)***	0.662 (0.011)***
Gender: Male	-0.010 (0.010)	-0.010 (0.010)	-0.010 (0.010)	-0.010 (0.010)	-0.010 (0.010)	-0.010 (0.010)
Age	0.088 (0.025)***	0.088 (0.025)***	0.088 (0.025)***	0.087 (0.025)***	0.087 (0.025)***	0.087 (0.025)***
Primary education	0.001 (0.050)	0.002 (0.050)	0.001 (0.050)	0.002 (0.050)	0.002 (0.050)	0.002 (0.050)
Secondary education	0.030 (0.050)	0.031 (0.050)	0.030 (0.050)	0.031 (0.050)	0.031 (0.050)	0.031 (0.050)
Tertiary education	0.105 (0.050)*	0.106 (0.050)*	0.105 (0.050)*	0.106 (0.050)*	0.106 (0.050)*	0.106 (0.050)*
Good governance	0.519 (0.071)***	-	0.559 (0.128)***	0.510 (0.073)***	-	0.539 (0.131)***
GDP per capita (log)	-	0.490 (0.127)***	-0.066 (0.182)	-	0.576 (0.133)***	-0.050 (0.185)
Good governance X knowledge	-	-	-	0.177 (0.054)**	-	0.193 (0.101)+
Good governance X winner	-	-	-	-0.149 (0.056)**	-	-0.180 (0.096)+
GDP X knowledge	-	-	-	-	0.199 (0.084)*	-0.028 (0.149)
GDP X winner	-	-	-	-	-0.156 (0.087)+	0.057 (0.141)
AIC	52190.787	52202.349	52194.244	52191.530	52206.743	52203.057
BIC	52360.208	52371.769	52371.732	52377.086	52392.299	52412.816
N (individuals)	23568	23568	23568	23568	23568	23568
N (countries)	28	28	28	28	28	28
Var (countries)	0.036	0.061	0.037	0.036	0.060	0.037
Var (individuals)	0.529	0.530	0.529	0.529	0.530	0.529

Table entries are unstandardized linear regression coefficients with standard errors in parentheses. Levels of statistical significance: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; + $p < 0.1$

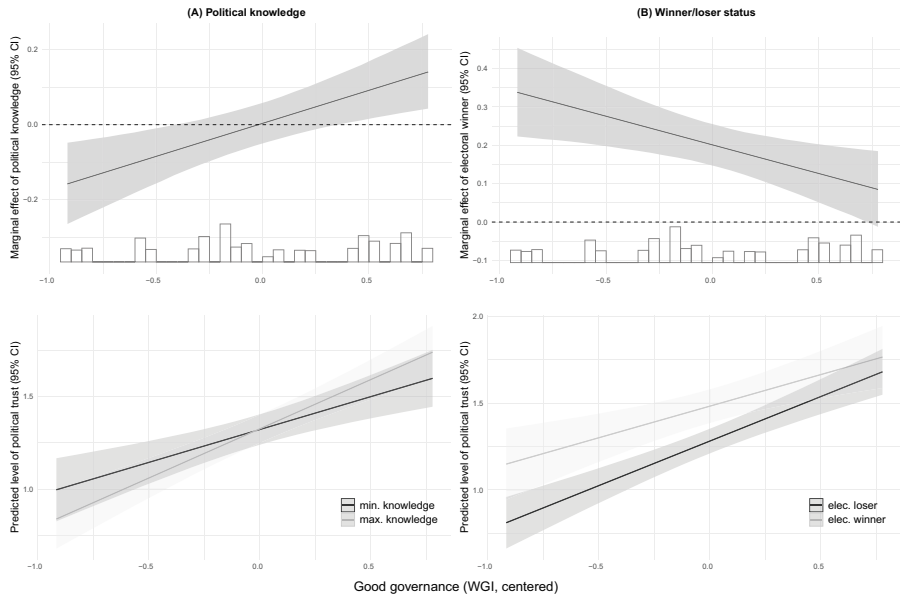


Fig. 1 Marginal effects of political knowledge (panel A) and status as electoral winner/loser (panel B) as well as predicted values of political trust, conditional on good governance. All predictions based on Model 4 in Table 1

Model 3, only good governance remains statistically significant, tentatively pointing to the fact that procedural performance is relatively more important than economic performance when it comes to citizens’ trust in the national parliament.

In Models 4 and 5, we focus on the affective and cognitive foundations of the performance-trust nexus (H2a/b and H3a/b). Starting with procedural performance and looking at Model 4, the results show statistically significant interactions between political knowledge and status as electoral winner/loser on the one hand and good governance on the other. To facilitate the interpretation of the interaction effects, Fig. 1 plots the marginal effects of political knowledge and status as electoral winner/loser (upper panels) as well as predicted values of political trust conditional on political knowledge and political allegiances (lower panels) across the full spectrum of procedural performance (i.e., good governance) as evident for the 28 countries included in our analysis.

Looking at the upper graph of panel A, we observe that political knowledge exerts a negative effect on political trust in countries with low levels of good governance, whereas it impacts positively on individuals’ trust in countries with high levels of good governance. Translated into predicted values of political trust (bottom graph in panel A), it is evident that politically knowledgeable individuals in countries with poor procedural performance display lower levels of trust than their less knowledgeable counterparts. This pattern is reversed in well-functioning countries where politically more knowledgeable individuals display higher levels of political trust. Overall, these findings confirm that the effect of procedural performance on political trust is particularly pronounced for citizens who possess an increased capacity to

understand the political realm (H3a). Apparently, these individuals are better able to accurately evaluate how well the political system functions and to feed this information into their trust calculus. This is not to say that less knowledgeable individuals are not able to link the (procedural) performance of the system to their political trust, but for them the performance-trust nexus is statistically and substantially weaker.

