



Close to politics and to policies: subjective knowledge about referendum topics in Eastern Europe

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Abstract

Citizens with political knowledge can contribute to the quality of democracy in their country. Previous research has established the existence of differences between the actual (objective) and perceived (subjective) level of political knowledge, but the factors driving citizens' subjective political knowledge in a specific setting in which they can take direct decisions remain unclear. To explain what determines subjective knowledge about referendum topics among voters, the present analysis focuses on seven referendums held in Eastern Europe between 2015 and 2019 in Bulgaria, Hungary, Moldova, Poland, Romania (twice), and Slovakia. We use individual-level data from surveys conducted in the aftermath of each referendum with a total number of 1825 actual voters. The results indicate that more politically engaged citizens, those who trust parties and are satisfied with democracy, and those who are critical towards the government consider themselves more informed about the referendum topics.

Keywords Referendum · Topics · Perceptions · Knowledge · Eastern Europe

Introduction

Citizens with political knowledge can contribute to the quality of democracy in their country. They can make informed decisions, engage in various forms of participation, commit to principles, be opinionated, efficacious, able to ensure the representation of their interests, and quickly identify the political competitors

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whose positions are closer to their views (Eveland 2004; Anderson and Goodyear-Grant 2010). Well-informed citizens can even thwart political manipulation and misinformation and contribute to the legitimacy of a democratic regime (Fowler and Margolis 2014). Knowledge is measured in this study in two ways: objective or factual knowledge is defined as the range of factual information about politics stored in an individual's long-term memory (Carlson et al. 2009) and subjective or perceived knowledge refers to an individual's degree of confidence and self-perception about how much they know (Aertsens et al. 2011; Schäfer 2020). Earlier research shows that there are differences between the actual and perceived level of political knowledge and that individuals' self-assessment of political knowledge is biased (Weber and Koehler 2017). Another strand of the literature explains the factors which can influence citizens' perceived knowledge about political processes in general (Müller et al. 2016; Cacciatore et al. 2018; Leonhard et al. 2020).

However, we know little about what drives citizens' perceptions of political knowledge in a particular setting in which they have the opportunity to take direct decisions. Referendums have increasingly been used in the last three decades to allow people to express their opinion on a variety of topics (Silagadze and Gherghina 2020). Explaining the variation in how much people think they know about the topic of a referendum in which they are voting is relevant for at least two reasons. First, the identification of systematic sources of perceived knowledge about the referendum topic allows a better understanding of people's behaviours in that referendum. Extensive literature focuses on why people vote in a certain way in referendums and how much they think they know about the topic may be the origin of their preferences (de Vreese 2007; Lutz and Hug 2010). Second, this investigation reveals the extent to which variations in perceived knowledge are random in the population. Based on the results, parties involved in a referendum will know where to work and how to alter (perceptions of) knowledge during the campaign.

To address this gap in the literature, this article seeks to explain what factors determine subjective knowledge about the referendum topic among voters. Our analysis focuses on seven referendums in Eastern Europe conducted on different topics between 2015 and 2019 in six countries: Bulgaria, Hungary, Moldova, Poland, Romania (twice), and Slovakia. We focused on Eastern Europe because the countries in the region share several characteristics that are important to the idea of political knowledge, and they all have recent experience with referendums (see research design section). We used individual-level data from original surveys conducted in the aftermath of each referendum. These surveys had a total of 1825 respondents, with different sample sizes across the referendums. They only included people who voted in the referendum because they are the least likely cases where we could observe variations in several key variables of interest to our study such as political interest, engagement, or perceived knowledge about the topic. We tested for the effects of three main categories of explanations on perceived knowledge about the referendum topic: engagement (interest and participation), dissatisfaction (with democracy and with government performance), and relation to parties (trust and the use of media channels used by parties). We controlled for education, left-right self-placement, and age. The analysis was conducted at the aggregate level, but the



article presents data visualisations of each referendum to strengthen the general observations.

The following section reviews the literature about potential sources of perceived political knowledge and provides an analytical framework with three categories of determinants. For each of these determinants, it formulates testable hypotheses. The third section presents the research design with an emphasis on the case selection, data, variables measurement, and methodology. Next, we provide an analysis and interpretation of the results with the help of bivariate and multivariate statistical analyses. The conclusions summarise the key findings and discuss their implications for the broader field of study.

Citizens and subjective political knowledge

Representative democracies provide citizens with many opportunities to participate in political activities. Individuals who are not informed about politics will not be aware of the benefits brought by political participation. Citizens who are well-informed or perceive themselves in this way are reportedly more willing to engage in political processes or to change the political realities (Delli Carpini 2000; Li and Marsh 2008). However, it is not always clear what makes citizens believe that they are well-informed about specific political processes. In the absence of studies explaining this belief, we build several arguments using research from connected fields. Our theoretical framework brings together three categories of potential determinants that could enhance this belief when it comes to the referendum topics: (1) engaged citizens; (2) dissatisfied citizens; and (3) closeness to the political actors involved in referendum campaigns. Each of the following subsections presents the arguments in detail and formulates several testable hypotheses.

