



Electoral context, habit-formation and voter turnout: A new analysis



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ABSTRACT

Drawing on the concept of habitual voting (Plutzer, 2002), Franklin (2004) argues that the effects of electoral context on voter turnout will be largely limited to the cohorts who have experienced few elections in their lifetime. Those with more electoral experience would thus remain unaffected. Testing the above hypothesis is a way of a feasible indirect examination of the concept of habitual voting. Such tests have so far focused primarily on the impact of electoral competitiveness on turnout. I propose a new superior analysis of Franklin's hypothesis that, I claim, approaches the standards of a natural experiment. My test – focusing on the national election cycles as a contextual trait of the European Parliament elections – delivers new evidence supporting this hypothesis.

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1. Introduction

Political scientists had quite early pointed to the impact of habit-formation on voter turnout (Milbrath, 1965; Brody and Sniderman, 1977). Putting it bluntly, voting at any given time might enhance the probability of a person voting at a next occasion. Turnout thus tends to be a persisting and self-reinforcing act. In recent years, numerous explicit tests have corroborated such a hypothesis of persisting and self-reinforcing nature of electoral participation (Kanazawa, 1998, 2000; Green and Shachar, 2000; Gerber et al., 2003; Fowler, 2006; Cutts et al., 2009; Denny and Doyle, 2009; Meredith, 2009; Dinas, in press). At the same time, Plutzer's (2002) seminal study has delivered a comprehensive theoretical framework that facilitates a more profound understanding of the consequences of habit-formation in turnout. According to Plutzer, the propensity to vote (or abstain) is considered to be people's permanent disposition, acquired during the

period of young adulthood. After reaching voting age young adults become exposed to their initial elections in lifetime. In the course of these several critical elections they acquire a preference for either participation or abstention; that disposition will tend to persist later in these citizens' lives. Franklin (2004) takes Plutzer's model a step further by introducing electoral context as a central determinant contributing to the process of habit-formation in young adulthood. He puts forward and tests empirically a proposition that electoral context should have a strong impact solely on young adults whose socialization to the electoral process has just started and whose propensity to vote or abstain has remained relatively unshaped. Those with more experience participating or abstaining in elections should stay relatively immune to contextual influences. The above proposition seems crucial. Not only does it throw new light on the phenomena of habit-formation in electoral behavior but it also fosters a deeper understanding of the effects of context on turnout. Hence, this idea for feasible indirect testing of the concept of habitual voting invites further research efforts.

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The paper proceeds as follows. The next section describes the developments in the area of empirical studies on behavioral self-reinforcement of turnout. The third section sketches the main components of Plutzer's (2002) developmental model of electoral participation. The fourth section refers to Franklin's (2004) work, focusing on electoral context as a set of factors driving the development of habits in electoral behavior. In particular, it refers to electoral competitiveness as central to Franklin's analyses of experience-conditioned effects of electoral context on turnout. It emphasizes potential downsides of competitiveness as a contextual trait relying on which to test the concept of voting as habit and, as a result, points to the need of a superior test. The fifth section refers to the context of the European Parliament elections – and more specifically to their placement within national election cycles – as a possibility for such a test. In particular, it claims that such a test approaches the standards of a natural experiment. The sixth section deals with the model to be estimated, the data to be used and the estimation issues to be resolved. The seventh section presents and discusses the results. The eighth section concludes the paper by emphasizing the questions that remain unanswered.

2. Turnout as habit: toward establishing a (causal) link between past and present participation

The idea that voting may be habit-forming in a strict sense – i.e. that the fact that a person votes at time t_0 increases significantly the probability of that person voting at a next election taking place at time t_1 – was first explicitly tested by Kanazawa (1998, 2000). The proposition that voting and abstention are self-reinforcing acts was a component of Kanazawa's broader stochastic learning model of turnout. That concept drew on Macy's (1991, 1995) behavioral model of cooperation with norms in social exchange. Its central proposition is that a contribution to a successful collective action is subjectively "rewarding" and should thus increase an individual's propensity for further cooperation. If the collective action one contributes to is unsuccessful then, on the contrary, the person experiences "punishment" and will therefore be less likely to cooperate in future. Accordingly, as Kanazawa proposes, voting for a winner should increase one's propensity to vote in future whereas voting for a loser should diminish such a propensity. Abstainers' future behavior will be driven by the same logic: abstention will be "rewarded" if one's favorite candidate wins but "punished" if the candidate loses. Nonetheless, the instrumental logic linking today's electoral result to citizens' future propensity to vote seems to be accompanied by another regularity. As Kanazawa (1998, 2000) emphasizes, those who have contributed to a collective action such as a democratic election will in any case be more likely to contribute at another occasion than those who have failed to contribute. He uses the term "habit" when referring to such a logic of behavioral self-reinforcement. Kanazawa's model can thus be considered to be the first dealing systematically with habit-formation in the domain of electoral behavior.

The habit-forming component of the stochastic learning model of turnout is much worth emphasizing,

especially in the light of the more instrumental aspects of Kanazawa's model. For that model has formed a basis for further theoretical work. In this context, a concept developed by Bendor et al. (2003) has delivered a useful lesson. Without delving deeper into the details of the model assumptions, it must be noted that Bendor et al. have completely abandoned the idea of habitual voting, retaining the more instrumental components of Kanazawa's model. These included the "reinforcement" ("punishment") mechanisms related to voting for winner (loser). The resulting model tends to perform well at the aggregate level. However, as Fowler (2006) rightly points out, it is rather confusing at the individual level. Putting it briefly, according to that concept, the citizens voting for a loser will be "punished" and the probability of their participation in a future election will thus decrease. Those who do not vote but support a loser will also be "punished" but in this case for abstention. As a result, the probability of their future participation will increase. This way, aggregate turnout can be maintained at fairly stable levels but there is also constant fluctuation between the groups of actual voters and non-voters. As Fowler (2006) argues, this contradicts consistent empirical findings accumulated within voting behavior literature. The latter clearly indicates that – whether or not habit-formation is the driving mechanism here – there is nothing more evident than citizens' pervasive engagement in either consistent electoral participation or equally consistent abstention (Milbrath, 1965; Miller and Shanks, 1996). The critique of the model proposed by Bendor et al. leads Fowler to a re-introduction of the habitual voting component to the stochastic learning model of voter turnout. The resulting third stochastic learning model of turnout is, in fact, a more mathematically elaborate version of Kanazawa's (1998, 2000) concepts. As such, it contains all the deficiencies of Kanazawa's model such as lack of a sound theoretical explanation of habitual voting and applicability essentially to only "binary-choice" elections. Nonetheless, the indicative empirical failure of the version proposed by Bendor et al. and the relative success of the models put forward by Kanazawa and Fowler are valuable experiences. They show that too narrowly instrumental concepts might be insufficient if turnout is to be explained comprehensively and that the notion of habit might thus be indispensable. This notion allows us to think of voting from a broader and – as I explain later – also from a more long-term (life-cycle) perspective.

The area of research emphasizing causal links between past and present turnout encompasses also a number of studies that have advanced the reflection on habitual voting methodologically. Kanazawa's (1998, 2000) tests of the habit-formation hypothesis – utilizing data from the United States – relied on simply inclusion of past turnout variable in a regression explaining a respondent's decision of whether or not to vote. Such tests can be considered "naive" as they ignore the problem of unobserved heterogeneity whereby certain factors affecting a person's past and present propensity to vote remain uncontrolled for. An attempt to control for the impact of such unobserved factors was made by Green and Shachar (2000) whose study has firmly corroborated the turnout self-

reinforcement hypothesis in the U.S. context. An even more promising design was implemented by Gerber et al. (2003). The data from their randomized field experiment yielded very strong support for the habit-formation hypothesis; participation in a past election increased the probability of a respondent voting at a later stage by about 50 percent (see Gerber et al., 2003: 547). A similar experimental study (Cutts et al., 2009) has more recently shown very strong habit effects in the United Kingdom. However, a recent Denny and Doyle's (2009) study indicated that the strength of the above effects might still have resulted from spuriousness of the estimates. The latter authors suggest that students of turnout as habit have failed to control for the initial conditions problem (Orme, 2001); voting at a previous unobserved time might affect present electoral behavior. Presence of such an effect would highly complicate the interpretation of any results pointing to the persistence of an individual's propensity to vote over time. Relying on the British National Child Development Study data, Denny and Doyle (2009) estimate the effect of turnout persistence, simultaneously accounting for both the initial conditions problem and fixed-effects unobserved heterogeneity. The results still point to the persistence of turnout but the effect is just about 13 percentage points increase in the probability of voting by the respondents who had cast a ballot in the past. Moreover, a natural experimental study by Meredith (2009) – exploiting the eligibility difference between individuals who turned eighteen just before a past election and those who turned eighteen just after it – yielded an even more modest habit effect: participation in the 2000 U.S. presidential election increased the probability of voting in 2004 by merely 5 percent. Relying on a similar design, however, Dinas (in press) has found a way stronger (17 percentage points) effect of voting in the 1968 U.S. presidential election on the probability of casting a ballot in 1972. It is obviously hard to assess whether all the above discrepancies are indeed a result of research design or they stem from differences in electoral settings. It is nonetheless worth emphasizing that all the studies mentioned here have corroborated the hypothesis of the habitual nature of turnout. This is not to say that the arising controversies as to the exact strength of the effect and the associated methodological nuances of the analysis of behavior self-reinforcement do not deserve to be remembered. Rather, it is to say that the stream of research depicted here can be considered to have delivered rich and convincing evidence for the persistence of electoral participation and abstention over time.