Moving to panel B, we contrast the moderating effect of political knowledge with that of individuals' political allegiances, i.e., their status as electoral winner or loser. The results show that the trust levels of electoral winners are less dependent on procedural performance than those of electoral losers; and that especially in countries exhibiting low levels of good governance electoral losers are clearly less trusting than winners. By contrast, in countries with the comparatively highest levels of procedural performance, the difference in trust levels between winners and losers does not even reach statistical significance (bottom graph in panel B). These findings are in line with H2a. In summary, our results suggest that both cognitive and affective considerations moderate the effect of procedural performance on trust in the national legislature. Concerning the relative importance of affective and cognitive considerations, the strength of their respective moderating roles with regard to objective procedural performance is similar but more pronounced for cognitive orientations.

Turning to Model 5, we can assess the moderating effects of political knowledge and political allegiances with regard to economic performance (H2b and H3b). It is evident that the general pattern of the observed interaction effects is identical to the one previously observed for procedural performance. However, this time only the interaction effect between political knowledge and economic performance reaches conventional levels of statistical significance at $p < 0.05$. Looking at the visual depiction of both interaction effects in Fig. 2, we observe that the impact of economic performance on political trust is more pronounced for citizens with higher levels of political knowledge (panel A). In countries with poor economic performance, highly sophisticated citizens exhibit lower levels of trust than their less sophisticated counterparts, while the opposite holds true in countries that are performing well in economic terms (bottom graph in panel A). Turning to panel B, the observed impact of economic performance on political trust does not differ significantly between electoral winners and losers, indicating the absence of a meaningful interaction effect. Overall, these findings are in line with H3b but not H2b. Hence, they also indicate that cognitive considerations are more relevant than affective ones when it comes to moderating the effect of economic performance on political trust.¹⁰

¹⁰ For the sake of completeness, Model 6 in Table 1 shows the results when simultaneously estimating all interaction effects in a single model. While in this model specification none of the interaction effects reaches conventional levels of statistical significance ($p < 0.05$), this finding should be interpreted with caution: Given the rather high correlation of $r > 0.7$ between good governance and GDP per capita (which is further amplified by the multiplicative interaction effects) in our relatively small sample of 28 countries in combination with the relatively high number of parameters estimated at the country level, the results in Model 6 are more likely to be of a statistical than a substantive nature. For this reason, Figs. 1 and 2 are based on the results shown in Models 4 and 5 in Table 1, which also exhibit a better model fit (BIC) in comparison to Model 6. Figures A1 and A2 in the Supplementary Materials visualize the results based on Model 6.

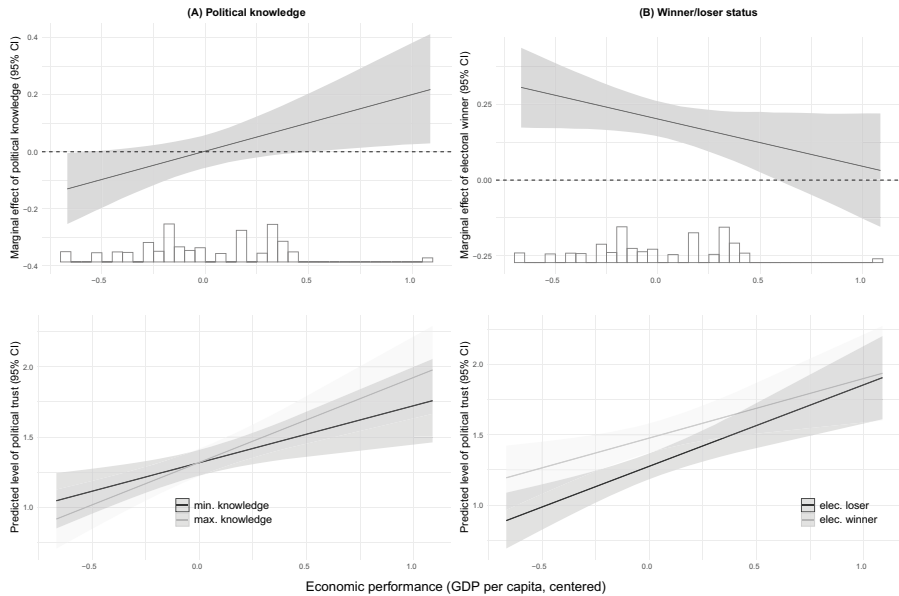


Fig. 2 Marginal effects of political knowledge (panel A) and status as electoral winner/loser (panel B) as well as predicted values of political trust, conditional on economic performance. All predictions based on Model 5 in Table 1

In the next step of our analysis, we try to replicate our findings using ESS data and political interest as a different cognitive moderator. Models 1 and 2 in Table 2 broadly mimic the results presented earlier for the EES data (see Models 1 and 2 in Table 1). Most importantly, also for the ESS data procedural and economic performance exert a positive and statistically significant effect on citizens' political trust, lending support to H1a and H1b. The effects amount to a maximum difference of 3.0 (good governance) and 3.5 (GDP per capita) points on the eleven-point trust scale between individuals living in countries with the highest and lowest observed procedural and economic performance, respectively. As Model 3 in Table 2 shows, when simultaneously assessing the direct effects of procedural and economic performance on political trust, both effects retain their statistical significance. For the ESS sample, the results thus suggest that both objective procedural and economic performance matter for citizens' political trust, while the effect for the latter is more pronounced.