Engaged citizens

To begin with engagement, previous studies explain that the instances in which someone participates in a political activity have educative roles and help them to accumulate political knowledge (Delli Carpini 2000; Halpin et al. 2018; El-Wakil and McKay 2020). In addition to the objective knowledge, we argue that subjective knowledge about politics (the perception of knowing) could be enhanced through political participation in two ways. First, these citizens usually tend to thoroughly inform themselves about the processes they are about to engage in, in order to understand their effects (Eveland 2004; Fishkin and Luskin 2005). Second, politically active citizens could perceive themselves as being better informed about the political realities in comparison with their peers who are alienated from these practices (Cooke 2000; Eveland 2004; Fowler and Margolis 2014).

Political participation helps to consolidate democratic values and is a cornerstone of good citizenship. A person's involvement in political processes could be perceived as an important component of healthy political behaviour in a democratic regime (Bolzendahl and Coffé, 2013). Irrespective of the forms of



participation or the social categories to which the citizens belong, those who participate in political activities are motivated by the desire to influence public decisions (Li and Marsh 2008; Nygård and Jakobsson 2013). People who participate are usually well-informed and tend to continuously inform themselves on political matters using multiple sources (Benz and Stutzer 2004; Anderson and Goodyear-Grant 2010). All these components increase the degree of citizens' political sophistication, in line with which they take better decisions during political processes and understand that their engagement could have positive effects in society (Enns and Kellstedt 2008; Gordon and Segura 2014; Hansen and Pedersen 2014).

Highly active citizens could perceive themselves as being well-informed about political processes for two major reasons: political interest and political participation. The two are often associated, but there are many instances in which interested citizens refuse to participate or in which disinterested people participate politically for other reasons. That is the reason why we consider political interest and political participation as two different variables with a potential impact on self-reported levels of knowledge. First, citizens who are interested in politics will seek more information about a topic, and the natural result is increased knowledge (Delli Carpini and Keeter 1996). At the same time, highly interested citizens may be more informed about political issues because they are more likely to follow political actors' responses on the topics in which they engage. Earlier research shows that governments usually react to political actions such as protests (Peña and Davies 2017), and individuals who are interested in politics are more likely to follow official statements on these actions in order to enhance their knowledge.

Second, political participation could influence the accumulation of political information for those who engage in these processes. For instance, people who sign petitions or take part in a protest know why they engage in these practices and are aware of the possible outcomes of their engagement (della Porta and Andretta, 2013; Halpin et al. 2018). They could also indirectly enhance their political knowledge by interacting with other citizens taking part in similar processes (Eveland 2004). To take another example of modes of political participation, deliberation provides citizens with opportunities to engage in discussions, to identify specific solutions to punctual problems, and to create an environment for a friendly exchange of ideas (Fishkin et al. 2010). Deliberation usually fulfils an educative role because participants can extend their knowledge of the subjects under discussion and widen their perceptions of specific issues (Cooke 2000; Fishkin and Luskin 2005). Since deliberation often provides information and develop the ability to support arguments, involvement in deliberative actions increases people's knowledge about specific subjects. This could further strengthen the participants' belief that they are better informed about political issues in comparison to those who do not take part in similar actions (Cooke 2000; Eveland 2004; Fowler and Margolis 2014). In the light of these findings, we expect that:

H1: Citizens who are more interested in politics are more likely to perceive that they are informed about a referendum topic.



H2: Citizens who are highly engaged are more likely to perceive that they are informed about a referendum topic.

Dissatisfied citizens

Earlier research provides evidence supporting that dissatisfied citizens perceive themselves as being well-informed about the political issues. Political dissatisfaction usually springs from a mixture of a high level of distrust towards political institutions and processes and a perceived sense of insignificance regarding one's ability to change political realities (Christensen 2016).

There is a broad consensus in the literature that citizens have become increasingly critical towards representative democracies over time (Norris 2011; Dalton 2019). In comparison with those who are satisfied about how the political system works and who have no reason to engage in actions aiming to change the political establishment, dissatisfied citizens actively engage in political practices meant to change realities that do not match their expectations (Norris 2011; Doorenspleet 2012). To take political action, dissatisfied citizens are usually informed about the setting in which they act and about the potential effects of their actions (Geissel 2008). Since dissatisfaction could be important for objective knowledge, there are theoretical reasons to expect that it could be one reason why citizens perceive themselves as being politically informed.

