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Habitual Voting: Origins and Consequences

Thesis for the Degree of Doctor of Philosophy in Political Science

2011

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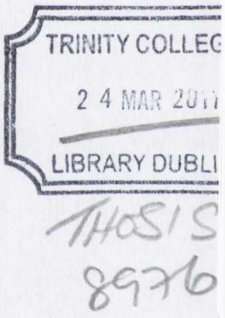

Summary

The thesis studies the phenomenon and the concept of habitual voting. It focuses on the phenomenon of habitual turnout, the tendency for a stable propensity to vote (or abstain) to form during the period of a few initial elections in a person's life. Such a "habit" then remains relatively immune to contextual influences. The thesis comprises three papers. Paper 1 contains reflection on theoretical nuances of the concept of habitual voting. It also posits that there should be a positive relationship between the formation of a strong propensity to vote and consistency of initial party choices. It tests this hypothesis in the context of the United Kingdom General Elections, using survey data (based on representative samples) and applying appropriate statistical techniques (population-averaged probit regression). Papers 2 and 3 propose that, if indeed a stable propensity to vote (or abstain) is formed in the course of a few initial elections in a person's life, electoral context should only affect turnout by the least experienced (in the electoral sense) cohorts of citizens. The more established (in the electoral sense) cohorts should remain largely unaffected. Paper 2 tests this general hypothesis focusing on the impact of election closeness on turnout in the United States and Sweden. Paper 3 focuses on the contextual characteristics and turnout in the European Parliament elections. Both these papers rely on survey data and apply statistical analysis (logistic regression, complementary log-log regression, population-averaged logistic regression). In the course of the analyses outlined above, I did not find convincing empirical evidence supporting the hypothesis, proposed in paper 1, about the impact of consistent party choice on the emergence of turnout habit. The proposition of experience-conditioned

impact of electoral context on turnout is, on the contrary, suggestively supported by virtually all the analyses presented in papers 2 and 3.

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Introduction

The term "habit" has recently been more and more frequently used in electoral behaviour literature. It has been considered the reason behind stability of both electoral participation (abstention) and choice. The seminal work by Plutzer (2002), building on the intuitions present in a number of earlier studies, drew political scientists' attention to the developmental nature of turnout propensity. According to Plutzer, a stable propensity to either vote or abstain is acquired during the electoral socialisation period, i.e. when a newly enfranchised person experiences their several initial elections in lifetime. This propensity (habit) is self-reinforcing and, as such, becomes virtually unchangeable later on. As Franklin (2004) observes, if the above is true then any contextual characteristics of elections should have strong impact on turnout by those who have not experienced too many elections in their lifetime. Those already experienced with the electoral process should, on the contrary, be relatively immune to these contextual influences. I hereby present three papers touching upon the simple ideas depicted above. On one hand, the papers constitute an entity, linked together by the notion of habitual turnout. On the other, they are self-contained papers that can be read separately (or in an order different to proposed here).

Paper 1 starts by invoking the origins of reflection on habits in electoral behaviour, to culminate with an account of Plutzer's (2002) work. It considers crucial theoretical nuances concerning habitual turnout. In particular, it proposes more solid theoretical foundations behind the concept and asks a question about the link between habitual turnout and habitual party choice (Butler and Stokes 1974; Shachar 2003). All

these efforts culminate in a proposition of an extension to the theory of habitual voting. I then attempt to test the proposition.

Papers 2 and 3 are inspired by Franklin's (2004) work and his claim about heterogeneous experience-conditioned impact of electoral context on turnout. In paper 2, I consider the notion of electoral competitiveness (election closeness) as an element of electoral context. I offer a new fully individual-level test of Franklin's proposition. The test encompasses three elections to the United States' House of Representatives and sixteen elections to the Swedish national parliament (*Riksdag*). Testing this hypothesis is extremely important to our understanding of what consequences electoral competitiveness (or lack of it) has on turnout trends. A common claim in the studies on the impact of closeness on turnout is that the aggregate-level effects are only moderately strong (Cox and Munger 1989; Endersby et al. 2002). However, if it is true that competitiveness affects only the youngest citizens, socialising to the electoral process, then long-term consequences of it might be dramatic. Aggregate-level effects of competitiveness would only disguise strong individual-level effects on those who have not experienced many elections. Their propensity to vote, partly resulting from the levels of competitiveness they experience, will quickly "solidify" (habituate) and become immune to future influences. As a result, the impact of continued closeness on long-term turnout trends might actually be strong.

Paper 3 continues by studying the idea of experience-conditioned impact of electoral context on turnout. This time, I turn to the European Parliament (EP) elections and the contextual factors surrounding them. Among others, building on the aggregate-level work by Franklin (2001), I propose that varying salience of the EP elections should

disproportionately strongly affect turnout by the citizens who have little electoral experience. Those with more experience should remain largely unaffected. Regarding the structure of the main idea, therefore, the paper neatly supplements the analyses presented in paper 2. Salience, like closeness, is an element of electoral context and it is reasonable to ask whether its impact on turnout is (or is not) conditioned by electoral experience. On the other hand, the analyses touch upon the EP rather than national elections. Salience of the EP elections is a conceptually unique term present within the second-order election model (Reif and Schmitt 1980), commonly used to explain the regularities observed in the EP elections. I thus believe paper 3 contributes not only to our understanding of the processes of habit acquisition but also deepens our knowledge on second-order elections.

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Paper 1

Habitual Turnout: Origins of Reflection, Theoretical Nuances, and the (Potential) Link to Habitual Party Loyalty

Abstract: The concept of habitual voting has recently risen to the status of a prominent approach explaining how and why people do (or do not) engage in electoral participation. In this paper, I aim to accomplish four objectives. First, I trace the origins of the concept as it was applied to electoral behaviour, especially voter turnout. Second, I explore theoretical nuances of the concept. Among others, I argue it is superior to the rational choice model of turnout. Furthermore, I claim habit is better understood as a probability rather than a property. Finally, referring to social psychology literature, I search for possible deeper causal explanations of how and why habits may form. Third, I explore the link between habitual voter turnout and habitual party choice, proposing that these two should be positively correlated. If so, an individual's consistent party choice in a given period of time should lead to an increased propensity to vote later on. Fourth, I attempt to test the above hypothesis using the British Household Panel Survey data. As the test does not confirm my hypothesis, I finally engage in a discussion on why the test has failed and why the proposed idea should not be abandoned.

Key words: voter turnout, habitual voting, party loyalty.

1. Introduction

The concept of habitual voting, in its mature form proposed by Plutzer (2002), has recently been making a considerable "career" as an explanation for electoral participation and abstention. In this paper, I theoretically elaborate on the concept. I propose its extension and attempt to empirically test the extended version of the theory.

The paper proceeds as follows. The next section gives an account of the origins of reflection on habitual voting. Section 3 explains why habitual voting theory can be considered superior to the rational choice model of turnout. Section 4 refers to the stochastic learning models of turnout and the importance of the notion of habitual voting for these models. Section 5 describes the life-course approach to turnout, proposed by Plutzer (2002), with the questions that remain unanswered within this promising concept. Section 6 describes the theory of self-perception as a viable explanation to the emergence of habits, including habits in electoral behaviour. Section 7 argues that habitual turnout should not be analysed separately from habitual party choice. If so, past consistent party choice should be a crucial factor increasing a person's present propensity to vote. The section also presents the above idea more formally. Section 8 explains why habit should be understood as a probability rather than a fixed property. Section 9 outlines a test of the ideas proposed in section 7, with a relevant model and hypotheses. Section 10 explains why the model should be tested only on the youngest cohorts of citizens. Section 11 describes the data and the variables. Section 12 deals with estimation issues. Section 13 contains an analysis and discussion of the empirical results obtained. As the test fails, I also engage in the work of justifying further tests. Finally,

section 14 concludes and summarises the paper, setting the stage for the analyses presented in papers 2 and 3.

2. Habitual Voting: Beginnings of Reflection

The phenomenon (and the concept) of habitual voting has recently attracted much attention on part of electoral behaviour students, with publications on it featuring in high-profile journals (Green and Shachar 2000; Plutzer 2002; Gerber et al. 2003; Shachar 2003; Fowler 2006; Denny and Doyle 2009). This should by no means be understood as only recent presence of this issue in electoral behaviour literature. Habit acquisition processes were much earlier suggested to be the mechanism behind people's long-term engagement in electoral participation. They were explicitly mentioned already by Milbrath (1965: 31-32), in his classic work on political participation. Milbrath referred to Pavlov's experimental studies in primary and secondary behavioural reinforcement. Applying these findings to electoral behaviour, if a given citizen feels somehow subjectively "rewarded" for their participation in an election, e.g. by getting excited by political competition, the election can be viewed as a stimulus in the process of primary reinforcement. However, if a certain stimulus is always present together with the primary reinforcement then the stimulus itself (elections in this case) becomes rewarding. That is how secondary reinforcement operates. As Milbrath (1965: 31) puts it: "This principle of secondary reinforcement is very important, because many social behaviour patterns are established by it. In addition, the concept helps us understand another very important mechanism, to be discussed shortly, called selective perception. If a certain behaviour pattern has been reinforced again and again [...] that behaviour

pattern, or predisposition, is said to have developed habit strength". This way Milbrath, drawing on the classic studies in behavioural psychology, introduces the concept of habit to the reflection on political participation. The idea is essentially simple and relies on the principle of subjective generalisation from the rewards, received when the stimulus is present, to the stimulus itself. In other words, in the process of secondary reinforcement the rewards (e.g. excitement by electoral competition) and the stimulus (e.g. election) become subjectively indistinguishable. This way, habit strength ensures that the stimulus is rewarding regardless of whether or not still accompanied by the primary reinforcement. Turning again to the electoral example, assume that a given person has experienced a few very competitive elections, participation in which gave this person a lot of excitement. Through continuous electoral participation this person would be likely to subjectively generalise this excitement. Then, for such a person, electoral participation would equal to excitement, and so the person could be quite likely to still cast a ballot even in uncompetitive elections.

Another piece of early reflection on habitual nature of electoral behaviour can be found in the seminal work by Butler and Stokes (1974). Their comprehensive account of British electoral politics includes, among other things, an analysis of the development of partisanship and party loyalty over the citizens' life course (Butler and Stokes 1974: 48-66). Butler and Stokes notice that there is a negative correlation between a person's age and their openness to vote switching. However, they also note: "There is evidence that what determines the strength and unchangeability of partisan ties is not so much the voter's age in years as the duration of his attachment to one party. Younger voters tend to be more plastic because their party preferences tend to be more recent. But older

voters who have supported a party for as brief a time prove to be just as weak and changeable in their partisanship. When the strength and duration of partisanship are examined within age-levels, it is quite clear that what counts is the duration of the party tie and not the age reached by the elector" (Butler and Stokes 1974: 59). The above quotation points to the crucial trait of the concept of voting as habit. It is repeated reinforcement of a given type of behaviour, and not just passage of time, that leads to habit formation. Obviously, older citizens have had the chance to experience more electoral stimuli in the past than have younger citizens. Habit strength should thus be strongly related to age. Moreover, as was already signalled, political behaviour tends to be a self-reinforcing act, and so over time people will have the tendency to acquire steady regular patterns of electoral behaviour. However, to stress it once more, what can be learned from Butler and Stokes (1974) is that passage of time is not conceptually crucial when it comes to understanding the life-cycle patterns of voting behaviour. These are recurring occasions for behaviours and reinforcements that matter. Passing time only makes room for those occasions to happen.

A different early work touching upon the habitual aspects of vote choice is the paper by Brody and Sniderman (1977). Reflecting on the impact of the micro-level personal matters on turnout, Brody and Sniderman (1977: 349) point to a person's formal educational attainments as the main predictor of political involvement, including turnout. They link this factor to the habitual nature of turnout: "With the exception of the small number still in school or who at some future time return [...] the principal factors responsible for voting regularity are fixed by the time a citizen reaches his thirties. Future citizens may, and likely will be, better educated then he, but he is

unlikely to be better educated in the future, certainly as things stand now. We offer these findings as fragmentary evidence (and a partial explanation) of why voting (or abstaining) is for many people very much like a habit, a settled decision made so often before it scarcely amounts to a decision at all" (Brody and Sniderman 1977: 349). Two elements in the above citation are worth reflection. First, as in the earlier studies by Milbrath (1965) as well as Butler and Stokes (1974), the stability of behaviour over time is emphasised and called "habit". Second and more important, Brody and Sniderman (1977), unlike Milbrath (1965), tend to overlook the process of habit acquisition. Their "partial" explanation focuses on the tendency for citizens' educational attainment to get "fixed" relatively early in their life. Is it then really just fixed social traits, like education, that are responsible for the habitual nature of voter turnout? If so, why does turnout tend to decline as education at all levels becomes more widespread? Finally, what is the role of political (and strictly electoral) context in the process of citizens' "habituation" to voting or abstention? The problem here is that Brody and Sniderman (1977) made a mistake that is frequently made by some students of electoral behaviour. They identified the tendency for turnout propensity to get fixed over time, and so they started to search for an explanatory variable that would get fixed in line with the same temporal pattern. The lesson Milbrath (1965), and indeed also classic behavioural psychology, teaches us is that predictors explaining turnout do not need to get fixed. On the contrary, it is a citizen's propensity to cast a ballot that gradually stabilises and defines the person's "sensitivity" (or "insensitivity") to various stimuli affecting turnout. It is especially so with respect to electoral context as a set of determinants of turnout. Context might constantly change but the citizen's propensity to react to it will tend to

decrease as the person experiences more and more elections. In a sense then the work by Brody and Sniderman (1977) is very important as it shows us the most serious pitfall in studying habitual voting phenomena. Later research into experience-conditioned impact of electoral context on turnout, especially the study by Franklin (2004), has shown how misleading the, at first look very sensible, explanation offered by Brody and Sniderman (1977) might actually have been. I briefly return to these issues in section 8 in which, debating with the recent work by Aldrich et al. (2007), I claim that habit is better understood as a probability rather than a fixed property.

3. Do People Know Their Vote Does Not Matter? Rational Choice Theory and the Invention of the Paradox of Voter Turnout

One of the fundamental advantages of the concept of habitual voting is that, unlike the rational choice model of voter turnout (Downs 1957; Riker and Ordeshook 1968; Riker and Ordeshook 1973), it does not rely on any "heroically" strong and unrealistic (Geys 2006: 16) assumptions. In particular, one of the problematic assumptions of the rational choice model is that individual citizens are somehow able to correctly perceive the probability of their vote being decisive as equal to (roughly) zero. This is how the paradox of voter turnout, this probably most obvious failure of rational choice theory in the domain of political science (Fiorina 1990; Green and Shapiro 1994), has been (to a great extent) artificially invented. The mentioned fundamental assumption present in the rational choice model of voter turnout seems reasonable at first look. Nonetheless, according to the available empirical evidence, it is far too strong. For instance, in his work on the issue of voter turnout, Opp (2001: 368) presents the distribution of answers

to the question about how respondents perceive their ability of personally exerting influence on politics by participating in elections. A 1-7 scale was presented to 3,206 respondents (a representative sample of the population of Germany) on which 1 denoted "no influence" and 7 "a very strong influence". Contrary to what is assumed within rational choice theory, only 5.7% of respondents gave the 1 ("no influence") answer. Moreover, 26.3% of them indicated their perceived influence as 7, 19.0% as 6 and 18.8% as 5 on the aforementioned 1-7 scale. Needless to say, this is undoubtedly an inadequate assessment. It thus seems clear that the strong assumption made by rational choice theorists, although reasonable at first look, introduces a fictional element to their model of voter turnout. The "paradox" resulting from that reasoning would not then be an inevitable trait of the reality that is being explained. Rather, it is an internal problem of the theory itself, and more precisely a problem of its unrealistic assumptions. It must be said that the work by Opp is not the only one suggesting that people might not know their vote is extremely unlikely to be decisive. Evidence indicating that many people indeed tend to believe their vote makes a difference was earlier presented by Blais (2000). A major strength of treating voting as a habitual activity is that, depending on a particular version of the concept, it is based on radically different assumptions. These are usually not as strong as the one presented here.

4. On the Stochastic Learning Models of Voter Turnout: How They Perform with and without the Habitual Voting Component

Even though the notion of voting as habit appeared fairly long ago (see section 2 of this paper) it was not until the first stochastic learning model of voter turnout was proposed

by Kanazawa (1998; 2000) that it has become an element of a comprehensive non-rational-choice model of voter turnout. Kanazawa drew on the work by Macy (1989; 1991; 1995). The latter criticised rational choice theory for its strong assumptions made about human cognitive abilities, in particular about the capacity to predict the probabilities of future events. This encompasses also the problem highlighted in the previous section. The stochastic learning model of voting, in the version presented by Kanazawa, posits that the citizens perceive the links between their own actions and the outcomes on the collective level in correlational, rather than causal, terms. This means that the citizens are "rewarded" when voting for a winner and "punished" when voting for a loser. In the case of the "binary-choice" elections, e.g. the American presidential elections, this would mean that the probability of a contribution to an election being "worthwhile" (from the viewpoint of an individual voter), in the long run, equals 50%. Rational choice theorists have assumed it equals zero. The correlational interpretation of an individual contribution to electoral results makes an "escape" from the paradox of voter turnout possible. In addition, Kanazawa proposes that habitual voting should also be observed whereby those who have voted in the past (regardless of whom they have supported) should be more likely to vote in the future than those who have not voted. This hypothesis is proposed relying on Macy's (1991) proposition that a contribution to a collective action should strengthen the broadly conceived norms of cooperation and thereby result in self-reinforcement of the cooperative behaviour. However, Macy has never provided a theoretical framework within which habitual behaviour could be better understood. I claim throughout this paper that the origins of habitual behaviour (and

habitual voting in particular) remain mysterious and that they need further theoretical reflection.

Since Kanazawa (1998; 2000) has presented some suggestive evidence in support of his concept the developments in this area have taken place quickly. Most notably, Bendor et al. (2003) have proposed a new behavioural model of turnout that relies on some of the stochastic learning propositions and has the capacity to predict aggregate voter turnout. Without delving deeper into the details of the model assumptions (sometimes again very strong) I must note that Bendor et al. have completely abandoned the idea of habitual voting, retaining the more instrumentally based elements 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 the model proposed by Bendor et al., 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 on fairly stable levels but there is also constant fluctuation between the groups of actual voters and non-voters. As Fowler (2006) argues, this is obviously in conflict with the consistent empirical findings accumulated within voting behaviour literature. These clearly indicate that, whether or not the voting habit itself 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. (2003) leads Fowler (2006) 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 the first model, proposed by Kanazawa (1998; 2000). As such, it contains all the deficiencies of Kanazawa's model, including lack of a sound theoretical explanation of habitual voting as well as applicability to essentially only "binary-choice" elections. Nonetheless, the stochastic learning approach to voter turnout should be perceived as a step forward in comparison to the rational choice models. Aside from that, the very spectacular empirical failure of the version proposed by Bendor et al. and the relative success of the models presented by Kanazawa and Fowler are also valuable experiences. For it is remarkable how persistent, even outside the rational choice approach, is the tendency towards failure of the models of turnout based solely on instrumental explanations. The notion of habit allows us to think of voting from a non-instrumental and, as it will be seen in the next section, also from a more long-term (life-cycle) perspective.

5. Life-Course Approach to Voter Turnout and Experimental Evidence of Habitual Voting: Consistency or Confusion?

The developmental model of voting as a habit, proposed by Plutzer (2002), overcomes one of the most obvious difficulties resulting from the stochastic learning approach. The difficulty, not mentioned in the previous section, stems from the mentioned models' inability to provide an answer to a question on how voting habit emerges. For the process of, so to speak, "self-reproduction" of voting over time, depicted by Kanazawa

(1998; 2000) and Fowler (2006), is only a part of the whole story. The citizens who experience their first elections are simply left out of the models proposed by the two aforementioned authors, i.e. they don't explain why someone votes, or does not vote, at their first opportunity. The approach by Plutzer (2002) 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. In this view, voting habit is something that must be developed over one's life-course. Plutzer clearly derives much from the work done within one of the established schools of research on broadly conceived 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 etc.), young adults need to rely on the broadly conceived resources, 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 and/or strong party supporters may be, all else being equal, more likely to vote when they attain the required age. That is because parental political knowledge and/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 be itself positively correlated with the very levels of political knowledge they possess. As Plutzer (2002) predicts, these (and other) resources, critical at the initial stage of socialisation to voting, will gradually lose their significance and, at further stages, voting (and indeed also abstention) will be more or less driven by inertia. In addition, different life-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 may weaken voting habit (e.g. by the fact of the necessity of re-registration which, obviously, does not apply to the countries where voting registration is automatic). 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 relevance of various social policy issues from the viewpoint of a given citizen.

The main strength of the approach proposed by Plutzer is that it provides a theoretical framework for analyses of voting habit as a permanent and persistent characteristic of individuals, a characteristic acquired in early adulthood and then more or less maintained, depending on one's circumstances. Putting an emphasis on the emergence of voting habit rather than on its simple self-reproduction helps obtain new knowledge on how and why voters may differ from non-voters (or rather how the groups differed at the time of their respective early adulthoods). The approach is also an excellent example of treating voter turnout as a dynamic phenomenon. One question remains unanswered. Why inertia? Or, in other words, why is it so that participation (abstention) at one time increases the probability of participation (abstention) at further stages? While Plutzer has shown how participation emerges and even hypothesised on some possible causes of the inertia mechanism (see Plutzer 2002: 43-44), the nature of this mechanism and its very consequences still require both theoretical reflection and empirical investigation.

Having referred to Plutzer's seminal work on voting as a habit, it seems appropriate to confront the work with another important contribution to the field - the experimental evidence of habitual voting. This was delivered by Gerber et al. (2003) who pointed to

the conceptual and methodological problem of unobserved heterogeneity. The latter would be dealt with if there are some unobserved factors, unaccounted for in the previous models encompassing habitual voting, affecting electoral participation (abstention) at different moments in time. In such a situation, the proposed causal relationship between past and present participation/abstention, i.e. the essence of the concept of habitual voting, appears at least questionable. Unfortunately, instrumental variable estimation (Green and Shachar 2000), a possible remedy to unobserved heterogeneity, relies on strong and, in practice, untestable assumptions. Therefore, Gerber et al. (2003) rely on evidence from a randomised field experiment. The experiment appears to have indeed shown successfully the presence of habit[1]. Gerber et al. were able (through mailing and personal canvassing) to induce higher turnout in their experimental group (residents of the city of New Haven) and the turnout (partially) persisted until the next election. The effect observed by Gerber et al. (2003: 547) was indeed extraordinarily strong, with participation in the midterm election of 1998 increasing the probability of a citizen voting in the municipal election of 1999 by 46.7 percentage points. At first look, this evidence may seem completely consistent with the work by Plutzer. On the very general level, it may also seem to be an ultimate scientific proof of the theory of habitual voting. Nonetheless, I claim here that this evidence introduces new puzzles. First, if turnout is a life-course phenomenon then the experimenters' ability to increase turnout (in the experimental group) by more than 10 percentage points (Gerber et al. 2003: 545) through personal canvassing poses a

[1] When assessing the results reported in Gerber et al. (2003) one must remember about the criticism, advanced by Imai (2005), of the so-called "New Haven experiment" (Gerber and Green 2000). Imai pointed to the apparent failure of randomisation in this experiment. As the evidence of the existence of habit in voter turnout (Gerber et al. 2003) relies on the same experimental data, Imai's criticism applies here as well. Hence, this evidence should be treated with caution.

problem. How is it possible that canvassers, not sent on behalf of any party, were able to exert such influence on the citizens if the latter are supposed to be either habitual voters or habitual abstainers? One answer to this is that actually such "incidental" stimuli like canvassing are critical to turnout which would mean that the model proposed by Plutzer over-emphasises long-term (or better life-long) regularities. Strong effects of party contact, especially in low-turnout elections (Karp et al. 2008), would provide support for such a thesis. However, the latter argument may also be used against the interpretation of turnout using the more, so to speak, short-term framework. For what the experiment by Gerber et al. (2003) encompassed are two low-turnout (presumably less salient) elections (a midterm and a municipal one). No presidential election was under examination in that experiment. This makes another explanation plausible. Habitual voters may comprise two groups, a one who vote only in the more salient (presidential in the American context) elections and one who tend to vote in all elections. In such a situation, those regularly voting in only the presidential elections are of course, in general, still somehow sensitive to political affairs. It is thus certainly easier, compared to those not voting even in presidential elections, to mobilise them (e.g. through personal canvassing) to vote also when electoral salience is lower. However, this would mean that in a presidential election it may have just been more difficult to obtain strong effects of personal canvassing which could have potentially led to a failure of the experiment. For the experiment eventually relied on a two-stage-probit estimation that requires a fairly strong correlation between the instrumental variable and the one used as explanatory at the second stage. On the other hand, the experiment referred to did not reveal the regularities that would be most helpful in assessing Plutzer's concept. For if

Plutzer is right then the magnitude of the regularities examined by Gerber et al. (2003) should display high vulnerability with respect to age (or better electoral experience). What the experimenters really provided is just an average effect for all age groups. Indeed, if the evidence from random-effects-probit estimation (using the British National Child Development Study data), presented by Denny and Doyle (2009), is looked at, it is clear that the youngest cohorts eligible to vote tend to display significantly weaker habit of voting ("only" 13 percentage points difference in the probability of future voting between those voting and those abstaining in a past election), in comparison to the strong averaged effect (46.7%) estimated by Gerber et al. (2003). Hence, the latter (averaged) effect can be very misleading. It should therefore be treated as a point of departure for further research. The problem is that the younger cohorts may display high sensitivity to different forms of campaigning (including personal canvassing), resulting from a relatively weak habit. Such a thesis, if supported by appropriate empirical evidence, could help disentangle the puzzles posed by the experiment referred to here and would be consistent with (and would actually supplement) Plutzer's (2002) work. I return to this issue in the Conclusion to this paper where I outline the need to conduct studies in experience-conditioned impact of electoral context on turnout. Finally, a still remaining problem is a theoretical explanation of the very "mechanism" of habitual voting. A proposition of such an explanation will be presented in the next section.

6. Explaining Habitual Voting: The Concept of Self-Perception

In his ground-breaking theory of self-perception, the social psychologist Daryl J. Bem (1967; 1972) proposed an approach that constituted a major departure from the ideas of cognitive dissonance theory (Festinger 1957) – the post-war social psychology's dominating approach. In short, Bem's proposition is that, while inferring their own attitudes and emotional states, humans frequently behave like outside observers, i.e. they infer about their own inner states by observing their own overt behaviour and external stimuli accompanying that behaviour. For instance, in one of the experiments conducted under the framework of both self-perception and cognitive dissonance theory (Bem 1967: 187-188; Bem 1972: 16-17), participants were asked to perform a repetitive "dull" task and subsequently tell somebody else that it was interesting. Some of the participants were paid $1 for doing so. Others got $20. Contrary to intuitive expectations, those who were paid significantly less were much more likely to perceive the task performed as really interesting. While under cognitive dissonance framework it is argued that such "immoral" proceeding will create emotional tensions in subjects, thereby motivating them to change their perception of the task, Bem's explanation of the above experimental results is much more straightforward. In the absence of a strong external stimulus, those paid only $1 for saying that the "boring" task was interesting interpreted their own overt behaviour (saying that the task was interesting) as an indicator of their attitudes towards the task performed. In other words, Bem suggests that in the absence of distinguishable strong stimuli humans will often use their own overt behaviour for the purpose of inference about their own inner states. In this context, taking a dynamic approach, it is frequently behaviour that leads to the emergence of attitudes (not the

other way around). I must emphasise that Bem's approach does not contradict the habit-based approach to voter turnout. More, I will claim here that not only can Bem's theory provide a general framework under which habitual voting may be better understood, but also that it can contribute to deepening and development of this concept. Unlike Aldrich et al. (2007), I claim that self-perception theory, rather than the concept of "automaticity", should be referred to when explaining habitual turnout. In the next section I thus put together the phenomena of habitual turnout and habitual vote choice (Butler and Stokes 1974) under the common framework of self-perception theory. This will lead me to a claim that the habit of turnout should not be considered in separation from the processes of party loyalty formation.