Next, we turn again to the affective and cognitive foundations of the performance-trust nexus. Model 4 in Table 2 shows that the relation between procedural performance and political trust is moderated by both citizens' political interest and status as electoral winner/loser. Figure 3 reveals that the moderating effect of political interest largely follows the pattern observed for political knowledge (see upper panel A in Fig. 1). More precisely, the effect of procedural performance on political trust is more pronounced for individuals who show some interest in politics (as compared to those who are not interested at all). Hence, the results suggest that the underlying mechanism for political interest is the same as in the case of political knowledge:

Table 2 Determinants of political trust and the conditionality of the performance-trust nexus (ESS 2002–2018)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Intercept	1.463 (0.111)***	1.980 (0.123)***	1.814 (0.132)***	1.420 (0.111)***	1.947 (0.114)***	1.797 (0.127)***
Winner	0.479 (0.007)***	0.479 (0.007)***	0.479 (0.007)***	0.468 (0.036)***	0.484 (0.037)***	0.469 (0.036)***
Pol. interest (1 vs 0)	0.545 (0.010)***	0.545 (0.010)***	0.545 (0.010)***	0.557 (0.031)***	0.550 (0.033)***	0.559 (0.032)***
Pol. interest (2 vs 0)	0.888 (0.011)***	0.888 (0.011)***	0.888 (0.011)***	0.893 (0.045)***	0.880 (0.047)***	0.895 (0.046)***
Pol. interest (3 vs 0)	1.011 (0.014)***	1.011 (0.014)***	1.010 (0.014)***	1.019 (0.058)***	1.004 (0.061)***	1.023 (0.058)***
General trust	3.379 (0.019)***	3.379 (0.019)***	3.378 (0.019)***	3.374 (0.019)***	3.374 (0.019)***	3.374 (0.019)***
Partisanship	0.374 (0.007)***	0.374 (0.007)***	0.374 (0.007)***	0.372 (0.007)***	0.372 (0.007)***	0.372 (0.007)***
Gender: Fe- male	0.032 (0.007)***	0.033 (0.007)***	0.033 (0.007)***	0.029 (0.007)***	0.029 (0.007)***	0.029 (0.007)***
Age	-0.291 (0.023)***	-0.291 (0.023)***	-0.291 (0.023)***	-0.274 (0.023)***	-0.273 (0.023)***	-0.274 (0.023)***
Years of educa- tion	0.314 (0.057)***	0.315 (0.057)***	0.314 (0.057)***	0.324 (0.057)***	0.325 (0.057)***	0.324 (0.057)***
Good gover- nance	3.022 (0.402)***	–	1.512 (0.512)**	2.947 (0.417)***	–	1.344 (0.498)**
GDP per capita	–	3.500 (0.427)***	2.464 (0.540)***	–	3.254 (0.390)***	2.385 (0.524)***
Governance X winner	–	–	–	-0.599 (0.199)**	–	-0.643 (0.220)**
Governance X interest (1 vs 0)	–	–	–	0.360 (0.167)*	–	0.274 (0.182)
Governance X interest (2 vs 0)	–	–	–	0.389 (0.231) +	–	0.320 (0.242)
Governance X interest (3 vs 0)	–	–	–	0.572 (0.295) +	–	0.627 (0.303)*
GDP X winner	–	–	–	–	-0.075 (0.165)	0.101 (0.179)
GDP X interest (1 vs 0)	–	–	–	–	0.358 (0.106)***	0.264 (0.148) +
GDP X interest (2 vs 0)	–	–	–	–	0.268 (0.135)*	0.240 (0.179)
GDP X interest (3 vs 0)	–	–	–	–	0.119 (0.179)	0.007 (0.210)
AIC	1223389.149	1223377.681	1223370.660	1221285.861	1221348.138	1221275.450
BIC	1223622.759	1223611.291	1223614.888	1221859.266	1221921.543	1221901.948

Table 2 (Continued)

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
<i>N</i> (individuals)	302132	302132	302132	302132	302132	302132
<i>N</i> (country-rounds)	211	211	211	211	211	211
<i>N</i> (country)	30	30	30	30	30	30
Var (country-round)	0.137	0.127	0.124	0.144	0.116	0.128
Var (country)	0.144	0.156	0.140	0.157	0.118	0.123
Var (individuals)	3.346	3.346	3.346	3.313	3.315	3.313

Table entries are unstandardized linear regression coefficients with standard errors in parentheses. Levels of statistical significance: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; + $p < 0.1$. Fixed effects for survey rounds shown in Table A3 in the Supplementary Materials

being politically interested allows individuals to better link the performance of the political system to their political trust. This finding is in line with H3a. In addition, our analysis based on the ESS data also provides evidence for a moderating role of individuals’ political allegiances (see panel B in Fig. 3). As for the preceding analysis based on EES data, we observe that the effect of procedural performance on political trust is attenuated for electoral winners, a finding consistent with H2a. Most notably, the results show that in poorly functioning countries political trust is higher for electoral winners (bottom graph in panel B). Overall, the interaction effects for

