Appendix to the Paper "Understanding Voter Fatigue: Election Frequency & Electoral Abstention Approval"

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# **Appendix A: Descriptive Statistics**

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	Control	Presid.	Municip.	EP	3 Elec.	Total
Man	%	%	%	%	%	%
0	51.6	52.1	53.5	51.5	52.2	52.2
1	48.4	47.9	46.5	48.5	47.8	47.8
Woman	48.5	48.0	16.6	18.6	48.0	47.0
1	48.5 51.5	48.0 52.0	40.0 53.4	48.0 51.4	48.0 52.0	47.9 52.1
Other Gender						
0	99.9 0.1	99.9 0.1	99.8 0.2	99.9 0.1	99.9 0.1	99.9 0.1
18 to 24 years	0.1	0.1	0.2	0.1	0.1	0.1
0	91.7	90.7	91.9	90.5	91.2	91.2
1	8.3	9.3	8.1	9.5	8.8	8.8
25 to 34 years 0	82.0	82.6	81.9	82.7	83.0	82.5
1	18.0	17.4	18.1	17.3	17.0	17.5
35 to 49 years						
0 1	73.3 26.7	72.2 27.8	72.1 27.9	71.8 28.2	72.4 27.6	72.4 27.6
50 to 64 years	20.1	21.0	21.0	20.2	21.0	21.0
0	72.4	73.2	73.2	72.4	73.4	72.9
1	27.6	26.8	26.8	27.6	26.6	27.1
65 years and more 0	80.6	81.2	81.0	82.5	80.0	81.1
1	19.4	18.8	19.0	17.5	20.0	18.9
Primary or none						
0	91.8 8.2	91.9 8.1	91.1 8.9	90.6 9.4	91.6 8.4	91.4 8.6
Vocational Education	0.2	0.1	0.0	5.4	0.4	0.0
0	64.4	64.8	63.7	64.2	64.2	64.3
1	35.6	35.2	36.3	35.8	35.8	35.7
High School Education	68 7	67.1	68.9	68.4	67.8	68.2
1	31.3	32.9	31.1	31.6	32.2	31.8
University Education						
0 1	75.1 24.9	76.2 23.8	76.3 23.7	76.7 23.3	76.4 23.6	76.2 23.8
Living comfortably						
0	87.8	88.5	87.1	88.4	88.5	88.1
1	12.2	11.5	12.9	11.6	11.5	11.9
Coping 0	54.6	54.3	54.4	55.5	54.0	54.5
1	45.4	45.7	45.6	44.5	46.0	45.5
Finding it difficult						
0 1	67.3 32.7	68.9 31.1	69.9 30.1	$\frac{66.9}{33.1}$	69.4 30.6	68.5 31.5
Finding it very difficult						
0	90.3	88.3	88.6	89.2	88.1	88.9
	9.7	11.7	11.4	10.8	11.9	11.1
Participation (last election) 0	43.5	43.6	41.7	44.1	43.4	43.3
1	56.5	56.4	58.3	55.9	56.6	56.7
Czechia	01.0	70.0	00.1	00.0	00.0	00.0
0 1	81.2 18.8	79.9 20.1	80.1 19.9	80.3 19.7	80.0 20.0	80.3 19.7
France						
0	79.9	79.5	79.9	80.5	80.0	80.0
1 Dolond	20.1	20.5	20.1	19.5	20.0	20.0
0	79.3	80.0	81.0	79.7	79.6	79.9
1	20.7	20.0	19.0	20.3	20.4	20.1
Romania	70.2	80.1	70.2	70.1	70.7	70 F
1	79.3 20.7	80.1 19.9	79.3 20.7	79.1 20.9	19.1 20.3	79.5 20.5
Slovakia						
0	80.1	80.5	79.8	80.5	80.7	80.3
1	19.9	19.5	20.2	19.5	19.3	19.7

Table A1: Descriptive Statistics by Treatment Group

Note: Percentages in columns.

Figure A1: Distribution of the Dependent Variable By Experimental Condition



Note: The dependent variable contains a significant proportion of extreme (0, 10) and mid-point (5) responses. However, this pattern does not vary across the experimental conditions and the robustness checks below demonstrate that this paper's main finding is not sensitive to the removal of these responses from the analysis or the use of an ordered logit regression.