7. Self-Perception, Party Loyalty and the Development of the Propensity to Vote: Towards a Unified Theory of Habitual Voting

As I mentioned above, Bem's theory can potentially deliver a framework under which habitual voting phenomena might be more profoundly understood. For the situation of voters largely resembles the situation of the participants of the aforementioned psychological experiments. Putting it bluntly, voters are usually neither paid nor forced to cast a ballot. In the absence of such external stimuli the act of voting might change the way citizens perceive themselves, thereby leading to strengthening the feeling of "democratic duty". This is what Gerber et al. (2003: 548) seem to suggest, referring to the work by Tyler (1990) on compliance with legal norms. Tyler's approach is very similar to that of Bem in that it puts an emphasis on the way behaviour may lead to the emergence of attitudes. Anyway, relying on one of the versions of the self-perception

approach, it seems quite obvious that the students of habitual voting, including Plutzer (2002) and Gerber et al. (2003), have not noticed a further implication of the approach they take. The latter will stem from the fact that the citizens usually not only vote but vote in a particular way (for a candidate or a party, or both). Hence, if self-perception is at stake, it appears logically justifiable (if not indeed necessary) that also the very preferences displayed by voters will be, at least partially, formed as habits. There are at least two arguments to claim so. First, it has been known at least since the already mentioned (see section 2) classic work by Butler and Stokes (1974) that party preferences, at least for the majority of voters, tend to be stable over time. In addition, the fact that a citizen has voted for the same party in several (usually three or four) consecutive elections makes such an individual very likely to become "immunised" to the influences potentially driving them to alter their preference in future. An analogy to habitual participation seems obvious here. Second, evidence of the possibility of habitual bases of party loyalty has already been presented by Shachar (2003). Relying on the American National Election Studies 1972-1976 panel data, Shachar has shown that a past voting decision has strong independent impact on citizens' present electoral choice, even when various factors contributing to both current and past utility are accounted for. This leads Shachar (2003) to claim that a citizen's current utility function is highly affected by habitual factors. Moreover, if habit is taken into account then the correlates of past utility lose their significance. This could mean that what previous partisanship researchers, like Fiorina (1977), hypothesised as a cumulative impact of electoral experiences (and utilities) at different moments of time on a present decision would maybe be better described in terms of a direct causal link between past and

present behaviour. Such a thesis neatly fits the proposition by Converse (1969; 1976), who suggested that in course of their lifetime the citizens' party identification will strengthen, in part because of the many occasions when those citizens vote for particular parties. Self-perception theory (Bem 1967; Bem 1972) is a plausible explanation of such a phenomenon. Anyway, if both turnout and political preferences appear to be, at least in the long run, of largely habitual nature, then the question remains what (if any) link exists between the two and what (if any) idea of how to disentangle the two can be derived from the aforementioned theory of self-perception. To throw some light on the issue, let us define "personal benefits" from voting (the well known element of the rational choice approach to turnout[2]) the following way:

$$1)\ B_{i,j} = \gamma B_{i,jI} + \delta B_{jLT},$$

where:

$B_{i,j}$ – citizen j's overall personal benefits from voting in the ith election.

$B_{i,jI}$ – citizen j's immediate personal benefits from voting for a chosen party (or a candidate from a given party) in the ith election.

B_{jLT} – citizen j's long-term personal benefits from voting for a chosen party.

γ and δ – weights (assumptions: $\gamma > 0$ and $\delta > 0$ and $\gamma < \delta$ and $\gamma + \delta = 1$).

This way, a citizen's personal benefits from voting in a given election are treated as comprising two distinct components. The citizens that have not yet acquired party

[2] I refer to the following formula (see Riker and Ordeshok 1968): $pB + D > C$, where p – the probability that a person's vote will be decisive, B – personal benefits from voting, D – democratic „duty", C – the cost of voting.

loyalty in the habitual sense, as proposed by Shachar (2003), base their choice on exclusively the short-term component (ascribed to the particular election in question). However, those voting consistently (i.e. for the same party) in a few consecutive elections are likely to become "immunised" (as noticed by Butler and Stokes (1974)) to the influence of short-term factors. In formula 1, it is proposed that the long-term benefits are not ascribed to a particular election, but will rather relate exclusively to a party. I assume that, by the very fact of consistent voting for the same party, a citizen's long-term benefits from voting for that party will accumulate. The proposition is based on the theory of self-perception, in the sense that every act of electoral support given to a party should somehow subtly strengthen a citizen's attachment to that party (Converse 1969; Converse 1976). Hence, for consistently voting citizens overall personal benefits from voting in a given election will increase with every election. For inconsistent voters those benefits, based exclusively on the short-term component, will rather tend to largely vanish. They will thus need to be, so to speak, "re-built" for the purpose of any subsequent election. An idea following from this reasoning is that the citizens who display consistency of electoral choice over time, i.e. those voting for the same party in consecutive elections, should be significantly more likely to vote at the next occasion than those voting inconsistently. Obviously, the latter proposition does not stand in contradiction to the thesis that the act of voting itself changes the way citizens perceive themselves (see Gerber et al. 2003: 548) which will result in the voters' (as a whole) being more likely to vote in the future than the non-voters. However, the proposition advanced in formula 1 supplements (in an arguably important way) the habit-based approach to voter turnout.

8. On the Concept of Habit Again: Probability vs. Property

From the general conceptual viewpoint, habit can be conceived of either in a probabilistic manner or as some sort of a fixed property acquired by a given voter. The latter approach was pursued in the already analysed work by Brody and Sniderman (1977). A more elaborate version of this approach has recently been advanced by Aldrich et al. (2007) who draw on the psychological work on habits as "automaticity' of behaviour (Moors and De Houwer 2006). In particular, they define habit as repeated behaviour occurring in a stable context (Wood et al. 2002). According to Aldrich et al. (2007), habitual voters are those who have repeatedly participated in consecutive elections under the same contextual features. Context change is here practically measured by house and community changes experienced by respondents. The authors of the concept thus view voting habit as a property. It is simply consistent electoral participation in the same context. These authors show that the citizens who have in the past displayed habit defined this way are subsequently, so to speak, less vulnerable to the influence of various factors commonly regarded as affecting turnout. While such an approach can certainly serve as a partial explanation of voter turnout, it also has obvious limitations. For instance, while context comprises the features of the communities the citizens inhabit, it is also constituted by the various characteristics of particular elections. As such, context, by definition, differs from election to election. Also, it must be emphasised that Aldrich et al. (2007) are too quick to draw a parallel between research on everyday activities like working, eating, cleaning, hygiene (see Wood et al. 2002: 1288) and the extremely rare events like elections. Anyway, the most important weakness of their treatment of the concept is their taking voting habit for granted (as a

starting point for researching its consequences) rather than tracing its emergence. This means not only omitting an important part of explanatory work, but also ignoring the individual-level findings of not only Plutzer (2002) but also Butler and Stokes (1974) and, last but not least, the aggregate-level findings of Franklin (2004), dealt with in more detail in the Conclusion to this paper. All this work shows that, in most cases, relative consistency of participation (or abstention) tends to be gradually accomplished after a few elections. This means that, in the case of turnout, the broadly conceived context should be regarded an important determinant of the "content" of habit (i.e. whether it is a habit of voting or a habit of abstention) rather than as a condition of its emergence. In most cases either a voting or an abstention habit is formed. Given all these considerations, a probabilistic view of habit, capturing all the dynamics and heterogeneity originally attached to the concept as applied to voting, appears more adequate here.

That said, the probabilistic nature of habitual voting, at the individual level, can be well (and somewhat metaphorically) described using the notion of entropy. The term is used in thermodynamics (see for instance Lambert 2002) where it measures energy dispersion. More precisely, it is the possible number of micro-states within a given macro-state of a certain system. However, the term entropy (retaining some analogies to the physical processes) was long ago introduced also to information theory (Shannon 1948) and that way of understanding of this notion is certainly most useful here. In this context, entropy is a measure of uncertainty involved when considering a given finite set of events. Entropy takes its minimum value, zero, when the probability of one of this set of events equals 1 while the probabilities of all other events, obviously, equal zero.

Consequently, when the probabilities of all those given events are equal (i.e. the probability of any of them equals $1/n$, where n is the number of all the possible events) entropy takes its maximum value. In this view, the process of acquiring a habit of voting (or abstention) could be understood as moving on a continuum between those two values of entropy. In their young adulthood, citizens would be placed at a point located relatively close to the ideal extreme state when entropy takes its maximum value, i.e. when, for a given citizen, all electoral choices (including abstention and all possible choices for voters) have the same probabilities of occurrence. Habituation of voting behaviour would be a process whereby, in consecutive elections, all those considered probabilities would become adjusted so that the behaviour performed at a given time is "favoured" (i.e. its probability increases at the cost of the probabilities of other possible behaviours) at the next occasion. This way, habitual voters (and habitual abstainers) would be considered located relatively close to the other ideal point in which entropy equals zero. Such a hypothetical process should be affected by the proposition included in formula 1 (previous section). That means, in particular, that the decrease in the probability of abstention at a given time for those voters whose electoral choice is consistent with a previous choice should be greater than for those voters for whom these two choices are different (with a respective difference in the increase in the probability of the behaviour chosen at the last occasion). Formulated this way, habit is not something fixed but is rather a dynamic concept relating to the process of reducing entropy (or uncertainty) involved in electoral behaviour at the individual level. In other words, I propose that, through the phenomenon of self-perception, the probability of occurrence of the forms of behaviour chosen in the past tends to increase which, in turn,

makes a given citizen relatively "immune" to any factors affecting electoral behaviour. The important point is that habit understood this way itself constitutes a continuum. I assume here that, since electoral behaviour is self-reinforcing, entropy will decrease with consecutive elections in which a given citizen is entitled to vote. In this way, habituation of voting behaviour, as in the work by Plutzer (2002), is explicitly regarded a "destiny" for vast majority of the citizens rather than a characteristic of a specific sub-group of them (those experiencing stable contexts), as proposed by Aldrich et al. (2007).

9. Model and Hypotheses

Given all the considerations in sections 7 and 8, in further parts of this paper I attempt to test the following model empirically:

$$2)\ \Pr(VOTE_t = 1) \sim \beta_0 + \beta_1 VOTE_{t-1} + \beta_2[VOTE_{t-1} \times VOTE_{t-2}] + \beta_3[VOTE_{t-1} \times VOTE_{t-2} \times CONSISTENT_{t-1,\,t-2}] + \beta_4 CONTROLS + \varepsilon$$

where:

$VOTE_t$ – voting/abstention at time t,

$VOTE_{t-1}$ – voting/abstention at time $t - 1$.

$VOTE_{t-2}$ – voting/abstention at time $t - 2$.

$CONSISTENT_{t-1,\,t-2}$ – consistent/inconsistent party choice at times $t - 1$ and $t - 2$.

$CONTROLS$ – control variables (see section 11 for details),

ε – error term.

Given the above model my first hypothesis is the following:

Hypothesis 1: All else being equal, the citizens who voted at time *t -1* will be more likely to vote at time *t* than the citizens who did not vote at time *t -1* ($\beta_1 > 0$).

The above proposition is the standard habitual voting hypothesis, tested in a number of previous studies (Green and Shachar 2000; Gerber et al. 2003; Fowler 2006; Denny and Doyle 2009). The second hypothesis is the following:

Hypothesis 2: All else being equal, the citizens who voted at time *t – 1* will be more likely to vote at time *t* if their participation is likely to be a permanent tendency, i.e. if they voted also at time *t – 2*. In other words, among the citizens voting at time *t -1* those who voted also at time *t – 2* will be more likely to vote at time *t* than those abstaining at time *t – 2*[3] ($\beta_2 > 0$).

Finally: I test the following third hypothesis:

Hypothesis 3: All else being equal, among the citizens who voted at both time *t -1* and time *t – 2* those voting for the same party at both times will be more likely to vote at time *t* than those not voting for the same party at time *t – 2* and time *t – 1* ($\beta_3 > 0$).

This way, I add two elements to the previous tests of habitual voting in the strict sense, i.e. the proposition that past and present participation/abstention are positively correlated. First, I propose that past participation, i.e. participation at time *t – 1*, is more

[3] Note that the dummy variable $VOTE_{t-2}$ enters the equation only in interaction with $VOTE_{t-1}$. The concept of habitual voting links present participation/abstention with participation/abstention only in the most recent past election. Here, I propose that habitual turnout is linked with habitual party choice (see hypothesis 3). In order to propose this, however, I must also assume more persistent participation. This is represented with the interaction between $VOTE_{t-1}$ and $VOTE_{t-2}$.

likely to affect present participation if it is an element of a persistent tendency. I approximate this tendency with participation/abstention also at time $t - 2$. However, hypothesis 2 is in a sense only auxiliary and makes room for hypothesis 3, namely the proposition that consistency with respect to past party choice will have a positive effect on the citizens' present propensity to cast a ballot (see section 7).

10. Note: On Testing the Hypothesis Only on the Youngest Cohorts

The test of the habitual turnout proposition by Denny and Doyle (2009) is in some respects unique. Most importantly, it utilises National Child Development Study data. The data encompass only the youngest cohorts of British citizens. Hence, Denny and Doyle essentially trace the development of voting habit. This is a sensible way of proceeding as the broader theoretical framework behind the tested proposition assumes that the habit of voting (or abstention) develops in the course of a few initial elections in a person's life to become virtually unchangeable thereafter (Plutzer 2002). If so, the evidence showing the process of habit acquisition would be theoretically meaningful only in the case of the youngest cohorts of citizens. In this paper, I also limit the sample analysed to the youngest cohorts. The limitations of the data, described in detail in the next section, prompt me to somewhat "stretch" the criteria according to which I include respondents in the analysis. I nonetheless believe the above compromise does not go so far as to violate the theoretical sensibility of the test.

11. Data and Variables

Unlike Denny and Doyle (2009), in this paper I cannot use the National Child Development Study data. These do not include comprehensive answers to the party choice question, i.e. the question was not asked in relation to a sufficient number of elections. Therefore, I use British Household Panel Survey (henceforward BHPS, see Taylor et al. 2010) data. This data set currently includes answers to turnout and party choice questions relating to four British General Election, conducted respectively in 1992, 1997, 2001 and 2005. I analyse the determinants of turnout in the 2001 and 2005 elections. For the former election time t *-1* means the 1997 election and time $t - 2$ the 1992 election. For the latter these are elections conducted in respectively 2001 and 1997. Due to panel attrition, analysing turnout only of respondents for whom the 1992 election was the first in their lifetime would leave me with relatively few observations. Therefore, as I mentioned in the previous section, I somewhat "stretch" the criteria for inclusion in the analysis by including those respondents for whom the 1992 election was at most third in their lifetime.

The dependent variable in my research is a dummy referring to individual-level voter turnout. Likewise, main explanatory variables are also dummies. These are: turnout at time $t - 1$, the interaction between turnout at time $t - 1$ and turnout at time $t - 2$, and finally the interaction between turnout at time $t - 1$, turnout at time $t - 2$ and consistency/inconsistency of party choice between the times $t - 1$ and $t - 2$. In addition, drawing on previous research on the determinants of voter turnout, I include a number

of control variables. These are: education (see Brady et al. 1995), parental social class[4] (see Crewe 1981; Parry et al. 1992), marital status (see Zuckerman et al. 1998; Zuckerman et al. 2005), a dummy referring to having (or not having) children under the age of sixteen (Plutzer 2002), union membership (Radcliff 2001), an indicator of mental health (Davey-Smith and Dorling 1996; Denny and Doyle 2007; Reitan 2003; Schur and Kruse 2000), age and gender. Finally, I also control for partisanship in 1991, i.e. before the first election encompassed by the BHPS data set. This is a methodologically conservative approach[5] aimed at taking into account the process whereby vote choice and partisanship affect each other (Converse 1969; Converse 1976). Certainly, the above variables do not exhaust all the set that, if available, should be controlled for in a model of socialisation to voting (see Denny and Doyle 2009: 25-26). Nonetheless, I believe I have made every effort to use all the opportunities offered by the BHPS data.

12. A Note on Estimation

The data set analysed here is a panel data set, with multiple observations on the same respondents. In practice, in the main analysis for most respondents I will have two observations. This poses the problem of unobserved heterogeneity. As Denny and Doyle (2009: 20-22) point out, random-effects models, commonly used to tackle the problem, might suffer from the fixed-effect unobserved heterogeneity problem. This would happen if there were uncontrolled time-invariant factors that exert consistent impact on the dependent variable (turnout in this case) and are correlated with observed variables

[4] Measuring parental social class, I use Hope-Goldthorpe scale (see Goldthorpe and Hope 1974) that grades occupations according to their social prestige.
[5] However, in a separate analysis (not reported here), in which I did not include the variable relating to partisanship in 1991, I obtained results largely mirroring those presented in this paper.

included in the model. I address this problem turning to generalised estimating equation (GEE) modelling (Hu et al. 1998) and estimating a population-averaged probit model[6].

Another estimation problem addressed by Denny and Doyle (2009) - the initial conditions problem – is even more central for research on behavioural self-reinforcement. In fact, none of the earlier studies on habitual turnout attempted to control for the problem. It will arise when the first wave of a given panel data set, i.e. the first time-point at which the given behaviour is observed, is not the point at which the examined process begins. Attempts to account for the problem are well known from the literature on unemployment persistence (Arulampalam et al. 2000). I must emphasise here that, when studying behavioural self-reinforcement (e.g. habitual turnout), initial conditions should be accounted for even if the first time a given behaviour occurs is covered by the data set used. Denny and Doyle (2009: 20) justify this necessity the following way: "A priori, one may question why we have an initial conditions problem in this study, as we observe the voting behaviour of the [...] cohort from their first election onwards. Yet political socialisation occurs prior to voting age, and young adults do not come to their first election as "political virgins". Rather, similar to political socialisation literature which emphasises the importance of family background in influencing political orientations, it appears that young adults are also socialised with respect to electoral participation". Indeed, Denny and Doyle, in their effort to tackle the initial conditions problem in a data set which contains information on

[6] I do not use a random-effects model as the latter assumes that the within-effect is equal to the between-effect. If not, the estimates are biased and inconsistent. The assumption is not easy to test for non-linear models, e.g. logit and probit (the latter is used here). In an analysis not reported in this paper, I estimated a random-effects probit model and it turned out that after controlling for the initial conditions problem (see next paragraph in this section) unobserved heterogeneity equals virtually zero. This means random-effects estimation is not even necessary here.

respondents' behaviour in their first election in lifetime, show that the problem might appear even when using in such a "friendly" data set. To account for the initial conditions problem, Denny and Doyle apply a technique developed by Orme (2001). They estimate a reduced-form equation explaining turnout at the first point (i.e. the initial probit model), in which they use a set of strictly exogenous explanatory variables. In addition, they use an identifying variable capturing residential mobility, a factor expected to be negatively correlated with the propensity to vote (Squire et al. 1987; Highton 2000). Then, estimating their main model, they remove this variable from the equation. Instead, they include the following probit generalised error (henceforward *PGE*) term:

3) $PGE = [(2y_{i1} - 1)\varphi(\lambda' z_i)]/[\Phi(\{2y_{i1} - 1\}\lambda' z_i)]$

where:

φ – normal density,

Φ – normal distribution,

y_{i1} – the *i*th respondent's observed turnout at the initial stage,

$\lambda' z_i$ - the *i*th respondent's predicted probability of voting at the initial stage.

In this paper, I approach the initial conditions problem in a similar way as Denny and Doyle (2009). Namely, predicting turnout at the initial stage (i.e. in the 1992 British General Election), I include a dummy variable distinguishing between the respondents who relocated (between 1991 and 1992) and those who did not do so. I calculate *PGE*, as in formula 3, and include it in the final model instead of the residential mobility

variable. The other variables used in the initial-stage model are the control variables mentioned in section 11, with the exception of partisanship in 1991. I expect the latter variable not to be strictly exogenous.

13. Results and Discussion

Results for the initial probit regression, explaining BHPS respondents' turnout in the 1992 General Election, are presented in table 1. The results are important in one respect. The fact of residential relocation between 1991 and 1992 has a highly statistically significant ($p < 0.01$) negative effect on the respondents' propensity to vote in 1992. Holding all other variables constant at their real values (and manipulating only the residential mobility variable), relocation brings an average decline of 11.6% in the probability of a respondent voting. As the variable can be considered strictly exogenous, i.e. an impact of turnout on residential mobility can be sensibly precluded, this variable seems to be an ideal candidate used for identification in further analyses. Hence, the PGE, computed as in formula 3 (previous section), will be included in further equations[7].

Table 2 contains results of the estimation of the main equation (as in formula 2) for the 2001 and 2005 General Elections (analysed jointly). The results do support hypotheses 1 and 2 but hypothesis 3 is not supported by evidence. In other words, consistency of past party choice between time $t - 1$ and time $t - 2$, if controlled for partisanship in 1991, has virtually no effect on the respondents' present propensity to vote. To give a better account of the effects, in table 5 I present predicted probabilities

[7] As should have been expected, the *PGE* has a consistently significant positive effect on the probability of a respondent voting (see tables 2 to 4).

of a respondent voting, given certain types of electoral behaviour and holding all the control variables constant at their real values. As it can be seen there, those voting at time $t - 1$ are, on average, nearly 28% more likely to vote at time t than those who did not vote at time $t - 1$. If participation at time $t - 1$ is an element of a longer "chain" of continuous participation, i.e. a respondent voted also at time $t - 2$, the propensity to vote at time t rises by further 16.6%. These are substantial effects, constituting further evidence supporting the thesis of habitual (self-reinforcing) nature of turnout Nonetheless, hypothesis 3, going beyond the previous studies (Green and Shachar 2000; Gerber et al. 2003; Denny and Doyle 2009) has clearly failed the empirical test. Consistent party choice at times $t - 1$ and $t - 2$ does not bring any visible change to the probability of a respondent voting at time t, in comparison to what is observed in the case of those whose choices at times $t - 1$ and $t - 2$ were inconsistent.

In search for deeper understanding of the regularities described above, in tables 2 and 3 (see also predicted values in tables 6 and 7) I estimate the model separately for both elections. Indeed, the impact of past choice consistency on present turnout differs between the 2001 and the 2005 election. For the former the effect is negative (opposite to what I have expected) and for the latter positive. Both these effects are not statistically significant but the positive effect in the 2005 General Election is at a very marginal level ($p = 0.052$ for a one-tailed test). All this suggests some temporal effects, related to the rapid change of relative support for the Conservatives and Labour, might have been observed[8]. However, my separate analyses (not reported here) did not confirm

[8] On the other hand, hypothesis 2 (relating to the impact of electoral participation/abstention at time $t - 2$, in its interaction with participation/abstention at time $t - 1$, on the probability of voting at time t) has much weaker support in 2001 than it has in 2005. This suggests some more fundamental, and possibly

the above intuition. Another intuitive explanation to the lack of a clear effect of past choice consistency on citizens' propensity to vote refers to the notion of electoral competitiveness, more precisely election closeness. That district-level competitiveness strongly affects turnout in British elections has been known for long (see Denver and Hands 1974). At the same time, people living and voting in close (competitive) districts might be more likely to change their political preferences and switch between parties. In particular, British electoral research emphasises the phenomenon of neighbourhood effects whereby "people who talked together voted together" (Miller 1978; Pattie and Johnston 1999; Pattie and Johnston 2000). It can be thus imagined that people living in close competitive districts, especially voters not leaning strongly towards any party, experience more diverse politically related pressures on part of their local environment. Hence, they should be more likely to switch between parties. At the same time, as mentioned earlier, competitiveness boosts turnout. Putting these two together, one might easily get an intuition explaining why past choice consistency and the citizens' propensity to vote are not clearly positively related. Unfortunately, the BHPS data set does not contain information on the House of Commons' districts in which the respondents live and/or vote. Therefore, controlling for district marginality is not possible here. At the same time, using any election studies data sets would leave one with very few young adults who could be included in the analyses. In this situation, I am forced to say that hypothesis 3 has so far not been supported by empirical evidence and leave the concept for further tests when better data are available.

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idiosyncratic, disruption in electoral behaviour patterns might have taken place between 1992 and 1997. Hence, studying all the hypotheses using future waves of the BHPS might be a sensible step.

Apart from the substantive deficiency of the analyses presented here, resulting from the forced omission of district-level competitiveness from the model, there are also at least three characteristics of the data used that may cast some doubt on the results presented here. First, unlike some election studies, the BHPS contain turnout data that are not validated. Self-reported turnout data might suffer from bias introduced by over-reporting of turnout (see for instance Karp and Brockington 2005). However, if failing to vote, party supporters should be expected to be more prone to over-report their turnout (Bernstein et al. 2001). This should, however, produce "fake" evidence in favour of hypothesis 3 rather than evidence not supporting it. Nonetheless, over-reporting regularities might certainly have their local specificity. In addition, in the British context this specificity could be related to the already mentioned notion of competitiveness (district marginality). Second, the BHPS surveys are conducted at least a few months (sometimes more) after a given General Election takes place.. This almost certainly introduces "recall bias" (see Himmelweit et al. 1978) to the data. A few months after an election some respondents could have already changed their political preferences and, when asked in a survey, give answers consistent with their current preference rather describing their true past choice. This would introduce bias as cases of choice inconsistency would be reported as consistency and (possibly) *vice versa.* Finally, as all panel data sets, also the BHPS suffers from attrition (Rendtel et al. 2004). The problem might be related to both turnout and choice consistency as attrition is certainly partly caused by respondents' residential relocation[9]. Relocation might affect

[9] This seems to be a reasonable claim, especially looking at the descriptive statistics presented in table 9. Among the respondents who voted at both time $t-1$ and time $t-2$, those voting consistently constitute well above 70%. This stands in contradiction to the previous findings indicating that party identification phenomena in Britain are, in general, characterised by instability (Clarke et al. 2004: 175-217).

both turnout and vote choice. Hence, attrition might introduce some systematic distortions to the data. Concluding, I believe the failure to provide evidence supporting hypothesis 3 in this paper should not mean the end of research on this hypothesis. On the contrary, the impact of past choice consistency on citizen's present propensity to vote should be tested in future, as soon as better data are available.

14. Conclusion

The theory of habitual voting - a prominent explanation of how and why people engage in electoral participation – is a nuanced concept. It also has its history during which the meaning of habitual turnout and its dynamics was not homogenous. In this paper, I have referred to the origins of the theory and traced its development, culminating with the study by Plutzer (2002). I asked important theoretical questions about habitual turnout. I explored its advantages comparing to the rational choice model of turnout. I also considered the issue of whether habit is better viewed as a probability or as a property, claiming the former is more conceptually fruitful than the latter. Last but not least, I argued that habitual turnout should not be analysed in separation from habitual party choice. This has led my to hypothesising that not only past participation but also consistent party choice should affect turnout. My test of the hypothesis, utilising the British Household Panel Survey data, did not deliver convincing evidence. However, I pointed to a few reasons why attempts to test this hypothesis, hopefully using better data emerging in future, should continue.

The current paper is the first paper in a set of three papers having habitual turnout as their "leitmotif". Papers 2 and 3, however, differ regarding the substance. The current

paper's main aim was to make a contribution going beyond the work by Plutzer (2002), and this work was the main orientation point here. Papers 2 and 3 have the work by Franklin (2004) as their departure point. Franklin, referring to Plutzer, claims that not only a person's individual social situation, but also electoral context, affects the process of socialisation to voting. In other words, the characteristics of elections (partly) decide whether the citizens socialising to the electoral process acquire a habit of voting or, on the contrary, a habit of abstention. The above idea leads Franklin (2004) to an invention of a simple way in which habitual voting theory can be tested. If this theory is true then electoral context should only influence turnout by the youngest cohorts, i.e. those who are going through socialisation to the electoral process. The experienced (established) cohorts should not be affected. In papers 2 and 3, I follow this idea. Paper 2 tests whether the effects of electoral competitiveness (election closeness) on turnout (in the United States and Sweden) are conditioned by citizens' electoral experience. Paper 3 asks a question about experience-conditioned impact of context on turnout in the European Parliament elections. These tests deliver strong evidence in favour of the concept of habitual voting. I thus believe further research driven by the concept, including further tests of the hypotheses proposed in this paper, is worth an effort.

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Appendix

Table 1 Determinants of Individual-Level Turnout in the 1992 British General Election: Initial Probit Regression

	Coef.	Robust SE
Relocated between 1991 and 1992	-0.369**	0.076
Parental Social Class (Hope-Goldthorpe Scale)	0.005**	0.002
University Education	0.125	0.115
Union Membership	0.133	0.088
Married	0.110	0.081
Has Children under 16	-0.244**	0.101
Received Mental Health Advice in the Last Year	-0.067	0.144
Age in Years	0.042 **	0.010
Female	0.196**	0.078
Constant	-0.587*	0.270
Log Likelihood	-966.128	
McFadden R^2	0.036	
N	1,857	

* $p < 0.05$; ** $p < 0.01$ (one-tailed test)
Note: The change in the probability of a respondent voting resulting from a change in "mover status" from 0 to 1, holding other variables at their real values, equals -11.6%, with a 95% confidence interval of [-16.8%; -6.5%].