3. The developmental model of voter turnout

The developmental model of turnout, put forward systematically by Plutzer (2002), delivers a theoretical framework for analyses of voting (or abstention) habit as a permanent and persistent characteristic of individuals. It facilitates our understanding of the long-term consequences of the habitual nature of turnout, emphasized by the studies mentioned in the previous section. Plutzer's approach is unique in that it is an attempt to identify the very factors responsible for initial engagement in voting, then trace whether the latter increases the probability of

further participation etc. From this viewpoint, voting habit is something that must be developed over one's life-course. More precisely, habit-formation takes place in a person's young adulthood when citizens experience a few initial elections in their life.

Plutzer clearly derives much from the work done within one of the established schools of research on political participation, namely the resource approach (Brady et al., 1995). According to Plutzer (2002: 42–44), in order to overcome the initial costs of electoral participation (e.g. registration or acquiring at least basic knowledge of political affairs), young adults need to rely on the resources, broadly conceived, available to them either through their families or because of their possession of certain crucial characteristics. For instance, young adults whose parents are themselves voters or strong party supporters may be, all else being equal, more likely to vote when they attain the required age. This is because parental political knowledge or partisanship may provide those young adults with a necessary cognitive framework under which to understand and interpret political affairs. Furthermore, the young adults' own educational attainment may itself be positively correlated with the levels of political knowledge they have. As Plutzer (2002) posits, these and other resources – critical at the initial stage of socialization to voting – will gradually lose their significance; at further stages, voting and abstention will be more or less driven by inertia. Obviously, various crucial events – like marriage, having children or relocating – may later in life disrupt one's voting or abstention habit. For instance, the fact of spatial mobility might weaken voting habit, e.g. because of the necessity of re-registration. On the other hand, getting married and having children in school may, on the contrary, disrupt the habit of abstention. Such life events might increase the relevance of various policy outcomes from the viewpoint of a given citizen and, as a result, enhance somehow the person's propensity to vote. Nonetheless, as Plutzer argues, the habit formed in early adulthood will remain relatively rigid; the period of socialization to elections in early adulthood should thus be considered most critical in citizens' "electoral biographies".

4. Electoral context and habit-formation

Drawing on Plutzer's work, Franklin (2004) takes the developmental model of turnout a step further. First, he proposes that long-term turnout trends will be an effect of generational replacement. If the individual dispositions for either voting or abstention are formed during the citizens' young adulthood, i.e. when they experience the initial elections in their lifetime, then cohort replacement should have an effect on aggregate voter turnout (as long as turnout levels differ between cohorts). Second, cohorts will differ with respect to turnout rates as long as their socialization to voting takes place under differing contextual circumstances. Finally and most importantly, since a relatively stable predisposition to vote (or abstain) is formed in the course of a few initial elections in a citizen's life then electoral context should have a relatively strong impact on turnout

by those who have experienced few elections in their lifetime, but little or no impact on the electorally experienced cohorts.¹ In other words, the effects of electoral context on turnout are not expected to be homogenous. Rather, on the contrary, they should be heterogeneous and conditioned by electoral experience. This way, an emphasis is shifted from individual and family traits – highlighted by Plutzer (2002) – to the contextual characteristics of elections, including their institutional (e.g. electoral system), temporal (e.g. electoral competitiveness) and social context. In particular, Franklin's analyses focus on electoral competitiveness (see for instance Cox and Munger, 1989; Endersby et al., 2002), its experience-conditioned impact on turnout and its role in the formation of the electorally initiating cohorts.

4.1. *Experience-conditioned effects of electoral context on turnout: the (problematic) case of electoral competitiveness*

The hypothesis of experience-conditioned impact of context on turnout has been left almost untested since Franklin's (2004) work (though see Pacheco, 2008, for an examination of the effect of political competition on youth turnout). This seems unfortunate as the notion of electoral context is vital from the viewpoint of the concept of habitual voting. Not only does context seem to be an important determinant in the process of habit-formation (Franklin, 2004), but examining experience-conditioned impact of context on turnout is also the most viable – even if somewhat indirect – way of testing the concept of turnout as habit. For the concept of habitual voting is a highly dynamic theory, emphasizing the development and subsequent persistence of the tendency to participate (or abstain) over time. Given the general dearth and the specific limitations of longitudinal data, evidence of experience-conditioned effects of context on turnout is thus very valuable. At first, such evidence seems to be readily obtainable, especially as it can be obtained from cross-sectional survey data. However, studying experience-conditioned impact of context on turnout is only possible if the examined contextual characteristic meets certain criteria. Most importantly, context must be characterized by considerable variation. Depending on the exact research question and the particular research design, either cross-sectional or temporal variation would be emphasized. The requirement of considerable variation in context, basic as it might seem, is not easily satisfied. Most contextual characteristics of elections are characterized by little variation. Some contextual components, like electoral system or

voting age, do not have any cross-sectional within-country variation. They might change over time but such changes would be extremely rare.

Limited variation in most components of electoral context, the problem pointed to above, causes serious difficulties testing experience-conditioned impact of context on turnout. Franklin's analyses have therefore largely focused on electoral competitiveness. Competitiveness (closeness, marginality) of electoral races might vary both between countries and within a single country. Due to incomparability of electoral systems, studying between-country variation in closeness poses problems, especially if district marginality is considered. In fact, Franklin assumes that the proportional representation (PR) systems are characterized by perfect district-level competition, and so competitiveness varies only as long as majoritarian systems are taken into account. While the latter assumption might have been problematic, the effect of competitiveness on turnout is anyway likely to be absent in PR systems with high district magnitude (see Blais and Lago, 2009). From a more general viewpoint, a situation whereby the definition of one contextual component (competitiveness) depends on another contextual characteristic (electoral system) is highly undesirable. Exploration of between-country variation in competitiveness is thus a seriously limited strategy of testing experience-conditioned effects of context on turnout. Within-country variation in competitiveness can arise both in a single election (most usually between electoral districts) or in a series of elections conducted over a certain period of time. The latter type of variation is an important element in Franklin's analyses. These analyses suggest that the effects of competitiveness on turnout are indeed conditioned by electoral experience, i.e. the impact of competitiveness on turnout diminishes as citizens' electoral experience increases. Such a result, important from the viewpoint of habitual voting theory, is nonetheless still not free from concerns of conceptual and methodological nature. This is where a second, more stringent, criterion of "usefulness" of a given contextual characteristic comes into play. Ideally, competitiveness should not only vary. Its temporal fluctuations should also have the properties of a random treatment rather than it be drifting toward one end of the spectrum of the possible outcomes. Focusing on competitiveness, its levels experienced by citizens throughout their electoral history should not systematically increase or decrease from cohort to cohort. Otherwise, the fact that the effect of competitiveness on turnout is conditioned by electoral experience – i.e. the number of elections a given citizen has already been eligible to vote – might constitute spurious evidence for the concept of voting as habit. For the concept posits that the effect of present context on turnout depends solely on the number of elections a given citizen has already been eligible to vote, and not on past electoral context (past competitiveness in this particular case). If the former (electoral experience) is correlated with the latter (past competitiveness) then the observed declining effects of competitiveness as electoral experience increases might not have resulted from habitual persistence of voting and abstention. Rather, they might have been a by-product of the fact that the systematic between-cohort differences in

¹ It is worth emphasizing at the outset that, from the viewpoint of the habitual voting theory, electoral experience is the number of elections a given citizen has already been eligible to vote. In other words, it is the number of elections that have taken place after the citizen reached voting age, regardless of whether this particular person voted or abstained in these elections. Since both voting and abstention are hypothesized to be self-reinforcing acts (see Gerber et al., 2003), a stable predisposition to either vote or abstain should form in the course of a few initial elections in a person's life. Such a predisposition is then expected to be relatively immune to contextual influences, regardless of whether the given citizen has become a habitual voter or a habitual abstainer.

past competitiveness levels have resulted in these cohorts' different present propensities to react to electoral competitiveness. For instance, given the apparent steady decline of competition in the U.S. House elections (Abramowitz, 1991; Abramowitz et al., 2006), it might be argued that an effect of closeness on turnout in younger cohorts is a result of their increased sensitivity to competitiveness which they have rarely encountered. Older cohorts would, on the contrary, have grown relatively insensitive to closeness as they had experienced much more of it in the past. Obviously, a steady decline of electoral competitiveness is not a universal phenomenon. For instance, in Britain closeness is considered to have the properties of a random treatment (Heath, 2007).² Nonetheless, I believe the arguments advanced in this section – relating to the potentially spurious relationship between electoral experience and competitiveness as well as to the latter's dependence on the electoral system – call for a new analysis of experience-conditioned effects of electoral context on turnout.