The delegation of power to representative institutions, the increasing distance between citizens and institutions, and the poor performance of institutions fosters citizens' alienation and decreases their involvement in decision-making (Welp and Milanese 2018; Cheruiyot et al. 2019). Low-quality public services, policy disapproval, wealth changes, and the lack of sustainable development are all associated with inefficient governments that are not supported by citizens but rather criticised. These evolutions give birth to dissatisfied democrats who support general democratic values but are not satisfied with the performance of the political system and its core institutions (Doorenspleet 2012; Dalton 2019). These citizens are usually well-informed, deeply involved in political actions, and keen to influence the government through specific forms of political participation (e.g. signing petitions and attending protests) because they have high expectations and want the political system to work better (Kim, 2010; Doorenspleet 2012; Webb 2013).

Dissatisfied citizens are more likely to perceive themselves as being informed on a referendum topic. Their general dissatisfaction towards the function of contemporary representative democracies and poor government performance have determined the political agenda to allow the greater involvement of citizens in political activities (Norris 2011; Dahlberg et al. 2015; Gherghina et al. 2020). This can be done by a more extensive use of referendums in order to give citizens a bigger say in politics (Breuer 2009; Gherghina 2019). Considering that dissatisfied citizens do want to change the political and social system by getting involved in different political actions, they are more likely to inform themselves about the referendum topic and the possible effects of their involvement. At the same time, dissatisfied citizens could perceive referendums as an alternative to the representative decision-making that



could better represent the interests of those who are dissatisfied with how they are represented (El-Wakil and McKay 2020). The literature identifies two possible relationships between direct and representative democracy: referendums replacing the institutions of representative democracy or referendums complementing the institutions of representative democracy (Geissel and Newton 2012; Morel and Qvortrup 2017). Dissatisfied citizens may regard referendums as a replacement for representative democracy and even perceive them as being more legitimate because they mirror the people's will in an unmediated manner (Dalton et al. 2001; de Vreese 2007; Gherghina 2017). Accordingly, we expect that:

H3: Citizens who are dissatisfied with the functioning of democracy are more likely to perceive that they are informed about a referendum topic.

H4: Citizens who are dissatisfied with the government's performance are more likely to perceive that they are informed about a referendum topic.

Closeness to parties

The perceived level of political knowledge may be also influenced by the relation between citizens and political parties. When citizens feel close to political parties, follow their activities on different platforms, and believe that their actions are directed towards the general good, they tend to consider themselves as being better informed regarding political processes (Levi and Stoker 2000; Müller et al. 2016; Cacciatore et al. 2018). Earlier research shows that trust plays a significant role in strengthening the quality of democracies (Budnik 2018) and that when a trusting relationship is maintained between political parties and citizens, the latter start to perceive the information delivered by the former as being reliable and of high quality. Citizens may perceive themselves as receiving reliable and trustworthy political content, which can enhance their belief of being informed.

Political parties are key actors in referendum campaigns (Walker 2003; Gherghina 2019; Hollander 2019). They initiate referendums, promote policies, and take stances on issues to be put to a popular vote. We argue that the closeness between citizens and parties—reflected in high levels of trust and in the use of communication channels—can positively influence the self-declared knowledge about the referendum topic. The mechanism behind trust in parties is straightforward. When people believe that political parties can meet their expectations and strive for the general good, they are more likely to cooperate and support them in elections (Levi and Stoker 2000; Whiteley et al. 2016). When citizens trust political parties and follow their positions and statements on a referendum issue at hand, they could perceive themselves as being sufficiently informed about the process. Since political parties are actively engaged in referendum campaigns, when people trust parties, they follow their actions and believe that they understand the reasons why the referendum is being held and its topic (Bowler and Donovan 2002; de Vreese and Semetko 2004; Lutz and Hug 2010).



The idea behind the use of communication channels is more complex. Referendums are often publicised by media portals, and citizens are provided with many opportunities to acquire political knowledge. The channels of communication often used by political parties can make a difference to citizens' perceptions of their own knowledge on a referendum topic. Political parties extensively use Internet sites and popular social media platforms to communicate with the electorate during and outside elections. The provision of unfiltered information, interactivity, speed, and the stimulation of collective actions at low cost are several of the benefits (Gibson and McAllister 2006; Chadwick and Stromer-Galley 2016). Political parties that communicate with the electorate via social media increase their transparency, strengthen the level of trust in political institutions, and enhance their perceived responsiveness when citizens seek replies from them (Nulty et al. 2016; Arshad and Khurram 2020).