## Appendix B: Balance Test

		10010 1120	Denember 100	•	
	(1)	(2)	(3)	(4)	(5)
	Control vs Any	Control vs Presidential	Control vs Municipal	Control vs European	Control vs Three Elections
Woman	-0.00 (0.01)	-0.00 (0.01)	-0.02 (0.01)	0.00(0.01)	-0.01 (0.01)
Other Gender	-0.00(0.10)	-0.01 (0.20)	-0.10(0.19)	0.11(0.22)	0.01(0.20)
25 to 34 years	0.01(0.02)	0.04(0.03)	-0.01 (0.03)	0.04(0.03)	0.02(0.03)
35 to 49 years	0.00(0.01)	0.02(0.03)	-0.02(0.03)	0.02(0.03)	0.01(0.03)
50 to 64 years	0.01(0.01)	0.04(0.03)	-0.01(0.03)	0.03(0.03)	0.02(0.03)
65 years and more	0.02(0.02)	0.04(0.03)	-0.01(0.03)	0.06(0.03)	0.01(0.03)
Vocational Education	0.01(0.01)	-0.01 (0.03)	0.01(0.03)	0.03(0.03)	0.00(0.03)
High School Education	0.00(0.01)	-0.03 (0.03)	0.02(0.03)	0.03(0.03)	-0.01 (0.03)
University Education	0.01(0.01)	-0.01 (0.03)	0.03(0.03)	0.04(0.03)	0.01(0.03)
Coping	-0.01(0.01)	-0.02 (0.02)	0.01(0.02)	-0.01(0.02)	-0.02 (0.02)
Finding it difficult	0.00(0.01)	-0.00 (0.03)	0.04(0.02)	-0.02(0.02)	0.00(0.02)
Finding it very difficult	-0.03(0.02)	-0.06 (0.03)*	-0.02(0.03)	-0.04(0.03)	-0.06 (0.03)*
France	0.01(0.01)	0.01(0.02)	0.01(0.02)	0.02(0.02)	0.01(0.02)
Poland	0.01(0.01)	0.03(0.02)	0.03(0.02)	0.02(0.02)	0.02(0.02)
Romania	0.01(0.01)	0.02(0.02)	0.01(0.02)	0.02(0.02)	0.02(0.02)
Slovakia	0.01(0.01)	0.03(0.02)	0.01(0.02)	0.02(0.02)	0.02(0.02)
Constant	$0.18(0.02)^{***}$	$0.49(0.04)^{***}$	$0.48(0.04)^{***}$	$0.45(0.04)^{***}$	$0.49(0.04)^{***}$
N	12221	4882	4895	4933	4960
R2	0.001	0.003	0.003	0.002	0.002

#### Table A2: Balance Test

Note: Dichotomous dependent variables (respondents assigned to the control group are coded as 1, the others as 0). Linear probability models. \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.

The analyses demonstrate that the data are balanced in terms of the main sociodemographics. The only statistically significant (but substantively small) difference is the lower number of respondents in the control group who report finding it very difficult to live on their income. Since this variable is negatively associated with the approval of electoral abstention (see Model 6 in Table A3), this slight imbalance makes the overall result of the experiment more conservative. In other words, the control group scores higher on the dependent variable than it would have without the imbalance.

## Appendix C: Robustness Checks

	(1)	(2)	(3)	(4)	(5)	(6)
	Without CZ	Without FR	Without PL	Without RO	Without SK	With Controls
Any Treatment	$0.23(0.08)^{**}$	$0.21(0.08)^*$	$0.22(0.08)^{**}$	$0.17(0.08)^*$	$0.22(0.08)^{**}$	0.20 (0.07)**
Woman						$-0.14(0.06)^*$
Other Gender						-0.58(0.82)
25 to $34$ years						$0.25~(0.12)^*$
35 to $49$ years						0.00(0.11)
50 to $64$ years						$-0.42(0.11)^{***}$
65 years and more						$-0.91(0.12)^{***}$
Vocational Education						$-0.23(0.11)^*$
High School Education						$-0.31(0.11)^{**}$
University Education						$-0.56(0.12)^{***}$
Coping						$-0.41(0.09)^{***}$
Finding it difficult						-0.53 (0.10)***
Finding it very difficult						$-0.24(0.12)^*$
Constant	$4.41 (0.07)^{***}$	$4.45(0.07)^{***}$	$4.68(0.07)^{***}$	$4.48(0.07)^{***}$	$4.41 \ (0.07)^{***}$	$5.51 \ (0.16)^{***}$
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Ν	9813	9772	9767	9715	9817	12221
R2	0.018	0.018	0.001	0.019	0.017	0.039

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(0)

Note: Reference categories are man, 18-24 years, primary or no education, and living comfortably. \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.