Table 2. Determinants of Individual-Level Turnout in the 2001 and 2005 British General Elections: Population-Averaged Probit Regression Estimates

	Coef.	Semi-Robust SE
Voted at Time *t – 1*	0.741**	0.109
Voted at Time *t – 1* X Voted at Time *t – 2*	0.516**	0.128
Voted at Time *t – 1* X Voted at Time *t – 2* X Consistent Party Choice	-0.003	0.089
Parental Social Class (Hope-Goldthorpe Scale)	0.005**	0.002
University Education	0.367**	0.085
Union Membership	0.136*	0.074
Married	0.156**	0.064
Has Children under 16	0.046	0.092
Received Mental Health Advice in the Last Year	-0.003	0.109
Age in Years	0.009	0.007
Female	-0.075	0.091
Party Supporter in 1991	0.353**	0.068
PGE	0.099*	0.047
Constant	-1.217**	0.282
Wald chi-square	544.210**	
Number of Observations	2,298	
Number of Respondents	1,274	

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

Table 3. Determinants of Individual-Level Turnout in the 2001 British General Election: Probit Regression Estimates

	Coef.	Robust SE
Voted at Time *t – 1*	0.947**	0.165
Voted at Time *t – 1* X Voted at Time *t – 2*	0.170	0.212
Voted at Time *t – 1* X Voted at Time *t – 2* X Consistent Party Choice	-0.180	0.113
Parental Social Class (Hope-Goldthorpe Scale)	0.005*	0.003
University Education	0.325**	0.115
Union Membership	0.063	0.099
Married	0.159*	0.083
Has Children under 16	0.178	0.119
Received Mental Health Advice in the Last Year	-0.109	0.143
Age in Years	0.022*	0.011
Female	-0.193*	0.116
Party Supporter in 1991	0.418**	0.091
PGE	0.226**	0.089
Log Likelihood	-680.723	
McFadden R^2	0.170	
N	1,256	

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

Table 4. Determinants of Individual-Level Turnout in the 2005 British General Election: Probit Regression Estimates

	Coef.	Robust SE
Voted at Time *t – 1*	0.342*	0.159
Voted at Time *t – 1* X Voted at Time *t – 2*	0.804**	0.191
Voted at Time *t – 1* X Voted at Time *t – 2* X Consistent Party Choice	0.240	0.148
Parental Social Class (Hope-Goldthorpe Scale)	0.006*	0.003
University Education	0.525**	0.130
Union Membership	0.233*	0.123
Married	0.170*	0.097
Has Children under 16	-0.192	0.135
Received Mental Health Advice in the Last Year	0.045	0.164
Age in Years	-0.026*	0.013
Female	0.155	0.133
Party Supporter in 1991	0.319**	0.107
PGE	0.167**	0.064
Log Likelihood	-503.585	
McFadden R^2	0.254	
N	1,042	

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

Table 5. Past Electoral Behaviour and the Probability of a Respondent Voting in the 2001 and 2005 British General Elections

Respondent's Past Electoral Behaviour	Probability of a Respondent Voting (in%)
Did not vote at time *t – 1*	35.5 [28.0; 43.1]
Voted at time *t -1* but did not vote at time *t - 2*	63.1 [53.6; 72.7]
Voted at both time *t -1* and time *t – 2* but party choice was not consistent	79.7 [73.3; 86.1]
Voted at both time *t -1* and time *t – 2* and party choice was consistent	79.6 [74.0; 85.2]

Note: The number in brackets are 95% confidence intervals.

Table 6. Past Electoral Behaviour and the Probability of a Respondent Voting in the 2001 British General Election

Respondent's Past Electoral Behaviour	Probability of a Respondent Voting (in%)
Did not vote at time *t – 1*	38.3 [27.5; 49.1]
Voted at time *t -1* but did not vote at time *t - 2*	72.2 [59.5; 84.9]
Voted at both time *t -1* and time *t – 2* but party choice was not consistent	77.3 [68.0; 86.5]
Voted at both time *t -1* and time *t – 2* and party choice was consistent	71.9 [62.7; 81.1]

Note: The number in brackets are 95% confidence intervals.

Table 7. Past Electoral Behaviour and the Probability of a Respondent Voting in the 2005 British General Election

Respondent's Past Electoral Behaviour	Probability of a Respondent Voting (in%)
Did not vote at time *t – 1*	39.7 [28.4; 50.9]
Voted at time *t -1* but did not vote at time *t - 2*	52.2 [37.5; 66.9]
Voted at both time *t -1* and time *t – 2* but party choice was not consistent	79.0 [69.1; 88.9]
Voted at both time *t -1* and time *t – 2* and party choice was consistent	84.9 [78.0; 91.7]

Note: The number in brackets are 95% confidence intervals.

Table 8. Descriptive Statistics – 1992 BHPS Survey

Variable	Distribution Statistics
Electoral Participation	0.770 (0.421)
Relocated between 1991 and 1992	0.225 (0.417)
Parental Social Class (Hope-Goldthorpe Scale)	47.233 (15.501)
University Education	0.109 (0.311)
Union Membership	0.197 (0.398)
Married	0.259 (0.439)
Has Children under the Age of 16	0.234 (0.423)
Received Mental Health Advice in the Last Year	0.056 (0.230)
Age in Years	25.224 (3.736)
Female	0.537 (0.499)

Note: Main entries are means and the numbers in parentheses are standard deviations.

Table 9. Descriptive Statistics – 2001 and 2005 BHPS Surveys

Variable	Distribution Statistics – 2001 and 2005 Surveys (Jointly)	Distribution Statistics – 2001 Survey	Distribution Statistics – 2005 Survey
Electoral Participation	0.644 (0.479)	0.641 (0.480)	0.649 (0.478)
Voted at Time *t - 1*	0.698 (0.459)	0.742 (0.438)	0.644 (0.479)
Voted at Time *t – 1* X Voted at Time *t - 2*	0.605 (0.489)	0.639 (0.481)	0.565 (0.496)
Voted at Time *t – 1* X Voted at Time *t – 2* (if Voted at Time *t – 1* = 1)	0.868 (0.339)	0.861 (0.347)	0.878 (0.328)
Voted at Time *t – 1* X Voted at Time *t – 2* X Consistent Party Choice	0.445 (0.497)	0.456 (0.498)	0.431 (0.495)
Voted at Time *t – 1* X Voted at Time *t – 2* X Consistent Party Choice (if Voted at Time *t – 1* = 1 and Voted at Time *t – 2* = 1)	0.735 (0.442)	0.714 (0.452)	0.762 (0.426)
Parental Social Class (Hope-Goldthorpe Scale)	47.194 (15.293)	47.256 (15.266)	47.119 (15.334)
University Education	0.197 (0.398)	0.188 (0.391)	0.208 (0.406)
Union Membership	0.208 (0.406)	0.212 (0.409)	0.204 (0.403)
Married	0.615 (0.487)	0.594 (0.491)	0.641 (0.480)
Has Children under the Age of 16	0.420 (0.494)	0.415 (0.493)	0.427 (0.495)
Received Mental Health Advice in the Last Year	0.079 (0.269)	0.076 (0.265)	0.083 (0.275)
Age in Years	36.231 (4.205)	34.395 (3.696)	38.444 (3.684)
Female	0.575 (0.494)	0.574 (0.495)	0.576 (0494)
Party Supporter in 1991	0.301 (0.459)	0.299 (0.458)	0.302 (0.459)
PGE	0.022 (0.691)	0.024 (0.691)	0.021 (0.691)

Note: Main entries are means and the numbers in parentheses are standard deviations.

Paper 2

Uncertainty Motivates Those Unshaped: Experience-Conditioned Effects of Election Closeness on Voter Turnout

Abstract: The recently prominent concept of habitual voting (Plutzer 2002; Franklin 2004) posits that, in the course of a few initial elections in their life, the citizens of the democratic polities would develop a stable propensity to vote or abstain. In further elections a "habit" acquired this way would persist and remain virtually unchangeable. If so, a hypothesis follows that the contextual characteristics of any given election, including election closeness, would more strongly affect turnout by the least experienced cohorts than turnout by the established cohorts. In this paper, I test the above hypothesis in the American and the Swedish context. The American test refers to the elections to the United States House of Representatives, using district marginality as a measure of closeness in midterm congressional elections. The Swedish test relies on the definition of closeness as the country-level gap between the two competing political blocs (the Left and the Right-Centre) in the national parliament elections. The tests utilise validated survey data from the American National Election Studies (1978, 1986 and 1990 midterm elections) and the Swedish National Election Studies (sixteen of the seventeen national parliament elections conducted between 1956 and 2006). They indicate that the significant impact of election closeness on voter turnout is largely limited to the least experienced (in the electoral sense) cohorts of citizens. These results lend suggestive support for the concept of voting as habit.

Key words: voter turnout, habitual voting, election closeness.

1. Introduction: Voting as Habit

The concept of voting as habit has recently been one of the prominent propositions explaining why the citizens of the democratic polities do or do not engage in electoral participation. The theory was first systematically elaborated by Plutzer (2002) whose research followed the earlier intuitions that appeared in political science literature (Milbrath 1965; Brody and Sniderman 1977: 349). According to Plutzer (2002), the propensity to vote is a "habit" that is learned a few initial elections in every citizen's life. Then, such a predisposition is relatively persistent and resistant to potential influences. In Plutzer's (2002: 42-44) argumentation, therefore, an important part is a clear link to the resource model of political participation (Brady et al. 1995). If, at the beginning of their electoral history, young adults have access to the broadly conceived "resources", either through their own characteristics (e.g. education) or the traits of their social environment (e.g. politically sophisticated parents), they will be likely to develop a strong predisposition ("habit") for voting. At later stages, all the "resources" would gradually lose their importance and the citizens' "voting history" would be the only element that practically matters. This reasoning is quite convincingly supplemented by another stream of research in habitual voting. It has been argued for some time that voting is "habitual" in the very strict sense, i.e. that there is *a causal relationship* between voting/abstention at a time t_0 and voting/abstention at the next time t_1 (Kanazawa 1998; Kanazawa 2000; Fowler 2006). A number of studies (Green and Shachar 2000; Gerber et al. 2003; Denny and Doyle 2009) have corroborated this

hypothesis even though the strength of the effect has been a matter of controversy. While there might be at least a few explanations why voting and abstention tend to be "self-reinforcing" acts (Gerber et al. 2003: 548-549) this tendency firmly fits into the developmental model of electoral participation sketched by Plutzer (2002). The last author stresses the importance of the "resources" that facilitate electoral participation at the starting point of a citizen's electoral history. Then, since voting is self-reinforcing, maintaining the predisposition to vote is gradually less and less "resource-consuming". Given the logical neatness of this argumentation, one that draws (sometimes more and sometimes less explicitly) on the behaviourist tradition of research on human behaviour (Bem 1967; Bem 1972; Macy 1991; Macy 1995), the concept of habitual voting seems to be a very promising explanation of why and how people engage in electoral participation or abstention.

Drawing on Plutzer's (2002) work, Franklin (2004) takes the developmental model of voting a step further. First, he proposes that long-term turnout trends will be an effect of generational replacement (Franklin 2004: 59-90). If the individual dispositions for either voting or abstention are formed during the citizens' young adulthood, i.e. when in their lifetime they experience the initial elections, 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 socialisation to voting takes place under different 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. 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. Franklin (2004: 43-46) distinguishes three levels of political context relevant to any election. The first level - the institutional characteristics - provides voters with information on how much is "at stake" in any given election. In other words, institutional context relates to the consequences of the ballot. An election is salient when it has policy consequences, relevant from the citizens' (and also the elites' if the latter are to spend various resources on campaigning) subjective viewpoint. The second crucial component of electoral context is its temporal dimension. Here, competitiveness of the election is mainly of interest. In particular, Franklin (2004) concentrates on election closeness, the central topic of also this study (see next section for a detailed discussion concerning election closeness as a determinant of voter turnout) and its role in formation of the electorally initiating cohorts. Finally, there is also a social dimension of electoral context, comprising all the social and group ties that have a potential impact on mobilisation to electoral participation. It might seem that this last component of electoral context is just Franklin's (2004) reiteration of Plutzer's (2002) arguments. However, Franklin's (2004: 63-66) analysis of the consequences of lowering voting age to eighteen shows how these essentially micro-level circumstances might differ between cohorts at their respective electoral socialisation periods, just because these periods take place at different age. In particular, Franklin (2004: 63-66) stresses the fact that the

eighteen-year-old citizens might no longer be under strong influence of their parents' home environment but nor so firmly socially and economically settled to be able to overcome the initial "costs" of electoral participation. As a result, socialisation to voting after lowering voting age to eighteen should be a more problematic process, with all the further negative consequences for long-term aggregate turnout regularities. This interesting argumentation, supported with empirical evidence, shows how an electoral reform can actually change the very individual-level circumstances in which the citizens make their decisions concerning electoral participation. It also supplements Franklin's (2004: 43-44) argument about electoral competitiveness, and election closeness in particular.

2. Election Closeness As an Indicator of Electoral Competitiveness: Theories, Measures, and Controversies

Election closeness has long been recognized as a potential factor affecting voter turnout in democratic elections. Putting it bluntly, if an election is expected to be close and its results uncertain then turnout is expected to rise. In fact, the notion appeared already in the work of the classic voting behaviour scholars, like Key (1949) or Downs (1957). The former author (Key 1949: 307) has stressed its potential impact on the behaviour of the political elites that should be expected to intensify their campaigning efforts in close elections. Increased campaigning would in turn cause a reaction by voters. The explanation by Downs (1957), retained by Riker and Ordeshook (1968) in their rational voter model, emphasised an unmediated direct reaction of the electorate to election closeness. According to that interpretation, the citizens will somehow know whether a

given election is going to be close and they will accordingly adjust their perception of the value of their vote. A vote cast in a close election will be valued more than a vote cast when the election result is easy to predict.

The above classic controversy surrounding the issue of the impact of election closeness on voter turnout is probably the most celebrated one. However, it is by no means the only one. In this section I attempt to explore a wider set of theoretical and methodological nuances that a potential student of this issue might (or must) encounter. First, I consider the already mentioned classic theoretical controversy between the explanations offered by Key (1949) and Downs (1957). Second, I touch upon the conceptually and methodologically crucial problem of measuring election closeness for different electoral systems. In this context, I emphasise the difference between single-member-district (henceforward SMD) and proportional representation (henceforward PR) electoral formulas. Third, I turn to the methodological "cavity" criticised by Cox (1988) who claims that relying on the usual *ex post* measures of closeness likely results in spuriousness of the estimated impact of closeness on turnout. Fourth, I refer to the study by Matsusaka and Palda (1993) and their claim that the effects of closeness on turnout observed in aggregate-level data might be flawed by ecological fallacy. Finally, I again refer to Franklin (2004) and reflect upon the potential benefits of this paper, i.e. a study on closeness as a contextual factor having heterogeneous (experience-conditioned), rather than homogenous, impact on voter turnout.

2.1. Election Closeness and Voter Turnout: The Citizens and the Elites

The classic controversy between Key (1949) and Downs (1957) as to the exact link between closeness and turnout has long been one of the foremost issues attracting the attention of voting behaviour scholars. Is it voters themselves who somehow (approximately adequately) perceive how competitive (close) a given election can be and thus react accordingly with heightened or lowered propensity to vote? Or is it political elites who are those able to acquire knowledge about competitiveness of a forthcoming election and intensify their efforts aimed at "getting out the vote" (Patterson and Caldeira 1983; Karp et al. 2008)? The former explanation is not without its merits. For instance, one might hypothesise that close elections would attract greater media attention (Blais 2000: 62), affecting the citizens' interest in politics and thereby also their propensity to cast a ballot. This obviously stands in strong contradiction to the rational choice argument (Riker and Ordeshook 1968) according to which the probability of an individual voter deciding any given election equals effectively zero. As a result, the assertion that "saying that closeness increases the probability of being pivotal [...] is like saying that tall men are more likely than short men to bump their heads on the moon" (Schwartz 1987: 118) is essentially (mathematically) very true. However, as the research by Opp (2001) suggests, the vast majority of the citizens tend to highly overestimate the probability of their vote being decisive. In other words, the fact that so many citizens of the democratic polities display the seemingly "irrational" behaviour and engage in electoral participation might be a result of some sort of "cognitive illusion". In this context, the so-called "paradox of voter turnout" (Fiorina 1990) is a problem manufactured by rational choice theorists rather than an unsolvable

"puzzle" of human behaviour. If that is the case then awareness of a forthcoming election being likely very competitive, a knowledge the citizens might acquire through media exposure (Blais 2000: 62), should strengthen the already widespread beliefs of a single voter being potentially pivotal.

If the "cognitive illusion" proposition (Opp 2001) is relied on then some earlier studies in the impact of closeness on turnout (e.g. Barzel and Silberberg 1973; Silberman and Durden 1975), relying on just including a closeness variable as a regressor in aggregate turnout analyses, might seem conceptually acceptable. However, many other studies (Berch 1993; Caldeira and Patterson 1982; Cox and Munger 1989; Dawson and Zinser 1976; Eagles 1991; Endersby et al. 2002; Kenny and Rice 1985; Patterson and Caldeira 1983; Settle and Abrams 1976; Tucker 1986) have followed the idea put forward by Key (1949: 307), controlling for elite activity (usually measured using campaign expenditures) in the respective analyses. A tentative consensus has arisen in the field according to which it is both the political elites *and* the citizens who react to competitiveness (closeness) of a given race. It is relatively widely accepted that the elites indeed react to closeness with increased mobilisation efforts, i.e. increased campaign spending (though see Dawson and Zinser 1976). At the same time, most of the past studies have distinguished at least minor effects of closeness on turnout, even when holding campaign expenditures constant. It therefore seems that the citizens themselves also have certain ability to assess closeness and react to it with increased or decreased propensity to vote. Despite the latter claim being sometimes firmly rejected (see Matsusaka 1993), it is now probably fairly uncontroversial that the analysed causal

narratives linking closeness to turnout, proposed by Downs (1957) and Key (1949), are both viable as explanations to the phenomena analysed here.

In the context of the analyses of the causal link between closeness and turnout the already mentioned work by Franklin (2004) is also worth brief consideration. On one hand, as it was already said, election closeness is one of the central elements of the analyses presented in that study. On the other, Franklin (2004: 44) considers closeness only a certain proxy for electoral competitiveness and, therefore, is uninterested in the exact causal link between closeness and turnout. Instead, an emphasis is put on the experience-conditioned impact of the margin of victory on turnout and the role of electoral competitiveness in the process of formation of the newly enfranchised cohorts of citizens. Such an approach leads to more parsimonious models of the impact of electoral competitiveness on voter turnout as campaign expenditures, and its potential interaction with electoral experience, is not controlled for. More importantly though, all the problems related to the arguably varying "true value" of the same amount of money across space (see Cox and Munger 1989), and especially time, are also avoided. In the situation of the above mentioned widespread consensus as to the links between closeness and turnout it thus seems to be a sensible way of proceeding. In this study, I follow Franklin (2004) in treating the margin of victory in a given election as a proxy for electoral competitiveness, leaving aside the issue of the exact causal mechanism linking closeness to turnout and, as a result, also the issue of campaign spending.

2.2. Election Closeness and Voter Turnout: Plurality and Proportional Representation Electoral Systems

The bulk of reflection on the impact of closeness on turnout concentrates on the countries using plurality, i.e. SMD, electoral system, including the United States (e.g. Cox and Munger 1989; Tucker 1986), Canada (e.g. Berch 1993; Endersby et al. 2002) and the United Kingdom (e.g. Denver and Hands 1974). There is also a fairly strong tradition of researching this issue in the countries implementing mixed electoral systems with a plurality component, for instance in Germany (Kirchgässner and Schimmelpfennig 1992; Kirchgässner and Meyer zu Himmern 1997) or New Zealand (Karp and Banducci 1999). This is certainly a logical consequence of the margin of victory being easily definable for the SMD electoral systems. Most usually, it is defined *ex post* as some form of a difference between the results attained by the winner and the runner-up in a particular district. Some of the major controversies that have arisen as to the exact definition of district marginality in the SMD systems (Cox 1988; Endersby et al. 2002) are subject to analysis in the next sub-section. Nonetheless, the very theoretical meaningfulness of the margin of victory as a basis of all the different definitions of closeness in this type of electoral system is universally recognised.

The situation is different in the case of the PR electoral systems. Under this type of electoral rules, the democratic polities are divided into multi-member districts which highly complicates the job of meaningfully defining of district marginality. At the same time, voter turnout in these systems tends to be higher (Blais and Dobrzynska 1998; Franklin 2002; Jackman 1987). This empirical regularity can obviously be explained with reference to the benefits, in terms of the ideal of representation through the

electoral process, brought by a more proportional allocation of parliamentary seats. However, in his recent study, Selb (2009) proposes that it is actually local (district) competitiveness that should be considered the factor driving higher turnout in the PR systems. In his reasoning, Selb (2009) relies on the notion of the "threshold of exclusion" (see Gallagher 1992), i.e. the maximum vote share with which a party might not possibly win an additional seat. This threshold reaches its theoretical maximum (i.e. the value of 0.50) in the SMD system. As district magnitude increases the threshold of exclusion will decrease. Hence, Selb (2009: 532) argues that in the PR systems district-level competitiveness should be characterised by relatively high mean and low variance, the latter decreasing as district magnitude increases. In the SMD system district competitiveness would vary greatly, some races being completely "safe" (which virtually never happens in the multi-member districts under the PR systems). The latter would produce the observed turnout difference between the SMD and the PR electoral systems. Selb (2009: 542) presents strong empirical evidence supporting his claims, mirroring the somewhat intuitive earlier findings by Cox et al. (1998). A question then arises as to whether all this work can serve as a basis for a better *ex post* definition of closeness in the PR systems. Indeed, general definitions of closeness, applicable to both the SMD and the PR systems, have recently been proposed by Grofman and Selb (2009) as well as Blais and Lago (2009). The latter authors define their competitiveness measure as "the minimal number of additional votes required, under the existing rules, for any party to win an additional seat" (Blais and Lago 2009: 96). The measure designed by Grofman and Selb (2009) relies on the essentially same idea. It must be said that a comparison of the preliminary empirical findings utilising the measures developed

in these two studies leaves one partly confused. Grofman and Selb (2009: 296) show that their "index of competition" (i.e. closeness) is negatively correlated with the threshold of exclusion, which is consistent with Selb's (2009) reasoning. However, Blais and Lago (2009: 97-98) observe that in the SMD systems (i.e. those with the highest threshold of exclusion) district competitiveness is actually slightly higher that in the other systems. This obviously might be a peculiar regularity observed in the particular set of elections analysed by these authors, especially as they also find that the effect of closeness on turnout diminishes as district magnitude increases (Blais and Lago 2009: 98). These findings actually reinforce Selb's (2009) argumentation. Certainly, further research employing the newly designed measures of district competitiveness is required to address the problem of the partially conflicting findings presented in the two mentioned preliminary studies.

Interesting as the discussion on the general measures of district competitiveness (closeness) may be, it does not directly affect the choice of measures employed in this paper. For this paper's empirical part consists of two semi-independent studies into experience-conditioned impact of election closeness on turnout in the United States and Sweden. In the part focusing on the U.S. House elections, I use the "traditional" district marginality measure, i.e. margin of victory (both percentage-point and raw vote margins). As Blais and Lago (2009: 96) note, in the case of the SMD electoral systems their new proposed closeness measure reduces to those traditionally utilised in voter turnout research. Hence, the new measure does not bring any benefits for the students of the SMD systems, especially as it does not overcome the major methodological problems related to the previously used measures (more on those problems in the next

sub-section). Sweden, using the modified Sainte-Lagüe electoral formula (Wildfeltd 2003: 780), is another cup of tea. Here, I use a form of the national (election-level) vote margin. Some previous international comparative studies (Blais and Dobrzynska 1998; Franklin 2002) relied on a national gap between the two largest parties. Recently it was also used by Kostadinova (2003) for the purpose of a comparative study on the determinants of voter turnout in the post-communist democracies. Curiously, the latter study showed no effect of closeness on turnout. As the electorally inexperienced citizens of the transitional democracies should be expected to disproportionately strongly react to electoral competitiveness (see Franklin 2004: 198-199), the results presented by Kostadinova (2003) point to the potential erroneousness of the national margin of victory as a measure of turnout in the PR systems. However, it has long been recognised that Scandinavian countries constitute a special case. Here, the national margin of victory between two political blocs, the Left and the Right-Centre, is considered a meaningful measure of election closeness (van Egmond 2003: 64-65). Since survey data are available on sixteen of the seventeen Swedish elections conducted between 1956 and 2006, in this study I utilise the aforementioned election-level measure of closeness. For the sake of purity, I calculate the measure twice, first including the small parties that did not make it to reach the required electoral threshold (Wildfeldt 2003: 780) and thereby win parliamentary seats, and second time excluding those parties.

2.3. Election Closeness and Voter Turnout: On the Problems with *Ex Post* Measures of Closeness

In his seminal methodological note on closeness and turnout, Cox (1988: 770-774) points to the potential difficulty resulting from the application of the percentage-point margin of victory as a measure of closeness of a given race. The difficulty results from the fact that the total number of votes cast appears in the denominator of the formula for such a measure. At the same time, this number appears also in the numerator of the turnout formula. In such a situation, the estimated effects of closeness on turnout might suffer from spuriousness, being only an artifactual consequence of the closeness measure used. As Cox (1988: 771) observes, an extreme case of such sort of spuriousness would happen if all districts had the same voting-age populations and the same raw vote margins of victory but varying numbers of actual voters. However, in reality not only is that never the case, but also any hypothetical change in raw vote margin would, in practice, lead to a change in the number of total votes cast. In addition, the alternative measure proposed by Cox (1988), the raw vote margin of victory, is not without its disadvantages either. As Endersby et al. (2002: 613-614) argue, it is only well-suited to the districts of equal voting-age population and to two-party electoral contests. Neither of these conditions strictly holds, for instance, in the case of the U.S. House elections to be studied here. Both Cox (1988) and Endersby et al. (2002) are certainly partly right. For all the methodological problems concerning closeness measures stem essentially from the fact that these measures are calculated *ex post*, i.e. using real electoral results. If available, an *ex ante* measure of closeness should of course be used. Unfortunately, nothing like this is available (though see van Egmond

2003 for a solution based on pre-election polls; it is used, however, for only a sub-set of Swedish elections). Therefore, for the purpose of the analyses concerning the U.S. House elections I utilise both percentage-point multi-party margin of victory (Endersby et al. 2002: 614) and the raw vote margin as proposed by Cox (1988). Proceeding this way, I am motivated by the fact that obtaining similar results using different definitions of closeness would certainly be reassuring. In section 3, I present the exact formulas for both these measures.

2.4. Election Closeness and Voter Turnout: Aggregate Turnout Studies and the (Potential) Threat of Ecological Fallacy

Students of the impact of election closeness on turnout might possibly encounter yet another potential methodological difficulty. As Matsusaka and Palda (1993) claim, the empirical results presented in the studies concentrating on the impact of closeness on aggregate-level turnout might likely be flawed by ecological fallacy. To prove their point, these authors estimate turnout models for the 1979 and 1980 Canadian national elections. The models are estimated from both aggregate (district-level) and survey, i.e. individual-level, data. Significant effects of closeness on turnout are obtained from the aggregate-level data, but not from the individual-level ones. Therefore, Matsusaka and Palda (1993) proceed to argue that the effects of district marginality on turnout, presented in many aggregate-level studies (and the latter constitute the bulk of the literature in this area), are likely a result of some sort of aggregation bias. The argument advanced by Matsusaka and Palda (1993) is certainly not trivial. The theories of voting behaviour, including the concept relating closeness to turnout, are individual-level

explanations. So, it is sensible to expect that analyses utilising individual-level data should confirm the hypotheses proposed. On the other hand, in many cases when ecological fallacy is the case its sources can be found. For instance, in his classic study of this problem, Robinson (1950) notices that aggregate-level data on the American states indicate higher literacy levels in the states populated by large numbers of migrants. Hence, one could conclude that, contrary to what should be expected, migrants are more literate than the native population. However, individual-level data show just the opposite. Migrants are, on average, less literate but they only tend to settle in the states where native people are, on average, highly literate. This way, Robinson (1950) clearly shows the exact way the aggregation bias operates in that particular case. Unlike this author, Matsusaka and Palda (1993: 873) frankly admit they cannot offer any deeper explanation to the results they present. This, in addition to the potential biases of the analyses based on survey data, including overreporting bias (see for instance Karp and Brockington 2005), casts some doubt on the ecological fallacy argument. Nonetheless, it is worthwhile emphasising that the analyses presented later in this paper are solely based on individual-level (survey) data. Moreover, for the data sets used here, the respondents' turnout has been validated with reference to actual electoral registers. This ensures overreporting bias (Karp and Brockington 2005) is not an issue here, although it could be in the case of the study by Matsusaka and Palda (1993).