By communicating with the electorate via social media platforms, political parties convey the idea that they are close to their supporters and striving to fulfil their political expectations, with the latter stimulating citizens' loyalty and trust in political actors (Parker and Parker 1993; Histe 2006; Klinger 2013; Spierings and Jacobs 2018). However, while social media networks are more appealing to younger generations, older people continue to follow the political parties they support on television in order to obtain political information. Social media and TV are therefore political parties' preferred channels of communication, providing the electorate with large quantities of political content, the possibility of interaction either with other users or directly with politicians, and a focus on contemporary events (Weber and Koehler 2017; Cacciatore et al. 2018; Leonhard et al. 2020). As such, citizens who are extensively engaging with these means of communication are exposed to a variety of information that can influence their perceptions about their own knowledge. Following this line of argument, we expect that:

H5: Citizens who trust political parties are more likely to perceive that they are informed about a referendum topic.

H6: Citizens who use the channels of communication extensively used by political parties are more likely to perceive that they are informed about a referendum topic.

Control variables

This article tests for three control variables that are expected to influence citizens' perception that they are informed about the referendum topic: education, self-placement on the political axis, and age. Highly educated individuals are more likely to inform themselves on the social and political realities within their countries. They are also more likely to be more involved in social dynamics, to gain a more thorough understanding of how political systems work, and to possess the necessary skills to accumulate and process political content (Clark 2016). The self-placement on the political axis could also produce an effect. Earlier studies show important differences in the political behaviour and attitudes of people who position themselves to



the left or to the right on the political axis. Those with more liberal views seem to have a better understanding of the importance of different perspectives and to make an effort to inform themselves more about political processes (Lesschaeve 2017). Age could also be an important determinant in stimulating the perception of information regarding political processes. For example, young people are heavy social media users on platforms where huge amounts of information are circulated (Leonhard et al. 2020), and they often engage in protests (Nygård and Jakobsson 2013) where they can interact with others and boost their information. At the same time, young people are often criticised for their limited conventional political participation in forms such as voting (including in referendums), and thus, their levels of information about the topic may be lower.¹

Research design

We used individual data collected through original surveys conducted among voters in seven referendums held in Eastern Europe between 2015 and 2019. We focused on Eastern Europe for two main reasons. First, the countries in the region share several common characteristics: low levels of trust in political institutions, low levels of citizens' involvement in politics, high electoral volatility, high prominence of parties in politics, and a challenging transition to democracy (Fagan and Kopecký, 2017). Second, Eastern European countries included direct democracy in their legislation very soon after the regime change prompted by the fall of communism, before some West European countries (Scarrow 2001), but did not make extensive use of referendums until recently (Gherghina 2017). Given this fairly limited and recent experience with referendums, these countries are critical cases where people are likely to treat referendums as important events and stay informed about their topic.

The seven referendums were organised on different topics: same-sex marriage ban, same-sex adoption ban, and sex education or euthanasia education choice (Slovakia 2015); introducing single-member constituencies, financing of political parties, and tax law interpretation (Poland 2015); migrant quota (Hungary 2016); a two-round system for parliamentary elections, compulsory voting, and political funding (Bulgaria 2016); defining family in the constitution (Romania 2018); reducing the number of parliamentarians and introducing the right to recall (Moldova 2019); and prohibiting amnesties and pardons for corruption offences and prohibiting the government from passing emergency ordinances concerning the judiciary (Romania 2019). The questions asked in referendums and turnout are available in Table 2. These different topics make the seven referendums an appropriate setting in which to test the hypothesised effects because the existence of statistical relationships across

¹ We also controlled for a series of other variables such as party membership, party voted for in the most recent election, preference in the referendum, gender, etc. None of these has a strong effect on the perceived knowledge about the topic, and they were excluded from the analysis to keep the models parsimonious.



a range of referendums can reveal robust findings which are independent from the policies subjected to popular vote.

The surveys were conducted online within three months of each referendum. This timeframe was used to avoid recall bias among respondents. The online survey was distributed on Facebook groups, discussion forums, and to the e-mail addresses we received from other respondents (snowball sampling). There may therefore be a potential bias towards the individuals who use the Internet. We used the same questionnaire translated into the national language of each country; for Moldova, this meant we used two questionnaires—in Romanian and in Russian—due to the ethnic composition of the country. The surveys only included the voters in these referendums because they are the least likely case in which to encounter variations in knowledge of the referendum topic. People who vote in referendums are usually familiar with the topic, and an explanatory model that works for small variations is likely to perform well for broad variations. We used a purposive sampling technique (maximum variation samples) that increased the variation in many key variables for this analysis (see Table 3). Representative sampling was not possible because none of the countries provides official statistics about the profile of voters. Without this information, we could not know the broader universe of cases and therefore could not use representative sampling. Our results are confined to the sample and are not generalisable to the entire population. Despite the non-representative character of the samples, the distribution in these surveys was rarely skewed; for example, for education level and age—which are often biased in online surveys due to self-selection bias—the distribution within the samples resembles the general spread within the broader population.