Figure A2: ATE of Any Treatment Calculated via Propensity Score Matching

Note: ATE stands for average treatment effect. Propensity score matching (Abadie and Imbens 2006) using gender, age group, education and subjective income. 95% confidence intervals.

	(1)	(2)	(3)
	Without 0, 5, 10	Binary Coding	Ordered Logit
Any Treatment	$0.23(0.09)^{**}$	$0.04 (0.01)^{**}$	$0.12(0.04)^{**}$
Constant	$4.52(0.08)^{***}$	$0.41 \ (0.01)^{***}$	
$\operatorname{cut1}$			$-1.69(0.05)^{***}$
$\mathrm{cut}2$			-1.30 (0.05)***
${ m cut}3$			-0.94 (0.05)***
cut4			-0.61 (0.05)***
${ m cut5}$			-0.33 (0.05)***
${ m cut}6$			$0.65(0.05)^{***}$
$\operatorname{cut7}$			$0.93(0.05)^{***}$
$\mathrm{cut8}$			$1.25(0.05)^{***}$
${ m cut9}$			1.62 (0.05)***
cut10			$1.95(0.05)^{***}$
Country FE	Yes	Yes	Yes
Ν	5833	9335	12221
R2	0.013	0.015	0.004

Table A4: Robustness Checks (Issues Related to the Distribution of the DV)

Note: Model 3 reports McFadden's Pseudo R2. \*<br/>  $p < 0.05, \, ^{\ast\ast}p < 0.01, \, ^{\ast\ast\ast}p < 0.001.$ 

These analyses demonstrate that the effect of the treatment is not influenced by the distribution of the dependent variable (i.e., the relatively high proportion of extreme and mid-point responses). The main results hold when the extreme values (0 and 10) and the mid-point (5) are excluded from the analysis (Model 1); when the dependent variable is recoded into a binary indicator (Model 2); and when the data are analyzed using an ordered logit regression instead of a linear regression (Model 3). For Model 2, the recoding assigns a value of zero to responses below 5 and one to responses above 5, with the mid-point excluded from the analysis.

#### **Appendix D: Testing Heterogenous Effects**

Table A5: Testing Heterogenous Effects (Gender, Age, Education, Abstention in the Last Legislative Election, and Observant Christians)

	(1)	(2)	(3)	(4)	(5)
Any	$0.26(0.10)^*$	$0.23(0.08)^{**}$	$0.17(0.08)^*$	$0.23(0.09)^*$	$0.19(0.08)^*$
Male	0.17(0.13)				
Any X Male	-0.08(0.14)				
University Education		$-0.78(0.16)^{***}$			
Any X University Education		-0.13(0.18)			
65 years and more			$-0.51(0.15)^{***}$		
Any X 65 years and more			0.15(0.17)		
Abstained				$1.37(0.13)^{***}$	
Any X Abstained				-0.05(0.14)	
Observ. Christian					-0.01(0.16)
Any X Observ. Christian					0.09(0.18)
_cons	$4.40(0.09)^{***}$	$4.64(0.07)^{***}$	$4.61(0.07)^{***}$	$3.90(0.09)^{***}$	4.49 (0.07)***
Country FE	Yes	Yes	Yes	Yes	Yes
Ν	12206	12221	12221	12221	12221
R2	0.016	0.027	0.018	0.044	0.016

Note: Model 1 excludes 15 individuals who identified as "Other" on the gender question. The variabale *Obser. Christian* in Model 5 corresponds to individuals who reported Christian faith (Catholic, Protestant, Orthodox, or other) and at least monthly attendance of religious services. \*p < 0.05, \*\*p < 0.01, \*\*\*p < 0.001.

All the interactions are statistically insignificant and, in many cases, also substantively negligible. This suggests that the effect of the treatment is *not* moderated by any of the tested variables and that none of the considered social groups is immune to the negative effect of election frequency. At the same time, the results reveal differences across groups in terms of abstention approval that are independent of the experimental condition. Those with a university education or older than 65 years of age are, in general, less likely to approve of abstention. Conversely, those who abstained in the last legislative election are more indulgent toward the hypothetical abstainer.

