# Electoral integrity and voting: The interplay of individual perceptions and contextual conditions

Christian Schnaudt, Christof Wolf

#### 1. Introduction

Representative democracy is unthinkable without regular elections and citizens' participation in the electoral process. By providing citizens with an opportunity to actively take part in the selection of political representatives, elections not only bestow legitimacy upon governments but also invigorate the public's acceptance of the political regime as a whole (Nohlen 2014: 28). Given their important legitimizing function, elections and citizens' participation in the electoral process have long been identified as crucial yardsticks for the overall quality of democracy (van Deth 2018: 96).

Evidently, elections and voting are mutually dependent. To render voting a meaningful and worthwhile democratic activity, elections must abide by certain standards and qualities that preserve their democratic character as free and fair. Only if the electoral process lives up to such standards of electoral integrity, voting may serve its intended purpose of giving citizens an effective opportunity to select political representatives that best represent their interests. By contrast, if elections lack integrity or citizens feel the electoral process is rigged, participation in elections may evolve into a purely expressive activity while no longer representing an expedient means for influencing electoral outcomes or the direction of public policies (Carreras/İrepoğlu 2013: 611; Norris 2014: 133; Schnaudt 2023a).

These interdependencies notwithstanding, research into the integrity of elections and citizens' voting behavior has been largely disconnected. While extant studies have accumulated a plethora of findings concerning the relevance, foundations, and measurement of electoral integrity (e.g., Norris 2013, 2014; van Ham 2015) as well as the antecedents of citizens' participation in elections (e.g., Smets/van Ham 2013; Arzheimer et al. 2017), with only few exceptions the apparent nexus between both phenomena has been mostly overlooked. Accordingly, electoral integrity and citizens' perceptions pertaining to the fairness of the electoral process have not

featured prominently in explanations of individual voting behavior (see also Birch 2008: 307; Norris 2018: 223).

To date, only few studies have investigated the relationship between electoral integrity (perceptions) and citizens' propensity to vote. At the macro level, these studies find that voter turnout is higher in contexts in which elections are free from manipulation and in which the electoral process adheres to standards of electoral integrity (Simpser 2012; Norris 2014: 137–138). At the micro level, extant research shows that citizens who believe that elections are conducted in a free and fair manner are more likely to cast a vote than those who lack confidence in the integrity of the electoral process (McCann/Domínguez 1998; Birch 2010; Carreras/İrepoğlu 2013; Norris 2014: 140; Schnaudt 2023a). While these studies have provided important insights into the behavioral implications of electoral integrity (perceptions) at both the macro and micro level, they have considered the relevance of contextual-level electoral integrity and individual-level electoral integrity perceptions as antecedents of citizens' voting behavior only in isolation.

Against this backdrop, our study aims to provide a fresh perspective on the nexus between electoral integrity and voting by simultaneously considering the influence of both countries' "objective" electoral integrity, as assessed by experts, and individual citizens' electoral integrity perceptions. In doing so, the study advances our understanding of the "democratic value" of electoral integrity in contemporary political systems by offering new empirical insights on (1) the congruence between measurements of objective electoral integrity and citizens' perceptions (Do citizens' perceptions reflect the objective integrity of elections in their country?), (2) their relative importance in shaping citizens' voting behavior (What matters more for citizens' participation in elections, objective conditions or individual perceptions?), and (3) the conditionality of the individual-level relationship between integrity perceptions and voting (Are electoral integrity perceptions equally relevant for citizens' voting behavior in contexts with high and low levels of objective electoral integrity?). In line with previous research, we posit that more positive perceptions concerning the integrity of elections as well as a higher objective quality of the electoral process go hand in hand with an increased propensity to vote. In addition, and as a novel contribution to extant research, we argue that the impact of individual-level electoral integrity perceptions on citizens' propensity to vote is conditional on the objective quality of elections in a given context. Specifically, we put forward that citizens' perceptions about the fairness and integrity of the

electoral process are more decisive for their participation in elections when the objective integrity of elections in their country is higher.

For the empirical test of these propositions, we rely on comprehensive individual-level data from the World Values Survey (WVS) and the European Values Study (EVS) enriched with contextual-level data on the integrity of elections taken from the Electoral Integrity Project (Norris et al. 2014). Overall, our analysis is based on approximately 130,000 individual respondents from a total of 75 countries, covering 94 country-years in the period from 2011 to 2021.

With our study, we contribute to the literature on the behavioral implications of electoral integrity (perceptions) in at least two distinct ways: theoretically, we offer novel arguments on the conditional interplay between contextual- and individual-level electoral integrity (perceptions) in bringing about individual voting behavior. Empirically, we provide a more encompassing test of our propositions than previous cross-national studies (e.g., Birch 2010; Norris 2014) by looking at a broader and more diverse set of countries and elections and considering an extended time frame.

The remainder of this study is structured as follows. Section 2 specifies the conceptual underpinnings of electoral integrity and elaborates on the conditional relationships between contextual- and individual-level electoral integrity (perceptions) and citizens' voting behavior. Section 3 outlines the various data sources, operationalizations, and statistical methods employed in the empirical analysis. Section 4 illustrates the empirical findings. Section 5 summarizes the study's main insights and discusses their implications.

## 2. Theory and hypotheses

While elections and voting behavior are long-established themes on the political science agenda, questions of electoral integrity have only recently become a topic of scholarly concern. The emerging interest in electoral integrity can be interpreted as a direct response to relevant developments across many political systems, with instances of electoral malpractices becoming more commonplace even in established democracies and (unfounded) allegations about voter fraud turning into a prime theme of populist rhetoric aiming to discredit the legitimacy of democratic elections and outcomes (Schnaudt 2023a, 2023b). But what do we mean when talking about electoral integrity?

## 2.1 Electoral integrity: citizen-based and expert-based approaches

Conceptually, electoral integrity pertains to universal principles in the conduct of elections whose fulfillment at the various stages of the electoral process is essential to render elections as 'free and fair'. As such, electoral integrity "refers to agreed upon international conventions and universal standards about elections reflecting global norms applying to all countries worldwide throughout the electoral cycle, including during the pre-electoral period, the campaign, on polling day, and its aftermath" (Norris 2014: 21).

Previous research has identified a total of eleven stages that together comprise the electoral cycle. These stages pertain to electoral laws, electoral procedures, district boundaries, voter and candidate registration, campaign media and finance, the voting process and vote count, as well as the declaration of results and the work of electoral management bodies (Norris 2013: 567-568; Norris et al. 2014: 790). Each of these stages has to meet certain standards that define the overall integrity of the electoral process. Among other things, these standards posit that electoral laws have to be impartial, there is transparent information about the voting process, there are equal opportunities for parties and candidates to run for office, and there is a fair coverage of parties and candidates in the media. In addition, these standards imply that all eligible citizens have a fair and equal chance to cast their votes, that votes are counted correctly, and election authorities act in a fair and transparent manner (Norris/Grömping 2019a: 29; Schnaudt 2023a: 83). If these principles and standards of electoral integrity are met, elections help to strengthen and foster democracy by guaranteeing and enabling inclusiveness, policy-directed voting, and effective aggregation of votes (Birch 2011: 16-26).