The samples varied across the countries, depending on the availability of respondents but also on the general turnout. For example, in Poland the turnout was lower than 8% and thus respondents were difficult to find. The total number of respondents providing complete answers was 1825, with individual country samples as follows: 329 (Bulgaria 2016), 114 (Hungary 2016), 133 (Moldova 2019), 148 (Poland 2015), 245 (Romania 2018), 634 (Romania 2019), and 222 (Slovakia 2015). Due to these differences, the analysis used weights according to sample size.

Variable operationalisation

The dependent variable of this study is the perception about information. This was measured as the answer to the question “How would you rate your knowledge about the referendum question(s)?”. Some of the referendums had more than one question, and the respondents were asked to estimate their general knowledge about the topic. The answers were recorded on an ordinal scale ranging between very limited (1) to very good (4). One caveat of this question was the extent to which we could get meaningful answers to questions that require introspection. While aware of the potential respondent bias, we followed the conclusions of earlier research according to which introspective questions can provide useful information about what drives people’s attitudes in referendums (Blais et al. 1998).



The first independent variable is interest in politics (H1), which was measured through the answer given to the usual question in international surveys “How interested are you in the politics of (country)?”. The available answers were recorded on a four-point ordinal scale that ranges between not at all (1) and very much (4). Political participation (H2) is a cumulative index that seeks to reflect whether respondents voted in elections, voted in previous referendums (also at the local level, whether they were involved in protests, signed petitions, or engaged in boycotts in the most recent five years before the referendum). The index was measured on a six-point ordinal scale with the following extremes: 0 for those who did not participate in any of these activities and 5 for those who had participated in all forms. The satisfaction with the functioning of democracy (H3) was operationalised through the answer provided to the question “How satisfied are you with the functioning of democracy in (country)?”. The answers were provided on an ordinal scale between not at all (1) and very satisfied (4). The satisfaction with government performance (H4) was measured on a similar scale to the answer to the question “How satisfied are you with the government performance in (country)?”.

Trust in political parties (H5) was measured through the answers to the straightforward question encountered in many international surveys “How much do you trust political parties?”. The answers were recorded on a four-point ordinal scale ranging between not at all (1) and very much (4). The media channels used by voters (H6) aimed to capture the sources of information about the referendum. This comprised a cumulative index of information received via TV, radio, or newspapers as traditional media, and Facebook as a social media platform. These were the channels where parties broadcast their messages during the campaigns. The index had three values: none of the traditional or social media was used, one was used, or both were used.

Education referred to the highest completed level and was measured on a five-point ordinal scale from primary to postgraduate studies. The left–right placement asked respondents to position themselves on an 11-point ordinal scale that is the equivalent of a political axis, with 0 as extreme left and 10 as extreme right. Age was a count variable measuring the complete years at the time of the survey. All variables were coded ascendingly for an easier interpretation, and all “do not know/no answer” options were removed from the analysis. The statistical analysis combined bivariate correlations and multivariate ordered logistic regression (due to the measurement of the dependent variable).

Analysis and results

The distribution of self-perceived knowledge across the respondents to the survey indicates that most of them were familiar or very familiar with the referendum topics (see Fig. 1). The horizontal axis reflects the degree of self-perceived knowledge coded as previously explained (1 = very limited; 4 = very good). The vertical axis corresponds to the percentage of respondents for each value. The distributions present the total, and for each referendum, although our analysis was conducted at an aggregate level, the distribution of answers per referendum provides relevant details