2.5. Election Closeness and Voter Turnout: Why (Again) Study Experience-Conditioned Effects of Closeness on Turnout?

Given all the considerations referred to above, one might still ask whether a need for more research in experience-conditioned impact of electoral competitiveness on voter turnout can be sufficiently justified. Such analyses have already been conducted by Franklin (2004), and so some evidence supporting the concept already exists. However, I argue there exist at least three important reasons for further study of this topic.

First, the effects of election closeness on turnout in the PR systems are, in fact, not at all touched upon in Franklin's (2004) analyses. For instance, Franklin (2004: 74-78) conducts a cohort-based multivariate analysis of the determinants of turnout in six countries (Germany, the Netherlands, Norway, Sweden, the United Kingdom and the Unites States). Margin of victory is one of the explanatory variables in the model estimated but the variable is coded as zero, i.e. constant, for Germany, the Netherlands, Norway and Sweden. It varies only for the countries employing the pure SMD electoral system, i.e. for the United Kingdom and the United States. This way of proceeding is partly justified and would clearly find support in the already discussed Selb's (2009) arguments on thresholds of exclusion but, as van Egmond (2003: 64-65) notes, for Scandinavian countries a substantively meaningful definition of closeness (two-bloc margin) is readily available. In this paper, I present the first analyses of experience-conditioned effects of closeness on turnout in a country using a PR electoral system (Sweden). Such a test of this hypothesis can certainly bring in new empirical evidence going beyond comparisons within the SMD systems as well as *en bloc* comparisons between the SMD and the PR electoral systems.

Second, for the SMD countries Franklin's (2004: 74-78) measure of closeness is mean margin of victory in a given election. As a result, the variable utilised varies only over time and no cross-sectional variation is taken into account. This is certainly a sensible research strategy in some cases, e.g. in the case of an analysis of turnout decline trends in the American midterm congressional elections (Franklin 2004: 105-111). However, as closeness varies across electoral districts, it is important to ask whether the impact of this variation on turnout levels also follows the patterns which should be expected on the basis of the concept of habitual voting. Such new evidence would strengthen the basis on which claims about experience-conditioned impact of electoral context on turnout are made, especially in comparison to the claims based solely on time-series analyses. For while all the research on the topic is conducted on the basis of observational (non-experimental) data, time-series studies would virtually always be sensitive to criticisms referring to spurious trend-based correlation between closeness and turnout. In such a situation, cross-sectional evidence is certainly a step forward as regards the quality of empirical evidence available to support the concepts studied here.

Finally, almost all of the analyses presented by Franklin (2004) rely on data that are in some way aggregated. Hence, the threat of ecological fallacy, highlighted by Matsusaka and Palda (1993), is at least potentially present in that study. As it was already mentioned, in this paper I rely solely on survey, i.e. individual-level, data. In addition, the turnout data I am using here are all validated. Therefore, my study constitutes a step forward also in comparison to Franklin's (2004: 151-170) fully individual-level analyses of post-war turnout in Germany. To put it more succinctly, my study is the first to empirically examine experience-conditioned impact of closeness on

turnout relying on individual-level validated turnout data. As a result, I am able to give a valid answer to the question of whether or not the effect of closeness on turnout, observed in vast majority of aggregate-level turnout studies, is a result of a more nuanced individual-level dynamics whereby the effect of closeness on turnout is conditioned by a person's electoral experience. If this is the case then re-estimating the Canadian turnout models from the study by Matsusaka and Palda (1993) might be a sensible job to do. For the lack of a significant individual-level effect of closeness on turnout in that study might have been a result of the proposed effect of closeness on turnout being additive (not interactive) rather than of aggregation bias. In any case, however, one must remember that the results presented here, obtained from validated data, should always be considered more credible than any studies relating to Canadian elections (for which no validated turnout data are available).

3. Experience-Conditioned Effects of Election Closeness on Voter Turnout: Data, Measures, and Hypotheses

The first test of the concepts outlined so far will refer to turnout in three U.S. midterm elections as a function of closeness of the races for the House of Representatives. I will use the American National Election Studies (2005) data. I test the theory with respect to only three midterm elections (conducted in 1978, 1986 and 1990) as only for these elections validated turnout data are available[10]. Also, I do not analyse turnout in

[10] I refrain from engaging in an analysis utilising the American National Election Studies data relating to other midterm elections for which I would have to rely on self-reported turnout data. The reason for not doing so is the fact that in separate analyses (not reported here) relating to the same elections, relying on self-reported data, I obtained dramatically different results from what I found using validated data. This certainly stems from the fact that in the U.S. context the phenomenon of turnout overreporting is strongly

presidential-year elections as these are dominated by the more salient presidential race which might distort the regularities observed in congressional elections conducted on the same day. I use two separate measures of closeness for House elections. The first one, the multi-party margin (Endersby et al. 2002: 614), is defined the following way:

$$1) \qquad MPM = [(v_1 - v_2)/v_t] \text{ X } 100$$

where:

MPM - multi-part margin of victory (House-district-level),

v_1 – the number of votes cast for the winner in a given House district,

v_2 – the number of votes cast for the runner-up in a given House district,

v_t – the total number of votes cast in a given House district[11].

Also, a measure of electoral experience (*EXPERIENCE*) will be utilised. *EXPERIENCE* stands for the number of presidential-year elections in which a given person has already been eligible to vote (regardless whether the person actually voted or not is these elections), based on the person's age. For the sake of purity, therefore, *the very few respondents who were not born in the United States (i.e. who could possibly arrive to that country and obtain a citizenship later in their life) will be excluded from the analysis*. Also, counting presidential elections only, an arguably reasonable assumption is made that the latter elections are most salient. The following model will be tested:

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positively related with age (see for instance Karp and Brockington 2005) and thereby obviously with electoral experience.

[11] Marginality of the House races has been calculated on the basis of the data available at the House website: http://clerk.house.gov/member_info/electionInfo/index.html.

2) $\Pr(VOTE = 1) \sim \beta_0 + \beta_1 \text{Ln}(MPM_i + 1) + \beta_2 \text{Ln}(EXPERIENCE_j + 1) + \beta_3[\text{Ln}(MPM_i + 1) \text{ X } \text{Ln}(EXPERIENCE_j + 1)] + \beta_4 CONTROLS_{ij} + \varepsilon_j$

where:

i - i*th* House race,

j – j*th* respondent,

ε_j – error term.

As it can be inferred from the formula 2, *I expect that both the effect of closeness on turnout and the mediating effect of electoral experience will take a logarithmic (more precisely, a natural logarithm) rather than a linear form.* Unlike in most studies in election closeness and turnout, I do not expect that a change in the *MPM* from, say, 35 to 45 percentage points will make the same difference to turnout as a change from 5 to 15 percentage points. More importantly, *EXPERIENCE* enters the above formula in a logarithmic form for theoretical reasons. For it is argued by Plutzer (2002) and Franklin (2004) that it is only a few initial elections that decide about the formation of a habit of voting or abstention. The major theoretical expectations here will be negative sign for β_1 and positive for β_3. As it can be seen above, a unit is added to both the *MPM* and *EXPERIENCE*. That is because both the variables can possibly take the value of zero for which a logarithm does not exist. Also, it is very unattractive from the theoretical viewpoint to use numbers between zero and one as in this range the logarithmic function

rapidly increases while I do not expect that the citizens will react so strongly to such a small change in either the *MPM* or *EXPERIENCE*.

The closeness measure referred to above is imperfect and the most profound criticism of it was advanced by Cox (1988) – see section 2.3 of this paper. While the alternative proposed by the author, the raw vote margin (henceforward the *RVM*), might also pose problems (Endersby et al. 2002: 614), I conduct a separate analysis utilising Cox's measure. The *RVM* is here defined the following way:

3) $RVM = (v_1 - v_2)/1{,}000$

where:

RVM - raw vote margin of victory (House-district-level),

v_1 – the number of votes cast for the winner in a given House district,

v_2 – the number of votes cast for the runner-up in a given House district.

As Cox (1988) notices, using the *RVM* requires inclusion of also the squared *RVM* in the model estimated. However, here I propose that the negative effect of the margin of victory on turnout should be logarithmic rather than linear. Therefore, I do not include the squared *RVM* to account for the fact that extremely large values of the *RVM* are only possible when turnout is high. Rather, I include the *RVM* in its linear form as the latter increases more rapidly than its logarithm. I estimate the following model:

4) $\Pr(VOTE = 1) \sim \beta_0 + \beta_1 RVM_i + \beta_2 \text{Ln}(RVM_i + 1) + \beta_3 \text{Ln}(EXPERIENCE_j + 1) + \beta_4[\text{Ln}(RVM_i + 1) \text{ X } \text{Ln}(EXPERIENCE_j + 1)] + \beta_5 CONTROLS_{ij} + \varepsilon_j$

where:

i - i*th* House race,

j – j*th* respondent,

ε_j – error term.

Here, I expect β_2 to be negative and β_4 to be positive. The effect of the *RVM* itself (i.e. β_1) should also be positive. Assessing experience-mediated impact of closeness on turnout with both the above described measures will certainly increase confidence that the results obtained are not spurious even tough, as I mentioned before, both these measures have their downsides.

The test for Sweden will be conducted using the Swedish National Election Studies (Särlvik et al. 2009) data. Sixteen *Riksdag* elections conducted between 1956 and 2006 will be subject of an analysis. Validated turnout data are available for all these elections. As was already mentioned, election closeness in Sweden is defined differently compared to what it would be in the American SMD system. It is commonly agreed (van Egmond 2003: 64-65) that in Sweden it is the margin of victory between the two opposing political blocs, the Left (the Social Democratic Party and the smaller left-wing parties) and the Right-Centre. More formally, the two-bloc margin (henceforward the *TBM*) can be defined the following way:

5) $TBM = [(v_1 - v_2)/v_t]$ X 100

where:

TBM – two-bloc margin,

v_1 – the number of votes cast for the winning political bloc,

v_2 – the number of votes cast for the other political bloc,

v_t – the total number of votes cast in a given election[12].

For Sweden, I will estimate the following model:

$$6) \quad \Pr(Vote = 1) \sim \beta_0 + \beta_1 \text{Ln}(TBM_i + 1) + \beta_2 \text{Ln}(EXPERIENCE_{ij} + 1) + \beta_3[\text{Ln}(TBM_i + 1) \text{ X } \text{Ln}(EXPERIENCE_{ij} + 1)] + \beta_4 CONTROLS_{ij} + \varepsilon_{ij}$$

where:

i – i*th* election,

j – j*th* respondent,

ε_{ij} – error term.

By analogy with the previously presented models, I hypothesise β_1 to be negative and β_3 to be positive. As the *TBM* does not obviously have variability comparable to the U.S. House district marginality measures, I also test the above model with the *TBM* in its untransformed form (i.e. without a logarithm). In addition, I also utilise two closeness measures applied by Franklin (2004: 151-170) for the purpose of his analyses of the determinants of individual-level turnout in post-war Germany. The first measure is a percentage-point gap between the two largest parties (not political blocs):

$$7) \quad CLOSE = [(v_1 - v_2)/v_t] \text{ X } 100$$

where:

[12] Closeness of the Swedish elections has here been calculated on the basis of the data available at the Parties and Elections in Europe website: http://www.parties-and-elections.de/.

CLOSE – election closeness,

v_1 – the number of votes cast for the largest party in a given election,

v_2 – the number of votes cast for the second largest party in a given election,

v_t – the total number of votes cast in a given election.

Using the above measure, I will test the following model:

$$8) \quad \Pr(Vote = 1) \sim \beta_0 + \beta_1 \text{Ln}(CLOSE_i) + \beta_2 \text{Ln}(EXPERIENCE_{ij} + 1) + \beta_3 [\text{Ln}(CLOSE_i) \text{ X } \text{Ln}(EXPERIENCE_{ij} + 1)] + \beta_4 CONTROLS_{ij} + \varepsilon_{ij}$$

where:

i – i*th* election,

j – j*th* respondent,

ε_{ij} – error term.

I again hypothesise β_1 to be negative and β_3 to be positive. By analogy with the model presented in formula 6, I will also test the above model (i.e. formula 8) with an untransformed closeness variable. Finally, another Franklin's (2004: 151-170) indicator of election closeness is the size of the largest party. The associated hypothesis proposes that the greater the vote share of the largest party the greater policy consequences a given election will have. Therefore, all else being equal, turnout should increase while the size of the largest party increases. The following measure will be applied:

$$9) \quad LARGEST\ PARTY = (v_1/v_t) \text{ X } 100$$

where:

v_1 – the number of votes cast for the largest party in a given election,

v_t – the total number of votes cast in a given election.

I will test the following model:

10) $$\Pr(Vote = 1) \sim \beta_0 + \beta_1(LARGEST\ PARTY_i) + \beta_2 \text{Ln}(EXPERIENCE_{ij} + 1) + \beta_3[(LARGEST\ PARTY_i) \text{ X } \text{Ln}(EXPERIENCE_{ij} + 1)] + \beta_4 CONTROLS_{ij} + \varepsilon_{ij}$$

where:

i – i*th* election,

j – j*th* respondent,

ε_{ij} – error term.

Unlike for the previous models, with respect to the model presented in formula 10 I hypothesise β_1 to be positive and β_3 to be negative. The Swedish National Election Studies do not contain data on where the respondents were born, and so all the respondents will be included in the analysis. Furthermore, the data on age are only given in the form of intervals (e.g. 31-35), and so the variable *EXPERIENCE* will in practice mean *the expected value* of the number of *Riksdag* elections already experienced[13], given a respondent's age group. In practice, therefore, for Sweden *EXPERIENCE* is a

[13] I rely on some simplifying assumptions here. First, I assume that if an election takes place in a year when a respondent reaches legal voting age then the probability of the respondent being eligible to vote in this particular election equals 50%. Second, I assume that if the respondent belongs to a given age interval then s/he has equal probabilities of being born in any of the years comprising the given interval.

variable measured with (arguably mostly unsystematic) error, and so the results presented later on in this paper can only be treated as approximate.

4. Experience-Mediated Effects of House District Marginality on Individual-Level Voter Turnout in the U.S. Midterm Elections of 1978, 1986 and 1990: Results and Discussion

The estimates for the model explaining turnout in the three U.S. midterm elections and adopting the *MPM* as a measure of closeness (more precisely, district marginality in this particular case), i.e. the model stated under formula 2, are presented in table 1. The model was estimated using logistic regression. A number of control variables have been included here, to account for both the attributes and social characteristics of respondents and for the political mobilisation phenomena as well. I control for partisanship, party contact, campaign participation, education, church attendance, income, union membership, homeownership, gender and race. Furthermore, a set of dummy variables have been included to account for the fact that Senate and gubernatorial elections might also be conducted on the same day which could affect turnout[14]. Also, to account for at least some unmodelled factors affecting turnout, I include state-level aggregate turnout in the preceding presidential election as a control variable. Finally, the model contains dummies distinguishing between three analysed midterm elections. I thus in practice estimate a model equivalent to fixed-effects logistic regression, with separate intercepts

[14] Intervals for marginality of a particular race have been used here, the reference category being cases where there was no election at all. The *MPM* measure was used here (practically reducing to a two-party margin in most cases). For Senate elections it was determined on the basis of the data available at the House of Representatives' website: http://clerk.house.gov/member_info/electionInfo/index.html. The results of the gubernatorial races can be found in publications by Glashan (1979), Mullaney (1988), and at the following website: http://en.wikipedia.org/wiki/Category:Gubernatorial_elections_in_the_United_States.

for every election. I do it to estimate strictly cross-sectional effects (averaged across all the three midterm elections), even though it must be remembered that these effects are averaged across all three elections.

As it can be seen in table 1, the effect of Ln(*MPM* + 1), i.e. β_1, is negative and statistically significant ($p < 0.01$). The interaction between Ln(*MPM* + 1) and Ln(*EXPERIENCE* + 1), i.e. β_3, is positive and also statistically significant ($p < 0.01$). Obviously, one must remember that the interaction effects in non-linear models, including logit, do not have a straightforward direct interpretation (Ai and Norton 2003). Therefore, in table 2 (see also figure 1) I present the impact of a changing margin of victory on turnout (for different levels of *EXPERIENCE*), holding all other variables constant at their medians[15]. Given that the effect of district marginality is modelled as logarithmic, I limit myself to the effects of a change in the *MPM* from its minimum to median value (that is, from 0 to 36%). The results presented in table 2 lend support to the hypotheses advanced here. The negative impact of increasing the *MPM* on turnout gradually declines as *EXPERIENCE* increases. Obviously, the 95% confidence intervals do overlap, and so it is still possible that the differences in the effects of the *MPM* at different levels of *EXPERIENCE* are a result of unsystematic error rather than of any substantive regularities. However, if the problem is approached from another angle then some important pattern can be noticed. The effects of the *MPM* can only be distinguished from zero (at the 95% confidence level) if the number of presidential elections already experienced is lower than four. For all the other levels of *EXPERIENCE* the 95% confidence intervals encompass zero. Moreover, for very high

[15] The effects and the corresponding 95% confidence intervals were calculated using CLARIFY 2.1 (Tomz et al. 2003).

values of *EXPERIENCE* the impact of the margin of victory on turnout is positive which contradicts the entire concept of election closeness. Nonetheless, even those extremely rare cases when *EXPERIENCE* reaches its maximum or nearly maximum (more than 99% of the respondents have experienced fewer than sixteen presidential elections) the respective 95% confidence intervals still easily encompass zero. As a result, the only confident statement that can be made on the basis of the results presented here is that an increase in the margin of victory has a negative impact on turnout but only in the case of the respondents whose personal electoral history has been fairly short (three or fewer presidential elections so far experienced). This arguably lends some support to the hypothesis about experience-conditioned impact of election closeness on voter turnout. Since the effects estimated here are purely cross-sectional, this analysis delivers important evidence supplementing Franklin's (2004) analyses of the analogous effects observed over time.

The second analysis for the three U.S. midterm elections (table 3), for the purpose of which raw vote margin (the *RVM*) as a measure of district marginality has been utilised, largely echoes the analysis discussed above (i.e. relying on a percentage-point margin). Again, there is a negative and statistically significant ($p < 0.01$) estimated value of the coefficient (β_2) accompanying $\text{Ln}(RVM + 1)$, in addition to a positive and statistically significant ($p < 0.05$) interaction effect with $\text{Ln}(EXPERIENCE + 1)$. Again, the effects of a change in the *RVM* (from its minimum to median value) on turnout for different levels of *EXPERIENCE*, are presented separately (see table 4 and figure 2)[16]. The results tell a very similar "story" to those presented using the *MPM* measure of

[16] Here also CLARIFY 2.1 (Tomz et al. 2003) was used.

closeness. The effect of *RVM* is being suppressed (while *EXPERIENCE* increases) at a slightly lower pace comparing to the regularities observed when the *MPM* was used. However, because of lower statistical significance of the findings, the confidence intervals start to encompass zero for the respondents who have experienced three presidential elections. Obviously, it is very difficult to conclusively establish when exactly during the respondents' electoral history district marginality ceases to affect the average propensity to vote. Nonetheless, the results presented here, obtained with two different measures of district marginality, constitute good evidence supporting the concept of voting as habit. Assuming a clear context-free answer to the question about when voting habit takes its definitive form is at all possible, future research could potentially establish some more conclusive evidence if there were validated data available for a larger number of midterm elections. In the next section I am testing the concept of experience-mediated impact of election closeness on voter turnout in a completely different context, the context of the Swedish national parliament elections.

5. Experience-Mediated Effects of the Two-Bloc Margin of Victory on Individual-Level Voter Turnout in the Swedish National Parliament (*Riksdag*) Elections: Results and Discussion

Before the Swedish test of the hypotheses stated above is presented and discussed, two remarks on estimation are necessary here. First, Sweden is a high-turnout country, and so the distribution of the turnout variable I am dealing with is highly skewed (turnout

validated positively for 91.9% observations[17]). Therefore, I am relying on complementary log-log regression (see for instance Martuzzi and Elliott 1998) rather than simple logistic regression estimates.. Second, the Swedish National Election Studies operate on the basis of a rolling panel whereby half of the respondents interviewed in any particular study are re-interviewed on the next occasion. This leads to a situation when there are double observations available on a sub-sample of respondents. Such observations are not independent, and so the standard binary choice models, like logit or probit might be considered to be inappropriate here. At the same time, this is not a proper panel data set, with multiple observations on every respondent (in fact, the average number of observations per respondent is approximately 1.5). Therefore, I decide to rely on the generalised estimating equations (henceforward GEE) approach, and more precisely on population-averaged (Hu et al. 1998: 695-696) complementary log-log regression. This approach, unlike random-effects models, treats the within-respondent correlation as a "nuisance", and the benefits from applying GEE are limited to more robust estimated variances of the regression coefficients.

In tables 6 and 10[18], I present the population-averaged (GEE) complementary log-log regression estimates for the sixteen Swedish elections conducted between 1956 and 2006. The Swedish National Election Studies are characterised by little continuity as regards the variables used, and so I am not able to include as many controls as in the U.S. case. At the individual level, I only control for education, partisanship and gender. I

[17] See table 11 for data on official turnout, survey turnout and the *TBM* for all the *Riksdag* elections analyses.

[18] The results utilising the *TBM* measure of closeness commented in this section have been obtained from the model in which the *TBM* is not transformed by taking a logarithm. The results from the models where the *TBM* enters untransformed (see tables and 8-9 and 12-13, also figures 5-6 and 9-10) are not substantially different and also indicate that the effects of closeness on turnout are conditioned by electoral experience.

also control for changing legal voting age (as it was altered twice in the period under analysis) and for aggregate-level voter turnout in the preceding *Riksdag* election[19]. As noted previously, I am estimating two separate models for Sweden. The reason for that is the fact that I calculated two versions of the closeness variable (the *TBM*), once including vote shares of the parties that did not make it to reach the electoral threshold and second time excluding vote shares of those parties.

The results I present in table 6 indicate presence of the expected pattern of the impact of the two-bloc margin (*TBM*) on turnout. The effect of Ln(*TBM* + 1) is negative and statistically significant ($p < 0.01$) while its interaction with Ln(*EXPERIENCE* + 1) positive and also statistically significant ($p < 0.05$). The estimates presented in table 10 (parties not passing the electoral threshold excluded) are even more supportive of the model presented, the interaction term between Ln(*TBM* + 1) and Ln(*EXPERIENCE* + 1) being even more statistically significant ($p < 0.01$). In tables 7 and 11 (see also figures 3-4 and 7-8), I present the effects of the changing *TBM* and *EXPERIENCE* on predicted probabilities of Swedish respondents voting, based on the estimates presented in table 6 and 10 respectively. An immediate observation I can make on the basis of these results

[19] Unlike in the case of the U.S. midterm elections, I am not able to cluster standard errors here. In the analyses presented in the previous section the errors were clustered at the level of a House race (i.e. according to a House district combined with election year). In the Swedish case there are only sixteen elections, i.e. sixteen races with their specific closeness. At the same time, cluster-robust standard errors tend to be biased when the number of clusters is smaller than forty (Wooldridge 2003). By including the lagged turnout variable I hope to get around the problem of unobserved factors contributing to turnout in a specific election. This seems to have been an efficient strategy. In separate analyses (not reported here), I estimated a non-parametric two-level model with clustering at election-level (disregarding clustering at respondent-level) and the estimated amount of residual variance due to clustering was very small (around 2.68%). Non-parametric estimation of the cluster effect (Rabe-Hesketh and Skrondal 2005), unlike cluster-robust standard errors and conventional multilevel modeling, is appropriate also when the number of clusters is small. Hence, I believe the standard errors I present in tables 6 and 8 (and thereby also the confidence intervals presented in tables 7 and 9) are realistic. The values of lagged voter turnout have been taken from the International Institute for Democracy and Electoral Assistance (IDEA) website: http://www.idea.int/vt/index.cfm.

is that the impact of closeness on turnout in Sweden never does have the strength I observed in the case of the least experienced American respondents. This, however, should not be a surprise, given that baseline turnout levels in Sweden are very high. This necessarily suppresses the impact of any explanatory variable on turnout. As expected, the negative effects of increasing *TBM* on turnout gradually vanish as *EXPERIENCE* increases. Nonetheless, they can be distinguished from zero even when respondents have experienced as many as eight (table 7) or ten (table 11) *Riksdag* elections. Obviously, the large number of observations influences the width of the confidence intervals presented in tables 7 and 11. As in the case of the analyses presented in the previous section, many of the confidence intervals overlap. So, the results are again only suggestive. Looking closely at, say, table 11 one can still make some clear statements concerning varying impact of closeness on turnout. For instance, the 95% confidence intervals for respondents who have not experienced any *Riksdag* elections and for those who have already experienced five such elections do not overlap at all. Some further pair-wise distinctions of this sort, relying on the 95% confidence intervals, might be made for both models. Hence, I can certainly conclude that the Swedish results are supportive too of the concept of experience-conditioned impact of election closeness on voter turnout and thereby of the overall theory of habitual voting.

The results of the analyses utilising Franklin's (2004: 151-170) indicators of closeness are less supportive of the hypothesis of experience-conditioned impact of closeness on turnout. *CLOSE* – the traditional two-party margin of victory - does not have any substantial or statistically significant effect on turnout, no matter whether it enters the model in an untransformed or a logarithmic form. Its interaction with

EXPERIENCE is also insignificant (see tables 14-15). This suggests *CLOSE* is a largely meaningless measure of competitiveness in the Swedish context. When it comes to the model utilising *LARGEST PARTY* (table 16), some more sound results have appeared. As expected, the effect of *LARGEST PARTY* is positive and highly statistically significant ($p < 0.01$) while its interaction with *EXPERIENCE* negative. Even though the latter effect is insignificant (but the respective p-value is at the very marginal level of 0.057), the results are arguably suggestive. Therefore, in table 17 (see also figures 11-12) I present detailed marginal effects of *LARGEST PARTY* on the probability of a respondent voting, assuming different level of electoral experience. Unlike the models using *CLOSE*, these results suggest largely the same patterns as those shown with respect to the *TBM*. However, the significance of the interaction effect with *EXPERIENCE* in the models utilising the last variable suggests that, as van Egmond (2003: 64-65) argues, the *TBM* is the best indicator of electoral competitiveness in the Swedish (and certainly more broadly Scandinavian) context.

Given what was said above, the Swedish case is extremely interesting. For it is not only the very shape that closeness takes in this particular case (the margin of victory between two opposite political blocs as a characteristic of a whole election, not of a district-level race), but also the difference as regards the baseline propensity to vote, that distinguishes it from the case of the U.S. House elections. I can provisionally argue here that I have found suggestive evidence supporting the concept of voting as habit in both the U.S. and Sweden, despite all the differences between those two polities, from the electoral and political system to the citizens' baseline willingness to turn out and cast a ballot. Whether the more nuanced differences (e.g. the level of electoral experience at

which the impact of closeness cannot be distinguished from zero) might simply be a result of the differences between the data sets used (i.e. mostly of the enormous gap between the numbers of respondents whose turnout has been validated) should certainly be a subject of further examination. So should be the consequences of the regularities studied here for the issues of aggregate voter turnout, especially from a long-term perspective. At this point, however, the concept of voting as habit should be regarded provisionally supported in both the U.S. and Sweden.

6. Conclusion

Election closeness has long been a topic of reflection by voting behaviour scholars. In this paper, I follow Franklin (2004), arguing that the effects of closeness on voter turnout, like (potentially) the effects of other contextual variables theorised to be related with turnout, should be conceived of as conditioned by the citizens' electoral experience. I proposed that the impact of election closeness on voter turnout would follow a logarithmic pattern but, at the same time, this effect will shrink in line with electoral experience, measured as the logarithm of the number of elections a given respondent has experienced after reaching voting age. Three contributions I believe this research is making can certainly enrich the field of studies on the determinants of voter turnout.