To assess the democratic quality of the electoral process in its entirety, the fulfillment or violation of the abovementioned universal standards of electoral integrity has to be checked against the actual conduct of elections. To accomplish this goal, previous studies have mostly relied on two different approaches. Citizen-based approaches focus on citizens' perceptions about the fairness and integrity of the electoral process at the individual level. Extant studies relying on this approach employ data from large-scale population surveys that ask respondents a variety of questions pertaining to different aspects of the electoral process. Examples include whether respondents consider elections in their country as free and fair;

how confident they are that their votes are counted correctly; whether election authorities act in a fair manner; whether all parties have a fair chance to present their positions; and whether voting by absentee ballot is considered a secure procedure (cf. Alvarez et al. 2008; Birch 2008; Norris 2014; Bowler et al. 2015; Schmitt-Beck/Faas 2021; Schnaudt 2023a, 2023c). In comparison, expert-based approaches aim to measure the actual quality of elections at the macro or contextual level. To assess the integrity of the electoral process, previous studies relying on this approach have primarily considered judgements by experts from the scholarly community.1 One of the most comprehensive and exhaustive attempts to measure the actual integrity of elections is exemplified by the Electoral Integrity Project (Norris et al. 2014; Garnett et al. 2022). As part of this world-wide survey, experts answer a total of 49 questions pertaining to different aspects of electoral integrity along the different stages of the electoral cycle, resulting in an encompassing evaluation of the overall integrity of different elections around the globe.

Citizen- and expert-based approaches provide us with different kinds of information about the quality of elections. While citizen-based approaches are primarily interested in what ordinary citizens – at the individual level – think about the conduct of elections, expert-based approaches aim to offer an objective picture about the integrity of a given election at the contextual level (for challenges in achieving this aim, see Martínez i Coma/van Ham 2015). In the following, we argue that a simultaneous consideration of both approaches combining individual-level and contextual-level perspectives enables us to generate novel insights on the behavioral implications of electoral integrity (perceptions).

# 2.2 Electoral integrity and voting behavior

While the "concept of electoral integrity can be seen as having introduced a new contextual and individual level variable relevant for models of political behavior" (Norris 2018: 229), research on how the quality of elections and individual perceptions about the integrity of the electoral process affect citizens' voting behavior remains scarce. As Norris (2018: 223) asserts,

<sup>1</sup> In addition, studies have relied on assessments by electoral administrators and officials (Clark 2017; Garnett 2019; Garnett/James 2021) as well as election agents of candidates (Fisher/Sällberg 2020).

"[m]icro-level studies of voter attitudes and behavior in established and newer democracies in particular have generally displayed very little interest in citizens' evaluations of the integrity of electoral processes and how this might influence voting choices and participation." In line with this assertion, a comprehensive meta-analysis of individual-level determinants of voting behavior shows that, while previous research has identified an "embarrassment of riches" (Smets/van Ham 2013), citizens' perceptions of electoral integrity do not belong to the long list of antecedents usually considered. It thus comes as no surprise that the number of studies that so far have analyzed the behavioral implications of individual electoral integrity perceptions is rather limited (but see McCann/Domínguez 1998; Birch 2010; Carreras/İrepoğlu 2013; Norris 2014; Schnaudt 2023a). With regard to contextual-level electoral integrity, the picture looks very similar: Whereas some studies considered the actual quality of elections as explanatory factor in their analyses, these studies were interested in outcomes other than voting behavior (cf. Birch 2008; Bowler et al. 2015; Fortin-Rittberger et al. 2017; Flesken/Hartl 2018).

Overall, then, the theoretical and empirical potential of individual- and contextual-level electoral integrity as antecedents of citizens' voting behavior has not been fully assessed yet. Only a limited number of studies have actually analyzed these factors in (cross-national) empirical studies, and hardly any have considered a simultaneous assessment of individual- and contextual-level electoral integrity (perceptions) as antecedents of voting. Against this background, the present study sheds light on the relationship between electoral integrity and voting behavior by considering the impact of (1) individual-level integrity perceptions, (2) contextual-level objective electoral integrity, as well as (3) their interplay in affecting citizens' participation in elections. Finally, (4) by including individual level data from 75 countries in the period from 2011-2021, our study is more comprehensive than previous research in this field.

# 2.2.1 Individual-level perceptions of electoral integrity and voting

Citizens' participation in elections can be expected to be a direct function of the integrity and fairness they attribute to the electoral process. To render voting more than a purely expressive activity, citizens must have the impression that their participation in the electoral process is worthwhile, i.e., that they have a tangible chance of influencing the outcome of an electoral contest and the direction of public policies by casting a vote (Car-

reras/İrepoğlu 2013: 611). From this perspective, confidence in the fairness and integrity of elections works as a motivational booster, assuring citizens that the parties and candidates running for office are competing on a level playing field and that the outcome of the election has not already been determined prior to election day (Norris 2014: 133; Schnaudt 2023a: 86). Conversely, if "voters fear that polls are corrupt, they have less incentive to bother casting a vote; participating in a process in which they do not have confidence will be less attractive, and they may well perceive the outcome of the election to be a foregone conclusion" (Birch 2010: 1603). If these propositions are true, it can be expected that citizens who perceive the electoral process as free and fair exhibit a higher propensity to vote than those who feel the electoral process is rigged.

As mentioned earlier, empirical evidence on the relationship between electoral integrity perceptions and voting is limited. Yet, the few existing studies are mostly supportive of the abovementioned expectation. For example, in their single-country study on Mexico, McCann and Dominguez (1998: 495) show that citizens who feel that electoral fraud is a widespread phenomenon are less likely to turn out to vote. In their study on Latin America, Carreras and İrepoğlu (2013: 615) find that citizens' trust in the electoral process fosters participation in elections, while exposure to vote buying practices lowers the probability of taking part in future elections.<sup>2</sup> In a more recent study investigating the German case, Schnaudt (2023a) as well finds that more positive evaluations regarding the integrity of different facets of the electoral process come with a higher propensity to take part in elections. These results from single-country studies have also been found in cross-national research (cf. Birch 2010; Norris 2014). In our empirical analysis, we reassess these earlier findings from extant research by testing the following hypothesis with more comprehensive data spanning 94 country-years over the period 2011-2021.

H1: The more positive individual-level perceptions of electoral integrity, the higher citizens' likelihood to participate in elections.

# 2.2.2 Contextual-level electoral integrity and voting

Electoral integrity can also be expected to affect citizens' turnout levels when understood as a characteristic of the context in which citizens reside.

<sup>2</sup> In a study on Nigeria, Bratton (2008: 626) finds no statistically significant relationship between perceived vote buying and turnout.