5. National election cycle and turnout in the European Parliament elections: toward a new analysis of experience-conditioned impact of electoral context on turnout

In this paper, I argue that the European Parliament (henceforward EP) elections constitute a superior setting within which to test experience-conditioned effects of electoral context on turnout. In particular, I propose that the effect of the timing of an EP election – and more precisely the effect of the placement of an EP election within a country's national parliament election cycle – on turnout will be conditioned by citizens' electoral experience. By emphasizing national election cycles as major contextual determinants of turnout in the EP elections, I build on the second-order election model (Reif and Schmitt, 1980; van der Eijk et al., 1996; Marsh, 1998) as the main, even if not the only (see Studlar et al., 2003; Weber, 2011), conceptual framework explaining turnout in these elections. Shortly after the first EP election was conducted, Reif and Schmitt (1980) put forward the concept of second-order elections, a broad theoretical proposition whose aim was to explain both turnout and voter choice in those elections. The EP elections are considered less salient because “there is less at stake as compared to first-order elections” (Reif, 1985: 8). More precisely, those elections, like the U.S. midterm congressional ones, do not determine “the disposition of executive power” (Franklin, 1999: 208). As a result, the EP elections can be considered second-order national elections as they tend to be hugely affected by the political affairs in “the first-order arena” (Reif, 1985: 8). As such, the (second-order) EP elections are considered overshadowed by the first-order elections, mostly elections to

the respective national parliaments. With respect to turnout, one of the obvious and early emphasized trends is lower turnout in the EP elections (Reif, 1985). The bulk of research on this phenomenon focuses on individuals. This scholarship includes, for instance, arguments stressing positive attitudes toward Europe as a stimulus for casting a ballot (van der Eijk and Oppenheim, 1990; van der Eijk and Schmitt, 1991) or the importance of various mobilization channels (van der Eijk and Schmitt, 2009; Wessels and Franklin, 2009). Overall, as van der Eijk et al. (1996) argue, individual-level research on turnout in the EP elections delivers no additional knowledge or evidence helpful in resolving the old puzzles of voter turnout. Therefore, an argument follows, focusing on the varying context of the EP elections and the consequences of such variation for turnout might yield much more fruitful results.

The concept of second-order elections emphasizes the relationship between the EP elections and the first-order (national) electoral contests. One of the propositions is that, all else being equal, turnout in the EP elections should increase as the amount of time until the next scheduled national parliament election decreases. Marsh and Franklin (1996) hypothesize that the reason for relatively high turnout rates later in the national election cycle might be “spill-over” from the national contest, with people being more politically aware and political elites making more effort “getting out” the vote. Furthermore, as van der Eijk et al. (1996) suggest, the EP elections, when conducted at a later stage of a country's national election cycle, are better suited as a “vehicle” for citizens' commenting on the first-order national political affairs. As such, these elections serve as “barometers” of citizens' preferences concerning domestic political landscapes, arousing interest on part of the media, the political elite and eventually also the electorate. With respect to explanations of turnout, the proposed relationship between European elections and national elections remains entirely hierarchical; the national electoral calendar is conceived of as the key to understanding country-level turnout rates in the European electoral contest.³ Moreover, it is worthwhile to stress here that the proximity between these two types of elections is always considered according to the sequence whereby the EP elections precede national parliament elections and not the other way around. Franklin (2001: 315–316) explains it putting an emphasis on a top-down model of political affairs. If an EP election takes place shortly after a given country's national election then a better “barometer” of the strength of national parties is already in place. Media and political elite would thus show less interest in the low-salience EP elections and therefore fail to mobilize the electorate to turn out and cast a ballot. Empirical evidence supports this claim. Of the EP elections conducted between 1989 and 2004 – the period covered by this study – there are only four cases of EP elections being held within a reasonably short period (one to four months) after respective national

² It is worth mention here that the paper by Heath (2007) indicates that Franklin's (2004) concept might not be well-suited as an explanation of long-term turnout trends in Britain. In particular, the study shows that temporal changes in turnout are fairly uncorrelated with the cohort replacement processes.

³ Despite this emphasis on a hierarchical relationship between national and European elections, it has also been shown that the very introduction of the EP elections to the EU countries' electoral calendars might have depressed turnout in respective national electoral contests (Franklin, 2003; Franklin and Hobolt, 2011).

parliament elections (Finland in 1999, Italy in 1994, the Netherlands in 1994 and Spain in 2004). All these cases are characterized by very low turnout rates.⁴ In this study, I thus follow previous research on turnout in the EP elections and consider the amount of time until a country's next national election as a critical contextual variable to be studied. I build on the aggregate-level studies on the determinants of turnout in the EP elections, in particular the study by Franklin (2001). That study delivers evidence supporting the claim that turnout in the EP elections indeed increases as the time gap between a given EP election and a country's impending national parliament election decreases. I test this hypothesis at the individual level, claiming that the impact of the mentioned time gap on turnout should be conditioned by citizens' electoral experience.

5.1. European elections as a natural experiment

I argue here that my analysis delivers new superior evidence supporting the hypothesis of experience-conditioned impact of electoral context on turnout and thereby the concept of voting as habit. In particular, the test conducted in this paper is superior to the tests of experience-conditioned effects of electoral competitiveness on turnout (see Franklin, 2004) in at least two respects. First, the placement of an EP election in a country's electoral calendar (henceforward *CYCLE*) has a universal definition, common for all electoral systems. Unlike in the case of competitiveness, between-country variation can thus be studied with no limitations. Moreover, the risk of confounding one contextual component (competitiveness) with another (electoral system), pointed to in the previous section, is not present here.

More important, however, is another trait of the *CYCLE* variable. I argue that the properties of this variable justify speaking of the test of experience-conditioned impact of *CYCLE* on turnout as of closely approaching the standards of a natural experiment (Angrist and Evans, 1998; Dinas, in press; Meredith, 2009; Sargent et al., 2004). A natural experimental situation takes place if a treatment, even though not assigned randomly by an experimenter, can be considered unsystematic from the viewpoint of the variables that are potential confounders in an observational study. In the light of the criticism of the tests of experience-conditioned effects of competitiveness on turnout, advanced earlier in this paper, the *CYCLE* variable seems to satisfy the above definition of a natural experiment. This is because the dates of the EP elections are fixed for the whole EU and the term of any given EP is set to five years. At the same time, the length of terms of national parliaments in most EU countries is different than the length of the EP term. This – in addition to between-country differences in national election cycles and premature dissolutions of national parliaments – leads to constant fluctuation of the *CYCLE* variable. As the variation in *CYCLE* is a result of mostly the mathematical properties of electoral cycles (i.e. both national and the EP election cycles), I argue that the *CYCLE* variable is perfectly

sued as an object of tests of experience-conditioned impact of context on turnout. For, unlike competitiveness, it is not prone to any clear temporal trends. There are strong empirical reasons to claim so. For the EP elections conducted between 1979 and 2004, the Pearson correlation coefficient between *CYCLE* and election year is very low (about 0.07) and statistically insignificant ($p = 0.52$). Although an analogous correlation coefficient between a logarithmic transformation of *CYCLE* – as modeled later on in this paper – and election year is somewhat higher (about 0.12) it is still insignificant ($p = 0.27$). There is thus no evidence for a systematic increase or decrease in *CYCLE* over time. Therefore, experience-conditioned effects of *CYCLE* on turnout cannot arise as a result of systematic between-cohort differences in *CYCLE* experienced in the past as such differences appear to be unsystematic.