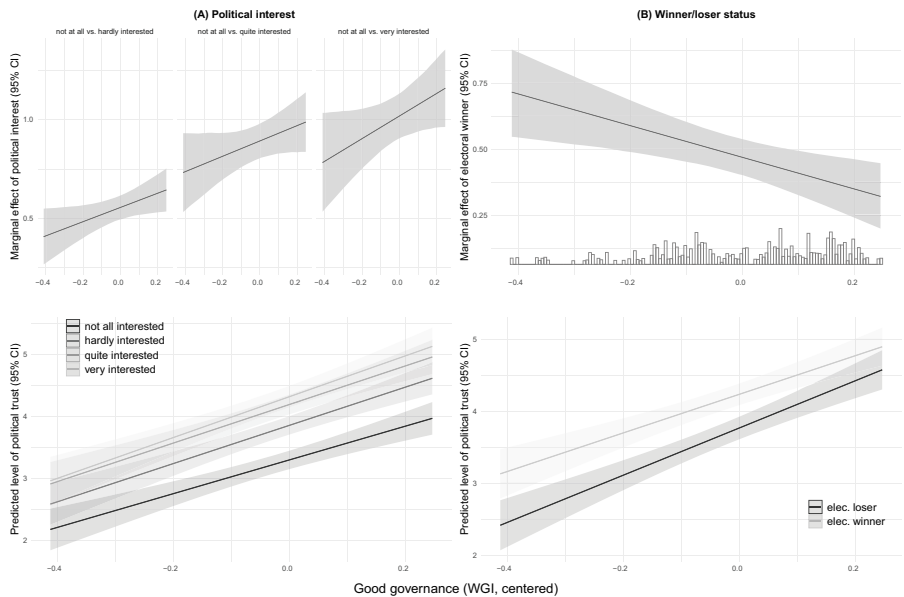


Fig. 3 Marginal effects of political interest (panel A) and status as electoral winner/loser (panel B) as well as predicted values of political trust, conditional on good governance. All predictions based on Model 4 in Table 2

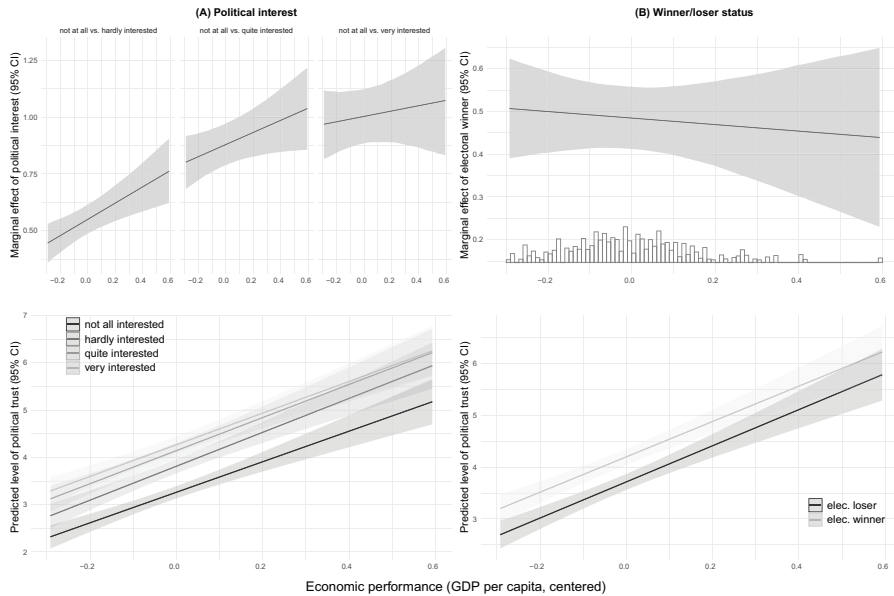


Fig. 4 Marginal effects of political interest (panel A) and status as electoral winner/loser (panel B) as well as predicted values of political trust, conditional on economic performance. All predictions based on Model 5 in Table 2

political allegiances and political interest appear to be of similar strength, indicating that in the ESS sample both affective and cognitive orientations are important moderators of the nexus between procedural performance on political trust.

Turning to the results of Model 5, our findings for the ESS data reveal that the nexus between economic performance and political trust only depends on citizens' political interest, but not their status as electoral winner or loser: The corresponding interaction effect fails to reach conventional levels of statistical significance. Figure 4 provides a visual depiction of the observed conditional effects. As can be seen, the effect of economic performance on political trust is stronger among citizens who are somewhat interested in politics (as compared to those who are not interested at all), with the difference in political trust levels between politically interested and non-interested individuals being more pronounced in countries with higher levels of economic performance (bottom graph in panel A). These findings are in line with H3b. Considering the differences in political trust levels between electoral winners and losers, it is evident that these are virtually constant across countries with positive and negative economic performance records (see panel B). As such, this finding contradicts the expectation formulated in H2b. Finally, when simultaneously estimating all interaction effects in a single model (see Model 6 in Table 2 and Figures A3 and A4 in the Supplementary Materials), the empirical findings show statistically significant moderating roles of affective and cognitive orientations only

with regard to procedural (H2a and H3a) but not economic performance (H2b and H3b).¹¹

In summary, our empirical analysis based on two high-quality European surveys has brought to light the following main findings: First, objective procedural and economic performance matter in a direct way for citizens' political trust (H1a/b). Second, the impact of procedural and economic performance is conditional on citizens' political allegiances (H2a/b) as well as political knowledge and interest (H3a/b). Our findings show that procedural and economic performance feature more prominently in the trust calculus of electoral losers and politically more knowledgeable and more interested citizens. Third, our analysis based on both EES and ESS data clarifies that cognitive orientations play an overall more important role than affective orientations in moderating the relation between objective performance and political trust.