As Birch (2010: 1603, emphasis in original) asserts, it is likely "that low quality opportunities for participation might translate into lower quantitative levels of turnout". Following this assertion, citizens living in contexts that are characterized by a free and fair electoral process and that, hence, provide meaningful opportunities for citizens to influence electoral outcomes, should exhibit a higher propensity to participate in elections than citizens residing in a context in which the electoral process is flawed and electoral malpractices more commonplace. Comprehensive empirical tests of this expectation are lacking. In a bivariate, aggregate-level analysis, Norris (2014: 138) finds that average levels of (self-reported) turnout in both national and local elections are higher in countries in which the electoral process lives up to universal standards of electoral integrity. Similarly, in his state-level analysis of turnout levels in Mexico, Simpser (2012: 793) shows that "the practice of electoral manipulation [...] significantly depressed voter participation." Overall, these findings suggest that the actual integrity of elections as measured at the contextual level comes with an important signaling function informing citizens whether taking part in elections represents a worthwhile democratic activity.

Yet, the existing evidence is based on aggregate-level studies only. Therefore, no conclusions can be drawn with regard to the influence of contextual-level electoral integrity on individual voting behavior. What is more, extant research lacks a simultaneous investigation of individual-level electoral integrity perceptions and contextual-level electoral integrity. This situation leaves open by which exact mechanism the objective integrity of a country might affect citizens' participation in elections, i.e., whether any observed relationships between contextual-level electoral integrity and individual voting behavior are based on genuine, direct contextual effects of the actual quality of elections or rather result from not taking into account the composition of individual-level electoral integrity perceptions across contexts (see also Segatti et al. 2021: 14-15). To shed light on this question, our study investigates how the objective integrity of elections as measured at the contextual level affects individual citizens' voting behavior while simultaneously considering individual-level perceptions about the fairness and integrity of the electoral process. To that end, the following hypothesis will be tested:

H2: The higher a country's contextual-level electoral integrity, the higher citizens' likelihood to participate in elections (while controlling for individual-level perceptions of electoral integrity).

## 2.2.3 The micro-macro conditionality of electoral integrity (perceptions)

Finally, we posit that (1) individual-level perceptions of electoral integrity and (2) a country's actual, contextual-level electoral integrity interact in affecting citizens' participation in elections. Specifically, we contend that the impact of individual-level perceptions is conditional on (i.e., moderated by) a country's actual adherence to standards of electoral integrity, with individual-level perceptions being more consequential for voting behavior in contexts in which the actual conduct of elections corresponds more closely with the ideal of free and fair elections. In other words, we argue that the strength of the individual-level relationship between electoral integrity perceptions and voting behavior should be more pronounced in contexts with higher levels of actual electoral integrity.

This general proposition is based on the underlying premise that, for individual electoral integrity perceptions to feature as a relevant factor in citizens' voting calculus, citizens need to hold expectations towards the political system in which the proper conduct of elections plays a prominent role. However, the prevalence and, hence, the impact of such expectations is likely to vary across contexts: In contexts in which the integrity of elections is severely compromised and the electoral process characterized by a wide variety of electoral malpractices, the apparent lack of quality associated with the electoral process establishes common knowledge among most citizens. In particular direct experiences with electoral malpractices, such as vote buying or violence at the polls (Bratton 2008), provide unmistakable cues that the electoral process is rigged. Such deviations from the ideal of electoral integrity usually also reflect more general deficiencies with regard to the overall functioning of democracy (Norris 2018: 227). Following insights generated by system justification theory (Jost 2019), in such contexts most citizens can be expected to update and adapt their expectations towards the political system in light of its actual handling of the electoral process. Specifically, by engaging in the process of system justification, citizens develop coping strategies that aim to avoid cognitive dissonances which result from "living under unjust conditions, but wanting to live in a just and fair environment" (Schnaudt et al. 2021: 7). One such coping strategy may include downgrading the relative importance of electoral integrity perceptions and instead relying on other factors (e.g., expected benefits from a particular election outcome) when it comes to the decision on whether or not to vote.<sup>3</sup> In contexts with apparent and widespread practices of electoral fraud, and as a consequence of citizens' engagement in system justification, deviations from universal standards of electoral integrity thus become 'normalized', with expectations concerning the proper conduct of elections and perceptions of the integrity of the electoral process playing only a minor role in citizens' voting calculus. In contrast, in contexts in which elections are overall free and fair, adherence to universal standards of electoral integrity is the norm. In such contexts, citizens are used to be governed democratically, and hence are likely to hold expectations according to which the electoral process has to provide a fair and effective means for influencing the outcome of elections and the direction of public policies. Therefore, perceptions concerning the proper conduct of elections should generally play a more important role for citizens' voting calculus in contexts with higher levels of actual electoral integrity.

Overall, then, perceived deviations from universal standards of electoral integrity in the actual conduct of elections can be expected to exert a particularly detrimental effect on citizens' propensity to vote in high-integrity contexts, while having a reduced impact in low-integrity contexts. If this argument is correct, the propensity to vote should differ most strongly between citizens with very positive and very negative electoral integrity perceptions in contexts with high quality elections. To assess these propositions empirically, the following hypothesis will be tested:

H3: The effect of individual-level perceptions of electoral integrity on citizens' likelihood to participate in elections is more pronounced in countries in which the contextual-level electoral integrity is higher.<sup>4</sup>

<sup>3</sup> Another coping strategy may consist in "whitewashing" one's perceptions of electoral integrity. However, this mechanism would imply a weaker correlation between objective levels of electoral integrity and individual perceptions in low-integrity contexts rather than a weaker individual-level relationship between electoral integrity perceptions and voting.

<sup>4</sup> Given the coding of the relevant electoral integrity variables in our empirical analysis according to which higher values reflect more positive individual-level perceptions of electoral integrity as well as higher levels of objective electoral integrity (for details, see section 3.2), we expect a positive interaction effect.

## 3. Data, operationalization, and methods

#### 3.1 Data

For our empirical analysis, we combine individual-level data with contextual-level data on elections in countries. The individual-level data come from different waves of the European Values Study (EVS) and the World Values Survey (WVS). From the WVS, we used waves 6 and 7. Wave 6 data, collected between 2010 and 2014, was taken from the second version of the WVS trend file (Haerpfer et al. 2022). These data were combined with the integrated EVS/WVS data for EVS wave 5 and WVS wave 7 which were collected between 2017 and 2022 (EVS/WVS 2022).

At the contextual level, our core variable of interest comes from the *Perceptions of Electoral Integrity* (PEI) project (Norris et al. 2014; see also https://www.electoralintegrityproject.com). Based on expert judgements, this project collects data on different aspects of the electoral process for most countries across the world. Because our individual data cover the period from 2010 to 2022, we combine data from versions 3.0 (Norris et al. 2015) and 7.0 (Norris/Grömping 2019b) of the Perceptions of Electoral Integrity project. With this strategy, we ensure that we attribute to individual respondents from different waves of the EVS/WVS adequate contextual-level information on the objective integrity of elections, i.e., information that reflects the objective integrity of elections at the time individual respondents were surveyed. Furthermore, for conducting additional robustness and sensitivity checks, we also make use of contextual-level data taken from the Varieties of Democracy (V-Dem) project (Coppedge et al. 2022).