First, as it turns out on the basis of the results presented in the previous sections, Franklin's (2004) claims of experience-conditioned impact of election closeness on voter turnout can successfully be extended to (at least some) of the PR systems. My analyses of the impact of election-level margin of victory on turnout in

Sweden suggest that closeness, if only defined in a contextually meaningful way, tends to have relatively strong impact on turnout by the least electorally experienced cohorts of citizens but much weaker on turnout by the more established ones. The relatively low overall effect of closeness on turnout in Sweden in certainly a result of high baseline propensity to vote displayed by Swedish citizens. The latter, however, does not preclude the (at least) partial relevance of habitual voting phenomena in the Swedish context.

Second, my American analyses show that experience-conditioned impact of the margin of victory on turnout in the SMD electoral systems can be observed in cross-sectional analyses. This finding supplements Franklin's (2004) analyses of the effect of the temporal changes in the average (election-level) margin of victory on turnout dynamics. The cross-sectional results I present cannot obviously be ascribed to any uncontrolled trend regularities. As such, they are reassuring and reinforce the conclusions Franklin (2004) has drawn on the basis of time-series analyses.

Finally, all the results I present have been obtained relying on validated individual-level (survey) data. Hence, they cannot be flawed by either ecological fallacy (Matsusaka and Palda 1993) or overreporting bias (Karp and Brockington 2005). I thus believe my analyses contribute to the reflection on the relationships between closeness and turnout also from the purely methodological viewpoint. As I argued above, this might make reconsideration of Matsusaka and Palda's (1993) claims referring to ecological fallacy sensible and warrant a need for new analyses of their data. In this sense, the results I present here might have consequences also beyond the narrow topic of the impact of closeness on turnout. For instance, using individual-level data Knack (1994) has found little evidence supporting the conventional wisdom that rainfall has

negative impact on turnout. However, a recent aggregate-level study (see Gomez et al. 2007) provides strong evidence supporting this conventional belief. Since Knack (1994) did not analyse experience-conditioned effects of rain on turnout it might be sensible to ask whether or not relying on the concept of habitual voting could reconcile conflicting findings of the two aforementioned studies. While the issue of the weather-turnout link is only one example, relying on the concept of voting as habit can possibly help electoral behaviour students get around of some other controversies of this sort.

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Appendix

Table 1. Predictors of Individual-Level (Validated) Turnout in 1978, 1986 and 1990 United States Midterm Elections (Percentage-Point Multi-Party Margin as a Measure of House District Marginality): Logistic Regression Estimates

	Coef.	Robust SE
Ln (*MPM* + 1)	-0.371**	0.135
Ln(*EXPERIENCE* + 1)	0.343	0.240
Ln(*MPM* + 1) X Ln(*EXPERIENCE* + 1)	0.164**	0.069
Margin - Senate Election (0-10%)	0.055	0.125
Margin - Senate Election (10-30%)	-0.054	0.129
Margin - Senate Election (over 30%)	-0.222	0.162
Margin - Gubernatorial Election (0-10%)	0.430**	0.115
Margin - Gubernatorial Election (10-30%)	0.496**	0.116
Margin – Gubernatorial Election (over 30%)	0.057	0.156
Turnout – Last Presidential Election (State-Level) in %	0.041**	0.008
Strong Party Supporter	0.422**	0.086
Party Contact	0.468**	0.090
Campaign Participation	0.813**	0.082
University Education	0.741**	0.095
Church Attendance		

(Every Week)	0.593**	0.084
Income (Top 33.3%)	0.328**	0.097
Income (Mid 33.3%)	0.354**	0.088
Union Membership	0.136	0.115
Homeownership	0.616**	0.087
Female	0.148*	0.074
Black	-0.426**	0.131
1978 Election	-0.069	0.120
1986 Election	-0.103	0.112
Constant	-4.526**	0.616
Log Likelihood	-2,354.595	
Wald χ^2	793.420**	
McFadden R^2	0.186	
% Correctly Predicted	70.4	
N	4,243	

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

Note: Standard errors have been clustered at House-race-level (348 clusters).

Table 2. Experience-Conditioned Effects of U.S. House Percentage-Point Multi-Party Margin of Victory (*MPM*) on Turnout by a Median Respondent

EXPERIENCE	Change in the Probability of Voting (in %) – *MPM* Change from 0 to 36% (Median)
0	-13.9 [-31.9; -2.5]
1	-12.7 [-25.9; -2.9]
2	-10.9 [-22.2; -2.3]
3	-9.1 [-18.9; -1.0]
4	-7.3 [-16.6; 0.5]
5	-5.6 [-14.5; 2.5]
6	-3.9 [-13.4; 4.5]
7	-2.4 [-12.1; 6.5]
8	-0.9 [-11.4; 8.4]
9	0.4 [-10.7; 10.4]
10	1.7 [-10.2; 12.4]
11	2.9 [-9.7; 14.2]
12	4.0 [-9.3; 15.9]
13	5.1 [-8.8; 17.5]
14	6.1 [-8.2; 19.0]
15	7.1 [-8.0; 20.5]
19	10.4 [-6.9; 26.0]

Note: The numbers in brackets are 95% confidence intervals.

Figure 1. Experience-Conditioned Effects of U.S. House Percentage-Point Multi-Party Margin of Victory (*MPM*) on Turnout by a Median Respondent – *MPM* Change from 0 to Median (36%)

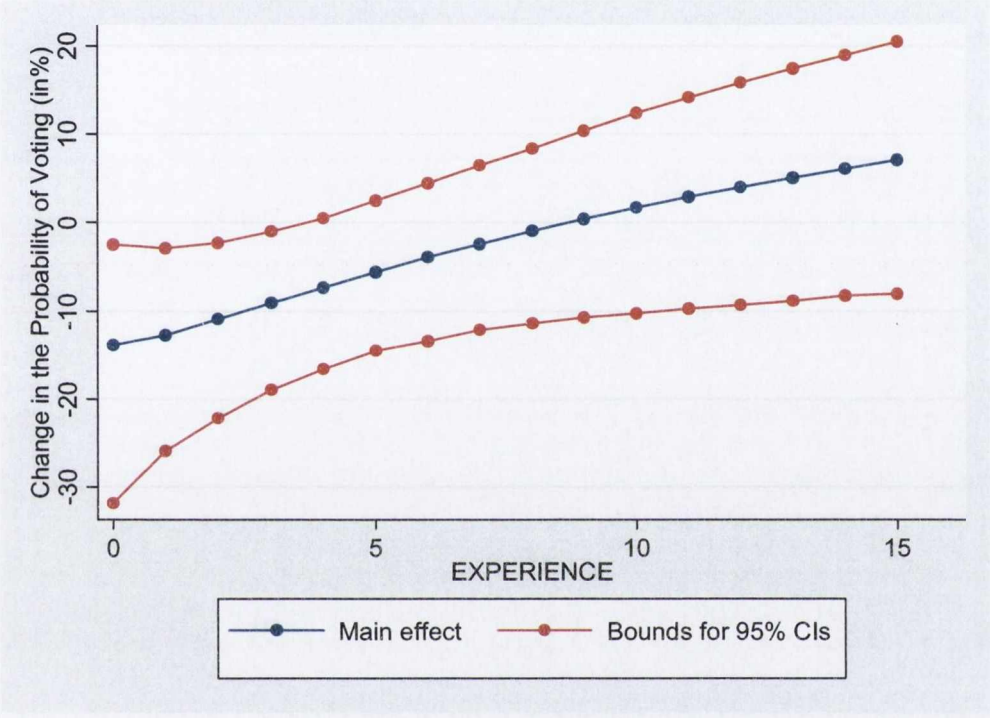

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Table 3. Predictors of Individual-Level (Validated) Turnout in 1978, 1986 and 1990 United States Midterm Elections (Raw Vote Margin as a Measure of House District Marginality): Logistic Regression Estimates

	Coef.	Robust SE
RVM	0.005	0.003
Ln(*RVM* + 1)	-0.390**	0.162
Ln(*EXPERIENCE* + 1)	0.411	0.285
Ln(*RVM* + 1) X Ln(*EXPERIENCE* + 1)	0.132*	0.075
Margin - Senate Election (0-10%)	0.009	0.132
Margin - Senate Election (10-30%)	-0.089	0.132
Margin - Senate Election (over 30%)	-0.235	0.155
Margin - Gubernatorial Election (0-10%)	0.391**	0.120
Margin - Gubernatorial Election (10-30%)	0.470**	0.114
Margin – Gubernatorial Election (over 30%)	0.031	0.160
Turnout – Last Presidential Election (State Level) in %	0.039**	0.008
Strong Party Supporter	0.421**	0.086
Party Contact	0.462**	0.089
Campaign Participation	0.807**	0.082
University Education	0.736**	0.095
Church Attendance (Every Week)	0.604**	0.083

Income (Top 33.3%)	0.322**	0.097
Income (Mid 33.3%)	0.354**	0.089
Union Membership	0.141	0.115
Homeownership	0.613**	0.087
Female	0.144*	0.074
Black	-0.446**	0.131
1978 Election	-0.065	0.117
1986 Election	-0.102	0.112
Constant	-4.412**	0.731
Log Likelihood	-2,355.000	
Wald χ^2	774.770**	
McFadden R^2	0.186	
% Correctly Predicted	70.5	
N	4,243	

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

Note: Standard errors have been clustered at House-race-level (348 clusters).

Table 4. Experience-Conditioned Effects of U.S. House District Raw Vote Margin of Victory (*RVM*) on Turnout by a Median Respondent

EXPERIENCE	Change in the Probability of Voting (in %) – *RVM* Change from 47 (Minimum) to 47,236 (Median) Votes
0	-13.1 [-32.4; -1.0]
1	-12.6 [-28.0; -0.9]
2	-11.5 [-25.6; -0.5]
3	-10.3 [-23.6; 0.8]
4	-8.9 [-22.6; 2.1]
5	-7.6 [-22.0; 4.1]
6	-6.4 [-21.4; 6.4]
7	-5.1 [-21.3; 8.4]
8	-4.0 [-20.6; 10.4]
9	-2.9 [-20.2; 12.5]
10	-1.8 [-19.9; 14.4]
11	-0.9 [-20.0; 16.2]
12	0.1 [-19.7; 17.6]
13	1.0 -[19.3; 18.9]
14	1.8 [-18.7; 20.4]
15	2.6 [-18.6; 21.9]
19	5.5 [-17.7; 27.1]

Note: The numbers in brackets are 95% confidence intervals.

Figure 2. Experience-Conditioned Effects of U.S. House District Raw Vote Margin of Victory (*RVM*) on Turnout by a Median Respondent - *RVM* Change from 47 (Minimum) to 47,236 (Median) Votes

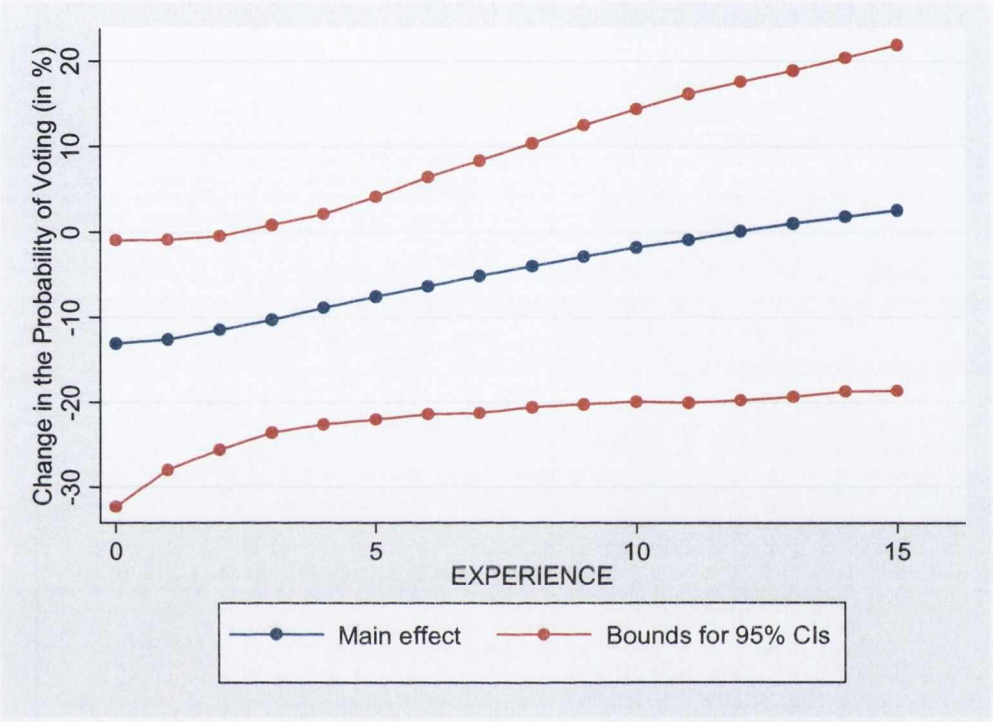

Table 5. American National Election Studies 1978, 1986 and 1990 Surveys: Descriptive Statistics

Variable	Distribution Statistics
Electoral Participation	0.425 (0.494)
MPM	36.958 (20.503)
RVM	49.914 (28.098)
EXPERIENCE	5.978 (4.060)
Margin – Senate Election (0-10%)	0.248 (0.432)
Margin – Senate Election (10-30%)	0.185 (0.388)
Margin – Senate Election (over 30%)	0.153 ((0.360)
Margin - Gubernatorial Election (0-10%)	0.359 (0.480)
Margin - Gubernatorial Election (10-30%)	0.303 (0.459)
Margin - Gubernatorial Election (over 30%)	0.143 (0.350)
Turnout – Last Presidential Election (State Level) in %	52.820 (6.272)
Strong Party Supporter	0.262 (0.440)
Party Contact	0.252 (0.434)
Campaign Participation	0.291 (0.454)
University Education	0.188 (0.391)
Church Attendance (Every Week)	0.248 (0.432)
Income (Top 33.3%)	0.342 (0.474)
Income (Mid 33.3%)	0.331 (0.471)
Union Membership	0.145 (0.352)
Homeownership	0.657 (0.475)
Female	0.547 (0.498)
Black	0.119 (0.324)
1978 Election	0.375 (0.484)
1986 Election	0.312 (0.463)

Note: Main entries are means and the numbers in parentheses are standard deviations.

Table 6. Predictors of Individual-Level (Validated) Turnout in the Swedish National Parliament (*Riksdag*) Elections (1956-2006): Population-Averaged Complementary Log-Log Regression Estimates

	Coef.	Semi-Robust SE
Ln(*TBM* + 1)	-0.097**	0.029
Ln(*EXPERIENCE* + 1)	0.053*	0.028
Ln(*TBM* + 1) X Ln(*EXPERIENCE* + 1)	0.032*	0.015
Strong Party Supporter	0.312**	0.016
University Education	0.259**	0.024
Female	0.018	0.016
Voting Age	-0.038**	0.008
Lagged Aggregate Turnout (in %)	0.012**	0.002
Constant	0.482*	0.290
Wald χ^2	684.570**	
Number of Observations	37,710	
Number of Respondents	25,280	

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

Note: The *TBM* measure takes into account all parties, including those that did not reach the electoral threshold.

Table 7. Average Experience-Conditioned Effects of Two-Bloc Margin of Victory (*TBM*) on Turnout in the Swedish National Parliament (*Riksdag*) Elections

EXPERIENCE	**Change in the Probability of Voting (in %) – *TBM* Change from 0.7% (Minimum) to 6.0% (Median)**	**Change in the Probability of Voting (in %) – *TBM* Change from 0.7% (Minimum) to 14.2% (Maximum)**
0	-3.3 [-5.1; -1.5]	-5.3 [-8.4; -2.2]
1	-2.4 [-3.5; -1.2]	-3.8 [-5.7; -1.8]
2	-1.9 [-2.7; -1.0]	-3.0 [-4.4; -1.6]
3	-1.5 [-2.2; -0.8]	-2.4 [-3.6; -1.3]
4	-1.3 [-1.9; -0.7]	-2.1 [-3.1; -1.1]
5	-1.1 [-1.7; -0.5]	-1.8 [-2.7; -0.8]
6	-1.0 [-1.5; -0.4]	-1.5 [-2.4; -0.6]
7	-0.8 [-1.4; -0.3]	-1.3 [-2.2; -0.4]
8	-0.7 [-1.3; -0.1]	-1.1 [-2.1; -0.2]
9	-0.6 [-1.2; 0.0]	-1.0 [-2.0; 0.0]
10	-0.5 [-1.2; 0.1]	-0.8 [-1.9; 0.2]
11	-0.5 [-1.1; 0.2]	-0.7 [-1.8; 0.4]
19	-0.1 [-1.0; 0.8]	-0.1 [-1.5; 1.3]

Note: The numbers in brackets are 95% confidence intervals. The *TBM* measure takes into account all parties, including those that did not reach the electoral threshold.

Figure 3. Average Experience-Conditioned Effects of Two-Bloc Margin of Victory (*TBM*) on Turnout in the Swedish National Parliament (*Riksdag*) Elections – *TBM* Change from 0.7% (Minimum) to 6.0% (Median)

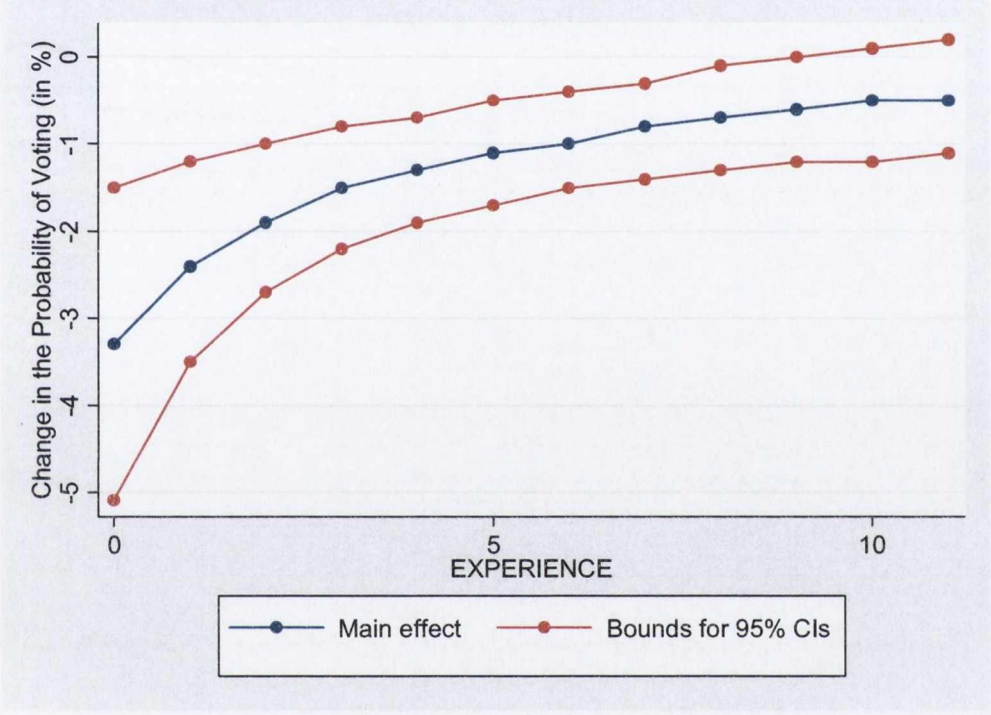

Figure 4. Average Experience-Conditioned Effects of Two-Bloc Margin of Victory (*TBM*) on Turnout in the Swedish National Parliament (*Riksdag*) Elections – *TBM* Change from 0.7% (Minimum) to 14.2% (Maximum)

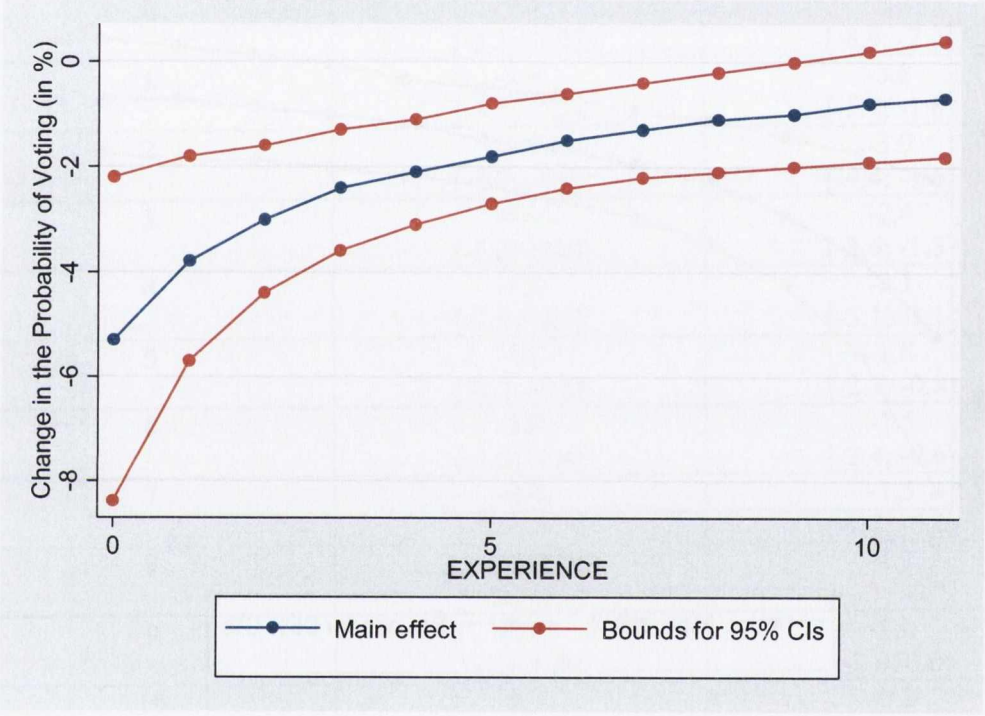

Table 8. Predictors of Individual-Level (Validated) Turnout in the Swedish National Parliament (*Riksdag*) Elections (1956-2006): Population-Averaged Complementary Log-Log Regression Estimates

	Coef.	Semi-Robust SE
TBM	-0.016**	0.005
Ln(*EXPERIENCE* + 1)	0.078**	0.018
***TBM* X Ln(*EXPERIENCE* + 1)**	0.005*	0.002
Strong Party Supporter	0.311**	0.016
University Education	0.261**	0.024
Female	0.017	0.016
Voting Age	-0.038**	0.008
Lagged Aggregate Turnout (in %)	0.012**	0.002
Constant	0.396	0.286
Wald χ^2	685.860**	
Number of Observations	37,710	
Number of Respondents	25,280	

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

Note: The *TBM* measure takes into account all parties, including those that did not reach the electoral threshold.

Table 9. Average Experience-Conditioned Effects of Two-Bloc Margin of Victory (*TBM*) on Turnout in the Swedish National Parliament (*Riksdag*) Elections

EXPERIENCE	**Change in the Probability of Voting (in %) – *TBM* Change from 0.7% (Minimum) to 6.0% (Median)**	**Change in the Probability of Voting (in %) – *TBM* Change from 0.7% (Minimum) to 14.2% (Maximum)**
0	-2.1 [-3.3; -0.9]	-5.7 [-9.1; -2.3]
1	-1.5 [-2.3; -0.8]	-4.1 [-6.3; -1.9]
2	-1.2 [-1.8; -0.7]	-3.2 [-4.8; -1.7]
3	-1.0 [-1.4; -0.6]	-2.7 [-3.9; -1.4]
4	-0.8 [-1.2; -0.5]	-2.3 [-3.3; -1.2]
5	-0.7 [-1.1; -0.4]	-1.9 [-3.0; -0.9]
6	-0.6 [-1.0; -0.3]	-1.7 [-2.7; -0.7]
7	-0.6 [-0.9; -0.2]	-1.5 [-2.5; -0.5]
8	-0.5 [-0.9; -0.1]	-1.3 [-2.3; -0.2]
9	-0.4 [-0.8; 0.0]	-1.1 [-2.2; 0.0]
10	-0.4 [-0.8; 0.0]	-1.0 [-2.1; 0.1]
11	-0.3 [-0.8; 0.1]	-0.9 [-2.1; 0.3]
19	-0.1 [-0.7; 0.5]	-0.2 [-1.7; 1.2]

Note: The numbers in brackets are 95% confidence intervals. The *TBM* measure takes into account all parties, including those that did not reach the electoral threshold.

Figure 5. Average Experience-Conditioned Effects of Two-Bloc Margin of Victory (*TBM*) on Turnout in the Swedish National Parliament (*Riksdag*) Elections – *TBM* Change from 0.7% (Minimum) to 6.0% (Median)

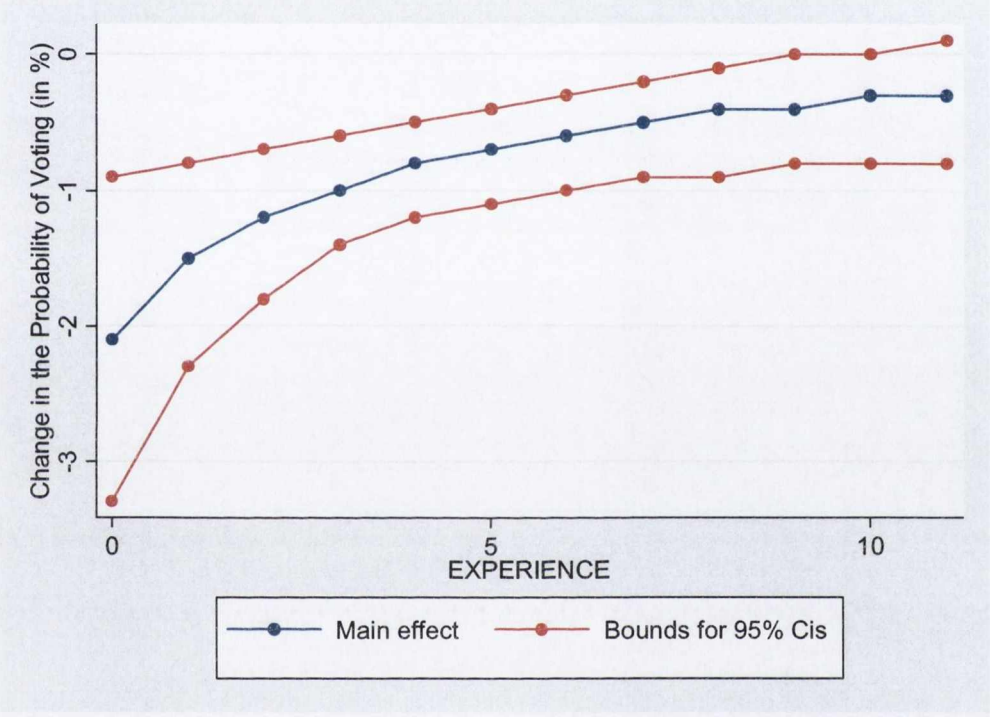

Figure 6. Average Experience-Conditioned Effects of Two-Bloc Margin of Victory (*TBM*) on Turnout in the Swedish National Parliament (*Riksdag*) Elections – *TBM* Change from 0.7% (Minimum) to 14.2% (Maximum)

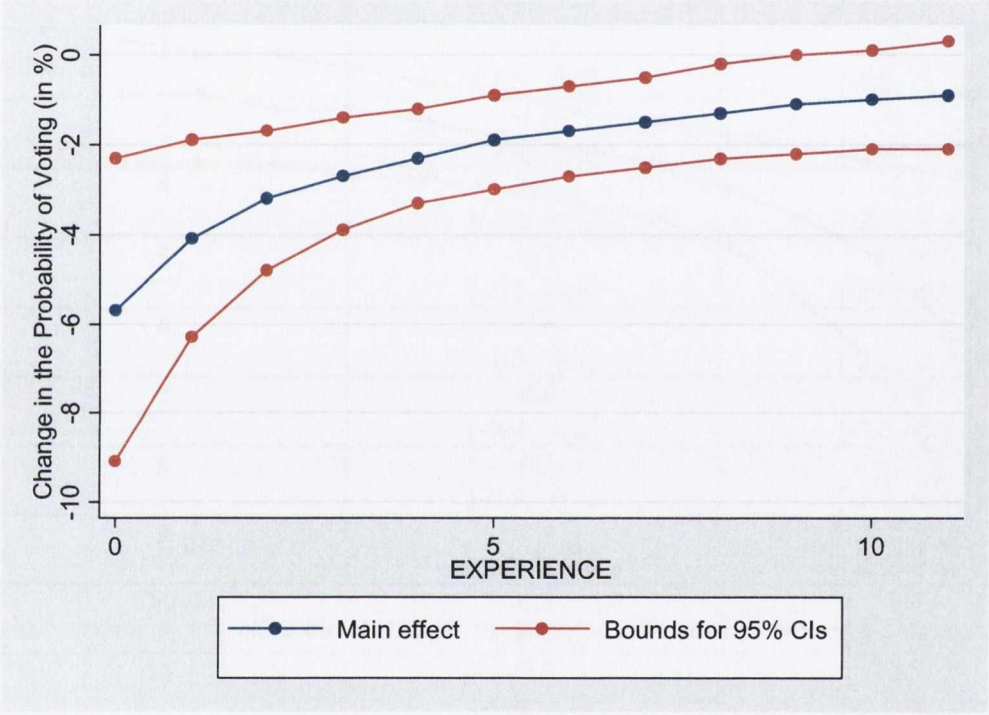

Table 10. Predictors of Individual-Level (Validated) Turnout in the Swedish National Parliament (*Riksdag*) Elections (1956-2006): Population-Averaged Complementary Log-Log Regression Estimates

	Coef.	Semi-Robust SE
Ln(*TBM* + 1)	-0.105**	0.023
Ln(*EXPERIENCE* + 1)	0.050*	0.024
Ln(*TBM* + 1) X Ln(*EXPERIENCE* + 1)	0.034**	0.012
Strong Party Supporter	0.311**	0.016
University Education	0.265**	0.024
Female	0.017	0.016
Voting Age	-0.033**	0.008
Lagged Aggregate Turnout (in %)	0.012**	0.002
Constant	0.378	0.278
Wald χ^2	700.270**	
Number of Observations	37,710	
Number of Respondents	25,280	

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

Note: The *TBM* measure does not take into account the parties that did not reach the electoral threshold.