4.2 Complementary analyses and robustness checks

In addition to the main analysis presented above, we conducted several complementary analyses and robustness checks to assess the sensitivity of our findings (for details, see Appendix A in the Supplementary Materials). For both the EES and ESS data, these pertain to the consideration of alternative operationalizations for (1) procedural (i.e., corruption) and economic performance (i.e., unemployment rate) as well as (2) cognitive orientations (i.e., education). For the EES data only, we additionally considered (3) political interest as operationalization for cognitive orientations to match the analysis based on the ESS data. Moreover, to assess (4) the relative importance of political knowledge and interest as cognitive moderators in comparison to education, for both the EES and ESS data we estimated models including interactions with both knowledge (EES)/interest (ESS) and education. For the EES data only, we also (5) checked the robustness of our findings using logistic rather than linear regression models. For the ESS data only, we (6) re-estimated all models using trust in parliament as dependent variable in order to match the analysis more closely with that for the EES data.

To summarize the main findings of these complementary analyses, (1) using corruption and unemployment rate as indicators for procedural and economic performance does not alter the overall findings and conclusions presented earlier (see Tables A4 and A5 in the Supplementary Materials). The only deviations from the preceding main analysis are that H3b no longer receives confirmation when using the unemployment rate as indicator for economic performance (in both the EES and ESS data), while H2a is not confirmed when using corruption as indicator for procedural performance (only in the ESS data). Replacing political knowledge (EES) and political interest (ESS) with (2) education as cognitive moderator of the performance trust nexus leads to identical conclusions with regard to procedural performance (H2a and H3a), but shows no moderating role for economic performance (H2b and H3b; see Tables A6 and A7). What is more, when (3) using political interest rather than political knowledge as cognitive moderator in the EES analysis, the results do not indicate a moderating role of political interest that would match the one observed

¹¹ See also footnote 10.

in the ESS sample (see Table A8). Moreover, when (4) simultaneously assessing the moderating roles of political knowledge/interest versus education, the results suggest that in the EES data political knowledge matters overall more than education (see Table A9), while in the ESS data education plays a somewhat stronger moderating role than political interest (see Table A10). Taken together, these findings indicate that the moderating role of cognitive orientations is at least in part sensitive to sample characteristics (EES vs. ESS) and the specific operationalization and measurement of cognitive orientations used (i.e., knowledge, interest, or formal education; ordinal vs. continuous scales). Overall, however, political knowledge seems to be the most potent cognitive moderator of the performance-trust nexus, whereas the moderating roles of political interest and education are slightly less relevant. Moreover, our main results and conclusions remain largely unchanged when (5) using binary logistic regression models in the EES analysis. The only deviation is the lack of a statistically significant interaction for procedural performance and winner-loser status (H2a; see Table A11). Finally, (6) relying on trust in parliament as dependent variable in the ESS models leads to identical conclusions as our main analysis (see Table A12).

5 Conclusion

In which ways and under what conditions do the procedural and economic performance of political systems matter for citizens' political trust? This study contributes to ongoing research on the trust-as-evaluation approach by shedding more light on the affective and cognitive foundations of the performance-trust nexus. Its main contributions consist in assessing the relative importance of cognitive and affective orientations in structuring the relationship between system performance and political trust, and in bringing to the forefront the role of political knowledge and interest as important but hitherto neglected cognitive moderators of the performance-trust nexus. Relying on data from two high-quality European surveys, our empirical analysis provides comprehensive evidence that the performance-trust nexus does not operate in the same way for all citizens alike. Rather, the procedural and economic performance of political systems feature particularly prominently in the trust calculus of politically more knowledgeable and interested individuals as well as electoral losers, whereas their impact is substantially attenuated for politically less sophisticated persons and electoral winners. Our findings are robust and largely consistent across two different cross-national data sets, procedural and economic aspects of system performance, as well as across different sub-facets of political sophistication, i.e., political knowledge and interest. We explain these findings concerning a varying strength of the performance-trust nexus by (1) the cognitive ability to accurately evaluate the performance of the political system (political knowledge and interest) and (2) an affective attachment to governing or opposition parties (political allegiances) which hampers the accuracy of performance evaluations when making a decision on whether or not to trust political institutions and authorities.

Our empirical findings on the affective and cognitive foundations of the performance-trust nexus contribute to existing research on the trust-as-evaluation approach in at least three distinct ways. First, we show that citizens' political trust is respon-

sive to the objective procedural and economic performance of political systems and thus provide further evidence on the rational underpinnings of the performance-trust nexus (van der Meer and Hakhverdian 2017, p. 83). Compared to previous studies, our findings are based on a broader empirical data basis consisting of two cross-national data sets and more encompassing operationalizations concerning (the conditional nature of) the performance-trust nexus, thereby increasing our confidence in the robustness and generalizability of the results obtained. Second, whereas previous studies exclusively relied on formal education as a rather general measure of cognitive abilities, we introduce political sophistication and its two sub-facets political knowledge and political interest in order to investigate the cognitive foundations of the performance-trust nexus. In contrast to education, political knowledge and interest more closely reflect individuals' cognitive abilities with regard to the political realm where the performance-trust nexus is located, and thus allow for a more direct test of the mechanisms underlying the cognitive foundations of the performance-trust nexus. Our results suggest that in particular political knowledge but also political interest as two different facets of political sophistication enable citizens to evaluate the performance of the political system more accurately, and to link that performance to their levels of political trust. Third, and most importantly, we provide a simultaneous assessment of the affective and cognitive foundations of the performance-trust nexus. While the moderating roles of affective and cognitive orientations have previously been studied in isolation, we show that, while both affective (political allegiances) and cognitive (political knowledge and interest) orientations are relevant in moderating the impact of objective procedural and economic performance on political trust, the respective moderating effects of cognitive orientations are overall more pronounced.