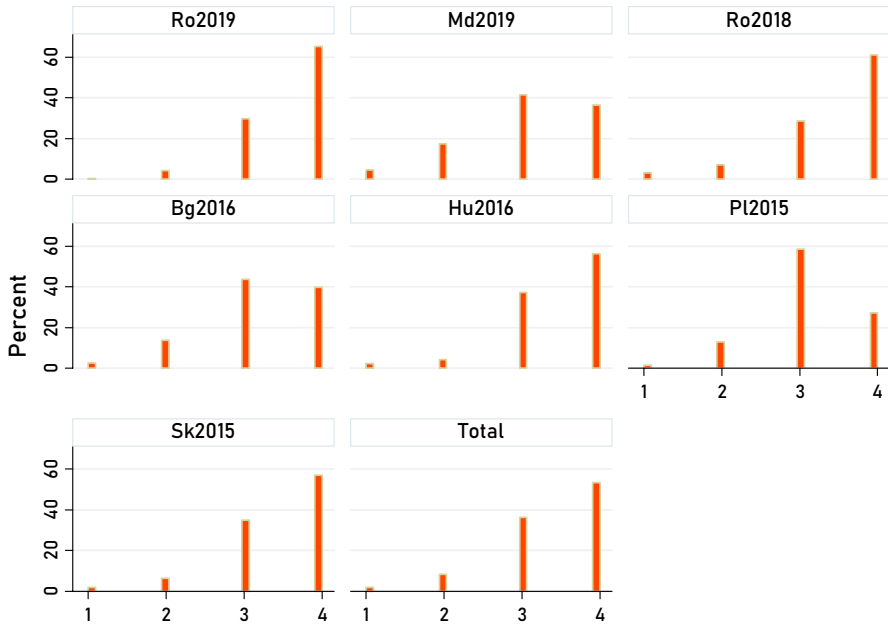


Fig. 1 The distribution of subjective knowledge about the referendum topic

about the variation. Overall, some variation is evident regarding the reported knowledge of the respondents about the referendum topic. Since the respondents voted in the referendum, it is not surprising that in total, many reported good or very good knowledge about the topic. Only a few respondents had limited information, while the very limited were almost negligible. However, the picture is slightly more nuanced when looking at the referendums. For example, in the 2015 Polish referendum the majority of respondents declared good knowledge about the referendum topic. In the 2016 Bulgarian referendum, the share of respondents with good and very good self-declared knowledge was fairly similar, with a considerable percentage claiming that they had limited knowledge. The same can be observed in the 2019 Moldovan referendum.

The signs and values of the correlation coefficients in Table 1 show empirical support for five of the hypothesised relationships. Interest in politics and political participation correlate the highest with self-perceived knowledge about the referendum topic. The respondents who reported a high interest in politics and those who had frequently participated considered themselves to be more informed about the referendum topic. There is a negative correlation between satisfaction with government performance, which matches the hypothesis according to which dissatisfied citizens are more likely to consider themselves informed about referendum topics. There is no statistical relationship between perceived knowledge and satisfaction with democracy. The correlations also indicate that the respondents who reportedly trust parties very much and those who frequently used the media on which political parties are often active (TV and social media) self-reported higher levels knowledge



Table 1 Correlation and regression coefficients for perceived knowledge

	Correlations	Ordinal regression analysis (ORs)	
		Model 1	Model 2
Interest in politics	0.33***	2.17***	2.30***
Political participation	0.23***	1.28***	1.22***
Satisfaction with democracy	0.01	1.17**	1.24**
Satisfaction with government	-0.15***	0.71***	0.68***
Trust in parties	0.13***	1.31***	1.26**
Media use	0.15***	1.25***	1.20**
Education	0.11***		1.09
Left-right placement	0.08***		1.06**
Age	0.10***		1.01*
N	1509–1822	1642	1369
Pseudo R ²		0.08	0.08
Log likelihood		-1462.06	-1191.22

The number of cases for correlations differs due to missing values for some variables

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

compared to the other respondents. All the controls correlate positively, which indicates that highly educated people, those who position themselves to the right of the political spectrum, and those who are older were all slightly more inclined to consider themselves well-informed about the referendum topic.

We ran two ordinal regression models (see Table 1): Model 1 included only the hypothesised effects and Model 2 added the controls. We ran statistical models with the referendums as dummy variables, and the results were very similar to what we report in the article. The fit of the model (pseudo-R²) is similar for the two models, which indicates that the three extra variables in Model 2 did not improve the fit of the model. Their limited effect, which is not always statistically significant, and the very similar values for the independent variables strengthen this observation. Among the controls, respondents who positioned themselves to the right of the political spectrum were more likely to perceive themselves as more informed, but the effect size is very small (OR = 1.06). For age, the size of the effect is extremely small although the effect is statistically significant at the 0.1 level. As such, the analysis and interpretation of results will refer mainly to Model 1 that included the independent variables.

Similar to the correlation analysis, the regression provides empirical evidence for five of the six hypotheses. All the effects are statistically significant. The strongest effect is observed for H1, where the respondents with a high interest in politics are 2.17 times more likely to consider themselves informed compared to those with no interest in politics. Respondents who participate politically (H2) are 1.28 times more likely to perceive themselves as being informed about the referendum topic. These two effects illustrate that the engagement of the survey respondents either at an attitudinal or behavioural level can increase their belief that they are better informed



about the referendum topic. This can be better understood if we look at a concrete case. For example, the 2016 referendum in Hungary was initiated by the government as a way to campaign against the mandatory quota of refugees proposed by the EU to address the crisis of asylum seekers coming from war zones. The vast majority of respondents from Hungary self-reported a high knowledge about the referendum topic (Fig. 1). Since the topic was new on the public agenda, those who voted had a high interest in politics and followed what was happening. Respondents who engaged in many forms of political participation were likely to vote in this referendum and were also in a good position to consider themselves informed. The actions of the two referendum camps facilitated the access of interested and engaged citizens to vote. On the one hand, the government promoted the topic extensively and encouraged its supporters to turn out. On the other hand, the opposition parties boycotted the referendum and advised their supporters to stay at home, as a way to invalidate the government's initiative (Hungary requires a participation quorum in order for a referendum to be valid). In these circumstances, those who voted were likely to be interested in politics or to have engaged before in other forms of participation.