Table 11. Average Effects of Two-Bloc Margin of Victory (*TBM*) on Turnout in the Swedish National Parliament (*Riksdag*) Elections: Account of Heterogeneity as Dependent on the Number of *Riksdag* Elections Already Experienced

EXPERIENCE	Change in the Probability of Voting (in %) – *TBM* Change from 0.1% (Minimum) to 6.2% (Median)	Change in the Probability of Voting (in %) – *TBM* Change from 0.1% (Minimum) to 15.4% (Maximum)
0	-4.6 [-6.4; -2.7]	-6.9 [-9.8; -4.0]
1	-3.3 [-4.5; -2.1]	-4.9 [-6.8; -3.1]
2	-2.6 [-3.5; -1.7]	-3.9 [-5.2; -2.5]
3	-2.2 [-2.9; -1.5]	-3.2 [-4.3; -2.1]
4	-1.8 [-2.4; -1.2]	-2.7 [-3.6; -1.8]
5	-1.6 [-2.1; -1.0]	-2.3 [-3.2; -1.4]
6	-1.4 [-1.9; -0.8]	-2.0 [-2.9; -1.1]
7	-1.2 [-1.8; -0.6]	-1.7 [-2.6; -0.8]
8	-1.0 [-1.6; -0.4]	-1.5 [-2.4; -0.6]
9	-0.9 [-1.6; -0.2]	-1.3 [-2.3; -0.3]
10	-0.8 [-1.5; -0.1]	-1.1 [-2.2; -0.1]
11	-0.7 [-1.4; 0.1]	-1.0 [-2.1; 0.1]
19	-0.1 [-1.1; 0.9]	-0.2 [-1.6; 1.2]

Note: The numbers in brackets are 95% confidence intervals. The *TBM* measure does not take into account the parties that did not reach the electoral threshold.

Figure 7. Average Experience-Conditioned Effects of Two-Bloc Margin of Victory (*TBM*) on Turnout in the Swedish National Parliament (*Riksdag*) Elections – *TBM* Change from 0.1% (Minimum) to 6.2% (Median)

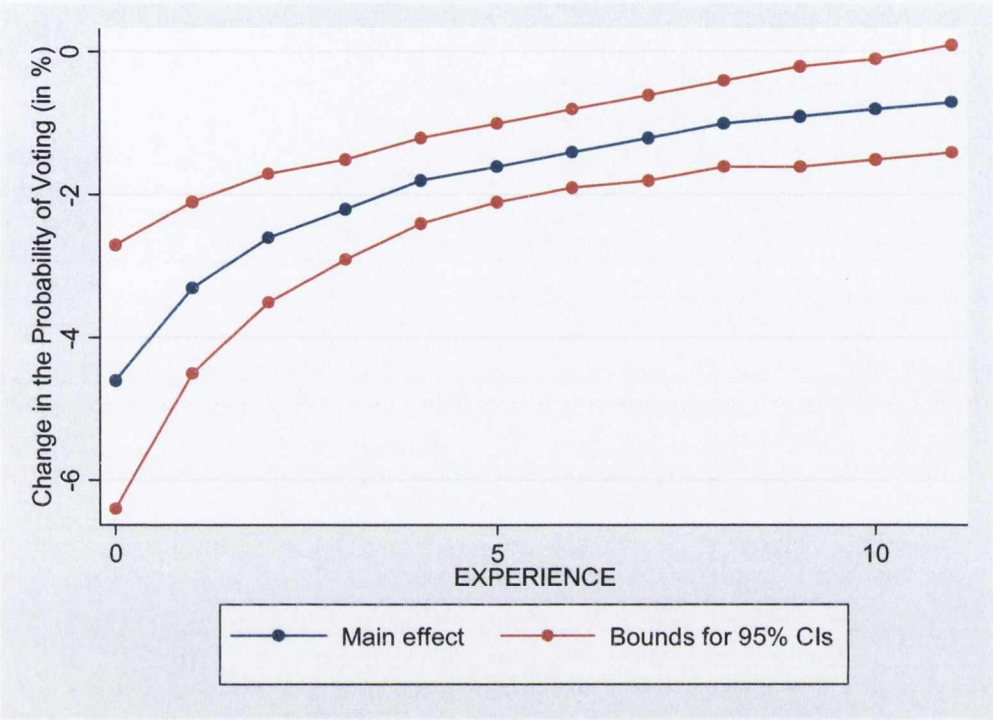

Figure 8. Average Experience-Conditioned Effects of Two-Bloc Margin of Victory (*TBM*) on Turnout in the Swedish National Parliament (*Riksdag*) Elections –*TBM* Change from 0.1% (Minimum) to 15.4% (Maximum)

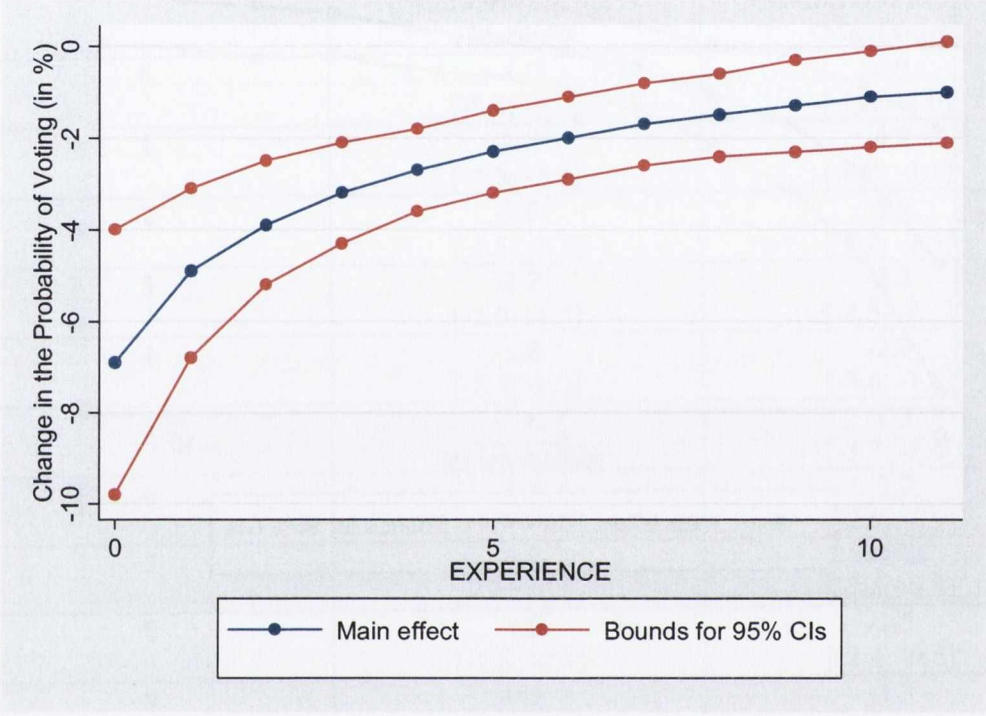

Table 12. Predictors of Individual-Level (Validated) Turnout in the Swedish National Parliament (*Riksdag*) Elections (1956-2006): Population-Averaged Complementary Log-Log Regression Estimates

	Coef.	Semi-Robust SE
TBM	-0.017**	0.004
Ln(*EXPERIENCE* + 1)	0.072**	0.017
***TBM* X Ln(*EXPERIENCE* + 1)**	0.006**	0.002
Strong Party Supporter	0.311**	0.016
University Education	0.263**	0.024
Female	0.017	0.016
Voting Age	-0.035**	0.008
Lagged Aggregate Turnout (in %)	0.012**	0.002
Constant	0.350	0.280
Wald χ^2	697.210**	
Number of Observations	37,710	
Number of Respondents	25,280	

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

Note: The *TBM* measure does not take into account the parties that did not reach the electoral threshold.

Table 13. Average Effects of Two-Bloc Margin of Victory (*TBM*) on Turnout in the Swedish National Parliament (*Riksdag*) Elections: Account of Heterogeneity as Dependent on the Number of *Riksdag* Elections Already Experienced

EXPERIENCE	**Change in the Probability of Voting (in %) – *TBM* Change from 0.1% (Minimum) to 6.2% (Median)**	**Change in the Probability of Voting (in %) – *TBM* Change from 0.1% (Minimum) to 15.4% (Maximum)**
0	-2.5 [-3.6; -1.4]	-6.9 [-10.1; -3.7]
1	-1.8 [-2.5; -1.1]	-4.9 [-6.9; -2.9]
2	-1.4 [-1.9; -0.9]	-3.8 [-5.3; -2.4]
3	-1.2 [-1.6; -0.8]	-3.1 [-4.3; -2.0]
4	-1.0 [-1.4; -0.6]	-2.6 [-3.7; -1.6]
5	-0.9 [-1.2; -0.5]	-2.3 [-3.2; -1.3]
6	-0.7 [-1.1; -0.4]	-1.9 [-2.9; -1.0]
7	-0.6 [-1.0; -0.3]	-1.7 [-2.6; -0.7]
8	-0.6 [-0.9; -0.2]	-1.4 [-2.5; -0.4]
9	-0.5 [-0.9; -0.1]	-1.3 [-2.3; -0.2]
10	-0.4 [-0.8; 0.0]	-1.1 [-2.2; 0.0]
11	-0.4 [-0.8; 0.1]	-0.9 [-2.1; 0.2]
19	-0.1 [-0.6; 0.5]	-0.1 [-1.5; 1.3]

Note: The numbers in brackets are 95% confidence intervals. The *TBM* measure does not take into account the parties that did not reach the electoral threshold.

Figure 9. Average Experience-Conditioned Effects of Two-Bloc Margin of Victory (*TBM*) on Turnout in the Swedish National Parliament (*Riksdag*) Elections – *TBM* Change from 0.1% (Minimum) to 6.2% (Median)

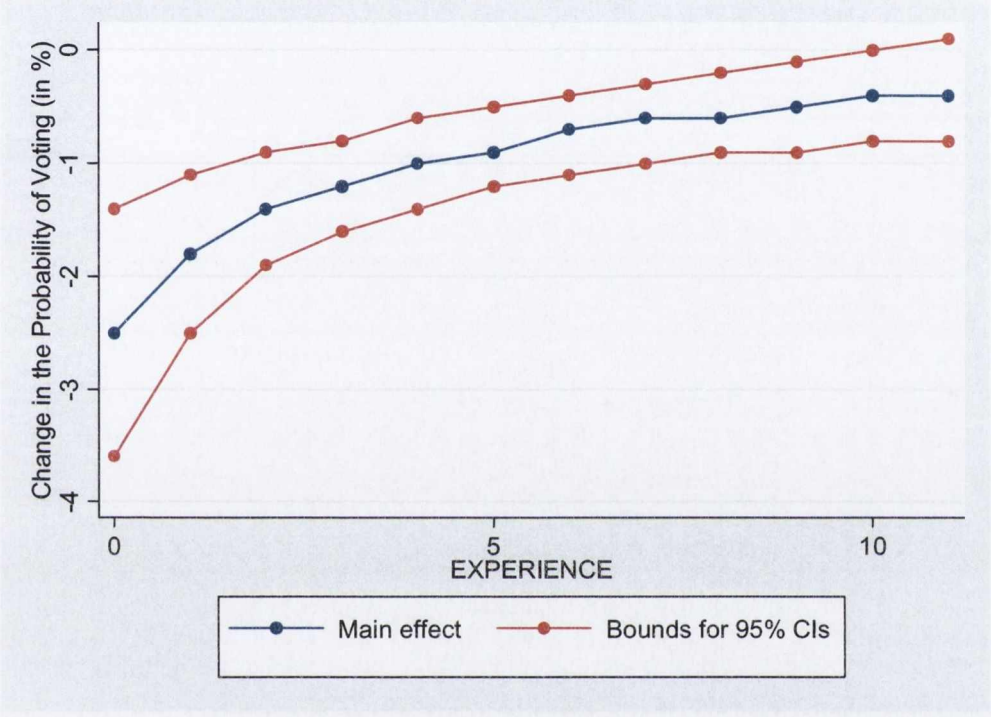

Figure 10. Average Experience-Conditioned Effects of Two-Bloc Margin of Victory (*TBM*) on Turnout in the Swedish National Parliament (*Riksdag*) Elections –*TBM* Change from 0.1% (Minimum) to 15.4% (Maximum)

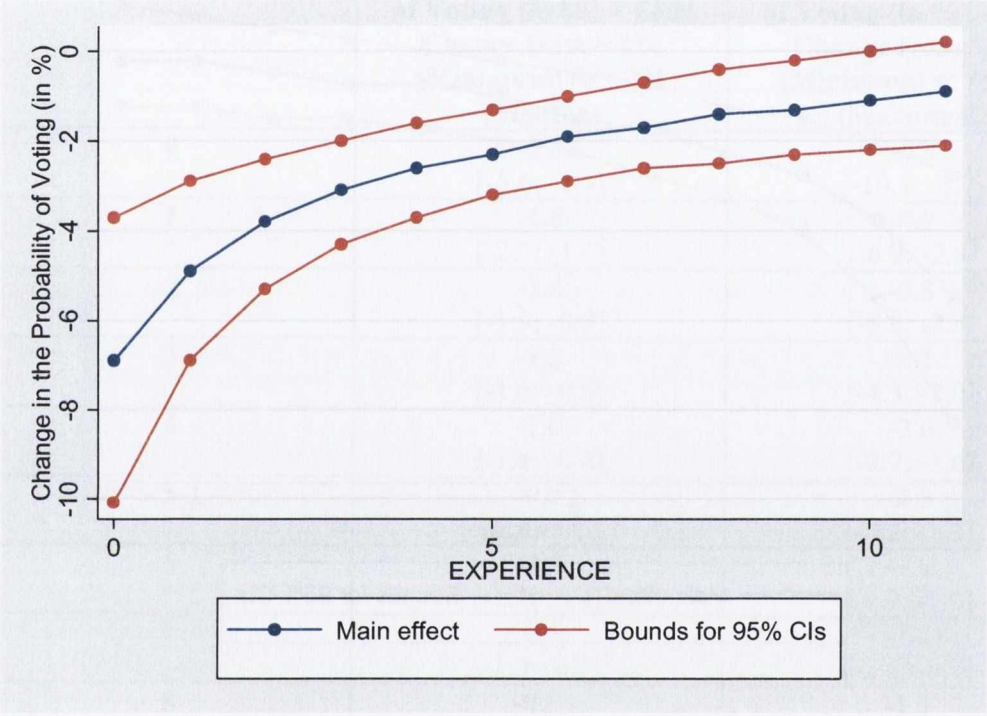

Table 14. Predictors of Individual-Level (Validated) Turnout in the Swedish National Parliament (*Riksdag*) Elections (1956-2006): Population-Averaged Complementary Log-Log Regression Estimates

	Coef.	**Semi-Robust SE**
CLOSE	0.0029	0.0031
Ln(*EXPERIENCE* + 1)	0.0821**	0.0332
***CLOSE* X Ln(*EXPERIENCE* + 1)**	0.0012	0.0015
Strong Party Supporter	0.3109**	0.0165
University Education	0.2590**	0.0244
Female	0.0173	0.0156
Voting Age	-0.0526**	0.0096
Lagged Aggregate Turnout (in %)	0.0104**	0.0020
Constant	0.6168*	0.3049
Wald χ^2	672.6500**	
Number of Observations	37,710	
Number of Respondents	25,280	

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

Table 15. Predictors of Individual-Level (Validated) Turnout in the Swedish National Parliament (*Riksdag*) Elections (1956-2006): Population-Averaged Complementary Log-Log Regression Estimates

	Coef.	Semi-Robust SE
Ln(*CLOSE*)	0.0512	0.0586
Ln(*EXPERIENCE* + 1)	0.0677	0.0826
Ln(*CLOSE*) X Ln(*EXPERIENCE* + 1)	0.0137	0.0271
Strong Party Supporter	0.3104**	0.0165
University Education	0.2589**	0.0245
Female	0.0175	0.0156
Voting Age	-0.0473**	0.0095
Lagged Aggregate Turnout (in %)	0.0102**	0.0021
Constant	0.4444	0.3236
Wald χ^2	666.3000**	
Number of Observations	37,710	
Number of Respondents	25,280	

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

Table 16. Predictors of Individual-Level (Validated) Turnout in the Swedish National Parliament (*Riksdag*) Elections (1956-2006): Population-Averaged Complementary Log-Log Regression Estimates

	Coef.	**Semi-Robust SE**
LARGEST PARTY	0.0243**	0.0048
Ln(*EXPERIENCE* + 1)	0.2670**	0.0984
***LARGEST PARTY* X Ln(*EXPERIENCE* + 1)**	-0.0036	0.0023
Strong Party Supporter	0.3127**	0.0165
University Education	0.2717**	0.0248
Female	0.0174	0.0156
Voting Age	-0.0784**	0.0097
Lagged Aggregate Turnout (in %)	0.0054**	0.0021
Constant	0.5408	0.3333
Wald χ^2	696,1200**	
Number of Observations	37,710	
Number of Respondents	25,280	

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

Table 17. Average Effects of the Largest Party's Vote Share (*LARGEST PARTY*) on Turnout in the Swedish National Parliament (*Riksdag*) Elections: Account of Heterogeneity as Dependent on the Number of *Riksdag* Elections Already Experienced

EXPERIENCE	**Change in the Probability of Voting (in %) – *LARGEST PARTY* Change from 35% (Minimum) to 44.6% (Median)**	**Change in the Probability of Voting (in %) – *LARGEST PARTY* Change from 35% (Minimum) to 50.1% (Maximum)**
0	6.4 [3.7; 9.0]	9.4 [5.7; 13.1]
1	5.3 [3.4; 7.1]	7.8 [5.2; 10.5]
2	4.6 [3.2; 6.1]	6.8 [4.9; 8.8]
3	4.2 [3.0; 5.4]	6.2 [4.5; 7.9]
4	3.9 [2.8; 5.0]	5.8 [4.2; 7.3]
5	3.7 [2.6; 4.7]	5.4 [3.9; 6.8]
6	3.5 [2.4; 4.5]	5.1 [3.7; 6.5]
7	3.3 [2.3; 4.3]	4.8 [3.4; 6.3]
8	3.1 [2.1; 4.2]	4.6 [3.2; 6.1]
9	3.0 [2.0; 4.1]	4.4 [3.0; 5.9]
10	2.9 [1.8; 4.0]	4.3 [2.8; 5.7]
11	2.8 [1.7; 3.9]	4.1 [2.6; 5.6]
19	2.2 [1.0; 3.5]	3.3 [1.6; 5.0]

Note: The numbers in brackets are 95% confidence intervals.

Figure 11. Average Experience-Conditioned Effects of *LARGEST PARTY* on Turnout in the Swedish National Parliament (*Riksdag*) Elections – *LARGEST PARTY* Change from 35% (Minimum) to 44.6% (Median)

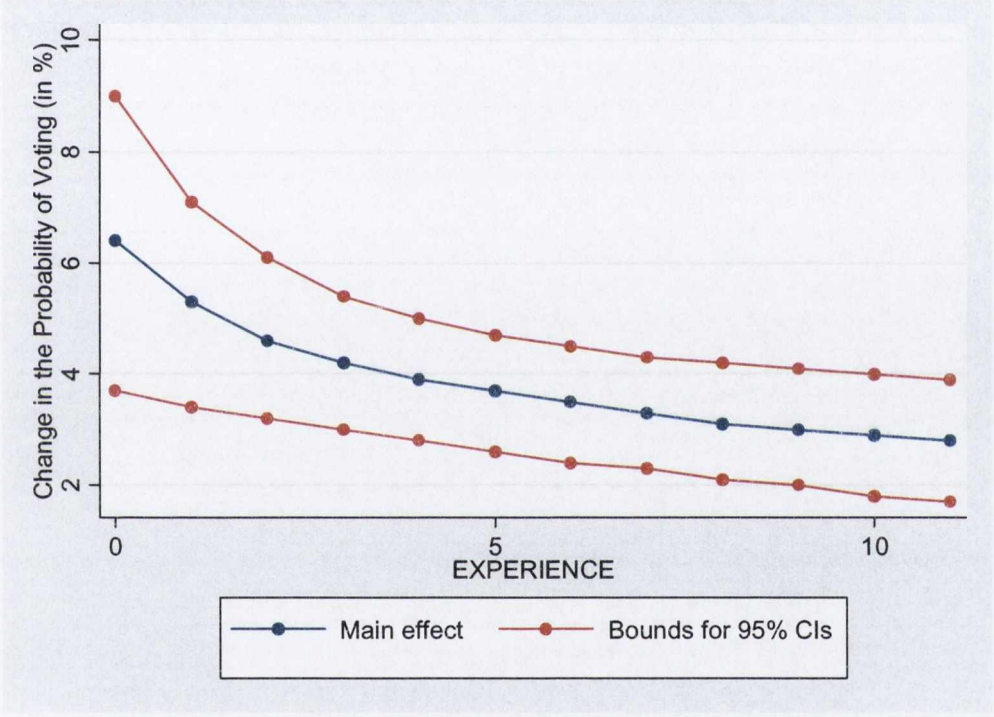

Figure 12. Average Experience-Conditioned Effects of *LARGEST PARTY* on Turnout in the Swedish National Parliament (*Riksdag*) Elections – *LARGEST PARTY* Change from 35% (Minimum) to 50.1% (Maximum)

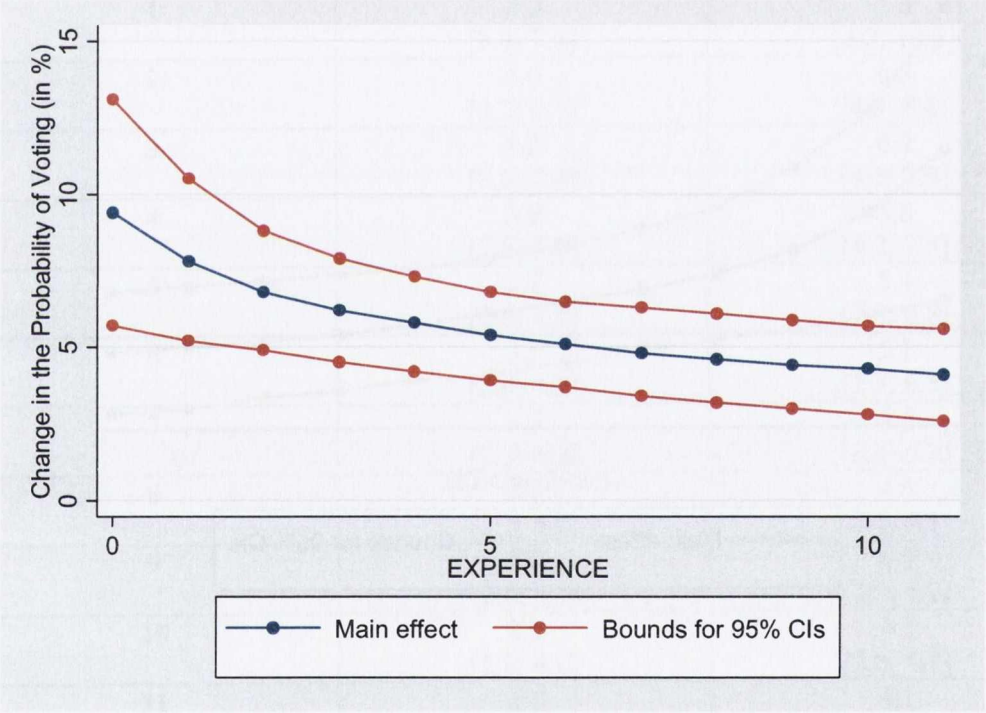

Table 18. Swedish National Election Studies 1956-2006 Surveys: Descriptive Statistics

Variable	Distribution Statistics
Electoral Participation	0.919 (0.273)
TBM (All Parties)	5.837 (3.687)
TBM (Parties Winning Seats Only)	6.373 (4.537)
CLOSE	22.497 (6.310)
LARGEST PARTY	43.383 (4.029)
EXPERIENCE	7.210 (4.607)
Strong Party Supporter	0.336 (0.472)
University Education	0.138 (0.345)
Female	0.481 (0.500)
Voting Age	18.720 (1.158)
Lagged Aggregate Turnout (in %)	86.804 (4.105)

Note: Main entries are means and the numbers in parentheses are standard deviations.

Table 19. Turnout (Official and Survey) and the *TBM* in the Swedish *Riksdag* Elections (1956-2006)

Election Year	Official Turnout (%)	Survey Turnout (%)	*TBM* (All Parties)	*TBM* (Parties Reaching the Electoral Threshold Only)
1956	77.4	86.7	0.7	0.7
1960	85.9	90.4	4.7	4.7
1964	83.9	88.1	6.7	8.6
1968	89.3	92.7	8.7	10.2
1970	88.3	91.8	0.7	2.5
1973	90.8	93.6	1.7	0.1
1976	91.8	95.6	4.7	3.3
1979	90.7	95.1	1.6	0.2
1982	91.4	93.4	6.0	6.2
1985	89.9	94.4	4.8	4.6
1988	86.0	90.5	9.8	12.7
1991	86.7	91.6	7.7	11.1
1994	86.8	92.4	14.2	15.4
1998	81.4	88.8	8.8	8.8
2002	80.1	89.3	8.9	8.9
2006	82.0	91.3	2.1	2.1

Note: The data necessary to compose the above table have been taken from the following websites: International IDEA (http://www.idea.int/vt/), Parties and Elections in Europe (http://www.parties-and-elections.de/). The Pearson correlation coefficient between official and survey turnout equals approximately 0.91 and between the two *TBM* measures approximately 0.96.

Paper 3

Habitual Voting and the "Second-Order" European Parliament Elections: On Experience-Conditioned Impact of Institutional and Temporal Context of Elections on Voter Turnout

Abstract: The recently prominent concept of habitual voting (Plutzer 2002) relies on the proposition that the citizens' propensity to vote (or abstain) is developed during their young adulthood. Then, this propensity ("habit") remains stable and resistant to potential influences, including electoral context. Franklin (2004) distinguishes three types of electoral context: institutional, temporal and social. Franklin's analyses indeed show that the impact of electoral context on turnout is conditioned by citizens' electoral experience. In this paper, I study the determinants of turnout in the ("second-order") European Parliament elections (Reif and Schmitt 1980; van der Eijk et al. 1996; Marsh 1998). I test three hypotheses. First, I propose that the decline in turnout in the low-salience European Parliament elections, comparing to national elections, is conditioned by electoral experience. More precisely, as a result of lower electoral salience (i.e. a change in the institutional context), turnout by the least electorally experienced cohorts should suffer from a more substantial decline than turnout by the more electorally experienced cohorts. A test referring to electoral participation in the national parliament and the European Parliament elections in Sweden largely supports this hypothesis. The second hypothesis proposes that the impact of not having compulsory voting arrangements on turnout in the European Parliament elections is most pronounced for

the least electorally experienced groups of citizens. In other words, controlling for turnout in the high-salience national elections, the decline in turnout in the European Parliament elections (resulting from lowered salience of the latter elections and lack of compulsory voting arrangements) should be most pronounced in the case of the least electorally experienced cohorts. I present suggestive, albeit imperfect, evidence supporting this thesis. Finally, I proceed to an analysis of the impact of temporal context on turnout in the European Parliament elections. I reflect on the long-standing proposition that, all else being equal, turnout in the European Parliament elections should increase while the temporal gap between these elections and a given country's impending national election decreases (Marsh and Franklin 1996; Franklin 2001). I propose that, at the individual level, the above mentioned effect of the placement of a European Parliament election in a given country's national electoral cycle should also be conditioned by electoral experience. Again, I present suggestive empirical evidence supporting the above thesis. Overall, provides fairly consistent evidence in favour of the theory of voting as habit. I believe it also contributes to our knowledge about the determinants of turnout in the European Parliament elections.