Although *CYCLE* does not seem to vary systematically over time, one can still claim it could be correlated with some crucial contextual factors affecting turnout in the EP elections. In particular, ruling parties or coalitions might call earlier elections and thereby try to maximize their outcomes in the national electoral contests. This obviously affects *CYCLE* and turnout in national elections but might influence turnout in the European contest as well. Unfortunately, it might also lead to a much unwanted association between *CYCLE* and the context of a respective upcoming national election. One could thus claim that turnout in the EP elections responds to the expected context of a next national election rather than to *CYCLE* itself. A correlation arising between *CYCLE* and the performance of the current largest (national) party in the impending national election would be an indicator of this sort of troublesome regularity. However, nothing like this seems to be the case as long as the EP elections held between 1979 and 2004 are considered. Collapsing *CYCLE* into four categories – applying two distinct modes of collapsing – I have examined if *CYCLE* is associated with the likelihood of the largest national party retaining its status after the next national election (see Table 1). Again, there is no evidence for an association here. It thus seems that not only is *CYCLE* stable over time, but it is also uncorrelated with a critical characteristic of the national elections preceded by respective EP elections. At the same time, low baseline turnout rates in the EP elections leave much room for a potential effect of *CYCLE* on turnout. It is against all this background that my study can be considered to approach the standards of a natural experiment.

6. National election cycle, electoral experience and turnout in the European Parliament elections: the model, the data and the estimation issues

In this study, I test experience-conditioned effects of national election cycle on turnout in the EP elections. I estimate the following model:

$$\Pr(VOTE = 1) \sim \beta_0 + \beta_1 \ln(CYCLE + 1) + \beta_2 \ln(EXPERIENCE + 1) + \beta_3 [\ln(CYCLE + 1) \times \ln(EXPERIENCE + 1)] + \beta_4 CONTROLS + \varepsilon \quad (1)$$

⁴ Aggregate turnout rates in the elections covered by the current study are reported in the Appendix Table A1.

Table 1
CYCLE and the likelihood of the largest national party retaining its status.

	Largest party retains its status	Largest party does not retain its status
CYCLE (0–6 months)	14	5
CYCLE (6–18 months)	11	3
CYCLE (18–36 months)	27	17
CYCLE (>36 months)	10	1
Overall	62	26
Fisher's exact test (<i>p</i> -value)	0.24	
CYCLE (0–3 months)	8	4
CYCLE (3–9 months)	9	1
CYCLE (9–18 months)	8	3
CYCLE (>18 months)	37	18
Overall	62	26
Fisher's exact test (<i>p</i> -value)	0.56	

Note: The numbers refer to the events where a largest national parliament party retains (does not retain) its status after a national election that follows a respective EP election. The EP elections held between 1979 and 2004 are considered.

where:

VOTE – turnout variable, taking the value of 1 if a respondent voted and the value of zero if the respondent did not vote⁵;

CYCLE – the number of months (to two significant digits) between the EP election and the given country's impending national parliament election⁶;

EXPERIENCE – the number of national parliament elections a respondent has already been eligible to vote in (after reaching voting age)⁷;

CONTROLS – control variables included in the model (see next paragraph for details);

ϵ – error term.

⁵ I am forced to use self-reported turnout data as validated data on turnout in the EP elections are unfortunately unavailable. However, I do not expect turnout over-reporting to drastically bias the results concerning the determinants of turnout in the EP elections. Saliency of these elections is considered to be very low. At the same time, non-voters' propensity to over-report their turnout has been found to decrease in line with electoral saliency (Karp and Brockington, 2005). Consequently, it has also been shown that the bias resulting from over-reporting of turnout in low-saliency elections, including the EP elections (Górecki, 2011b) and the U.S. midterm congressional elections (Górecki, 2011a), is negligible.

⁶ Even though aggregate-level studies (Marsh and Franklin, 1996; Franklin, 2001) model turnout in the EP elections using an untransformed *CYCLE* variable, it is reasonable to expect that, for instance, a change in *CYCLE* from 1 to 6 months will bring a greater change in turnout than a change in *CYCLE* from 11 to 16 months. Given the characteristics of the logarithmic function and the fact that *CYCLE* might take the value of zero in some cases, a unit is added to *CYCLE* before taking its logarithm.

⁷ For theoretical reasons, *EXPERIENCE* enters the equation after a logarithmic transformation. That is because the concept of habitual voting posits that a habit of voting or abstention forms after a few initial elections in a citizen's lifetime instead of developing linearly throughout an entire lifespan. In addition, as most European countries had a significant disruption concerning the democratic process, due to the World War II, I only count post-war elections here. Counting electoral experience, I relied on respondents' age and the data on elections taken from the almanac by Mackie and Rose (1991), and from the following websites: <http://www.parties-and-elections.de/>; <http://cdp.binghamton.edu/era/index.html>. Whenever there is doubt as to a respondent's eligibility to participate in an election (i.e. when a respondent attains voting age during an election year), I rely on an expected value of *EXPERIENCE*, given some simplifying assumptions.

On the basis of the above model, I test the following hypothesis:

The effect of logged *CYCLE* on the probability of a respondent voting will be negative ($\beta_1 < 0$), with a positive interaction effect between the latter variable and logged *EXPERIENCE* ($\beta_3 > 0$).

6.1. Control variables

Although *CYCLE* can be considered to have the desirable properties of a random treatment, the other crucial component of the model – *EXPERIENCE* – might still be correlated with certain predictors of turnout. Therefore, I include a number of control variables in my model. The possibilities for including controls are seriously limited as the data set I am using – the European Election Studies Trend File (1989–2004) – is to a great extent a compilation of mutually uncoordinated country-specific studies. Nonetheless, a few fundamental individual-level variables can be controlled for. Most importantly, I control for respondents' support for their country memberships in the EU, a variable that has been shown to affect turnout in the EP elections (van der Eijk and Oppenhuis, 1990; van der Eijk and Schmitt, 1991). Two other crucial factors – expected to be strong predictors of turnout in general – are partisanship (see e.g. Abramson and Aldrich, 1982) and education (see e.g. Brady et al., 1995). The above two variables thus need to be controlled for, especially as they are also very likely to undergo changes from generation to generation and thereby be strongly correlated with *EXPERIENCE*. In addition, I control for trade union membership, self-perceived social class and gender.

Apart from the above-mentioned individual-level variables, I include two aggregate-level ones. The first of them is an entirely obvious choice. The variable distinguishes between countries that do have compulsory voting arrangements in place and those that do not have them. This variable accompanies *CYCLE* in Franklin's (2001) aggregate-level model of turnout in the EP elections. The last variable present in Franklin's model distinguishes between the first EP election held in a given country and further ones. Inclusion of this variable follows an observation that a given country's first EP election usually attracts higher turnout than the country's later EP elections. Although this seems to be a sensible observation, I do not control for this process in my model. The reason is that I include election-year dummies (see next paragraph for a broader discussion). I thus estimate within-election-year effects only and thereby I automatically rule the above purely longitudinal (within-country) regularity out of my model. However, looking at the aggregate-level data on turnout in the EP elections, another regularity is apparent. When considered from a cross-sectional viewpoint, it is evident that turnout levels tend to be higher in the countries that had long been members of the European Community and thus held more EP elections in the past than did the less "mature" EU member states. I thus include – as another aggregate-level control – a country's deviation from the EU-wide average number of the EP elections held before a particular EP election.

6.2. Data and estimation issues

I use the European Election Studies (EES) Trend File (1989–2004) data.⁸ After excluding the elections for which no data are available, sixty surveys (the EP election year combined with country) are available for analysis (see Appendix Table A1 for details). Obviously, *CYCLE* will vary only between those sixty surveys, and no within-survey variation will be observed. Unfortunately, not only do the EES data have little continuity as regards many variables potentially correlated with turnout but they also suffer from a considerable degree of “missingness” as to the variables that are available in the surveys. Therefore, I have decided to impute missing data (only for the independent variables) using AMELIA software (King et al., 2001; Honaker et al., 2010). To do so, I have retained all the observations for which turnout data were available (i.e. non-missing) and multiply imputed the missing values of the independent variables. I have obtained five multiply imputed data sets. The results presented in the next section are based on a combined analysis utilizing all these five data sets. I have conducted this analysis using CLARIFY software (King et al., 2000; Tomz et al., 2001). I also used this software to simulate the changes (first-differences) in the expected probabilities of a respondent voting. I must emphasize here the fact that alternative analyses (not reported here), conducted separately on all of the five imputed data sets, did not yield results that would substantially deviate from the combined results presented in the next section.