Figure A1 in the Online Appendix gives an overview of the several steps we have taken in combining the different data sets as well as the sample sizes regarding individual respondents and countries. Our final data set comprises 128,416 respondents from 75 countries, spanning a total of 94 country-years in the period of 2011-2021.

## 3.2 Operationalization

At the individual level, the main concepts of interest are voting behavior and electoral integrity perceptions. For measuring voting behavior, the EVS and WVS ask respondents if they always, usually, or never participate in national elections or if they are ineligible to vote  $(E264)^5$ . In our final operationalization, we dichotomize this variable distinguishing those who always or usually vote (1) from those who never vote or are not eligible to vote (0).

For measuring individual perceptions of electoral integrity, the EVS/WVS data offer an item battery of several questions capturing respondents' evaluations of different aspects of the electoral process. In line with previous research based on the WVS data only (Norris 2019: 10–11), we rely on an additive scale reflecting the average of valid responses to the following three items: "votes are counted fairly" (E265\_01); "journalists provide fair coverage of elections" (E265\_05), and "election officials are fair" (E265\_06).<sup>7</sup> These items were preceded by the following question: "In your view, how often do the following things occur in this country's elections?" For each item, answer options ranged from "not at all often" to "very often" on a four-point scale.

To assess the relative importance of electoral integrity perceptions as antecedent of voting and to control for any spurious relationships, we include several control variables at the individual level. To increase the comparability and compatibility of our analysis and findings with extant research, the selection of control variables follows earlier studies (cf. Birch 2010; Norris 2014: 140; Schnaudt 2023a) and comprises attitudinal factors related to both voting and electoral integrity perceptions as well as socioeconomic background variables. Specifically, we consider political interest (*E023*), importance of politics (*A004*), left-right placement (*E033*), satisfaction with democracy (*E236*), life satisfaction (*A170*), social trust (*A165*), church attendance (*F028*), sex (*X001*), age (*X003*), and education (*X025R*).

With the exceptions of left-right placement and education all continuous individual-level variables were normalized to range from 0 to 1, with higher values indicating a higher intensity on the underlying concept. Left-right placement was used as categorical variable distinguishing respondents at the center (values 4 to 7 on a 10-point scale), those at the extreme left

<sup>5</sup> To facilitate replication, we include the variable names in parentheses.

<sup>6</sup> Coding "usually" responses as non-voting or excluding ineligibles from the analysis does not alter the results and conclusions presented in this study.

<sup>7</sup> The uni-dimensionality of the scale was confirmed in an exploratory factor analysis yielding a single factor that explains 61 percent of all items' variance (Eigenvalue = 1.8; Cronbach's alpha = 0.7).

(values 1 to 3), those at the extreme right (values 8 to 10), and those who could not or did not want to place themselves on this scale (a strategy employed to reduce the loss of cases available in the statistical analysis). Finally, education was categorized in lower, middle, and upper levels of education (pre-specified coding in the EVS/WVS data). For the estimation of cross-level interactions, continuous individual-level variables have been group-mean centered.

At the contextual level, we are mainly interested in the impact of objective electoral integrity. Our operationalization relies on the Perceptions of Electoral Integrity (PEI) index provided by the EIP project (*PEIIndexp*). The PEI index is an encompassing measure summarizing 49 indicators reflecting the integrity of different stages and aspects of the electoral process based on assessments by country experts (for details, see Norris et al. 2014).<sup>8</sup> As with all continuous variables at the individual level, we normalize this index to range from 0 to 1 with higher values reflecting higher levels of objective electoral integrity. Additionally, for the estimation of cross-level interactions, the index has been grand-mean centered.

For further sensitivity analyses and robustness checks only, we use additional contextual-level variables from the V-Dem data (Coppedge et al. 2022). These are the electoral democracy index ( $v2x\_polyarchy$ ), the political corruption index ( $v2x\_corr$ ), the rule of law estimate ( $e\_wbgi\_rle$ ), and GDP per capita ( $e\_gdppc$ ). Again, all these continuous measures were normalized to a range from 0 to 1. Additionally, we control for compulsory voting (v2elcomvot, dummy-coded).

# 3.3 Analytical approach

To test our hypotheses concerning the effects of individual- and contextual-level electoral integrity perceptions on the likelihood to vote, we use mixed-effects logistic regression models. These models are suitable to model individual-level and contextual-level variables simultaneously. Because we observe 19 countries at two timepoints (i.e., in the period from 2011-2021, information on objective electoral integrity in these countries is available for two elections), we use country-years rather than countries as nesting factor at the contextual level.

<sup>8</sup> While the PEI index is thus one of the most comprehensive and rigorous attempts to measure the actual or objective integrity of elections across countries, its reliance on expert perceptions does not render it a strictly objective measure.

Equation (1) depicts a model for the likelihood of voting with all main effects we study: the effect of individual-level perceptions of electoral integrity  $(i.PEI_{ij})$ , the country-year-level objective electoral integrity  $(c.PEI_j)$  as well as some individual-level control variables  $(C_{kij})$ . The characteristic of mixed-effects models is that they do not only contain the named "fixed" effects but, in addition, random effects. In our models these are an individual error term  $(\varepsilon_{ij})$  as well as a term reflecting variation on the country-year-level  $(\gamma_j)$ .

$$ln(\frac{P_{ij}}{1-P_{ij}}) = \beta_1 \times i \cdot PEI_{ij} + \beta_2 \times c \cdot PEI_j + \sum \beta_k \times C_{kij} + \gamma_j + \varepsilon_{ij}$$
 (1)

The model given in equation (1) allows us to assess hypotheses 1 and 2. To test hypothesis 3, we need to also introduce the cross-level interaction between individual-level and contextual-level electoral integrity perceptions on the likelihood to vote  $(i.PEI_{ij} \times c.PEI_j)$ ; see equation (2)). In addition to the interaction term, this equation contains a third random term reflecting a "random slope" for the country-year-specific impact of individual-level perceptions of electoral integrity on voting behavior (cf. Heisig and Schaeffer 2019).

$$ln(\frac{P_{ij}}{1-P_{ij}}) = \beta_1 \times i.PEI_{ij} + \beta_2 \times c.PEI_j + \beta_3 \times i.PEI_{ij} \times c.PEI_j + \sum_j \beta_k \times C_{kij} + i.PEI_{ij} \times \gamma_{1j} + \gamma_{0j} + \varepsilon_{ij}$$
(2)

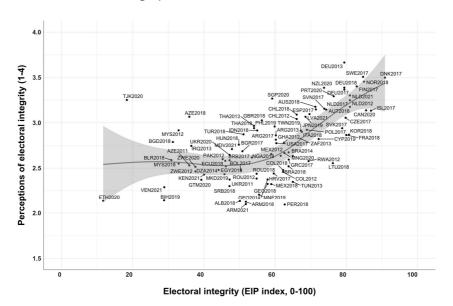
In section 4.2, we present the results of these models in graphic form to ease interpretation. Numerical results of estimates, significance levels and fit statistics can be found in Table AI in the Online Appendix. To assess the robustness of our results, we also perform a number of sensitivity analyses (see section 4.3). Before discussing the findings from these mixed-effects models, we present some descriptive results to give readers a first impression of the relationship between electoral integrity perceptions and voting behavior.