Our findings on the affective and cognitive foundations of the performance-trust nexus entail further implications with regard to the overall functioning and viability of modern democracies. In times in which researchers, political commentators and pundits increasingly lament about a rise of political apathy and disaffection among citizens (Schnaudt 2019, pp. 2–3; van der Meer and Zmerli 2017, p. 2), it is good news for democracies that citizens' political trust responds to the objective procedural and economic performance of their political systems. This finding indicates that citizens are attentive to the actual workings of political institutions and authorities as well as the achievements these bring about, and that citizens make use of that information when judging to grant or withhold their political trust. At the same time, while objective performance seems to matter for the political trust levels of all citizens, it does so to varying degrees for different segments of the population. These findings on the conditional nature of the performance-trust nexus come with important implications concerning (1) the reform potential of political systems and (2) the status of political trust as an indicator for the functioning of modern democracies. Our findings suggest that less politically sophisticated citizens as well as electoral winners—albeit for different reasons—exhibit a higher 'tolerance limit' for possible underperformances of the political system. In particular in countries with poor objective (procedural and policy) performance, this observation may delay or even prevent necessary reforms to improve the quality of governance. Such a reform gridlock increases the risk of extended periods characterized by (even

more) inefficient and costly governance which, in the long run, is likely to come at the expense of society as a whole. On a more general level, the varying strength of the performance-trust nexus conditional on citizens' political allegiances and political sophistication also begs the question to what extent political trust can serve as an informative feedback mechanism concerning the actual workings of political institutions and authorities and the performance of a political system as a whole. Evidently, poor performance does not translate equally into low(er) levels of political trust among citizens, and positive performance is not equally reflected in high(er) levels of political trust. Accordingly, while much has been said about the diagnostic function of political trust, its status as an indicator for the functioning and viability of democratic systems is not absolute, but very conditional in nature.

Against this background, more research is needed in order to improve our understanding of the ways in which the performance-trust nexus can serve as an informative indicator for the overall quality of modern democracies. In light of our findings, at least three possible avenues come to mind. First, future research may seek to investigate the impact of policy performance more generally, thus extending our focus on economic performance by analyzing contemporary political systems' performance in other salient policy domains, such as the environment, sustainability, or immigration. Second, given the partly diverging findings concerning the moderating roles of political knowledge, interest, and education across the EES and ESS samples investigated in this study, future studies may delve deeper into the cognitive foundations of the performance-trust nexus, thus analyzing under what conditions which specific cognitive abilities matter for citizens when it comes to connect performance with expressions of political trust. Third and last, another promising next step is to focus in more detail on the *interplay* of cognitive and affective orientations in moderating the performance-trust nexus. Specifically, an open question following from the findings of this study pertains to how citizens' political trust responds to system performance when their affective and cognitive orientations provide citizens with (in)consistent signals. For example, the performance-trust nexus can be expected to be particularly pronounced for citizens who combine high levels of political knowledge and interest with allegiances to opposition parties ('sophisticated losers'), whereas the impact of performance on trust could be almost nullified for politically less knowledgeable and interested citizens with allegiances towards governing parties ('unsophisticated winners'). Expectations on the strength of the performance-trust nexus are less straightforward when considering highly sophisticated citizens with allegiances to governing parties ('sophisticated winners') or their corresponding counterparts ('unsophisticated losers'). For these types of citizens, it remains unclear whether their affective or cognitive orientations will be more influential in shaping the performance-trust nexus or whether their respective influences cancel each other out. By explicitly investigating whether and how different moderators of the performance-trust nexus complement, substitute or add to each other, future research could further enlighten our understanding of the performance-trust nexus and its relevance for the functioning of contemporary political systems.

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Conflict of interest C. Schnaudt and S.A. Popa declare that they have no competing interests.