Before proceeding to the analysis, a note on estimation is necessary. The dataset used here is rather complex. The data are clustered in, at least, three ways. First and foremost, turnout levels in every EU country will follow a common pattern, certainly in great part due to unobserved factors. Second, there may be a time effect whereby EU-wide turnout in a given EP election will have some common component, regardless of a country. Finally, a combination of the two above-mentioned dimensions – i.e. country combined with election year – constitutes a unique level at which observations might be clustered. One technique with which to approach such a complex dataset would be to estimate a model with three random effects. These random effects would have to be mutually independently distributed. Instead of making this strong and untestable assumption, I propose another solution. I estimate an ordinary logistic regression model, explicitly addressing the problem of clustering (unobserved heterogeneity) at all of the above-mentioned levels. First, in order to account for country-level heterogeneity, I include voter turnout (in percent) in the given country’s most recent national parliament election. Second, I include a set of dummy variables referring to election

year, accounting for the election-year effect. This way, I estimate a kind of fixed-effects model whereby the effects I obtain are average within-election-year effects. Finally, to account for the combined effect of country and election year I cluster standard errors at this level. There are sixty one⁹ such clusters, a number high enough to rely on cluster-robust standard errors (Wooldridge, 2003). This way, I believe, all the ways of potential clustering are accounted for.

7. Results and discussion

Logistic regression estimates of the model proposed in the previous section are presented in Table 2. The estimates on the left refer to a basic model from which control variables – apart from those that account for clustering (i.e. election-year dummies and lagged turnout) – are excluded. The model on the right contains all the controls described in the previous section. For both models, the negative and statistically significant ($p < 0.01$) coefficients for *CYCLE* are accompanied by positive and significant ($p < 0.05$) interaction effects with *EXPERIENCE*. At first look, the results thus support the hypothesis of experience-conditioned effects of context turnout. However, as the logit model is non-linear, unstandardized coefficients might be very misleading (Ai and Norton, 2003). Therefore, in Table 3 I present the effects of *CYCLE* change – from its median to minimum value – on turnout, assuming different levels of *EXPERIENCE* and holding other variables constant at their medians.¹⁰ Having calculated those, I also take into account the “ceiling effect” that stems from the fact that respondents with different levels of *EXPERIENCE* are characterized by varying propensities to vote (see the second column in Table 3), a problem unnoticed by Plutzer (2002) and Franklin (2004). As respondents’ baseline propensity to vote increases with *EXPERIENCE*, at least part of the decrease in the effect of *CYCLE* might be due to experienced respondents’ higher baseline propensity to vote rather than due to a mediating effect of *EXPERIENCE*.¹¹ To separate these two effects, I calculate the proportional change (in percent) in the number of non-voters as *CYCLE* changes from its median to minimum value, given a respondent’s baseline propensity to vote at a particular level of *EXPERIENCE*. When calculating baseline propensities to vote at different levels of *EXPERIENCE* I hold all other variables, including logged *CYCLE*, at their medians.

The results are suggestive. For those respondents who have not experienced any national parliament elections in their life, a change in *CYCLE* from its median (22.3 months) to minimum value (zero, i.e. an EP and a national election

⁸ See http://www.tcd.ie/Political_Science/staff/michael_marshall/ees_trend_file.php. An additional election study was conducted following the 2009 EP election but it has not yet been incorporated in a trend file.

⁹ The 61st cluster is a result of treating the eastern and the western part of Germany as two separate clusters in the 1994 EP election.

¹⁰ All the results presented in Table 3 are based on the full model, including all control variables.

¹¹ To some extent, the problem resembles ceiling effects in medical research, defined as “the phenomenon in which a drug reaches its maximum effect, so that increasing the drug dosage does not increase its effectiveness” (Baker, 2004: 40).

Table 2

Predictors of voter turnout in the European Parliament elections (1989–2004): logistic regression estimates.

	Controls excluded	Controls included
Ln(CYCLE + 1)	–0.35** (0.11)	–0.42** (0.11)
Ln(EXPERIENCE + 1)	0.21 (0.17)	0.25 (0.19)
Ln(CYCLE + 1) × Ln(EXPERIENCE + 1)	0.10* (0.05)	0.10* (0.06)
EU membership – good thing	–	0.46** (0.04)
EU membership – bad thing	–	–0.23** (0.08)
Very of fairly close to a party	–	0.57** (0.06)
Still in full-time education or finished education later than the age of 18	–	0.23** (0.06)
Trade union membership	–	0.04 (0.07)
Middle class (self-perceived)	–	0.12 (0.10)
Working class (self-perceived)	–	–0.14 (0.11)
Female	–	–0.10** (0.03)
Compulsory voting	–	1.15** (0.19)
EP elections held in country to date – deviation from the EU average	–	0.12** (0.04)
Turnout in the latest national parliament election (in %)	0.04** (0.01)	0.03** (0.01)
1994 EP election	0.00 (0.26)	0.32 (0.22)
1999 EP election	–0.19 (0.28)	–0.01 (0.24)
2004 EP election	0.04 (0.27)	–0.04 (0.22)
Constant	–2.41** (0.86)	–1.73* (0.85)
Log likelihood (average)	–37,703.34	–35,473.01
McFadden R^2 (average)	0.06	0.10
N	58,953	58,953

* $p < 0.05$; ** $p < 0.01$ (one-tailed tests).

Note: Main entries are unstandardized regression coefficients and the numbers in parentheses are standard errors. Errors are clustered at the level of election year combined with a country (61 clusters). Estimation was performed via multiple imputation (5 imputed data sets were used). Model fit characteristics were averaged across all the imputed data sets.

conducted on the same day¹²) results in a decline in the probability of a respondent voting by 29.8 percent. The 95 percent confidence interval for the least experienced group does not overlap with the corresponding interval for those who have experienced nine national parliament elections. In addition, for all the respondents who have experienced nine or more national parliament elections the 95 percent confidence intervals encompass zero. In other words, the effect of CYCLE on turnout in the EP elections is statistically insignificant if EXPERIENCE exceeds eight elections. The results are somewhat less certain when the proportional changes in the numbers of non-voters are looked at (see the third column in Table 3 and, for a graphical presentation, Fig. 1). On the one hand, a change in CYCLE from its median

to minimum value results in a 54.3 percent decrease in the number of non-voters among the least experienced respondents, an effect that drops below 20 percent for the most experienced groups. On the other hand, all the 95 percent confidence intervals overlap. Partly this is a consequence of my conservative approach to uncertainty. Nonetheless, my results clearly indicate that the heterogeneous impact of context on turnout stems from at least two sources. The first of them – as in Franklin's hypothesis – is the inexperienced citizens' greater "sensitivity" to context. The other separate reason is varying baseline propensities to vote across groups characterized by different levels of EXPERIENCE. Although Franklin (2004) might have overlooked the latter factor, I still believe his hypothesis is suggestively supported by my analysis. For even the analysis of the figures concerning the proportional change in the numbers of non-voters clearly distinguishes between two groups of respondents: those for whom the effect of CYCLE is statistically significant and those for whom it is insignificant. The former group encompasses approximately 70 percent of respondents. Although the proportion seems large – especially in the light of Franklin's (2004) assertion that context should strongly affect turnout in at most three initial elections in a person's life – it should rather come as a no surprise. Citizens' baseline propensities to vote in the low-salience EP elections are much lower than in the case of the national elections. Thus, every EP election sees many citizens who vote regularly in the national elections but tend to abstain when the EP elections are held. Perhaps presence of this part of the electorate – "sensitive" to electoral competition as such but withdrawing temporally because of low electoral salience –

¹² One might obviously argue that the EP elections conducted on the same day as national elections are fundamentally different from other EP elections and therefore they should be excluded from the analysis. However, a separate analysis excluding such elections has yielded the following results with respect to the coefficients (standard errors in parentheses) for logged CYCLE, logged EXPERIENCE and their interaction: $-0.42 (0.11) \times \text{Ln}(\text{CYCLE} + 1) + 0.26 (0.20) \times \text{Ln}(\text{EXPERIENCE} + 1) + 0.10 (0.06) \times \text{Ln}(\text{CYCLE} + 1) \times \text{Ln}(\text{EXPERIENCE} + 1)$. These results are roughly identical to those presented in Table 2. In addition, another robustness check utilized the following dichotomization of CYCLE: the variable took the value of 1 when CYCLE was 5 months or less and the value of 0 when CYCLE was greater than 5 months. The analysis yielded results strongly supporting Franklin's hypothesis, the coefficient for the respective interaction between dichotomized CYCLE and logged EXPERIENCE achieving a greater level of statistical significance ($p < 0.01$) than did the corresponding coefficient presented in Table 2. The following results were obtained with respect to the three main coefficients: $0.71 (0.26) \times \text{CYCLE} (5 \text{ MONTHS OR LESS}) + 0.58 (0.05) \times \text{Ln}(\text{EXPERIENCE} + 1) - 0.26 (0.10) \times \text{CYCLE} (5 \text{ MONTHS OR LESS}) \times \text{Ln}(\text{EXPERIENCE} + 1)$.