#### **Appendix E: Power Analysis**

Before pre-registration, a power analysis was conducted using statistical software for the two-sample t-test to compare the means between the control group and the treated groups (Chow et al. 2017, chapter 3). The expected values on the dependent variable were drawn from the left-right scale in the European Social Survey (Wave 8)<sup>1</sup> for the countries under study.<sup>2</sup> Assuming a mean of 5.2 in the control group, a common standard deviation of 2.4, a treatment effect of 0.2 (4%), and a 95% statistical significance threshold, the required sample size for comparison between the control and one treatment group with 80% power is approximately 2,262 respondents per treatment condition. The pre-registration thus aimed at a minimal sample size of 2,300 respondents by country (11,500 respondents in total).<sup>3</sup> This sample size yields 95% power for the comparison of the control group with the pooled group of all treatment conditions (sample size ratio 1:4).

<sup>1.</sup> A pilot study, which could have informed the power analysis, was not feasible. Therefore, the ESS left-right scale (measured on the same 0–10 range) was used as a reasonable approximation of how the collected dependent variable might be distributed (mean and mode around 5, with similar variance). This assumption proved correct, except for a larger number of extreme values (0 and 10) in the collected data, which are addressed in the robustness checks (see Table A4).

<sup>2.</sup> Czechia, France, Poland, and Slovakia. Romania was not included due to missing data in the ESS wave.

<sup>3.</sup> Given that there are 5 countries and 5 treatment conditions, the sample size for each country and each treatment conditions is approximately the same.

### **Appendix F: Anonymized Preregistration**

#### 1 Project Overview

Liberal democracies have experienced a significant increase in election frequency in recent decades. This is due to processes such as decentralization, European integration, growing popularity of direct democracy, and various idiosyncratic institutional reforms. While these processes expand voters' choice, there is also evidence that they may decrease citizen participation. The existing literature finds that high election frequency is detrimental to electoral participation (Rallings, Thrasher, and Borisyuk 2003; Fauvelle-Aymar and Stegmaier 2008; Schakel and Dandoy 2014; Garmann 2017; Nonnemacher 2021) and this applies even to first-order elections (Kostelka et al. 2023). It is thus not surprising that recent studies have demonstrated that the on-going proliferation of elections contributes to the global decline in voter turnout (Kostelka and Blais 2021).

However, the causal mechanisms remain understudied. Especially, we do not know to what extent the reduction of participation is based on conscious decisions made by citizens that would reflect their conditional perception of the participatory norm. This paper addresses these questions and theorizes how election frequency affects the perception of electoral abstention. I hypothesize that when election frequency increases, voter abstention becomes more socially acceptable. The more elections were held recently, the more citizens consider that it is acceptable to abstain. Furthermore, I hypothesize that this reduction of the participatory imperative does not depend on the type of previous election. Finally, I hypothesize that some citizens are more resistant to the effect of election frequency than others. The empirical hypotheses are tested via an original survey experiment fielded in five countries that all conduct a variety of election types ranging from presidential through European Parliament to municipal elections.

This preregistration first sets out my hypotheses. It then introduces the experimental design.

#### 2 Hypotheses

According to the voting calculus (see Equation 2), the decision to cast a ballot results from a cost-benefit analysis (Downs 1957; Riker and Ordeshook 1968; Blais 2000). Voters participate in election when instrumental benefits B, multiplied by the probability of casting a decisive ballot P, are larger than voting costs C. Given that P is negligible in large electorates, voting is a paradox from a purely instrumental perspective. The existing literature responded to this paradox by adding a non-instrumental term D to the equation, which stands for psychological rewards from voting (Riker and Ordeshook 1968). It mostly reflects the fact that citizens consider that voting is their duty and an ethical obligation vis-à-vis other citizens.

$$Participation = B * P - C + D \tag{1}$$

In empirical research, the feeling that voting is a civic duty has been found as one of the main drivers of voter turnout (Blais 2000; Blais and Rubenson 2013; Blais and Achen 2019; Blais and Daoust 2020). The results of existing studies demonstrate that voters believe there is a participatory norm with which they should comply. In the European Social Survey, most citizens reported that good citizens vote in elections (see the wave from 2002). The existence of such a norm is corroborated, *inter alia*, by the under-reporting of electoral abstention that is observed in most post-election surveys (Morin-Chassé et al. 2017).