## 4. Analysis

4.1 Citizen and expert evaluations of electoral integrity and voter turnout: a first descriptive analysis

In this study, our main focus is on the effect of electoral integrity on turnout in national elections. Because we have two independent measures of electoral integrity – ordinary citizens' perceptions and expert ratings of objective electoral integrity – we first explore the relationship between these variables. Do experts and citizens evaluate the integrity of the electoral process in the same way or do their evaluations differ? To study this question, we correlated expert ratings with the mean respondent rating in each of the 94 country-year samples. With a correlation of r=0.6, the relationship between the two ratings is substantial but not perfect. A closer look at Figure 1 shows that for elections which are rated with a value of less than 50 by experts (mid-point of scale, x-axis), aggregated respondent perceptions of electoral integrity are inconsistent and largely unrelated to expert judgement. In contrast, for systems with expert ratings above a value of 50, citizens' perceptions and experts' ratings are far more closely and positively linked.

Figure 1: The relationship between expert ratings and citizen perceptions of electoral integrity



Notes: Loess regression fit, bandwidth = .75; N = 94.

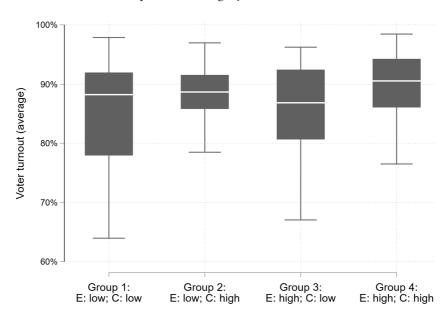


Figure 2: Average voter turnout by expert (E) ratings and citizen (C) evaluations of electoral integrity

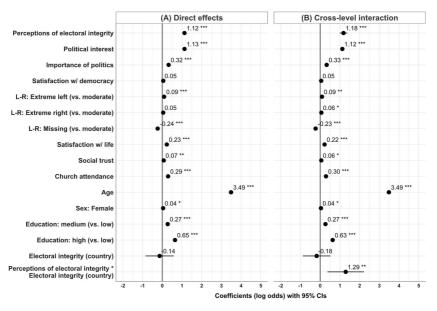
Notes: Observed mean differences between groups 1 and 4 as well as groups 3 and 4 are statistically significant at p < 0.05 (N = 94).

Before modeling the effects of individual- and contextual-level electoral integrity perceptions on voting, let us briefly explore the relationship between these three variables in a simple descriptive analysis. Figure 2 shows box plots of voter turnout at the country-year level across four different settings: settings with low electoral integrity according to experts and citizens (group 1); settings with low electoral integrity according to experts but high integrity according to citizens (group 2); settings with the opposite pattern (group 3); and settings in which experts and citizens agree on high levels of electoral integrity (group 4). At least three interesting observations can be taken from this graph. First, average voter turnout is highest in settings in which the electoral process exhibits high levels of integrity according to both experts and citizens (group 4). However, it is noteworthy that average voter turnout is lowest in settings with high electoral integrity according to experts but low integrity perceptions by citizens (group 3). Second, in countries in which the electoral process is compromised according to experts (groups 1 and 2), citizens' perceptions do not seem to be systematically related to mean turnout, i.e., average turnout is virtually identical. Together with the findings for settings with high objective levels of electoral integrity (groups 3 and 4), this observation can be interpreted as a first indication of an interaction effect between expert and citizen electoral integrity perceptions on turnout: average turnout levels between citizens with positive and negative perceptions of electoral integrity differ more strongly in settings with high objective electoral integrity than in settings with low objective integrity. We assess this hypothesis more formally in the next section. Finally, Figure 2 indicates that turnout is much more varied and dispersed in settings in which citizens believe the integrity of the electoral process is compromised (groups 1 and 3) than in settings in which citizens feel elections correspond with standards of electoral integrity (groups 2 and 4).

## 4.2 Multivariate analysis

Following this first descriptive glance at the empirical relationship between electoral integrity (perceptions) and voting, we now turn to a more thorough, multivariate assessment of the hypotheses specified earlier. Figure 3 presents the results from a mixed-effects logistic regression analysis predicting individual participation in elections. Starting with the influence of individual-level perceptions of electoral integrity (H1), in Panel A we observe a positive and statistically significant association with the propensity to vote. Accordingly, citizens who believe that elections in their country correspond with universal standards of electoral integrity are more likely to turn out on election day than citizens who feel that the electoral process is rigged. These differences in the propensity to vote are substantial: while the predicted probability to vote amounts to 93 percent for a person with most positive electoral integrity perceptions, the same person with most negative perceptions of electoral integrity exhibits a probability of only 80 percent - a notable difference of 13 percentage points (results not shown). In addition, the empirical relevance of individual electoral integrity perceptions for citizens' propensity to vote is also evident when comparing their effects with traditional antecedents of individual voting behavior. As Panel A in Figure 3 shows, perceptions of electoral integrity belong to the strongest predictors of voting behavior, exerting an influence that is similar to that of political interest as one of the most established determinants of voting behavior (cf. Smets/van Ham 2013: 356). Overall, these findings underline the status of individual electoral integrity perceptions as an important factor in citizens' voting calculus and thus lend empirical support to H1.

Figure 3: Individual- and contextual-level electoral integrity (perceptions) as antecedents of voting



Notes: Mixed-effects logistic regression (results based on Models 6 and 8 in Table A1 in the Online Appendix). Logit coefficients with 95% confidence intervals. N (individuals) = 128,416; N (country-years) = 94. Source data: WVS, EVS, EIP.

Turning to the results concerning the effect of contextual-level electoral integrity (H2), Panel A in Figure 3 shows that there is no statistically significant association between a country's actual quality of the electoral process and individual citizens' participation in elections. Apparently, then, whether citizens reside in a context in which elections are free and fair or live in an environment in which the electoral process is characterized by malpractices and fraud is not of direct relevance for citizens' participation in elections. When simultaneously considering individual perceptions of electoral integrity (and other relevant individual-level determinants of voting behavior), the contextual-level integrity of elections is thus largely negligible for citizens' propensity to vote. This finding is at odds with the expectation stated in H2.

To shed light on this null finding and to explore the relevance of contextual-level electoral integrity for individual voting behavior in more detail, we estimated additional regression models that are summarized in Table A1 in the Online Appendix. As Model 4 shows, when not taking into account individual-level determinants of voting behavior, there is a positive and statistically significant effect of contextual-level electoral integrity, indicating that citizens living in contexts in which the actual integrity of elections is higher are, on average, more likely to vote. However, this observed positive effect of contextual-level integrity vanishes as soon as individual-level integrity perceptions are included in the estimation (see Model 5). These findings point to the presence of an indirect contextual or composition effect (cf. Segatti et al. 2021: 14-15 and section 2.2.2): In contexts in which elections are free and fair, the average propensity to vote is higher because these contexts are characterized by an overall greater share of citizens' exhibiting positive perceptions about the electoral process. Once the composition of individual-level electoral integrity perceptions across contexts is taken into account, the effect of contextual-level electoral integrity on individual voting behavior disappears. In summary, then, the actual quality of elections is not directly relevant for citizens' voting behavior but rather indirectly by eliciting more positive perceptions about the electoral process.