Table 3

Experience-conditioned effects of the temporal gap between a European Parliament election and the impending national parliament election (*CYCLE*) on turnout by a median respondent (1989–2004 European Parliament elections).

<i>EXPERIENCE</i>	% change in the probability of voting – <i>CYCLE</i> change from 22.3 months (median) to 0	Baseline probability of voting (in %) – <i>CYCLE</i> held at median level (22.3 months)	% change in the number of non-voters – <i>CYCLE</i> change from 22.3 months (median) to 0
0	29.8 [15.9; 41.8]	45.1 [33.5; 57.3]	–54.3 [–76.1; –29.0]
1	23.2 [13.1; 32.3]	54.9 [43.8; 65.7]	–51.4 [–71.6; –29.0]
2	19.3 [10.6; 27.1]	60.6 [50.1; 70.4]	–49.0 [–68.8; –26.9]
3	16.5 [8.4; 24.0]	64.4 [54.5; 73.5]	–46.3 [–67.4; –23.6]
4	14.5 [6.6; 21.6]	67.3 [57.7; 75.6]	–44.3 [–66.1; –20.2]
5	12.8 [5.0; 19.8]	69.6 [60.5; 77.4]	–42.1 [–65.1; –16.4]
6	11.5 [3.4; 18.5]	71.4 [62.7; 78.8]	–40.2 [–64.7; –11.9]
7	10.4 [2.2; 17.3]	72.9 [64.6; 79.9]	–38.4 [–63.8; –8.1]
8	9.4 [1.2; 16.3]	74.3 [66.2; 80.9]	–36.6 [–63.4; –4.7]
9	8.6 [0.0; 15.6]	75.4 [67.6; 81.7]	–35.0 [–63.4; 0.0]
10	7.9 [–1.0; 15.0]	76.4 [68.9; 82.5]	–33.5 [–63.6; 4.2]
11	7.2 [–2.0; 14.3]	77.3 [70.0; 83.2]	–31.7 [–63.0; 8.8]
12	6.7 [–3.0; 13.8]	78.1 [71.0; 83.8]	–30.6 [–63.0; 13.7]
13	6.1 [–3.8; 13.3]	78.8 [71.9; 84.4]	–28.8 [–62.7; 17.9]
14	5.7 [–4.6; 12.9]	79.5 [72.7; 84.9]	–27.8 [–62.9; 22.4]
15	5.2 [–5.3; 12.5]	80.1 [73.5; 85.3]	–26.1 [–62.8; 26.6]
16	4.8 [–5.9; 12.2]	80.6 [74.2; 85.7]	–24.7 [–62.9; 30.4]
17	4.5 [–6.5; 11.8]	81.1 [75.0; 86.1]	–23.8 [–62.4; 34.4]
18	4.1 [–6.9; 11.6]	81.6 [75.6; 86.4]	–22.3 [–63.0; 37.5]
19	3.8 [–7.4; 11.3]	82.0 [76.2; 86.8]	–21.1 [–62.8; 41.1]
20	3.5 [–8.0; 11.0]	82.5 [76.7; 87.1]	–20.0 [–62.9; 45.7]
21	3.3 [–8.6; 10.8]	82.8 [77.2; 87.4]	–19.2 [–62.8; 50.0]
22	3.0 [–9.1; 10.5]	83.2 [77.6; 87.6]	–17.9 [–62.5; 54.2]
23	2.8 [–9.6; 10.3]	83.5 [78.1; 87.9]	–17.0 [–62.4; 58.2]

Note: The numbers in brackets are 95% confidence intervals. Control variables are held constant at their median values.

makes much room for the impact of contextual factors on turnout. Overall, I believe that conclusions from my analyses should be twofold. First, Franklin's hypothesis might require a bit more nuanced approach than originally proposed. In particular, the baseline propensities to vote and salience of a particular type of election should be taken into account while interpreting results of the tests of this hypothesis. At the same time, my analysis indicates that, in principle, the hypothesis – and thereby also the developmental model of turnout as a whole – is a sensible proposition worth studying in future.

The above analysis can be considered to be an individual-level extension of Franklin's (2001) aggregate-

level study on turnout in the EP elections. In that study, Franklin found an only moderate, albeit highly statistically significant, effect of *CYCLE* on turnout. My analysis uncovers notable individual-level heterogeneity hidden behind Franklin's aggregate-level results. In particular, my results suggest that the impact of *CYCLE* on turnout by those respondents whose electoral history has been short might actually be very strong. I thus believe I offer a deeper look at the issues relating to the second-order election model, in addition to a superior test of the concept of voting as habit, emphasized throughout this paper.

Overall, the results of my analyses reinforce Franklin's findings of experience-conditioned impact of electoral competitiveness on turnout. Nonetheless, the properties of this test make this evidence especially important in the assessment of Franklin's hypothesis. For the placement of an EP election in a country's electoral calendar (*CYCLE*) undergoes rapid changes, dependent on the short-term mathematics of electoral cycles rather than on any long-term or inter-generational political trends. As a result, the between-cohort differences in *CYCLE* – experienced by citizens throughout their electoral history – cannot be systematic. My analysis thus approaches the standards of a natural experiment. It does not solve all puzzles posed by the concept of habitual voting (more on them in the Conclusion). I nonetheless believe it does deliver new superior evidence pointing to the relevance of the hypothesis of experience-conditioned impact of context on voter turnout and thereby supporting the concept of voting as habit.

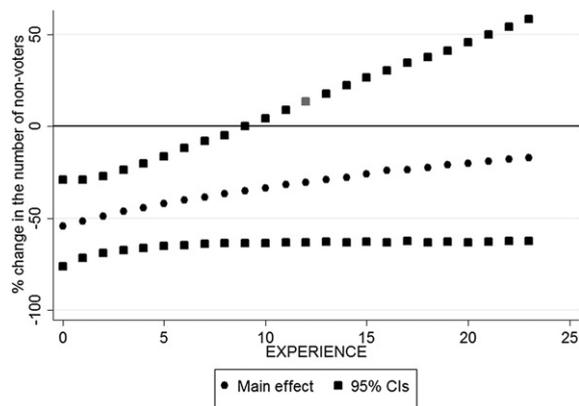


Fig. 1. *EXPERIENCE* and proportional change (in %) in the number of non-voters – *CYCLE* change from 22.3 months (median) to 0.

8. Conclusion

Franklin's proposition of experience-conditioned impact of electoral context on voter turnout is an immediate logical consequence of thinking of voting and abstention in terms of habit. Testing this hypothesis is the most viable – and often the only possible – way of delivering evidence supporting the concept of habitual voting. Tests of this proposition have so far focused primarily on electoral competitiveness. In this paper, I have argued that a test focusing on the context of the European Parliament elections – and more precisely the placement of these elections within a country's national parliament election cycle – would be a superior way of examining experience-conditioned impact of context on turnout. As temporal fluctuations in *CYCLE* tend to be unsystematic, such a test is nearly like a natural experiment. Studying individual level-turnout in four EP elections conducted between 1989 and 2004, I have delivered suggestive evidence supporting Franklin's hypothesis. I believe this greatly strengthens the empirical material on the basis of which to assess this proposition.

That said, there still are cavities in the empirical evidence related to Franklin's hypothesis. In particular, a question remains as to whether the impact of context on turnout is indeed conditioned by electoral experience or by age.¹³ Franklin has effectively left this question beyond the realm of his investigation, relying on a theoretically plausible explanation focused on experience. No wonder, his study examined solely established democracies, i.e. polities where age and electoral experience are nearly perfectly correlated. On the other hand, even for post-communist countries the correlation between age and *EXPERIENCE* equals approximately 0.65 in the 2004 EES survey (comparing to 0.93 for other EU countries). The coefficient will obviously increase as more time passes since the breakdown of communism. A more discouraging obstacle, however, is little remaining variation in *CYCLE* if one decided to limit the analyses to new democracies. Initial democratic (national) elections held in the post-communist countries in early the 1990s – i.e. straight after the breakdown of communism – should thus deliver a much more appropriate setting here. As the beginning of the transition period saw citizens of all ages having no experience of electoral democracy and gradually gaining such experience during the 1990s, the dilemma as to what really mediates the impact of context on turnout can possibly be solved effectively in the course of research on these initial elections. Evidence from post-communist countries is therefore much worth searching for in future.