While the feeling that voting is a civic duty is fairly stable over time (Feitosa and Galais 2020), its effect does not have to be. When election frequency increases, this may provoke voter fatigue, which corresponds to "a temporary reduction in willingness to act upon one's predispositions and external incentives for voting" (Kostelka et al. 2023). In other words, the participatory norm may be conditional. If being a good citizen becomes too costly (i.e., there are too many participatory demands), the effect of the participatory norm may be temporarily partially de-activated. Citizens still believe that, in normal circumstances, their duty is to participate in elections and they disapprove of electoral abstention. However, when the participatory demands grow and clash with respondents private life's imperatives, electoral abstention may become more socially acceptable.

# Hypothesis 1 (H1): The higher election frequency, the more social acceptable it is to abstain in elections.

An important theoretical and empirical question is whether, concerning voter fatigue, the effect of different types of past elections is interchangeable. The literature has long either explicitly or implicitly suggested that first-order (national legislative and presidential) elections contribute more to voter fatigue than second-order (transnational and sub-national) elections (Norris 2002; Ezrow and Xezonakis 2016; Rallings, Thrasher, and Borisyuk 2003; Fauvelle-Aymar and Stegmaier 2008; Schakel and Dandoy 2014; Garmann 2017; Nonnemacher 2021).<sup>1</sup> However, a systematic examination in the most extensive study of election frequency to date found that the difference in the effects of past first-order and second-order elections on current voter turnout is substantively small and statistically insignificant (Kostelka et al. 2023). Their findings suggest that it is more important for participation whether any election was held recently rather than whether this election was first-order or second-order. I therefore hypothesize that, when it comes to the effect of election frequency on social acceptability of electoral abstention, it does not matter whether the past election was first-order.

# Hypothesis 2 (H2): Election type does not matter for the relationship between election frequency and social acceptability of voter abstention.

Finally, it is reasonable to assume that election frequency exerts heterogeneous effects on citizens. Two types of attitudes are particularly conducive to participation (Blais and Daoust 2020): feeling that voting is a civic duty and interest in politics. These participation-friendly attitudes may constitute a wellspring of participatory goodwill that attenuates voter fatigue. If citizens are strongly attached to the voting norm (i.e., they believe voting is a civic duty), the may resist voter fatigue and be less complacent with abstainers. Similarly, citizens that are strongly interested in politics, are likely to consider the voting act little costly and enjoyable, thus being resistant to voter fatigue.

**Hypothesis 3 (H3):** Those citizens who strongly believe that voting is a civic duty are less likely to accept the excuse of election frequency for electoral abstention.

**Hypothesis 4 (H4):** Those citizens who are strongly interested in politics are less likely they are to accept the excuse of election frequency for electoral abstention.

### 3 Data and Methods

To test the above hypotheses, I will conduct a vignette experiment embedded in a larger public opinion survey. My case selection includes five European countries: Czechia, France, Poland, Romania, Slovakia. All of

<sup>1.</sup> The distinction between first-order and second-order elections was first conceptualized by Reif and Schmitt 1980.

them conduct a large variety of elections<sup>2</sup>, which makes temporal variation in election frequency realistic and meaningful. The survey will be administered via computer assisted online interviews by the survey company Cint, programmed in the survey software Qualtrics, in November 2023. The samples will be based on quotas on sex, age, region, size of municipality, and education. The sample size will be approximately 2,300 respondents by country (11,500 respondents in total). Respondents will receive a small financial compensation roughly equivalent to 2 euros for completing the survey.

In addition to the experiment, the survey *inter alia* includes:

- Basic socio-demographics (gender, age, education, ethnicity, languages spoken at home)
- Basic political positioning and attitudes (left-right self-placement, political interest, voting as a right or duty)
- More specific attitudes (views about strong leaders, pacifism, conspiracy beliefs)
- Political issue preferences (redistribution, economic regulation, homosexuality, immigration, environment, European integration)
- Views on the war in Ukraine and the acceptance of different types of migrants
- Political behavior (vote choice, propensity to vote for parties, nonelectoral participation)
- Additional demographics, asked after the conjoint experiment (income, social class, economic hardship, religious affiliation, frequency of religious attendance)

The experiment randomly divides respondents into five groups. Each is presented with a vignette describing a scenario about a hypothetical citizen named Peter. Peter is a regular voter, but he abstained in a recent legislative election. The vignettes vary in the degree of election frequency that preceded Peter's abstention in the legislative election. It ranges from 0 (control group) to three elections. The vignettes are as follows:

<sup>2.</sup> All of these countries regularly conduct presidential, legislative, regional, municipal, and European parliament elections, and they all have conducted at least one referendum in their post-communist past.