In a last step of our empirical analysis, we assess the micro-macro conditionality of electoral integrity (perceptions) in affecting citizens' participation in elections (H3). To investigate the conditional interplay between individual-level electoral integrity perceptions and the contextual-level quality of elections, an additional interaction term between both has been added to the regression model shown in Panel B in Figure 3. As can be seen, the interaction between individual-level perceptions and contextual-level electoral integrity is positive and statistically significant, indicating that the effect of electoral integrity perceptions on citizens' propensity to vote is more pronounced in contexts in which the actual integrity of elections is higher – a finding in line with H3.

To provide a more intuitive assessment of the observed interaction effect, Figures 4 and 5 display conditional marginal effects of individual electoral integrity perceptions as well as predicted probabilities of voting along the empirical spectrum of contextual-level electoral integrity.

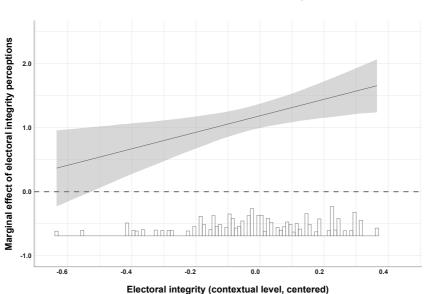


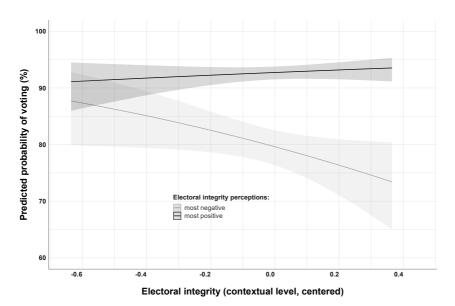
Figure 4: Marginal effect of individual-level electoral integrity perceptions conditional on contextual-level electoral integrity

Notes: Mixed-effects logistic regression (results based on Model 8 in Table A1 in the Online Appendix). Logit coefficients with 95% confidence intervals. Control variables not shown. N (individuals) = 128,416; N (country-years) = 94. Source data: WVS, EVS, EIP.

In Figure 4 it is evident that citizens' perceptions concerning the proper conduct of elections in their country are relevant antecedents of voting in both high- and low-integrity contexts. Only in countries with the lowest levels of objective electoral integrity (minimum on the x-axis), individual electoral integrity perceptions do not seem to matter for citizens' participation in elections (the 95% confidence interval of the marginal effect includes 0). Yet, it is also evident that the relative impact of electoral integrity perceptions on citizens' propensity to vote is overall stronger in contexts in which elections abide by universal standards of electoral integrity. This conditional relevance of individual-level electoral integrity perceptions across contexts is also reflected in the predicted probabilities of voting for citizens with most positive and most negative perceptions. Looking at Figure 5, we observe that, in contexts in which the integrity of elections is severely compromised, the probability to vote hardly differs between citizens with diverging perceptions about the quality of elections.

In contrast, in contexts in which elections adhere to universal standards of electoral integrity, the difference in predicted probabilities amounts to approximately 20 percentage points: whereas citizens with very positive perceptions exhibit a probability of 93 percent, the probability to vote for those with very negative integrity perceptions reaches only 73 percent. These findings underline that perceptions of electoral integrity are more decisive in citizens' voting calculus when the actual integrity of elections is high, and that it is first and foremost negative perceptions that lower the inclination to vote rather than positive perceptions boosting citizens' participation in elections. Overall, these findings provide empirical support for H3.

Figure 5: Predicted probabilities of voting conditional on contextual-level electoral integrity



Notes: Mixed-effects logistic regression (results based on Model 8 in Table A1 in the Online Appendix). Logit coefficients with 95% confidence intervals. N (individuals) = 128,416; N (country-years) = 94. Source data: WVS, EVS, EIP.

## 4.3 Sensitivity analysis

To assess the sensitivity of the empirical findings presented above, we conducted several robustness checks pertaining to (1) the inclusion of additional control variables at the country-level, (2) the composition of the country sample, as well as (3) the specification of the statistical models. First, to ascertain that the observed (conditional) relationships between contextual-level electoral integrity, individual integrity perceptions, and voting are not driven by other contextual characteristics that are closely related to the integrity of elections in a country, we estimated additional models controlling for the level of democratization, corruption, and adherence to the rule of law. Moreover, we also took into account the effects of economic performance and compulsory voting. The substantive findings and conclusions presented earlier do not change when controlling for these additional contextual-level factors in our regression models (see Tables A2-A6 in the Online Appendix). Second, we assessed to what extent the empirical results are driven by the composition of our country sample. Therefore, we excluded countries with particularly low (Ethiopia and Tajikistan) and high (Denmark) levels of electoral integrity from the analysis. In addition, we re-estimated all statistical models using only a subset of countries exhibiting higher-than-average levels of electoral integrity. These additional robustness checks do not lead to any substantively different findings and conclusions than the ones presented above (see Tables A7 and A8 in the Online Appendix). Finally, we also considered a different nesting structure for our empirical analysis, with citizens nested in country-waves rather than country-years. Using this alternative nesting structure does not affect the empirical findings illustrated before (see Table A9 in the Online Appendix). In summary, our sensitivity analysis thus confirms the substantive findings and conclusions presented in the main analysis.

## 5. Conclusion

Elections and citizens' participation in the electoral process are at the heart of representative democracy. In the absence of free and fair elections, citizens lack a meaningful opportunity to take part in the selection of political representatives and, hence, are deprived of an effective means to influence the direction of public policies in their country. Elections and

voting thus fulfill an important legitimizing function that is indispensable for the long-term viability of modern democratic systems.

Despite its overall relevance for democratic well-being, the nexus between the integrity of the electoral process and citizens' inclination to participate in elections has been largely overlooked in extant research. Accordingly, the theoretical and empirical picture with regard to the behavioral implications of electoral integrity (perceptions) remains incomplete. Against this background, our study has aimed to shed new light on how the integrity of the electoral process and individual perceptions about the proper conduct of elections are related to citizens' voting behavior. In doing so, the study contributes to the extant literature in at least three distinct ways: First, it provides a more comprehensive analysis than previous research by simultaneously considering both individual-level electoral integrity perceptions and countries' actual, contextual-level electoral integrity as antecedents of individual citizens' participation in elections. Second, it highlights the micro-macro conditionality of electoral integrity by arguing that the relevance of individual-level electoral integrity perceptions as determinants of citizens' voting behavior depends on the actual, contextuallevel electoral integrity of a country. Third, it offers a more encompassing empirical test than previous studies by analyzing information from 130,000 individual survey respondents, covering a total of 75 countries over a period of eleven years (2011-2021).