Finally, not only empirical evidence but also theoretical reflection is still needed to explicate more convincingly the actual causes of habit-formation in

electoral participation. It is so especially in the light of a recent study by Aldrich et al. (2011) that aims to provide a new framework within which to understand turnout as habit. It contains the proposition that habit can only emerge as a result of an interaction of repeated participation with a continued experience of a similar performance setting (operationalized as a stable place of residence). The stability of a setting is a novel component, inexistent in previous concepts of habitual voting, from Kanazawa to Franklin. The study by Aldrich et al. thus proposes an effectively new theory of habitual voting. On the one hand, this theory follows more closely the well-developed psychological theory of habits as “automaticity” (Moors and De Houwer, 2006), which seems (at first) valuable. On the other, the concept relies on a sharply drawn analogy between everyday activities, e.g. clicking on a seat belt in a car (Aldrich et al., 2011: 536), and rare events such as elections. The extent of this analogy – and thereby the applicability of the notion of “automaticity” to turnout – is certainly something to worry about. After all, what if in the previous concepts, from Kanazawa to Franklin, the term “habit” was just a misnomer for an otherwise sensible developmental concept of turnout? For, contrary to what Aldrich et al. claim, the mere repetition might be just enough to trigger behavioral self-reinforcement. The already classic concept of self-perception (Bem, 1967, 1972) might be helpful here: initial behavior, especially in the absence of strong attitudes, might itself become a “hint” as to a person's own view on a given issue. Consequently, participation in an election might simply strengthen a person's self-image as a “good citizen” who contributes to a collective good such as electoral democracy (Gerber et al., 2003: 548). Stability of a performance setting is not a necessary component of the above plausible explanation.¹⁴ Aldrich et al. (2011) have shifted the attention from the critical initial elections – emphasized by Franklin (2004) – to the distinction between those who have and those who have not experienced stable residential settings. Staying within the conceptual domain created by Franklin's work, my study has delivered new evidence supporting (albeit indirectly) the idea of habit-formation in the critical initial elections in a person's life. Future studies should confront this concept with Aldrich et al.'s proposition and establish precisely the applicability of both these frameworks to turnout-related phenomena.

Acknowledgments

I thank Mark Franklin, Michael Marsh, and two anonymous reviewers, for their comments on earlier drafts of this article.

¹³ While the question as to what mediates the impact of context on turnout is far from being answered satisfactorily, it must be noted that Dinas (in press) has delivered important preliminary evidence by ruling out age as a potential confounder in a study of self-reinforcement of turnout.

¹⁴ Recent research on the development of partisanship (Bølstad et al., in press) has pointed to cognitive dissonance reduction (Festinger, 1957) as yet another plausible explanation of habit-formation processes. Given the low costs of voting, however, the applicability of that concept to turnout seems very debatable.

Appendix

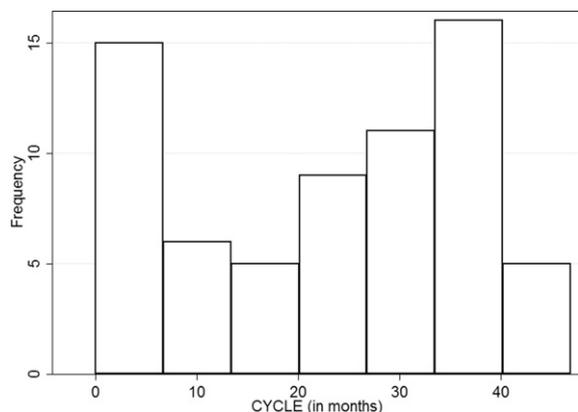


Fig. A1. Time gap between a European Parliament election and a country's next scheduled national parliament election (1989–2004): Histogram. Note: The histogram includes only the elections for which the EES survey data are available.

Table A1

Official voter turnout, EES survey voter turnout and the time gap between the European Parliament Elections and upcoming national parliament elections (*CYCLE*) – the European Parliament elections conducted between 1989 and 2004.

Country	EP election year	Official turnout (in %)	EES survey turnout (in %)	<i>CYCLE</i> (in months)
Austria	1996	67.73	–	35.67
Austria	1999	49.01	64.11	3.67
Austria	2004	42.43	58.00	27.60
Belgium	1989	90.73	92.29	29.20
Belgium	1994	90.66	90.52	11.30
Belgium	1999	91.05	92.57	0.00
Belgium	2004	90.81	–	35.90
Cyprus	2004	72.50	79.00	23.27
Czech Republic	2004	28.30	50.45	23.70
Denmark	1989	46.20	63.63	17.90
Denmark	1994	52.92	70.29	3.40
Denmark	1999	50.39	68.40	29.33
Denmark	2004	47.89	64.69	7.83
Estonia	2004	26.83	42.76	32.70
Finland	1996	57.60	–	29.03
Finland	1999	30.14	47.59	45.10
Finland	2004	39.43	64.98	33.17
France	1989	48.70	58.96	45.20
France	1994	52.76	65.95	35.43
France	1999	46.76	65.27	35.87
France	2004	42.76	60.42	35.90
Germany	1989	62.28	76.79	17.47
Germany	1994	60.02	77.24	4.13
Germany	1999	45.21	66.77	39.30
Germany	2004	43.00	63.52	15.17
Greece	1989	79.90	91.66	0.10
Greece	1994	73.18	94.34	27.33
Greece	1999	71.49	89.18	9.87
Greece	2004	63.22	82.46	39.10
Hungary	2004	38.50	52.35	21.87
Ireland	1989	68.30	84.65	0.00
Ireland	1994	43.98	59.91	35.87
Ireland	1999	50.21	71.43	35.20
Ireland	2004	58.58	84.38	35.43
Italy	1989	81.00	89.20	33.57
Italy	1994	73.60	88.74	22.30
Italy	1999	69.76	88.61	23.00

Table A1 (continued)

Country	EP election year	Official turnout (in %)	EES survey turnout (in %)	<i>CYCLE</i> (in months)
Italy	2004	71.72	91.52	21.87
Latvia	2004	41.34	49.55	27.83
Lithuania	2004	48.38	–	3.90
Luxembourg	1989	87.40	95.60	0.00
Luxembourg	1994	88.55	95.63	0.00
Luxembourg	1999	87.27	84.28	0.00
Luxembourg	2004	91.35	–	0.00
Malta	2004	82.39	–	44.83
Netherlands	1989	47.20	65.85	2.70
Netherlands	1994	35.69	54.28	46.90
Netherlands	1999	30.02	48.20	35.17
Netherlands	2004	39.26	67.51	29.40
Poland	2004	20.87	33.75	15.40
Portugal	1989	51.20	60.09	27.60
Portugal	1994	35.54	54.58	15.63
Portugal	1999	39.93	57.52	3.90
Portugal	2004	38.60	65.10	8.23
Slovakia	2004	16.97	33.43	24.13
Slovenia	2004	28.35	38.32	3.67
Spain	1989	54.60	67.38	4.37
Spain	1994	59.14	75.05	20.70
Spain	1999	63.05	80.73	8.97
Spain	2004	45.14	63.46	44.87
Sweden	1995	41.63	–	36.10
Sweden	1999	38.84	54.65	39.07
Sweden	2004	37.85	44.09	27.13
United Kingdom	1989	36.21	57.08	33.80
United Kingdom	1994	36.43	50.34	34.73
United Kingdom	1999	24.02	38.74	23.90
United Kingdom	2004	39.21	60.18	10.83

Note: Gaps in EES survey turnout are caused by data unavailability. Data on official turnout in the EP elections are available from the following website: <http://www.idea.int/vt/>. Pearson correlation coefficient between official and EES survey turnout equals approximately 0.95.

References

- Abramowitz, A.I., 1991. Incumbency, campaign spending, and the decline of competition in U.S. House elections. *Journal of Politics* 53, 34–56.
- Abramowitz, A.I., Alexander, B., Gunning, M., 2006. Incumbency, redistricting, and the decline of competition in U.S. House elections. *Journal of Politics* 68, 75–88.
- Abramson, P.R., Aldrich, J.H., 1982. The decline of electoral participation in America. *American Political Science Review* 76, 502–521.
- Ai, C., Norton, E.C., 2003. Interaction terms in logit and probit models. *Economics Letters* 80 (1), 123–129.
- Aldrich, J.H., Montgomery, J.M., Wood, W., 2011. Turnout as habit. *Political Behavior* 33, 535–563.
- Angrist, J.D., Evans, W.N., 1998. Children and their parents' labor supply: evidence from exogenous variation in family size. *American Economic Review* 88, 450–477.
- Baker, H., 2004. *Illustrated Medical Dictionary*. Lotus Press, New Delhi.
- Bem, D.J., 1967. Self-perception: an alternative interpretation of cognitive dissonance phenomena. *Psychological Review* 74 (3), 183–200.
- Bem, D.J., 1972. Self-perception theory. In: Berkowitz, L. (Ed.), *Advances in Experimental Social Psychology*, vol. 6. Academic Press, New York, pp. 1–62.
- Bendor, J., Diermeier, D., Ting, M., 2003. A behavioral model of turnout. *American Political Science Review* 97 (2), 261–280.
- Blais, A., Lago, I., 2009. A general measure of district competitiveness. *Electoral Studies* 28, 94–100.
- Bølstad, J., Dinas, E., Riera, P. Tactical voting and party preferences: a test of cognitive dissonance theory. *Political Behavior*, in press.
- Brady, H.E., Verba, S., Schlozman, K.L., 1995. Beyond SES: a resource model of political participation. *American Political Science Review* 89 (2), 271–294.
- Brody, R.A., Sniderman, P.M., 1977. From life space to polling place: the relevance of personal concerns for voting behaviour. *British Journal of Political Science* 7 (1), 337–360.