Key words: voter turnout, habitual voting, European Parliament elections.

1. Introduction: Voting as Habit

The concept of voting as habit has recently been one of the prominent propositions explaining why the citizens of the democratic polities do or do not engage in electoral participation. The concept has first systematically been elaborated on by Plutzer (2002) whose research followed the earlier intuitions that appeared in political science literature

(Milbrath 1965; Brody and Sniderman 1977: 349). According to Plutzer (2002), the propensity to vote is a "habit" that is learned (or not) in a few initial elections in every citizen's life. Such a predisposition is relatively persistent and resistant to potential influences. In Plutzer's (2002: 42-44) argumentation, an important part is a clear link to the resource model of political participation (Brady et al. 1995). If, at the beginning of their electoral history, young adults have access to the broadly conceived "resources", either through their own characteristics (e.g. education) or the traits of their social environment (e.g. politically sophisticated parents), they will be likely to develop a strong predisposition ("habit") for voting. At later stages, however, all the "resources" would gradually lose their importance and the citizens' "voting history" would be the only element that practically matters. This reasoning is quite convincingly supplemented by another stream of research in habitual voting. It has been argued for some time that voting is "habitual" in the very strict sense, i.e. that there is *a causal relationship* between voting/abstention at a time t_0 and voting/abstention at the next time t_1 (Kanazawa 1998; Kanazawa 2000; Fowler 2006). A number of studies (Green and Shachar 2000; Gerber et al. 2003; Denny and Doyle 2009) have corroborated this hypothesis even though the strength of the effect has been a matter of controversy. While there might be at least a few explanations why voting and abstention tend to be "self-reinforcing" acts (Gerber et al. 2003) this tendency firmly fits into the developmental model of electoral participation sketched by Plutzer (2002). The latter author stresses the importance of the "resources" that facilitate electoral participation at the starting point of a citizen's electoral history. Then, since voting is self-reinforcing, maintaining the predisposition to vote is gradually less and less "resource-consuming".

Given the logical neatness of this argumentation, that draws (sometimes more and sometimes less explicitly) on the behaviourist tradition of research on human behaviour (Bem 1967; Bem 1972; Macy 1991; Macy 1995), the theory of habitual voting seems to be a very promising systematic concept explaining why people do or do not engage in electoral participation.

Drawing on Plutzer's (2002) work, Franklin (2004) takes the developmental model of voting behaviour a step further. First, the latter author proposes that long-term turnout trends will be an effect of generational replacement (Franklin 2004: 59-90). If the individual dispositions for either voting or abstention are formed during the citizens' young adulthood, i.e. when they experience their initial elections in 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 socialisation to voting takes place under different 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. 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. Franklin (2004: 43-46) distinguishes three levels of political context relevant to any election. Most importantly, the institutional characteristics provide voters with

information on how much is "at stake" in any given election. In other words, institutional context relates to the consequences of the ballot. An election is salient when it has policy consequences, relevant from the citizens' (and also elites' if the latter are to spend various resources on campaigning) subjective viewpoint. Otherwise, the election is not salient or it is, as commonly used in relation to the European Parliament (henceforward EP) elections, second-order (Reif and Schmitt 1980; van der Eijk et al. 1996; Marsh 1998). Other institutions that comprise the institutional context of elections, providing voters with further stimuli for voting or abstention, are compulsory voting arrangements (or lack of them) and electoral systems. Another crucial component of electoral context is its temporal dimension. Here, competitiveness of the election is mainly of interest. In particular, Franklin (2004) concentrates on election closeness (see for instance Endersby et al. 2002) and its role in formation of the electorally initiating cohorts. Finally, there is also a social dimension of electoral context, comprising all the social and group ties that have a potential impact on mobilisation to electoral participation. It might seem that this last component of electoral context is just Franklin's (2004) reiteration of Plutzer's (2002) arguments. However, Franklin's (2004: 63-66) analysis of the consequences of lowering voting age to eighteen shows how these essentially micro-level circumstances might differ between cohorts at their respective electoral socialisation periods, just because these periods take place at different age. In particular, Franklin (2004: 63-66) stresses the fact that the eighteen-year-old citizens might already be less influenced by their parents' home environment and, on the other hand, not yet firmly socially and economically settled to be able to overcome the initial "costs" of electoral participation. As a result, socialisation to voting after lowering

voting age to eighteen should be a more problematic process, with all the further negative consequences for long-term aggregate turnout regularities. This interesting argumentation, supported with empirical evidence, shows how an electoral reform can actually change the very individual-level circumstances in which citizens make their decisions concerning electoral participation. It also supplements Franklin's (2004: 43-44) argument about electoral competitiveness.

2. "Second-Order" European Parliament Elections: A Case for Further Research into Experienced-Conditioned Impact of Electoral Context on Voter Turnout

Franklin (2004) delivers extensive evidence on the effects of temporal and social context on short- and long-term turnout regularities. As I noted before, this research concentrates mostly on the impact of electoral competitiveness and voting age reform on turnout. Institutional context is somewhat left aside. This is to an extent justified as Franklin's (2004) analyses focus on long-term turnout regularities. At the same time, in some countries, like the United States with its presidential-year and midterm elections always held according to the same time sequence, the institutional context can be considered constant. In such cases, socialisation to voting for different cohorts can reasonably be viewed as influenced by fluctuating electoral competitiveness and various one-off "shocks" (e.g. the already mentioned voting age reform). However, not all democracies do meet the criterion of stable (constant) institutional context, especially if the context is thought of in relation to the process of socialisation to voting. In particular, I will argue in this paper that the ("second-order") EP elections, conducted since 1979 in the European Union (EU) member states, provide a case that poses

questions about experience-conditioned impact of institutional context on voter turnout. Moreover, this case also invites further research into the impact of temporal context on turnout, research that would go beyond the notions of electoral competitiveness or election closeness.

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 is to explain both turnout and vote 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 emphasised trends is lower turnout in the EP elections (Reif 1985). The bulk of research in turnout in these elections focuses on individuals. This scholarship includes, for instance, arguments stressing positive attitudes towards Europe as a stimulus for casting a ballot (van der Eijk and Oppenhuis 1990; van der Eijk and Schmitt 1991) or the importance of various mobilisation channels (van der Eijk and Schmitt 2009; Wessels and Franklin 2009). Others have emphasised the significance of "habitual voting" (Schmitt and Mannheimer 1991), i.e. the propensity to vote in whatever election happens to be taking place. This last argument should not be confused with the broad concept of habitual voting as

proposed by Plutzer (2002) and Franklin (2004). For the latter authors put forward a complex dynamic model of socialisation to voting while Schmitt and Mannheimer (1991) notice just the simple fact that the individuals' propensity to vote in both the EP and the national elections is related to largely the same set of explanatory variables (including age, political interest or party attachment). Overall, as van der Eijk et al. (1996: 153) 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, the argument follows (van der Eijk et al. 1996: 154-155), concentrating on the varying context of the EP elections and the consequences of such variation for turnout might yield much more fruitful results. For instance, following the idea of a "second-order" character of the EP elections, it has been found that turnout in those elections tends to be higher if they are conducted shortly before the respective country's national elections (Marsh and Franklin 1996; Franklin 2001).

Emphasising importance of electoral context, Franklin (2001) goes as far as to argue that, after excluding a few outlying cases, nearly all (cross-country and temporal) variation in turnout in the EP elections can be explained by three contextual variables: the above mentioned placement of an EP election in a country's national election cycle, existence (or not) of compulsory voting arrangements in a given country, and a dummy variable indicating whether a given EP election is (or is not) the first one conducted in a given country. The empirical evidence presented by Franklin (2001) is strong, albeit now and then criticised (see Studlar et al. 2003). Nonetheless, it leaves room for further questions. First, the evidence is aggregate-level, the dependent variable being turnout rate in a given country (in a given EP election). The individual-level distribution of the

effects of context remains thus unknown. In the light of the concept of voting as habit, one must therefore ask whether these effects are (or are not) conditioned by electoral experience. A second, but no less important, problem concerns the way the salience of the elections to the EP, as compared to salience of national elections, is considered. In the following sub-sections I consider all the above issues in more detail from the viewpoint of the concept of habitual voting. First, I discuss the issue of the EP vs. national elections, i.e. high- vs. low-salience elections. Second, I proceed to the problem of compulsory voting and its impact on turnout in the ("second-order") EP elections. Third, I reflect upon the issue of the placement of an EP election within a country's national election cycle. This way, I proceed from analyses of institutional context and, holding the latter constant, I touch upon temporal context of the low-salience elections. Finally, I briefly consider the tendency for turnout to be higher if a given EP election is the first conducted in a given country.

2.1. Electoral Salience: A Long-Term Characteristic or a One-Off Shock?

Electoral salience is an institutional characteristic of an election. From the viewpoint of the theory of habitual voting, the impact of institutional context on turnout is the understudied (or even unstudied) phenomenon. Franklin (2004) does not present any evidence of experience-conditioned effects of electoral salience on turnout. This is justified to the extent to which institutional context can, from a perspective reaching beyond a single election, remain constant. The best example here is the United States where the (high-salience) presidential and the (low-salience) midterm congressional elections are always conducted according to the same cycle. In the long run electoral

salience is thus constant and all cohorts are socialised to the electoral process under the same institutional context. When we consider the case of the EP elections, however, the issue is not that clear. For the first EP election was conducted in 1979, i.e. at a point when the then EU member states were already advanced as regards their history as democracies. Therefore, at the time they happened to be experiencing their first "second-order" EP election, many citizens of those polities were already quite experienced with the electoral process in general. From the viewpoint of the theory of habitual voting, it should thus be expected that vast majority of those citizens should have acquired a stable predisposition to vote or abstain already before experiencing their first EP election. This intuition is even more justified with respect to those EU member states that, like Sweden, joined the EU in the mid-1990s and, as a result, only then conducted their first EP election. In such a situation, I expect that an introduction of the low-salience EP elections to a country's electoral calendar might have an effect similar to the one-off temporal stimuli like, for instance, election closeness. I therefore propose that the drop-off in turnout in the EP elections, comparing to national elections, should be conditioned by electoral experience. More precisely, the difference in citizens' propensity to vote between the national and the EP elections should be most pronounced in the case of the least electorally experienced cohorts. This difference should then decrease while electoral experience increases. The above proposition follows the somewhat intuitive observation made already in the course of early research in the EP elections, namely the fact that turnout decline in these elections (comparing to the first-order elections) becomes potentially less pronounced while the citizens' age increases. Ysmal and Cayrol (1996: 121), for instance, show this regularity quite clearly,

comparing French respondents' propensity to cast a ballot in the 1989 EP election with their expressed intention of voting or abstention in the subsequently held election to the national legislature. In this paper, I explicitly refer to electoral experience which, at least in established democracies, is almost perfectly correlated with age. I use validated data on electoral participation in the national parliament and the EP elections in Sweden to more explicitly test the above mentioned intuitive finding by Ysmal and Cayrol (1996).

2.2. Compulsory Voting and Voter Turnout: Normative and Theoretical Considerations

Compulsory voting is an institutional factor found to significantly increase turnout rates (Powell 1986; Jackman 1987; Jackman and Miller 1995; Franklin 1996; Blais and Dobrzynska 1998; Gray and Caul 2000). The EP elections are not an exception here. As Franklin (2001) demonstrates, in the EP elections conducted between 1979 and 1999 the average effect of compulsory voting arrangements was an increase in turnout rates by more than 33 percentage points. This strong effect was, however, estimated from aggregate (country-level) data and its individual-level distribution remains thus unknown. However, as the general tendency is that turnout decline is affected by socio-economic factors and age (Birch 2009), a number of normative and theoretical (in particular with respect to age-related heterogeneity) implications follow with respect to the problem of compulsory voting.

In her paper making the case for compulsory voting, Birch (2009) argues that this institution improves fairness of the democratic process in three ways. First, full (or fuller) electoral participation would increase political fairness. That is the most obvious

consequence of compulsory voting, and means more or less the fact that if participation was full then all groups' "voice" would be proportional to their share in the politically eligible part of a given population. Second, the electoral process would also be socially fairer under compulsory voting arrangements. In particular, there are a number of studies (Hicks and Swank 1992; Lijphart 1997; Mueller and Stratmann 2003) suggesting that higher turnout rates are associated with more equal distribution of wealth. Evidence more directly related to compulsory voting, suggesting that it might contribute to lowering of the levels of income inequality, also exists (see Chong and Olivera 2005). Similar, though somewhat more tentative, conclusions can be drawn with respect to age. For instance, in the 2005 British General Election turnout among the 18-25 age group was 37 percent but for those older than 65 it was 75 percent (Birch 2009: 22). This not only raises problems of normative nature, but also invites theoretical reflection from the standpoint of habitual voting theory (see the next paragraph below). Finally, Birch (2009) also argues that full participation leads to procedural fairness whereby all the eligible citizens pay the "cost" of the collective "goods" resulting from the democratic processes. While objections as to the sensibility of compulsory voting as an institution aimed at increasing turnout rates have been raised as well (Birch 2009: 24-25; Franklin 1999), the evidence for the institution being efficient in raising aggregate turnout levels is overwhelming. Less obvious are the individual-level distribution of this effect and the theoretical implications of potential variety with respect to it.

As Birch (2009: 22) notices, in the voluntary voting countries turnout rates might be significantly skewed with respect to age. If so, an interpretation from the viewpoint of habitual voting theory (and the related issue of electoral experience) might be

appropriate here. I explicitly argue that it is especially so in the case of the low-salience (e.g. the EP) elections. In other words, low electoral salience is a factor discouraging participation, a factor whose negative impact could be neutralised if an efficient mechanism of compulsory voting was in place. From this viewpoint, compulsory voting would be considered an institution preventing turnout in low-salience elections from dropping significantly relative to turnout in high-salience elections. To give an example, when the high-salience national parliament elections are considered then turnout level differences between, say, Belgium and Sweden are not dramatically large. However, in the low-salience EP elections turnout in Sweden decreases drastically while in Belgium if does not. This regularity can certainly be explained by the existence of compulsory voting in Belgium and its absence in Sweden. In this paper, I study experience-conditioned impact of compulsory voting arrangements on turnout in the EP elections, explicitly controlling for turnout in a given country's national parliament elections. Substantively, therefore, I aim to learn what difference can compulsory voting arrangements make to individual-level distribution of turnout decline in the EP elections.

2.3. First-Order National Parliament Elections and the Issue of Voter Turnout in the Second-Order European Parliament Elections

As was already said, the concept of second-order elections, the theory dominating reflection on turnout and vote choice in the EP elections, emphasises the relationship between these 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 national election decreases. Marsh and Franklin (1996: 18) hypothesise that the reason for relatively high turnout later in the 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. More precisely, as van de Eijk et al. (1996: 154-155) 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. This way, the EP elections might potentially influence the domestic political landscapes in the EU countries. However, with respect to explanations of turnout, the proposed relationship between the EP and the national elections remains entirely "hierarchical", with the national electoral calendar being conceived of as the key to understanding country-level turnout rates in the European electoral contest. Sensible as it might seem, I believe it does not exhaust the entire set of relationships between the EP and the national contests. I come back to this issue in the Conclusion, suggesting further research reaching far beyond the scope of this study.

The idea that the time gap between an EP election and the next scheduled national election should be negatively correlated with turnout has been empirically corroborated in a number of studies (e.g. Marsh and Franklin 1996; Franklin et al. 1996). In his aggregate-level study on turnout in the EP elections, encompassing five sets of European elections conducted between 1979 and 1999, Franklin (2001) includes the variable in his model, along with variables referring to compulsory voting and the distinction between the first and further EP elections conducted in a given country. After excluding outliers, this modest set of three predictors nearly perfectly explain turnout in

the EP elections conducted between 1979 and 1999. Analyses of the relative impact of the above variables led Franklin (2001: 318) to a conclusion that the effect of the placement of an EP election within a given country's national electoral cycle, albeit statistically significant, is rather weak. Depending on the model specification, a change in the time gap between an EP and a national election by its mean is associated with a mean change in turnout of (roughly) 4 to 6 percentage points. While I by no means try to neglect these (relatively weak) effects, they do not compare to the already mentioned (see previous sub-section) impact of compulsory voting arrangements (if any valid comparison between the effects of binary and continuous variables is at all possible). This rather moderate effect, however, yields questions analogous to those first asked by Franklin (2004) with regard to the effects of election closeness on turnout. More precisely, from the viewpoint of the concept of voting as habit it is sensible to ask whether the impact of the national election cycle variable on turnout in the EP elections is conditioned by electoral experience. If the answer to the above question is positive then the situation might resemble what is observed with respect to the impact of closeness on turnout. This effect might be relatively weak when looked at the from the aggregate-level viewpoint (see for instance Cox and Munger 1989). At the individual-level, it might yet be "composed" of strong effects for the electorally inexperienced citizens, dropping to virtually null for the established cohorts (Franklin 2004). In this paper, I rely on individual-level (survey) data relating to electoral participation in the EP elections (conducted between 1989 and 2004). I am thus able to test the hypothesis that the impact of the national election cycle variable on voter turnout in the EP elections in conditioned by citizens' electoral experience.

2.4. First European Parliament Election as a Stimulus for Higher Turnout

The third variable which, according to Franklin (2001), should be expected to explain turnout in the EP elections is a dummy distinguishing the first from further EP elections conducted in a given country. A fairly general observed regularity has been higher turnout in a country's first EP election than it has been in the country's subsequent EP elections. In the period between 1979 and 1999 turnout in such elections was, on average, higher by more than 8 percentage points, regardless of model specification (see Franklin 2001: 317). This tendency is usually explained with reference to the citizens' excitement with novelty introduced by the Europe-wide elections (Reif 1984; van der Eijk et al. 1996). Unfortunately, even though a hypothesis pointing to the potentially experience-conditioned character of this "excitement" is most worth empirical examination, such a test cannot be conducted in this paper. For the European Election Studies (EES) data used in this paper encompass only the EP elections conducted between 1989 and 2004, excluding the instances when elections were conducted outside the regular schedule (e.g. the 1995 EP election in Sweden, Austria and Finland). As a result, the only "first" EP elections are those conducted in 2004 in the ten new EU member states (following the 2004 EU enlargement). This leaves no within-country variation as regards the variable distinguishing between the first and further EP elections. In such a situation, I cannot test the above mentioned promising hypothesis. In the analyses concerning experience-conditioned impact of national electoral cycle and compulsory voting on turnout I thus only control by using a dummy referring to the EU member states admitted as a result of the 2004 enlargement.

3. Hypotheses and Data

I attempt to test three hypotheses. The first test relates to the Swedish national parliament (*Riksdag*) elections and the elections to the EP taking place in Sweden. I conduct an analysis of experienced-conditioned impact of the low-salience of the EP elections on turnout. Then, using the EES 1989-2004 data, I test the hypotheses of experience-conditioned effects of national election cycle and compulsory voting on turnout in the EP elections. The first model I test is the following:

$$1)\quad \Pr(VOTE = 1) \sim \beta_0 + \beta_1 EP + \beta_2 \mathrm{Ln}(EXPERIENCE + 1) + \beta_3 [EP \times \mathrm{Ln}(EXPERIENCE + 1)] + \beta_4 CONTROLS + \varepsilon$$

where:

EP – a dummy variable taking the value of 1 if the election is an EP one and zero otherwise;

EXPERIENCE – the number of first-order (*Riksdag*) elections a respondent has already experienced (after reaching voting age)[20];

CONTROLS – I control for party attachment, education, trade union membership, gender and whether the election was conducted after 1995 or not

[20] In the Swedish National and EP Election Studies utilised here (see further part of this section for the description of data used in this paper), the data on age are only given in the form of intervals (e.g. 31-35), and so the variable *EXPERIENCE* will in practice mean *the expected value* of the number of *Riksdag* elections already experienced, given a respondent's age group. In practice, therefore, for Sweden *EXPERIENCE* is a variable measured with (arguably mostly unsystematic) error, and so the results presented later on in this paper can only be treated as approximate. I also rely on some simplifying assumptions here. First, I assume that if an election takes place in a year when a respondent reaches legal voting age then the probability of the respondent being eligible to vote in this particular election equals 50%. Second, I assume that if the respondent belongs to a given age interval than s/he has equal probabilities of being born in any of the years comprising the given interval.

(as there was significant decline in turnout in Sweden after 1995, in both *Riksdag* and the EP elections),

ε - error term.

Given the above model, my first hypothesis is the following:

Hypothesis 1: The effect of the EP dummy variable on the respondents' probability to vote should be negative ($\beta_1 < 0$), with a positive interaction effect between the latter variable and logged *EXPERIENCE* ($\beta_3 > 0$).

Second, I estimate the following model:

$$2)\ \Pr(VOTE = 1) \sim \beta_0 + \beta_1 COMPULS + \beta_2 \mathrm{Ln}(EXPERIENCE + 1) + \beta_3[COMPULS \times \mathrm{Ln}(EXPERIENCE + 1)] + \beta_4 CONTROLS + \varepsilon$$

where:

COMPULS – a dummy variable taking the value of 1 if the given country has compulsory voting arrangements in place at the time of the given EP election[21] and zero if otherwise;

EXPERIENCE – the number of national parliament elections a respondent has already experienced (after reaching voting age)[22];

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[21] Here, I take into account the fact that after 1993 Italy has effectively abolished sanctions for electoral abstention (Franklin 2001: 311), and that the same happened in Greece after 2000.

[22] 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 used the data 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.

CONTROLS – I control for respondents' assessment of their country's membership in the EU ("good thing", "bad thing" with "no opinion" as a reference category), party attachment, education, trade union membership, social class (self-perceived), gender, turnout in the given country's most recent national parliament election, national election cycle (see the *CYCLE* variable in model 3 below), and dummy variables for the particular EP elections,

ε - error term.

I test the following hypothesis:

Hypothesis 2: The effect of the *COMPULS* dummy variable on the respondents' probability to vote should be positive ($\beta_1 > 0$), with a negative interaction effect between the latter variable and logged *EXPERIENCE* ($\beta_3 < 0$).

Finally, I estimate the third model:

3) $\Pr(VOTE = 1) \sim \beta_0 + \beta_1 CYCLE + \beta_2 \text{Ln}(EXPERIENCE + 1) + \beta_3 [CYCLE \text{ X } \text{Ln}(EXPERIENCE + 1)] + \beta_4 CONTROLS + \varepsilon$

where:

CYCLE – the number of months (to two significant digits) between the EP election and the given country's next scheduled national election[23];

EXPERIENCE – same as in model 2 above.

CONTROLS - same as in model 2, with the exception that in model 3 I control for *COMPULS* (while *CYCLE* is the main explanatory variable).

[23] Unlike in Franklin's (2001) work, in the cases when the EP election is conducted on the same day with a national election, *CYCLE* equals zero.

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

Hypothesis 3: The effect of the *CYCLE* variable on the respondents' probability to vote should be negative ($\beta_1 < 0$), with a positive interaction effect between the latter variable and logged *EXPERIENCE* ($\beta_3 > 0$).

Testing the above three hypotheses, I use two data sets. The first hypothesis is tested solely with survey data concerning electoral participation in Sweden. More precisely, I use the Swedish National Election Studies (Särlvik et al. 2004) and the Swedish part of the European Election Studies (Holmberg et al. 2006). My choice of data is motivated by methodological concerns. The test involves an explicit comparison of turnout regularities between the EP and national parliament elections. At the same time, the phenomenon of turnout over-reporting, whereby a significant proportion of non-voters say they did cast a ballot, tends to be far more pronounced in high-salience elections (see Karp and Brockington 2005, Górecki 2009). The latter tendency would make the validity of the results of this particular test very questionable if self-reported turnout data were used. To avoid that problem, I limit myself to testing the first hypothesis only in Sweden as the Swedish part of the EES is the only part of this data set that contains validated turnout data. I have selected four *Riksdag* and two EP elections for the purpose of the first hypothesis testing. The *Riksdag* elections were

conducted in 1991, 1994, 1998 and 2002 while the EP ones in 1995 (first EP election in Sweden) and in 1999[24].

Hypotheses 2 and 3 are tested using the EES Trend File (1989-2004) data (see http://www.tcd.ie/Political_Science/staff/michael_marsh/ees_trend_file.php). After excluding the elections for which no turnout data is available, sixty surveys (the EP election year combined with country) are available for analysis. Obviously, the value of *CYCLE* will vary only between those sixty surveys, and no within-survey variation will be observed. Unfortunately, the ESS data have little continuity as regards many variables potentially correlated with turnout. In addition, there is considerable degree of "missingness" as to the variables that exist 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 analyses utilising all these five data sets. I have conducted such analyses using CLARIFY software (King et al. 2000; Tomz et al. 2001). While testing hypotheses 2 and 3, I also used this software, to simulate the changes (first-difference) to expected probabilities of a respondent voting. I must emphasise here the fact that alternative analyses (not reported here), conducted

[24] The reasons for excluding the most recent (post-2002) Swedish electoral surveys is that the latter report age in wider confidence intervals than it was before which introduces potential difficulties while comparing electoral experience across surveys. Also, the four *Riksdag* elections analysed here are characterised by clear turnout decline after the first EP election, with little difference between the 1991 and 1994 turnout as well as between 1998 and 2002 (see Table 1). This is fortunate as every election can potentially constitute a cluster, with positive intra-cluster correlation. This can't be accounted for by means of cluster-robust standard errors as these would require at least 40-50 clusters (Wooldridge 2003), i.e. 40-50 elections. However, while the difference in turnout is between pre-1995 and post-1995 elections mainly, any intra-election error correlation can be considered a "nuisance" only here.

separately on all of the five imputed data sets, did not yield any results substantially deviating from the "combined" results presented in the next section.

4. Results and Discussion

Before the tests of the hypotheses stated in the previous section are presented and discussed, some remarks on estimation issues is necessary here. The first problem concerns the test of hypothesis 1, a test relying solely on survey data on electoral participation in Sweden. The Swedish National Election Studies operate on the basis of a rolling panel whereby half of the respondents interviewed in any particular study are re-interviewed on the next occasion. This leads to a situation when there are double observations available on a sub-sample of respondents. Such observations are not independent, and so the standard binary choice models, like logit or probit, are inappropriate here. At the same time, I do not deal with a proper panel data set, with multiple observations on every respondent (in fact, the average number of observations per respondent is lower than 1.5). Therefore, I decide to rely on the generalised estimating equations (henceforward GEE) approach, and more precisely on population-averaged logistic regression (Hu et al. 1998: 695-696). This approach, unlike random-effects models, treats within-respondent correlation as a "nuisance", and the benefits from applying GEE are limited to more robust estimated variances of the regression coefficients.

The tests of hypotheses 2 and 3, to be conducted using the EES data, present an even more complex set of estimation problems. The data are clustered at, at least, three levels. First and foremost, turnout levels in every EU country will follow a common

pattern, almost certainly in great part due to unobserved (i.e. not included in the estimated model) factors. Second, there can be a time effect whereby EU-wide turnout in the 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 data might be clustered. As a result, estimation cannot be performed relying on just two-level random-effects model. However, instead of estimating a four-level model, which would pose a problem of consistency testing, 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 %) 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 one such clusters[25], a number high enough to make such step sensible (Wooldridge 2003). This way, I believe all levels of potential clustering are accounted for.

The GEE estimates of the turnout equation for the four Swedish *Riksdag* elections (1991, 1994, 1998 and 2002) and the two EP ones (1995 and 1999) are presented in table 2. The highly significant ($p < 0.01$) negative effect of the "EP Election" dummy on turnout is not surprising at all, given the huge turnout gap between

[25] The 61st cluster is a result of treating East and West Germany as separate clusters in the 1994 EP election.