Vignette 1 (control group): "In previous years, Peter regularly voted in elections. This year, one election took place: a legislative election. Peter felt busy at work and abstained in that legislative election."

Vignette 2: "In previous years, Peter regularly voted in elections. This year, two elections took place: a presidential election and a legislative election. After having voted in the presidential election, Peter felt busy at work and abstained in the legislative election."

Vignette 3: "In previous years, Peter regularly voted in elections. This year, two elections took place: a municipal election, and a legislative election. After having voted in the municipal election, Peter felt busy at work and abstained in the legislative election."

Vignette 4: "In previous years, Peter regularly voted in elections. This year, two elections took place: a European Parliament election, and a legislative election. After having voted in the European parliament election, Peter felt busy at work and abstained in the legislative election."

Vignette 5: "In previous years, Peter regularly voted in elections. This year, four elections took place: a presidential election, a European parliament election, a municipal election, and a legislative election. After having voted in the first three elections, Peter felt busy at work and abstained in the legislative election."

After having read their vignette, respondents are asked whether they find Peter's decision to abstain in the legislative election acceptable or not. Their answers are given on a 0-10 scale where 0 means "totally unacceptable" and 10 means "totally acceptable".<sup>3</sup> All respondents are then invited to pass a manipulation check. They have to report how many elections took place in their vignette and in how many elections Peter abstained.

Hypothesis 1 will be tested by comparing the scores of Group 1 to those of Groups 2 to 5. The test of Hypothesis 2 will compare Group 5 to Groups 2 to 4. Respondents' civic duty and political interests are measured through two 0-10 scales.<sup>4</sup> To test Hypotheses 3 and 4, we will conduct an OLS regression, regressing the acceptability score on the vignettes, the two

<sup>3.</sup> The question reads as follows: "Do you find Peters' decision to abstain unacceptable or acceptable? Use a 0 to 10 scale where 0 means totally unacceptable and 10 means totally acceptable."

<sup>4.</sup> These questions read as follows: "Different people feel differently about voting. For some, voting is a DUTY. They feel that they should vote in every election, however they feel about the candidates and parties. For some, voting is a RIGHT. They feel free to vote or not to vote in an election depending on how they feel about the candidates and parties. For you personally, is voting in an election first and foremost a duty or a right? On the scale below, 0 means that 'voting is a duty' and 10 means 'voting is a right'." "How interested are you in politics?" (0=Not at all, 10=Very much)

attitudes, and interactions between the vignettes and attitudes. Although I did not formulate corresponding formal hypotheses, my analysis will also explore the effects of election frequency on different socio-demographic groups defined in terms of gender, education, age, income, degree of political involvement (i.e., involvement in other, non-electoral forms of political participation), and ideology. My analyses will report the effect of leaving out individuals who will have failed the manipulation or survey quality checks.

#### References

- Blais, André. 2000. To vote or not to vote?: the merits and limits of rational choice theory. Pittsburgh: University of Pittsburgh Press.
- Blais, André, and Christopher Achen. 2019. Civic duty and voter turnout. *Political Behavior* 41 (June 1, 2019).
- Blais, André, and Jean-François Daoust. 2020. Motivation to vote. Vancouver: UBC Press.
- Blais, André, and Daniel Rubenson. 2013. The source of turnout decline new values or new contexts? *Comparative Political Studies* 46 (1): 95–117.
- Downs, Anthony. 1957. An economic theory of democracy. Harper.
- Ezrow, Lawrence, and Georgios Xezonakis. 2016. Satisfaction with democracy and voter turnout a temporal perspective. *Party Politics* 22 (1): 3–14.
- Fauvelle-Aymar, Christine, and Mary Stegmaier. 2008. Economic and political effects on european parliamentary electoral turnout in post-communist europe. *Electoral Studies* 27 (4): 661–672.
- Feitosa, Fernando, and Carol Galais. 2020. How stable is the sense of civic duty to vote? a panel study on the individual-level stability of the attitude. *International Journal* of Public Opinion Research 32, no. 2 (June 1, 2020): 344–353.
- Garmann, Sebastian. 2017. Election frequency, choice fatigue, and voter turnout. *European Journal of Political Economy* 47 (March): 19–35.
- Kostelka, Filip, and André Blais. 2021. The generational and institutional sources of the global decline in voter turnout. Publisher: Cambridge University Press, *World Politics* 73 (4): 629–667.
- Kostelka, Filip, Eva Krejcova, Nicolas Sauger, and Alexander Wuttke. 2023. Election frequency and voter turnout. *Comparative Political Studies* 56 (14): 2231–2268.