- Cox, G.W., Munger, M.C., 1989. Closeness, expenditures, and turnout in the 1982 U.S. House elections. *American Political Science Review* 83 (1), 217–230.
- Cutts, D., Fieldhouse, E., John, P., 2009. Is voting habit forming? The longitudinal impact of a GOTV campaign in the UK. *Journal of Elections, Public Opinion and Parties* 19 (3), 251–263.
- Denny, K., Doyle, O., 2009. Does voting history matter? Analyzing persistence in turnout. *American Journal of Political Science* 53 (1), 17–35.
- Dinas, E. The formation of voting habits. *Journal of Elections, Public Opinion and Parties*, in press.
- van der Eijk, C., Franklin, M.N., Marsh, M., 1996. What voters teach us about Europe-wide elections: what Europe-wide elections teach us about voters. *Electoral Studies* 15 (2), 149–166.
- van der Eijk, C., Oppenhuis, E., 1990. Turnout and second-order effects in the European elections of June 1989 – evidence from the Netherlands. *Acta Politica* 25 (1), 67–94.
- van der Eijk, C., Schmitt, H., 1991. The role of the Eurobarometer in the study of European elections and the development of comparative electoral research. In: Reif, K., Inglehart, R. (Eds.), *Eurobarometer: the Dynamics of European Public Opinion*. Macmillan, London, pp. 257–274.
- van der Eijk, C., Schmitt, H., 2009. Legitimacy and electoral abstention in European Parliament elections. In: Thomassen, J. (Ed.), *The Legitimacy of the European Union After Enlargement*. Oxford University Press, Oxford-New York, pp. 208–224.
- Endersby, J.W., Galatas, S.E., Rackaway, C.B., 2002. Closeness counts in Canada: voter participation in the 1993 and 1997 Federal election. *Journal of Politics* 64 (2), 610–631.
- Festinger, L., 1957. *A Theory of Cognitive Dissonance*. Row, Peterson, Evanston.
- Fowler, J.H., 2006. Habitual voting and behavioral turnout. *Journal of Politics* 68 (2), 335–344.
- Franklin, M.N., 1999. Electoral engineering and cross-national turnout differences: what role for compulsory voting? *British Journal of Political Science* 29, 205–224.
- Franklin, M.N., 2001. How structural factors cause turnout variations at European Parliament elections. *European Union Politics* 2 (3), 309–328.
- Franklin, M.N., 2003. Too Much Democracy? How Elections to the European Parliament Depress Turnout at National Elections in Europe. Paper Presented at the Congress of the European Consortium for Political Research, Marburg, Germany.
- Franklin, M.N., 2004. *Voter Turnout and the Dynamics of Electoral Competition in Established Democracies Since 1945*. Cambridge University Press, Cambridge-New York.
- Franklin, M.N., Hobolt, S., 2011. The legacy of lethargy: how elections to the European Parliament depress turnout. *Electoral Studies* 30, 67–76.
- Gerber, A.S., Green, D.P., Shachar, R., 2003. Voting may be habit-forming: evidence from a randomized field experiment. *American Journal of Political Science* 47 (3), 540–550.
- Górecki, M.A., 2011a. Electoral salience and vote overreporting: another look at the problem of validity in voter turnout studies. *International Journal of Public Opinion Research* 23, 544–557.
- Górecki, M.A., 2011b. Why bother lying when you know so few care? Party contact, education and over-reporting voter turnout in different types of elections. *Scandinavian Political Studies* 34, 250–267.
- Green, D.P., Shachar, R., 2000. Habit formation and political behaviour: evidence of consuetude in voter turnout. *British Journal of Political Science* 30, 561–573.
- Heath, O., 2007. Explaining turnout decline in Britain, 1964–2005: party identification and the political context. *Political Behavior* 29, 493–516.
- Honaker, J., King, G., Blackwell, M., 2010. AMELIA II: a Program for Missing Data. <http://gking.harvard.edu/amelia/docs/amelia.pdf>.
- Kanazawa, S., 1998. A possible solution to the paradox of voter turnout. *Journal of Politics* 60, 974–995.
- Kanazawa, S., 2000. A new solution to the collective action problem: the paradox of voter turnout. *American Sociological Review* 65 (3), 433–442.
- Karp, J.A., Brockington, D., 2005. Social desirability and response validity: a comparative analysis of overreporting voter turnout in five countries. *Journal of Politics* 67 (3), 825–840.
- King, G., Honaker, J., Joseph, A., Scheve, K., 2001. Analyzing incomplete political science data: an alternative algorithm to multiple imputation. *American Political Science Review* 95 (1), 49–69.
- King, G., Tomz, M., Wittenberg, J., 2000. Making the most of statistical analyses: improving interpretation and presentation. *American Journal of Political Science* 44 (2), 341–355.
- Mackie, T.T., Rose, R., 1991. *The International Almanac of Electoral History*. Macmillan, London.
- Macy, M.W., 1991. Learning to cooperate: stochastic and tacit collusions in social exchange. *American Journal of Sociology* 97 (3), 808–843.
- Macy, M.W., 1995. PAVLOV and the evolution of cooperation: an experimental test. *Social Psychology Quarterly* 58 (2), 74–87.
- Marsh, M., 1998. Testing the second-order election model after four European elections. *British Journal of Political Science* 28, 591–607.
- Marsh, M., Franklin, M.N., 1996. The foundations: unanswered questions from the study of European elections, 1979–1994. In: van der Eijk, C., Franklin, M.N. (Eds.), *Choosing Europe? The European Electorate and National Politics in the Face of Union*. University of Michigan Press, Ann Arbor, pp. 11–32.
- Meredith, M., 2009. Persistence in political participation. *Quarterly Journal of Political Science* 4 (3), 186–208.
- Milbrath, L.W., 1965. *Political Participation: How and Why Do People Get Involved in Politics?* Rand McNally, Chicago.
- Miller, W.E., Shanks, J.M., 1996. *The New American Voter*. Harvard University Press, Cambridge, MA.
- Moors, A., De Houwer, J., 2006. Automaticity: a theoretical and conceptual analysis. *Psychological Bulletin* 132 (2), 297–326.
- Orme, C.D., 2001. *The Initial Conditions Problem and Two-step Estimation in Discrete Panel Data Models*. Department of Economics Discussion Paper No. 9633. University of Manchester.
- Pacheco, J.S., 2008. Political socialization in context: the effect of political competition on youth voter turnout. *Political Behavior* 30, 415–436.
- Plutzer, E., 2002. Becoming a habitual voter: inertia, resources, and growth in young adulthood. *American Political Science Review* 96 (1), 41–56.
- Reif, K., 1985. Ten second-order elections. In: Reif, K. (Ed.), *Ten European Elections*. Gower, Aldershot, pp. 1–36.
- Reif, K., Schmitt, H., 1980. Nine second-order elections: a conceptual framework for the analysis of European election results. *European Journal of Political Research* 8 (1), 3–44.
- Sargent, R.P., Shepard, R.M., Glantz, S.A., 2004. Reduced incidence of admissions for myocardial infarction associated with public smoking ban: before and after study. *British Medical Journal* 328, 977–980.
- Studlar, D., Flickinger, R.S., Bennett, S., 2003. Turnout in European Parliament elections: towards a European-centred model. *Journal of Elections, Public Opinion and Parties* 13 (1), 195–209.
- Tomz, M., Wittenberg, J., King, G., 2001. Clarify: Software for Interpreting and Presenting Statistical Results. <http://gking.harvard.edu/clarify/clarify.pdf>.
- Weber, T., 2011. Exit, voice and cyclical: a micrologic of midterm effects in European Parliament elections. *American Journal of Political Science* 55 (4), 907–922.
- Wessels, B., Franklin, M.N., 2009. Turning out or turning off: do mobilization and attitudes account for turnout differences between new and established member states at the 2004 EP elections? *Journal of European Integration* 31 (5), 609–626.
- Wooldridge, J.M., 2003. Cluster-sample methods in applied econometrics. *American Economic Review* 93 (2), 133–138.