The two hypothesised effects for dissatisfied citizens go in different directions. There is empirical support for H4, which proposes that respondents who are critical towards the activity of their national government are more inclined to report knowledge about the referendum topic compared to satisfied respondents. This was quite obvious in cases such as the 2019 Romanian referendum, when the country's president initiated a popular vote to counter-balance the government's repeated attempts to amend several laws of justice. The referendum was advertised as being about anti-corruption and mobilised a large share of the electorate. It was organised for the same day as the elections for the European Parliament in which the governing party was defeated at the polls. Dissatisfaction with the government also produces an effect in referendums where the government was among the initiators. For example, the 2015 referendum in Slovakia and the 2018 referendum in Romania were on similar anti-same-sex marriage topics. They were initiated by conservative civil society organisations and backed by the Church and the government in both countries (Gherghina and Silagadze 2021b). Although those who voted in the referendums were massively in favour of the proposal—and thus agreed with the government's position—the results indicate that some of these voters were dissatisfied with the government and did not see it as associated with the policy.

There is no empirical support for H3, as the evidence indicates that respondents who are satisfied with democracy are more likely to consider themselves well-informed about the referendum topic. One possible explanation for this effect is that citizens do not see referendums as replacing, but rather as complementing, representative democracy. Using the same two examples from Slovakia in 2015 and Romania in 2018, respondents may have been unhappy about the performance of the government, but they did not extend this attitude to the functioning of democracy. Some were satisfied with how it works and may believe that the decisions that they take directly on various policies can contribute to the quality of democracy.

There is empirical evidence for H5 and H6 according to which those respondents who trust parties and regularly use the media channels where parties often advertise



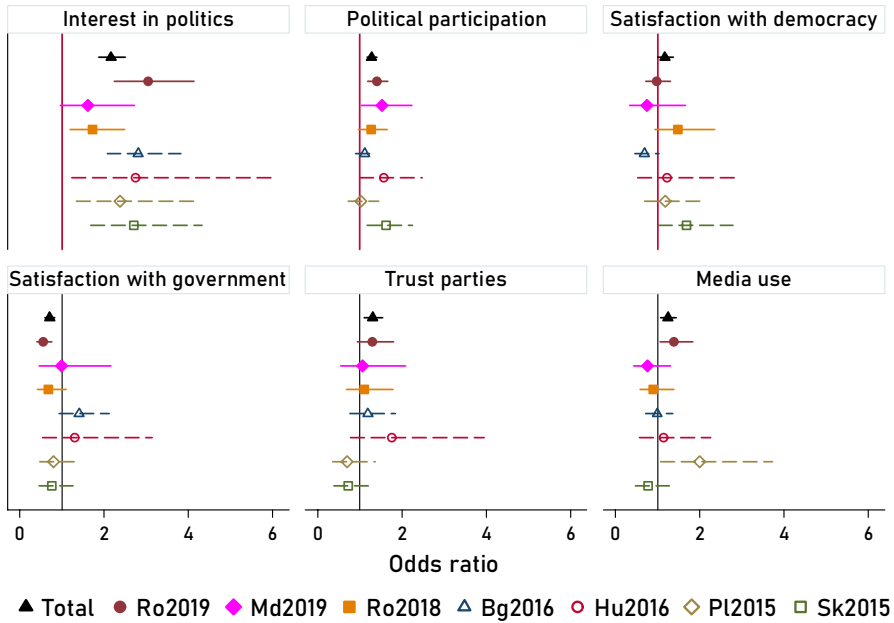


Fig. 2 Effects of independent variables in each referendum

(TV and social media) for information purposes are 1.31 and 1.25 times more likely to consider themselves informed about the referendum topic compared to the others. For example, in referendums that were initiated by parties, or where parties were highly active in taking stances and promoting the topic (e.g. Hungary in 2016), the positive effect of trust in parties is straightforward, strong, and positive (Fig. 2). In other instances, the effects are weaker, as in the 2016 referendum in Bulgaria that had three topics directly related to political parties: the electoral system, the type of voting, and party funding. The referendum was initiated by a popular show host and producer, and parties were not actively involved in the campaign (Gherghina and Bankov 2021). Some respondents paid attention to the topics more than other citizens because they trusted political parties or found the issues related to the latter important. However, the effect is still limited because the Bulgarian referendum was sometimes presented as a weapon that people could use to defeat the political class and political parties.