The study's empirical analysis based on individual-level data from the World Values Survey (WVS) and the European Values Study (EVS) combined with contextual-level data on the actual integrity of elections provided by the Electoral Integrity Project (Norris et al. 2014) brings to light three key insights: First, individual perceptions concerning the proper conduct of elections constitute a decisive factor in citizens' voting calculus. If citizens perceive the electoral process to be free and fair, they are more likely to take part in elections. Second, there is no direct effect of a country's contextual-level electoral integrity on individual voting behavior. While citizens' propensity to vote is, on average, higher in contexts in which elections are free and fair, this observation results from a composition rather than a genuine contextual effect. More precisely, citizens in high-integrity contexts are more likely to vote because in those contexts the share of citizens exhibiting positive perceptions of the electoral process is greater than in low-integrity contexts. Accordingly, what matters for citizens' participation in the electoral process is their perception of an election's integrity which reflects - but is not identical with - the objective level of integrity. Third, the impact of individual-level electoral integrity perceptions on citizens' propensity to vote is conditioned by the actual electoral integrity across contexts. Specifically, individual perceptions are more relevant for citizens' voting calculus when the actual quality of the electoral process is higher.

These findings come with important implications for the functioning of modern democracies. First of all, it is good news that citizens' perceptions about the conduct of elections (largely) correspond with the actual quality of the electoral process in their country. This observation indicates that citizens, on average, are able to sense instances of electoral misconduct and to diagnose the overall quality of elections in their environment. At the same time, there appears to be a 'normalization process' in countries characterized by electoral malpractices and fraud by which citizens' perceptions about the electoral process are rendered less meaningful in their voting calculus. Accordingly, while most citizens in low-integrity contexts are aware of deficiencies in the electoral process, this information is less relevant for their decision to vote when compared to citizens in contexts in which elections are free and fair. Apparently, then, once electoral malpractices are normalized, issues of electoral integrity feature less prominently in citizens' decision to vote. By contrast, in countries in which elections adhere to universal standards of electoral integrity, individual perceptions concerning the conduct of elections establish an important determinant of voting. Whereas in these countries most citizens perceive the electoral process as free and fair and hence turn out to vote, it is first and foremost the small share of citizens who (erroneously) believe that elections are rigged who may pose a potential challenge to the functioning of (electoral) democracy. This group of citizens which, despite residing in an environment in which elections are overall free and fair, perceives electoral fraud to be commonplace withdraws more often from the electoral process and, in doing so, renounces one of the most basic and fundamental democratic rights to influence government formation and gain political representation.

In light of these findings, future research may delve more deeply into the reasons behind 'biased' electoral integrity perceptions, including the roles of political actors and elites (Berlinski et al. 2023; Schnaudt 2023b) as well as the media (Karp et al. 2018) in portraying the electoral process across countries. In addition, future studies may extend the arguments and findings presented in this study by considering citizens' political behavior more broadly. If citizens, for whatever reason, feel that the electoral process is rigged and for that reason decide to abstain from elections, a crucial ques-

tion for democratic well-being concerns whether they withdraw completely from the political process or engage in other political activities aside from voting instead (for such an analysis for Germany, see Schnaudt 2023a). Providing encompassing, cross-national evidence on these questions will further advance our understanding of electoral integrity and its behavioral implications, and further clarify the relevance of electoral integrity for the viability of democratic systems.

#### References

- Alvarez, R.M., Hall, T.E., Llewellyn, M.H., 2008. Are Americans Confident Their Ballots Are Counted? The Journal of Politics 70, 754–766. https://doi.org/10.1017/S0022 381608080730
- Arzheimer, K., Evans, J., Lewis-Beck, M.S. (Eds.), 2017. The Sage Handbook of Electoral Behaviour. Sage, Los Angeles.
- Berlinski, N., Doyle, M., Guess, A.M., Levy, G., Lyons, B., Montgomery, J.M., Nyhan, B., Reifler, J., 2023. The Effects of Unsubstantiated Claims of Voter Fraud on Confidence in Elections. Journal of Experimental Political Science 10, 34–49. https://doi.org/10.1017/XPS.2021.18
- Birch, S., 2008. Electoral Institutions and Popular Confidence in Electoral Processes: A Cross-national Analysis. Electoral Studies 27, 305–320. https://doi.org/10.1016/j.electstud.2008.01.005
- Birch, S., 2010. Perceptions of Electoral Fairness and Voter Turnout. Comparative Political Studies 43, 1601–1622. https://doi.org/10.1177/0010414010374021
- Birch, S., 2011. Electoral Malpractice. Oxford University Press, Oxford.
- Bowler, S., Brunell, T., Donovan, T., Gronke, P., 2015. Election Administration and Perceptions of Fair Elections. Electoral Studies 38, 1–9. https://doi.org/10.1016/j.electstud.2015.01.004
- Bratton, M., 2008. Vote Buying and Violence in Nigerian Election Campaigns. Electoral Studies 27, 621–632. https://doi.org/10.1016/j.electstud.2008.04.013
- Carreras, M., İrepoğlu, Y., 2013. Trust in Elections, Vote Buying, and Turnout in Latin America. Electoral Studies, Special Symposium: The New Research Agenda on Electoral Integrity 32, 609–619. https://doi.org/10.1016/j.electstud.2013.07.012
- Clark, A., 2017. Identifying the Determinants of Electoral Integrity and Administration in Advanced Democracies: the Case of Britain. European Political Science Review 9, 471–492. https://doi.org/10.1017/S1755773916000060
- Coppedge, M., Gerring, J., Knutsen, C.H., Lindberg, S.I., Teorell, J., Alizada, N., Altman, D., Bernhard, M., Cornell, A., Fish, M.S., Gastaldi, L., Gjerløw, H., Glynn, A., Grahn, S., Hicken, A., Hindle, G., Ilchenko, N., Kinzelbach, K., Krusell, J., Marquardt, K.L., McMann, K., Mechkova, V., Medzihorsky, J., Paxton, P., Pemstein, D., Pernes, J., Ryd´en, O., von Römer, J., Seim, B., Sigman, R., Skaaning, S.-E., Staton, J., Sundström, A., Tzelgov, E., Wang, Y., Wig, T., Wilson, S., Ziblatt, D., 2022. V-Dem Country-Year Dataset v12. https://doi.org/10.23696/vdemds22