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References

- Anderson, Cameron D. 2009. Institutional change, economic conditions and confidence in government: evidence from Belgium. *Acta Politica* 44(1):28–49.
- Anderson, Christopher J., and Matthew M. Singer. 2008. The sensitive left and the impervious right. Multi-level models and the politics of inequality, ideology, and legitimacy in Europe. *Comparative Political Studies* 41(4/5):564–599.
- Anderson, Christopher J., and Yuliya V. Tverdova. 2003. Corruption, political allegiances, and attitudes toward government in contemporary democracies. *American Journal of Political Science* 47(1):91–109.
- Anderson, Christopher J., André Blais, Shaun Bowler, Todd Donovan, and Ola Lijsthaug. 2005. *Losers' consent: elections and democratic legitimacy*. Oxford: Oxford University Press.
- Barabas, Jason, Jennifer Jerit, William Pollock, and Carlisle Rainey. 2014. The question(s) of political knowledge. *American Political Science Review* 108(4):840–855.
- Bok, Derek. 1997. Measuring the performance of government. In *Why people don't trust government*, ed. Joseph S. Nye, Philip D. Zelikow, and David C. King, 55–75. Cambridge: Harvard University Press.
- Brady, Henry E., and Paul M. Sniderman. 1985. Attitude attribution: a group basis for political reasoning. *American Political Science Review* 79(4):1061–1078.
- Catterberg, Gabriela, and Alejandro Moreno. 2005. The individual bases of political trust: trends in new and established democracies. *International Journal of Public Opinion Research* 18(1):31–48.
- Citrin, Jack, and Samantha Luks. 2001. Political trust revisited: Déjà vu all over again? In *What is it about government that Americans dislike?*, ed. John R. Hibbing, Elizabeth Theiss-Morse, 9–27. Cambridge: Cambridge University Press.
- Coffé, Hilde, and Åsa von Schoultz. 2021. How candidate characteristics matter: candidate profiles, political sophistication, and vote choice. *Politics* 41(2):137–155.
- Criado, Henar, and Francisco Herreros. 2007. Political support: taking into account the institutional context. *Comparative Political Studies* 40(12):1511–1532.
- Dahlberg, Stefan, and Sören Holmberg. 2014. Democracy and bureaucracy: how their quality matters for popular satisfaction. *West European Politics* 37(3):515–537.
- Dalton, Russell J. 2004. *Democratic challenges, democratic choices: the erosion of political support in advanced industrial democracies*. Oxford: Oxford University Press.
- Delli Carpini, Michael X., and Scott Keeter. 1996. *What americans know about politics and why it matters*. New Haven: Yale University Press.

- Denters, Bas, Oscar W. Gabriel, and Mariano Torcal. 2007. Political confidence in representative democracies. In *Citizenship and involvement in European democracies: a comparative analysis*, ed. Jan W. van Deth, Jos R. Montero, and Anders Westholm, 66–87. London: Routledge.
- Easton, David. 1975. A re-assessment of the concept of political support. *British Journal of Political Science* 5(4):435–457.
- van Elsas, Erika. 2015. Political trust as a rational attitude: a comparison of the nature of political trust across different levels of education. *Political Studies* 63(5):1158–1178.
- van Erkel, Patrick F.A., and Tom van der Meer. 2016. Macroeconomic performance, political trust and the Great Recession: a multilevel analysis of the effects of within-country fluctuations in macroeconomic performance on political trust in 15 EU countries, 1999–2011. *European Journal of Political Research* 55(1):177–197.
- Hakhverdian, Armen, and Quinton Mayne. 2012. Institutional trust, education, and corruption: a micro-macro interactive approach. *The Journal of Politics* 74(03):739–750.
- Hansen, Kasper M., Asmus L. Olsen, and Mickael Bech. 2015. Cross-national yardstick comparisons: a choice experiment on a forgotten voter heuristic. *Political Behavior* 37:767–789.
- Heisig, Jan Paul, and Merlin Schaeffer. 2019. Why you should always include a random slope for the lower-level variable involved in a cross-level interaction. *European Sociological Review* 35(2):258–279.
- Hobolt, Sara B., and James Tilley. 2014. Who's in charge? How voters attribute responsibility in the European Union. *Comparative Political Studies* 47(6):795–819.
- Hooghe, Marc, and Ruth Dassonneville. 2018. A spiral of distrust: a panel study on the relation between political distrust and protest voting in Belgium. *Government and Opposition* 53(1):104–130.
- Hyllygus, D. Sunshine. 2005. The missing link: exploring the relationship between higher education and political engagement. *Political Behavior* 27(1):25–47.
- Jacoby, William G. 1995. The structure of ideological thinking in the American electorate. *American Journal of Political Science* 39(2):314–335.
- James, Oliver, and Gregg G. Van Ryzin. 2017. Motivated reasoning about public performance: an experimental study of how citizens judge the affordable care act. *Journal of Public Administration Research And Theory* 27(1):197–209.
- Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2011. The worldwide governance indicators: methodology and analytical issues. *Hague Journal on the Rule of Law* 3:220–246.
- Kayser, Mark A., and Michael Peress. 2012. Benchmarking across borders: electoral accountability and the necessity of comparison. *American Political Science Review* 106(3):661–684.
- Kornberg, Allan, and Harold D. Clarke. 1992. *Citizens and community: political support in a representative democracy*. Cambridge: Cambridge University Press.
- Kotzian, Peter. 2011. Conditional trust: the role of individual and system-level features for trust and confidence in institutions. *Zeitschrift für Vergleichende Politikwissenschaft* 5(1):25–49.
- Lewis-Beck, Michael S., and Mary Stegmaier. 2000. Economic determinants of electoral outcomes. *Annual Review of Political Science* 3(1):183–219.
- Lupia, Arthur. 1994. Shortcuts versus encyclopedias: information and voting behavior in California insurance reform elections. *The American Political Science Review* 88(1):63–76.
- Luskin, Robert. 1990. Explaining political sophistication. *Political Behavior* 12(4):331–361.
- Luskin, Robert C., and John G. Bullock. 2011. “Don’t know” means “don’t know”: DK responses and the public’s level of political knowledge. *The Journal of Politics* 73(2):547–557.
- Marien, Sofie. 2011. Measuring political trust across time and space. In *Political trust. Why context matters*, ed. Sonja Zmerli, Marc Hooghe, 13–45. Colchester: ECPR Press.
- Marien, Sofie. 2017. The measurement equivalence of political trust. In *Handbook on political trust*, ed. Sonja Zmerli, Tom van de Meer, 89–103. Cheltenham: Edward Elgar.
- Martini, Sergio, and Mario Quaranta. 2019. Political support among winners and losers: Within- and between-country effects of structure, process and performance in Europe. *European Journal of Political Research* 58(1):341–361.
- Mayne, Quinton, and Armen Hakhverdian. 2017. Education, socialization, and political trust. In *Handbook on political trust*, ed. Sonja Zmerli, Tom van der Meer, 176–196. Cheltenham: Edward Elgar.
- McAllister, Ian. 1999. The economic performance of governments. In *Critical citizens: global support for democratic governance*, ed. Pippa Norris, 188–203. Oxford: Oxford University Press.
- van der Meer, Tom. 2018. Economic performance and political trust. In *The Oxford handbook of social and political trust*, ed. Eric M. Uslaner, 599–616. Oxford: Oxford University Press.
- van der Meer, Tom, and Paul Dekker. 2011. Trustworthy states, trusting citizens? A multilevel study into objective and subjective determinants of political trust. In *Political trust. Why context matters*, ed. Sonja Zmerli, Marc Hooghe, 95–116. Colchester: ECPR Press.