- Morin-Chassé, Alexandre, Damien Bol, Laura B. Stephenson, and Simon Labbé St-Vincent. 2017. How to survey about electoral turnout? the efficacy of the face-saving response items in 19 different contexts. *Political Science Research and Methods* 5 (5): 575–584.
- Nonnemacher, Jeffrey. 2021. Disengaging elections? political interest, number of elections, and turnout in elections to the european parliament. Publisher: SAGE Publications, *European Union Politics* 22, no. 3 (September 1, 2021): 545–565.
- Norris, Pippa. 2002. *Democratic phoenix: reinventing political activism.* Cambridge: Cambridge University Press.
- Rallings, Colin, Michael Thrasher, and Galina Borisyuk. 2003. Seasonal factors, voter fatigue and the costs of voting. *Electoral Studies* 22, no. 1 (March): 65–79.
- Reif, Karlheinz, and Hermann Schmitt. 1980. Nine second-order national elections a conceptual framework for the analysis of european election results. *European Journal of Political Research* 8 (1): 3–44.
- Riker, William H., and Peter C. Ordeshook. 1968. A theory of the calculus of voting. American Political Science Review 62 (1): 25–42.
- Schakel, Arjan H., and Régis Dandoy. 2014. Electoral Cycles and Turnout in Multilevel Electoral Systems. West European Politics 37, no. 3 (May): 605–623.

#### Appendix G: Additional Discussion of the Research Design

#### Case Selection

One potential concern with the case selection is that four of the five studied countries are located in Central and Eastern Europe (CEE), where voter turnout is particularly low in EP elections. However, this likely makes the experiment conservative compared to an experiment that would include only Western European Countries. If, in the countries under study, there is a strong gap in participation between EP elections and national elections (i.e. national elections are considered much more important), previous participation in EP elections should be less accepted as an excuse for abstention in national elections. Therefore, the effect observed in this experiment may be lower than what might be seen in a sample of exclusively Western European countries, where EP elections are viewed as more important. That said, when it comes to the general relationship between election frequency and turnout, Kostelka et al. (2023) included countries from both CEE and Western Europe and did not find any regionspecific differences. Finally, EP elections are only one of four treatments examined, and all treatments point in the same direction, strengthening the robustness of the present findings.

#### The Treatment's Realism

Respondents are presented with hypothetical scenarios, which are fairly realistic in the studied contexts. All the countries under study frequently hold two or more elections in a short period of time. Two elections in one year (12 months) are more of a rule than an exception. For example, in France, legislative elections are usually preceded by two rounds of presidential elections. In three out of the four CEE countries (Czechia, Slovakia, and Romania), the last legislative election before the experiment was preceded by a regional election held no more than 12 months beforehand.

The least realistic treatment may be the most intense one (Vignette 5), where Peter can participate in four elections in a single year. That said, similarly intense electoral periods are occasionally observed in all the countries under study. For instance, Poles could participate in three separate elections in seven months between October 2023 and June 2024 (a legislative election held jointly with a referendum in October 2023; a local election in April 2024; a European Parliament election in June 2024). In Romania, citizens could participate in five rounds of voting (and up to five

election types) in the 18 months between May 2019 and December 2020 (a European Parliament election and a referendum in May 2019; two rounds of a presidential election in November 2019; a local election in September 2020; and a legislative election in December 2020).

If Vignette 5 were unrealistic, this should attenuate the magnitude of the observed effect. Yet, the results show a significantly stronger regression coefficient for the three-election treatment than for the one-election treatment, suggesting that respondents see Vignette 5 as credible.

#### References

Kostelka, Filip, Eva Krejcova, Nicolas Sauger, and Alexander Wuttke. 2023. Election frequency and voter turnout. *Comparative Political Studies* 56 (14): 2231–2268.