- EVS/WVS, 2022. Joint EVS/WVS 2017-2022 Dataset. https://doi.org/10.4232/1.14023. ZA7505 Data file version 3.0.0. GESIS, Cologne.
- Fisher, J., Sällberg, Y., 2020. Electoral Integrity The Winner Takes it All? Evidence from Three British General Elections. The British Journal of Politics and International Relations 22, 404–420. https://doi.org/10.1177/1369148120912668
- Flesken, A., Hartl, J., 2018. Party Support, Values, and Perceptions of Electoral Integrity. Political Psychology 39, 707–724. https://doi.org/10.1111/pops.12431
- Fortin-Rittberger, J., Harfst, P., Dingler, S.C., 2017. The Costs of Electoral Fraud: Establishing the Link between Electoral Integrity, Winning an Election, and Satisfaction with Democracy. Journal of Elections, Public Opinion and Parties 27, 350–368. https://doi.org/10.1080/17457289.2017.1310111
- Garnett, H.A., 2019. On the Front Lines of Democracy: Perceptions of Electoral Officials and Democratic Elections. Democratization 26, 1399–1418. https://doi.org/10.1080/13510347.2019.1641797
- Garnett, H.A., James, T.S., 2021. Measuring Electoral Integrity: Using Practitioner Knowledge to Assess Elections. Journal of Elections, Public Opinion and Parties 31, 348–367. https://doi.org/10.1080/17457289.2020.1824186
- Garnett, H.A., James, T.S., MacGregor, M., 2022. Year in Elections Global Report: 2019-2021. The Electoral Integrity Project.
- Haerpfer, C., Inglehart, R., Moreno, A., Welzel, C., Kizilova, K., Diez-Medrano, J., Lagos, M., Norris, P., Ponarin, E., Puranen, B., 2022. World Values Survey Trend File (1981-2022) Cross-National Data-Set. https://doi.org/10.14281/18241.23. Data File Version 2.0.0. Madrid & Vienna: JD Systems Institute & WVSA Secretariat.
- Heisig, J.P., Schaeffer, M., 2019. Why You Should Always Include a Random Slope for the Lower-Level Variable Involved in a Cross-Level Interaction. European Sociological Review 35, 258–279. https://doi.org/10.1093/esr/jcy053
- Jost, J.T., 2019. A Quarter Century of System Justification Theory: Questions, Answers, Criticisms, and Societal Applications. British Journal of Social Psychology 58, 263–314. https://doi.org/10.1111/bjso.12297
- Karp, J.A., Nai, A., Norris, P., 2018. Dial 'F' for Fraud: Explaining Citizens' Suspicions about Elections. Electoral Studies 53, 11–19. https://doi.org/10.1016/j.electstud.2018.01. 010
- Martínez i Coma, F., van Ham, C., 2015. Can Experts Judge Elections? Testing the Validity of Expert Judgments for Measuring Election Integrity. European Journal of Political Research 54, 305–325. https://doi.org/10.1111/1475-6765.12084
- McCann, J.A., Domínguez, J.I., 1998. Mexicans React to Electoral Fraud and Political Corruption: An Assessment of Public Opinion and Voting Behavior. Electoral Studies 17, 483–503. https://doi.org/10.1016/S0261-3794(98)00026-2
- Nohlen, D., 2014. Wahlrecht und Parteiensystem, 7th ed. Budrich, Opladen.
- Norris, P., 2019. Do Perceptions of Electoral Malpractice Undermine Democratic Satisfaction? The US in Comparative Perspective. International Political Science Review 40, 5–22. https://doi.org/10.1177/0192512118806783

- Norris, P., 2018. Electoral integrity, in: Fisher, J., Fieldhouse, E., Franklin, M.N., Gibson, R., Cantijoch, M., Wlezien, C. (Eds.), The Routledge Handbook of Elections, Voting Behavior and Public Opinion. Routledge, Abingdon, 220–231. https://doi.org/10.4324/9781315712390.ch18
- Norris, P., 2014. Why Electoral Integrity Matters. Cambridge University Press.
- Norris, P., 2013. The New Research Agenda Studying Electoral Integrity. Electoral Studies, Special Symposium: The New Research Agenda on Electoral Integrity 32, 563–575. https://doi.org/10.1016/j.electstud.2013.07.015
- Norris, P., Frank, R.W., Martínez i Coma, F., 2014. Measuring Electoral Integrity around the World: A New Dataset. PS: Political Science & Politics 47, 789–798. https://doi.org/10.1017/S1049096514001061
- Norris, P., Grömping, M., 2019a. Electoral Integrity Worldwide. University of Sydney, Sydney.
- Norris, P., Grömping, M., 2019b. Perceptions of Electoral Integrity Data, version PEI-7.0. https://doi.org/10.7910/DVN/PDYRWL
- Norris, P., Martinez i Coma, F., Grömping, M., 2015. Perceptions of Electoral Integrity Data, version PEI-3.0. https://doi.org/10.7910/DVN/29114
- Schmitt-Beck, R., Faas, T., 2021. Wie frei und fair war die Bundestagswahl 2017? Elektorale Integrität aus Sicht der Bürgerinnen und Bürger, in: Weßels, B., Schoen, H. (Eds.), Wahlen und Wähler: Analysen aus Anlass der Bundestagswahl 2017. Springer, Wiesbaden, 139–161. https://doi.org/10.1007/978-3-658-33582-3\_8
- Schnaudt, C., 2023a. Exit or Voice? Behavioral Implications of Electoral-Integrity Beliefs in Germany. Politische Vierteljahresschrift 64, 79–105. https://doi.org/10.1007/s1 1615-022-00403-9
- Schnaudt, C., 2023b. Sowing the Seeds of Skepticism? Electoral-integrity Beliefs among Political Elites. Electoral Studies 84, 102654. https://doi.org/10.1016/j.electstud.2023.1 02654
- Schnaudt, C., 2023c. Mind the Gap(s): Winning, Losing, and Perceptions of Electoral Integrity in Mixed-member Proportional Systems. Electoral Studies 83, 102611. https://doi.org/10.1016/j.electstud.2023.102611
- Schnaudt, C., Hahn, C., Heppner, E., 2021. Distributive and Procedural Justice and Political Trust in Europe. Frontiers in Political Science 3, 24. https://doi.org/10.3389/fpos.2021.642232
- Segatti, P., Schmitt, H., van der Eijk, C., 2021. Comparing Individual Behaviour across Contexts: The Core Research Question, in: Schmitt, H., Segatti, P., Eijk, C. van der (Eds.), Consequences of Context: How the Social, Political, and Economic Environment Affects Voting. ECPR Press, London; Lanham, 1–20.
- Simpser, A., 2012. Does Electoral Manipulation Discourage Voter Turnout? Evidence from Mexico. The Journal of Politics 74, 782–795. https://doi.org/10.1017/S002238161 2000333
- Smets, K., van Ham, C., 2013. The Embarrassment of Riches? A Meta-analysis of Individual-level Research on Voter Turnout. Electoral Studies 32, 344–359. https://doi.org/10.1016/j.electstud.2012.12.006

### Christian Schnaudt, Christof Wolf

van Deth, J.W., 2018. Voting and the Expanding Repertoire of Participation, in: Fisher, J., Fieldhouse, E., Franklin, M.N., Gibson, R., Cantijoch, M., Wlezien, C. (Eds.), The Routledge Handbook of Elections, Voting Behavior and Public Opinion. Routledge, Abingdon, 96–107.

van Ham, C., 2015. Getting Elections right? Measuring Electoral Integrity. Democratization 22, 714–737. https://doi.org/10.1080/13510347.2013.877447