- van der Meer, Tom, and Armen Hakhverdian. 2017. Political trust as the evaluation of process and performance: a cross-national study of 42 European countries. *Political Studies* 65(1):81–102.
- van der Meer, Tom, and Sonja Zmerli. 2017. The deeply rooted concern with political trust. In *Handbook on political trust*, ed. Sonja Zmerli, Tom van der Meer, 1–15. Cheltenham: Edward Elgar.
- Moosdorf, Daniel, Christian Schnaudt, Markus Tausendpfund, and Bettina Westle. 2020. Messung politischen Wissens. In *Politisches Wissen in Deutschland. Empirische Analysen mit dem ALLBUS 2018*, ed. Markus Tausendpfund, Bettina Westle, 55–88. Wiesbaden: Springer VS.
- Norris, Pippa. 1999. Introduction: the growth of critical citizens? In *Critical citizens: global support for democratic governance*, ed. Pippa Norris, 1–27. Oxford: Oxford University Press.
- Pétry, Francois, and Dominic Duval. 2017. When heuristics go bad: Citizens' misevaluations of campaign pledge fulfilment. *Electoral Studies* 50:116–127.
- Popa, Sebastian A. 2015. Political sophistication in central and eastern europe: how can parties help? *Party Politics* 21(3):440–455.
- Popkin, Samuel L. 1994. *The reasoning voter: communication and persuasion in presidential campaigns*, 7–71.
- Rothstein, Bo, and Jan Teorell. 2008. What is quality of government? A theory of impartial government institutions. *Governance* 21(2):165–190.
- Schmitt, Hermann, Sara B. Hobolt, Sebastian Adrian Popa, Eftichia Teperoglou, and Directorate-General for Communication European Parliament. 2015. European Parliament Election Study 2014, Voter Study. *GESIS Data Archive, Cologne. ZA5160 Data file Version 3.0.0*, <https://doi.org/10.4232/1.12384>.
- Schnaudt, Christian. 2019. *Political confidence and democracy in Europe. Antecedents and consequences of citizens' confidence in representative and regulative institutions and authorities*. Cham: Springer.
- Schnaudt, Christian. 2020. Politisches Wissen und politisches Vertrauen. In *Politisches Wissen in Deutschland. Empirische Analysen mit dem ALLBUS 2018*, ed. Markus Tausendpfund, Bettina Westle, 127–164. Wiesbaden: Springer VS.
- Schnaudt, Christian. 2023. Mind the gap(s): winning, losing, and perceptions of electoral integrity in mixed-member proportional systems. *Electoral Studies* 83:102611.
- Schnaudt, Christian, Michael Weinhardt, Rory Fitzgerald, and Stefan Liebig. 2014. The European social survey: contents, design, and research potential. *Schmollers Jahrbuch* 134(4):487–506.
- Schnaudt, Christian, Caroline Hahn, and Elias Heppner. 2021. Distributive and procedural justice and political trust in Europe. *Frontiers in Political Science* 3:24.
- Sturgis, Patrick, and Patten Smith. 2010. Fictitious issues revisited: political interest, knowledge and the generation of nonattitudes. *Political Studies* 58(1):66–84.
- Vegetti, Federico, Zoltán Fazekas, and Zsombor Zoltán Méder. 2017. Sorting your way out: perceived party positions, political knowledge, and polarization. *Acta Politica* 52(4):479–501.
- de Vries, Catherine, and Nathalie Giger. 2013. Holding governments accountable? Individual heterogeneity in performance voting. *European Journal of Political Research* 53(2):345–362.
- Weatherford, M. Stephen. 1987. How does government performance influence political support? *Political Behavior* 9(1):5–28.
- Weissberg, Robert. 2001. Democratic political competence: clearing the underbrush and a controversial proposal. *Political Behavior* 23(3):257–284.
- Zaller, John R. 1990. Political awareness, elite opinion leadership, and the mass survey response. *Social Cognition* 8(1):125–153.
- Zaller, John R. 1992. *The nature and origins of mass opinion*. Cambridge: Cambridge University Press.