Figure 2 displays the effects for each hypothesis at aggregate and referendum levels. We ran Model 1 for each referendum, and the graph depicts the odds ratios for every variable extracted from this model. Although the analysis and interpretation of results was done only at the aggregate level in this article (total in Fig. 2), the effects for individual referendums are still a useful way to indicate the robustness of the findings. Some of the country-level differences may come from different topics subjected to popular vote. Overall, the aggregate effects correspond to what was observed for each referendum. There are some instances in which the effects in specific referendums are different from the general effects, but these remain isolated.



For example, the Moldovan respondents who were dissatisfied with the functioning of democracy were more likely to consider themselves informed about the referendum topic. In that specific case, the referendum was about reducing the number of parliamentarians and the introduction of a recall procedure, which is a form of direct democracy. Given those topics, it is natural that some Moldovan respondents saw the referendum as replacing representative institutions and thus were informed (or at least perceived that they were informed) about it.

Conclusions

This article aimed to explain which factors determine the perception of knowledge about referendum topics among voters. It covered seven referendums in Eastern Europe conducted on different topics between 2015 and 2019. The findings illustrate that the political engagement of citizens and close ties with political parties produce a strong, positive, and statistically significant effect on the perception of knowledge. These results are consistent at a general level and across most of the referendums investigated in the article. The picture is more nuanced in relation to dissatisfied citizens. On the one hand, those survey respondents who are satisfied with the way democracy works are slightly more likely to consider themselves more informed than the rest. This is probably the case because they see referendums as complementing representative democracy. On the other hand, those respondents who are dissatisfied with the way the government functions are more likely to perceive themselves as well-informed about the referendum topic. In this case, people may perceive referendums as replacing representative democracy.

This analysis and its findings have two important implications for the study of referendums and perceived knowledge. At a theoretical level, it proposes an analytical model that can be replicated and applied to other settings outside Eastern Europe. This is the first attempt to systematically study the determinants of perceived knowledge about referendum topics. Since the use of referendums is on the rise and none of the identified variables is context-sensitive, the framework can be applied to future referendums organised elsewhere. At an empirical level, the findings indicate a robust effect of engagement and closeness to political parties on perceived knowledge. This evidence illustrates the existence of a certain voter profile that can be useful for future campaigns. The interested and active citizens will be those who quickly assimilate the information provided in the early stages of campaigns. Since closeness to parties matters, the parties that actively campaign can provide information—and cognitive cues—to their voters, because doing so appears to boost their confidence in the acquired knowledge.

One limitation of the study is the use of a purposive sample, derived from our exclusive focus on referendum voters, and the online features of the survey that could have biased the selection towards those individuals with high internet literacy or users of social media. Future research can address these shortcomings by expanding the analysis to the broader public and including non-voters. This would allow the use of representative samples, and it would be relevant to compare the subjective knowledge about the referendum topic of voters and non-voters. Another avenue for



research could be to unfold the causal mechanisms covered in this article. Our statistical analysis revealed some patterns that require further investigation. One way to achieve this would be through semi-structured interviews in which the respondents can indicate how one or more of the independent variables tested in this article shaped their perceptions and knowledge about the referendum topic.

Appendix

See Tables 2 and 3.

Table 2 The referendums included in the analysis. *Source:* Gherghina and Silagadze (2021a)

Country	Year	Questions	Turnout (%)
Bulgaria	2016	Two-round system for parliamentary elections Compulsory voting Political funding	50.81
Hungary	2016	Migrant quota referendum	44.04
Moldova	2019	Reducing the number of parliamentarians Introducing the right to recall	38.95 38.93
Poland	2015	Introducing single-member constituencies Financing of political parties Tax law interpretation	7.80
Romania	2018	Defining family in constitution (anti-same-sex marriage)	21.10
Romania	2019	Prohibit amnesties and pardons for corruption offences Prohibit the Government from passing emergency ordinances concerning the judiciary	41.03 40.81
Slovakia	2015	Same-sex marriage ban Same-sex adoption ban Sex education or euthanasia education choice	21.41

Table 3 Descriptive statistics of the variables included in the analysis

	Mean	Std. dev.	Min	Max	N
Perceived knowledge	3.41	0.72	1	4	1822
Interest in politics	3.21	0.73	1	4	1819
Political participation	2.80	1.38	0	5	1825
Satisfaction with democracy	1.82	0.76	1	4	1817
Satisfaction with government	1.54	0.72	1	4	1817
Trust in parties	1.76	0.63	1	4	1651
Media use	1.06	0.70	0	2	1825
Education	4.03	0.82	1	5	1641
Left–right placement	6.08	2.51	0	10	1510
Age	35.12	15.89	18	90	1568



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