Riksdag and EP elections. The impact of electoral experience is also positive and strongly statistically significant ($p < 0.01$). Clearly, the respondents' baseline propensity to vote tends to increase with electoral experience. Most crucially, however, there is also statistically significant ($p < 0.05$) interaction effect between the dummy referring to election type and electoral experience. However, the sign of the coefficient might potentially be misleading as with the non-linear models, including logit, it is possible that interaction effects will be of different signs for different groups of observations (Ai and Norton 2003). Therefore, in table 3 (see also figure 1) I present the average effects of election type (more precisely the decrease in the respondents' average predicted probability to vote in the EP elections as compared to *Riksdag* elections) for respondents of different levels of electoral experience. The results are reassuring. For all the possible levels of electoral experience (from zero to nineteen *Riksdag* elections already experienced by a given respondent) the interaction effect is positive, i.e. the decline in turnout in the EP elections (comparing to *Riksdag* elections) becomes less pronounced as electoral experience increases. The results mirror the intuition derived from earlier studies, e.g. the study on the 1989 EP election in France by Ysmal and Cayrol (1996: 121). Obviously, for all the levels of electoral experience the decline in turnout in the EP elections is dramatic. However, the difference in the estimated effects exceeds 20% if the respondents with no previous electoral experience are compared to those whose experience reaches highest levels. The same conclusions might be drawn when the respective 95% confidence intervals are looked at. It is very easy here to find pairs of intervals that do not overlap. In other words, it is possible, using conventional significance levels, to make confident statements about heterogeneity regarding the

effect of lower electoral salience of the EP elections. Turnout in these elections in Sweden suffers greatly regardless of the citizens' electoral experience, but the losses are significantly more serious in the case of the youngest, i.e. least electorally experienced, cohorts.

The analysis concerning compulsory voting (table 6) yields weaker but still suggestive results. Obviously, the effect of compulsory voting on the probability of a respondent voting is highly statistically significant ($p < 0.01$). However, the interaction effect (*COMPULS* with logged *EXPERIENCE*), even though positive as expected, is statistically insignificant (but p-value for a one-tailed test being at the somewhat marginal level of 0.082). In table 7 (see also figure 2) I present the impact of absence of compulsory voting arrangements in a given country on the probability of a respondent voting, for different values of *EXPERIENCE*. It is important here to stress once again that one of the control variables in this analysis is turnout in the preceding national parliament election. In other words, I can interpret the analysis as answering the question about the decline in turnout as a result of low salience of the EP elections, depending on the presence or absence of compulsory voting arrangements in a given country. As it can be seen in table 7, for those who have not yet experienced any national parliament elections, lack of compulsory voting arrangements results in a decline in the probability of a respondent voting by nearly 35%. The effect gradually drops as *EXPERIENCE* increases. For those who have experienced seven national parliament elections, the probability of a respondent voting differs by 14.7% between countries having and not having compulsory voting arrangements. In addition, for the last level of *EXPERIENCE* (i.e. seven national parliament elections already

experienced) the 95% confidence interval does not overlap with the analogous interval for the completely electorally inexperienced respondents. This is a more persuasive result, given that some respondents have experienced more than twenty national parliament elections. At the same time, I must emphasise the fact that for the vast majority of respondents the effect of compulsory voting on turnout is statistically significant. Only for those who have experienced twenty or more national parliament elections do the 95% confidence intervals encompass zero. Overall, lack of compulsory voting contributes to a disproportionate decline in the EP elections' turnout by the electorally inexperienced respondents. Of course, this mirrors the observation by Birch (2009), stressing the more general age bias with respect to turnout in voluntary voting countries. This obviously poses a question about the relationships between age and electoral experience. Given that mostly established democracies, where age and experience are almost perfectly correlated, are studied here, this question is somewhat beyond the scope of this paper. Nonetheless, the concept of voting as habit provides a useful and theoretically coherent way of interpreting both the regularities presented here and those highlighted by Birch (2009).

The final analysis in this paper stresses the impact of temporal context of the EP elections on voter turnout. As with electoral competitiveness (election closeness), the placement of an EP election in a given country's national electoral calendar varies not only between but also within countries. The EP elections are conducted according to a fixed schedule (once every five years) whereas national parliament elections might be conducted according to a different "rhythm" (e.g. every four years), additionally complicated by premature parliament dissolutions. That is why the *CYCLE* variable is as

crucial for testing experience-conditioned impact of electoral context on turnout as is election closeness in the case of national elections. The results obtained in the course of my analyses (see table 8) are supportive of the concept of habitual voting. The negative and highly statistically significant ($p < 0.01$) effect of *CYCLE* on the probability of a respondent voting is not at all surprising, at least not in the light of the aggregate-level study by Franklin (2001). Nonetheless, there is also a positive and statistically significant ($p < 0.05$) effect of the interaction between *CYCLE* and logged *EXPERIENCE*. The simulated experience-conditioned effects, presented in table 9 (see also figures 3 and 4), are reassuring. For those respondents who have not experienced any national parliament elections in their life, a change in *CYCLE* from its minimum (zero months, i.e. an EP and a national election conducted on the same day) to median value (22.3 months) results in a decline in the probability of a respondent voting by 14.4%. The 95% confidence interval for the latter group does not overlap with the corresponding interval for those who have experienced six national parliament elections. In addition, for all the respondents who have experienced nine or more national parliament elections the 95% confidence intervals encompass zero (i.e. the effect of *CYCLE* on turnout is statistically insignificant). Largely similar conclusions can be drawn when analysing the impact of *CYCLE* change from its minimum to maximum value (46.9 months). This is an important result mirroring the previous findings on experience-conditioned impact of election closeness on turnout (Franklin 2004; Górecki 2010). For the constantly fluctuating temporal context is the most indicative instance for testing the concept of habitual voting. Here, I provide results strongly supportive of the idea of experience-conditioned impact of temporal context on turnout in the very

specific setting of the EP elections. This suggests further research efforts aimed at testing the second-order election model (Reif and Schmitt 1980; van der Eijk et al. 1996; Marsh and Franklin 1996), efforts not limited to the turnout part of this comprehensive theoretical proposition, are most worthwhile undertaking. I elaborate on these issues in greater detail in the Conclusion to this paper.

5. Conclusion

In this paper, I studied the issue of voter turnout in the European Parliament elections. I compared turnout patterns in these elections to analogous regularities in national parliament elections. Also, I examined the effects of electoral context on turnout in the EP elections. Drawing on the concept of habitual voting (Plutzer 2002; Franklin 2004), I proposed that the contextual effects should be heterogeneous and conditioned by electoral experience rather than simply homogenous. Empirical evidence delivered in my analyses of turnout decline in the EP elections in Sweden, as compared to this country's national parliament elections, suggests that low salience of the EP elections disproportionately strongly affects the least electorally experienced citizens. Furthermore, my analyses of the impact of compulsory voting and national election cycle on turnout in the EP elections indicate that the latter effects are also conditioned by electoral experience. Overall, the results presented in this paper constitute evidence supporting the concept of voting as habit and its relevance for the students of voter turnout in the EP elections. Further studies into this broad set of issues should certainly take into account three other ideas.

First, the EP elections are now conducted in a number of new post-communist democracies. These countries are an interesting case from the viewpoint of the theory of habitual voting. For, unlike in the established democracies, in the newly democratic polities citizens' electoral experience is not perfectly (or nearly perfectly) correlated with age. This case could thus help disentangle the potential concern on whether the effects of contextual variables on turnout are indeed conditioned by electoral experience or by age. In this study, I simply included a dummy variable distinguishing between new and established EU member states in the 2004 EP election. This variable captures all the post-communist EU member states plus Cyprus (where democracy was introduced in the 1960s only). Hence, this paper "omits" the above issue, instead of explicitly studying it, and concentrates on other regularities. A separate study focusing solely on the post-communist context could thus be worth an effort[26]. However, in the situation when *EXPERIENCE* cannot decrease as a person ages[27], pessimism as to the possibility of solving the aforementioned "age vs. experience dilemma" is certainly justified[28].

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[26] As *CYCLE* is a variable that takes a single value for a given EP election held in a given country, the researchers wanting to examine experience-conditioned impact of *CYCLE* on turnout in solely the post-communist countries would however have to wait until further EP elections. The latter will allow to increase variation in the *CYCLE* variable. On the other hand, one must remember that correlation between age and *EXPERIENCE* for post-communist countries equals around 0.65 already in the 2004 EES survey (comparing to 0.93 for other EU countries in 2004). The coefficient will obviously increase as more time passes since the breakdown of communism. This should be discouraging enough. Therefore, research into experience-conditioned impact of context, e.g. district-level competitiveness in national elections, on turnout in the post-communist countries should focus on national rather than the EP elections. A study in turnout in early post-communist elections, e.g. in the effects of district marginality on turnout in Hungary, could throw some light on the relationship between the effect of age and the effect of *EXPERIENCE*.

[27] I thank Stephen Nickell for pointing to me that „age is experience".

[28] However, I have also estimated a model (see table 10) in which the impact of *CYCLE* on the probability of a respondent voting is conditioned by a natural logarithm of age (in years) rather than by *EXPERIENCE*. Despite the impressive sample size, the interaction effect between *CYCLE* and the logarithm of age is not statistically significant at conventional levels ($p = 0.100$ for a one-tailed test). At the same time, the previously analysed interaction between *CYCLE* and a logarithm of *EXPERIENCE* (table 8) was statistically significant ($p = 0.014$ for a one-tailed test). Hence, I conclude that *EXPERIENCE* performs better (than age) as a factor conditioning the effect of *CYCLE* on the probability of a respondent voting.

Second, the second-order election model (Reif and Schmitt 1980; van der Eijk et al. 1996) assumes strict hierarchical dependence of turnout in the EP elections on the first-order national political affairs. An important building block of this approach is the hypothesis linking turnout in the EP elections to the national election cycle. In his work focusing on habitual voting phenomena and turnout change as a function of generational replacement, Franklin (2004) largely follows the same line of reasoning. The approach might however be limited in an important manner. For from the viewpoint of the concept of voting as habit, a theory stressing people's generalised propensity to vote or not in whatever election happens to be conducted, electoral salience should be treated *en bloc.* In other words, overall average salience under which a given cohort of citizens socialises to the electoral process should be taken into account. This means that introduction of the low salience (second-order) EP elections should have suppressed turnout in the first-order elections conducted in the EU member states. A study by Franklin (2003) seems to support the above intuition even though the explanation proposed in the mentioned work emphasises citizens' "fatigue" with too many elections rather than the processes of habitual voting. While the "fatigue" argument has recently gained support in the study by Tavits (2009), a closer individual-level inspection of whether the turnout decline following the introduction of the EP election was (or was not) conditioned by electoral experience would throw some new light on these issues. Such a methodologically challenging study would certainly constitute a milestone of turnout research. A recent study by Franklin and Hobolt (2010) is the first to consider the above issues and research into these should certainly continue.

Finally, studies on habitual voting phenomena in the EP elections should reach beyond turnout issues. In particular, the second-order election model (Reif and Schmitt 1980; Reif 1984) includes also propositions concerning vote choice. More precisely, it is proposed that government parties, as well as bigger parties, should suffer losses in the EP elections (comparing to their performance in the respective national elections). These regularities, with the mediating impact of national electoral cycle and the distinction between countries where alternation in government is a norm and those where it is not, were comprehensively tested by Marsh (1998), and then by Hix and Marsh (2007). Marsh (1998) relied on aggregate-level data relating to the four EP elections conducted between 1979 and 1994. At the same time, one must remember that habitual voting theory does not only relate to turnout. Evidence of party loyalty being formed as a habit has also been presented (Shachar 2003). These findings echo many previous studies in vote choice, e.g. the classic study by Butler and Stokes (1974), suggesting that the newly enfranchised citizens are most prone to change the parties they vote for. Therefore, re-examination of the regularities found by Marsh (1998) with individual level-data and testing a hypothesis of experience-conditioned propensity for vote switching in the EP elections seems very sensible as a future research effort. Such a study would relate to the work by Marsh (1998) in the same way as the current paper relates to the work by Franklin (2001). It would also certainly facilitate a more profound understanding of the processes of party loyalty formation and the issues of vote choice in the EP elections.

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Appendix

Table 1. Official and Survey Voter Turnout the Swedish National Parliament (*Riksdag*) and European Parliament Elections (1991-2002)

Year	Election Type	Official Voter Turnout (in %)	Survey Voter Turnout (in %)
1991	National	86.7	91.5
1994	National	86.8	92.4
1995	European	41.6	47.9
1998	National	81.4	88.7
1999	European	38.8	50.9
2002	National	80.1	89.2

Note: Data on election results in Sweden were taken from the website "Parties and Elections in Europe" (http://www.parties-and-elections.de/) and from the European Parliament website (http://www.europarl.europa.eu/elections2004/ep-election/sites/en/results1306/turnout_ep/turnout_table.html). Correlation coefficient between official and survey turnout equals approximately 0.99.

Table 2. Predictors of Voter Turnout in the Swedish *Riksdag* (1991, 1994, 1998, 2002) and the European Parliament (1995, 1999) Elections: Population-Averaged Logistic Regression Estimates

	Coef.	SE
EP Election	-2.70**	0.15
Ln(*EXPERIENCE* + 1)	0.36**	0.04
EP Election X Ln(*EXPERIENCE* + 1)	0.14*	0.07
Strong Party Supporter	0.77**	0.07
University Degree	0.78**	0.07
Trade Union Membership	0.08	0.05
Female	0.19**	0.05
Post-1995 Election	-0.16**	0.05
Constant	1.22**	0.09
Wald χ^2	2,168.15**	
Number of Observations	12,914	
Number of Respondents	10,350	

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

Table 3. Effects of Election Type (Change from a *Riksdag* to a European Parliament Election) for Different Levels of Electoral Experience

EXPERIENCE	Average % Change in the Probability of Voting in an EP Election (Comparing to a *Riksdag* Election)
0	-55.8 [-61.0; -50.5]
1	-51.8 [-56.0; -47.7]
2	-49.0 [-52.5; -45.5]
3	-46.7 [-49.8; -43.6]
4	-44.9 [-47.7; -42.0]
5	-43.3 [-46.0; -40.6]
6	-42.0 [-44.6; -39.3]
7	-40.8 [-43.4; -38.2]
8	-39.7 [-42.3; -37.1]
9	-38.7 [-41.4; -36.1]
10	-37.9 [-40.6; -35.1]
11	-37.1 [-39.9; -34.2]
12	-36.3 [-39.2; -33.4]
13	-35.6 [-38.6; -32.7]
14	-35.0 [-38.1; -32.0]
15	-34.4 [-37.5; -31.3]
16	-33.9 [-37.0; -30.7]
17	-33.3 [-36.6; -30.1]
18	-32.8 [-36.2; -29.5]
19	-32.4 [-35.8; -28.9]

Note: The numbers in brackets are 95% confidence intervals. The control variables are held at their real values.

Figure 1. Effects of Election Type (Change from a *Riksdag* to a European Parliament Election) for Different Levels of Electoral Experience

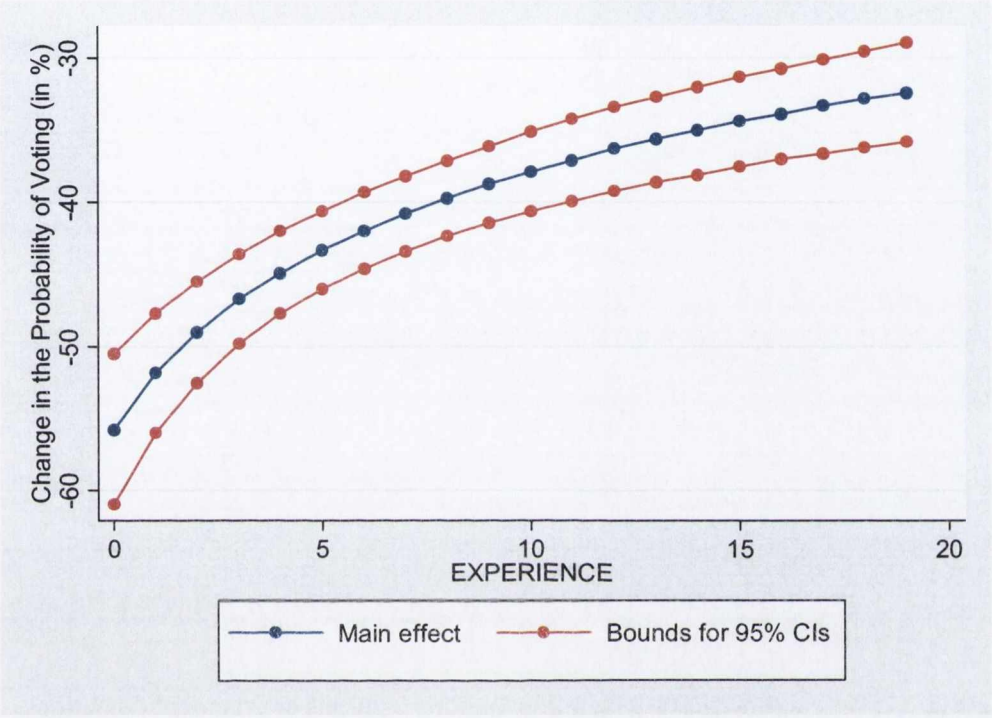

Table 4. Swedish National Parliament and European Parliament Election Surveys (1991-2002) – Descriptive Statistics

Variable	Distribution statistics
Electoral Participation	0.793 (0.405)
EP Election	0.272 (0.445)
EXPERIENCE	7.970 (4.972)
Strong Party Supporter	0.256 (0.437)
University Degree	0.246 (0.430)
Trade Union Membership	0.656 (0.475)
Female	0.479 (0.500)
Post-1995 Election	0.453 (0.498)

Note: Main entries are means and the numbers in parentheses are standard deviations.

Table 5. Official and European Election Studies Survey Turnout - the European Parliament Elections conducted between 1989 and 2004

Country	EP Election Year	Official Turnout (in %)	EES Survey Turnout (in %)
Austria	1999	49.4	64.1
Austria	2004	42.4	58.0
Belgium	1989	90.7	92.3
Belgium	1994	90.7	90.5
Belgium	1999	91.1	92.6
Cyprus	2004	72.5	79.0
Czech Republic	2004	28.3	50.5
Denmark	1989	46.2	63.6
Denmark	1994	52.9	73.0
Denmark	1999	50.5	68.4
Denmark	2004	47.9	64.7
Estonia	2004	26.8	42.8
Finland	1999	30.1	47.6
Finland	2004	39.4	65.0
France	1989	48.8	59.0
France	1994	52.7	65.9
France	1999	46.8	65.3
France	2004	42.8	60.4
Germany	1989	62.3	76.8
Germany	1994	60.0	77.2
Germany	1999	45.2	66.8
Germany	2004	43.0	63.5
Greece	1989	80.0	91.7
Greece	1994	73.2	94.3
Greece	1999	70.3	89.2
Greece	2004	63,2	82.5
Hungary	2004	38.5	52.3
Ireland	1989	68.3	84.7
Ireland	1994	44.0	59.9
Ireland	1999	50.2	71.4
Ireland	2004	58.6	84.4
Italy	1989	81.1	89.2
Italy	1994	73.6	88.7
Italy	1999	69.8	88.6
Italy	2004	71.7	91.5
Latvia	2004	41.2	49.5
Luxembourg	1989	87.4	95.6
Luxembourg	1994	88.6	95.6
Luxembourg	1999	87.3	84.3

Netherlands	1989	47.5	65.8
Netherlands	1994	35.7	54.3
Netherlands	1999	30.0	48.2
Netherlands	2004	39.3	67.5
Poland	2004	20.9	33.8
Portugal	1989	51.1	60.1
Portugal	1994	35.5	54.6
Portugal	1999	39.9	57.5
Portugal	2004	38.6	65.1
Slovakia	2004	17.0	33.4
Slovenia	2004	28.4	38.3
Spain	1989	54.7	67.4
Spain	1994	59.1	75.1
Spain	1999	63.0	80.7
Spain	2004	45.1	63.5
Sweden	1999	38.8	54.7
Sweden	2004	37.8	44.1
United Kingdom	1989	36.4	57.1
United Kingdom	1994	36.4	50.3
United Kingdom	1999	24.0	38.7
United Kingdom	2004	38.5	60.2

Note: Table 4 does not contain data on elections excluded from multivariate analyses due to missing data. Data on official turnout in the EP elections were taken from the following website: http://www.ukpolitical.info/european-parliament-election-turnout.htm. Correlation coefficient between official and EES survey turnout equals approximately 0.95.

Table 6. Predictors of Individual-Level Voter Turnout in the European Parliament Elections (1989-2004): Logistic Regression Estimates

	Coef.	Robust SE
Compulsory Voting (*COMPULS*)	1.6720**	0.3367
Ln(*EXPERIENCE* + 1)	0.5795**	0.0417
Compulsory Voting (*COMPULS*) X Ln(*EXPERIENCE* + 1)	-0.2880	0.2066
EU Membership – Good Thing	0.4698**	0.0441
EU Membership – Bad Thing	-0.2494**	0.0785
Very of Fairly Close to a Party	0.5788**	0.0562
Still in Full-Time Education or Finished Education Later than the Age of 18	0.2291**	0.0570
Trade Union Membership	0.0166	0.0765
Middle Class (Self –Perceived)	0.1123	0.0992
Working Class (Self-Perceived)	-0.1548	0.1068
Female	-0.0989**	0.0268
CYCLE	-0.0143**	0.0047
Turnout in the Preceding National Parliament Election (in %)	0.0262*	0.0112
1994 EP Election	0.3038	0.2067
1999 EP Election	0.0047	0.2363
2004 EP Election	0.1430	0.2352
New EU Member State (2004)	-0.5522**	0.1486
Constant	-2.5633**	0.8378

Log Likelihood (Average)	-33,620.8560
McFadden R^2 (Average)	0.1014
N	58,953

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

Note: Standard 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.

Table 7. Experience–Conditioned Effects of Lack of Compulsory Voting on Turnout by a Median Respondent (1989-2004 European Parliament Elections)

EXPERIENCE	% Change in the Probability of Voting – *COMPULS* Change from 1 to 0
0	-34.9 [-46.8; -22.2]
1	-28.0 [-37.1; -19.2]
2	-23.9 [-32.1; -16.3]
3	-21.0 [-28.7; -14.1]
4	-18.9 [-26.0; -12.4]
5	-17.2 [-24.3; -10.8]
6	-15.9 [-22.8; -9.4]
7	-14.7 [-21.7; -8.5]
8	-13.7 [-20.7; -7.4]
9	-12.9 [-19.8; -6.5]
10	-12.2 [-19.1; -5.7]
11	-11.5 [-18.5; -5.1]
12	-10.9 [-17.9; -4.3]
13	-10.4 [-17.3; -3.5]
14	-9.9 [-16.8; -2.7]
15	-9.5 [-16.4; -2.1]
16	-9.1 [-16.0; -1.6]
17	-8.7 [-15.6; -1.2]
18	-8.3 [-15.3; -0.7]
19	-8.0 [-15.0; -0.1]

20	-7.7 [-14.7; 0.3]
21	-7.4 [-14.5; 0.6]
22	-7.2 [-14.2; 1.0]
23	-6.9 [-13.9; 1.3]

Note: The numbers in brackets are 95% confidence intervals.

Figure 2. Experience–Conditioned Effects of Lack of Compulsory Voting on Turnout by a Median Respondent (1989-2004 European Parliament Elections)

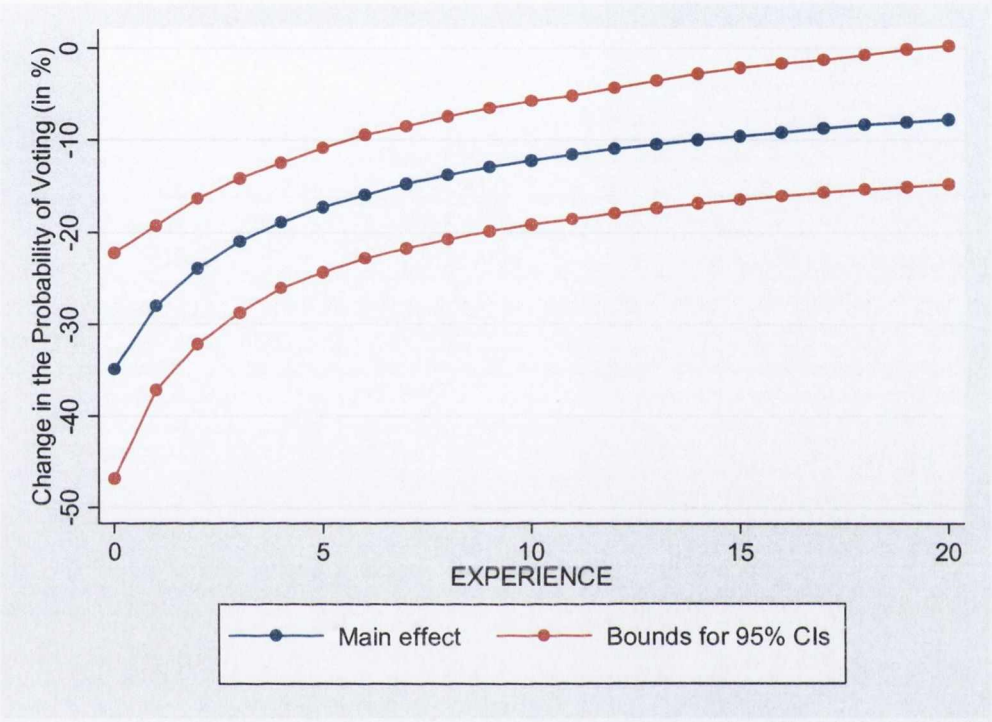

Table 8. Predictors of Individual-Level Voter Turnout in the European Parliament Elections (1989-2004): Logistic Regression Estimates

	Coef.	Robust SE
CYCLE	-0.0270**	0.0058
Ln(*EXPERIENCE* + 1)	0.3939**	0.1001
***CYCLE* X Ln(*EXPERIENCE* + 1)**	0.0073*	0.0033
EU Membership – Good Thing	0.4673**	0.0446
EU Membership – Bad Thing	-0.2504**	0.0790
Very of Fairly Close to a Party	0.5773**	0.0567
Still in Full-Time Education or Finished Education Later than the Age of 18	0.2334**	0.0559
Trade Union Membership	0.0172	0.0767
Middle Class (Self –Perceived)	0.1132	0.0990
Working Class (Self-Perceived)	-0.1514	0.1063
Female	-0.0989**	0.0272
Compulsory Voting (*COMPULS*)	1.2223**	0.1890
Turnout in the Preceding National Parliament Election (in %)	0.0262*	0.0113
1994 EP Election	0.3073	0.2061
1999 EP Election	0.0097	0.2353
2004 EP Election	0.1588	0.2351
New EU Member State (2004)	-0.5670**	0.1497
Constant	-2.2613**	0.8565

Log Likelihood (Average)	-33,604.5072
McFadden R^2 (Average)	0.1018
N	58,953

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

Note: Standard 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.

Table 9. 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)

EXPERIENCE	% Change in the Probability of Voting – *CYCLE* Change from 0 to 22.3 Months (Median)	% Change in the Probability of Voting – *CYCLE* Change from 0 to 46.9 Months (Maximum)
0	-14.4 [-20.0; -8.4]	-30.0 [-41.8; -17.1]
1	-11.1 [-14.9; -7.0]	-24.3 [-33.2; -15.0]
2	-9.1 [-12.3; -5.5]	-20.3 [-28.0; -11.8]
3	-7.7 [-10.7; -4.4]	-17.3 [-24.8; -9.4]
4	-6.6 [-9.6; -3.3]	-15.0 [-22.7; -7.1]
5	-5.8 [-8.8; -2.4]	-13.2 [-21.1; -5.1]
6	-5.1 [-8.2; -1.7]	-11.7 [-19.8; -3.6]
7	-4.5 [-7.8; -1.1]	-10.4 [-18.6; -2.3]
8	-4.1 [-7.2; -0.4]	-9.3 [-17.6; -0.8]
9	-3.6 [-6.8; 0.2]	-8.4 [-16.8; 0.4]
10	-3.3 [-6.5; 0.6]	-7.6 [-16.1; 1.3]
11	-3.0 [-6.2; 1.0]	-6.9 [-15.6; 2.1]
12	-2.7 [-5.9; 1.4]	-6.2 [-15.1; 2.9]
13	-2.4 [-5.7; 1.7]	-5.7 [-14.5; 3.6]
14	-2.2 [-5.5; 2.0]	-5.2 [-13.9; 4.1]
15	-2.0 [-5.3; 2.2]	-4.7 [-13.4; 4.6]
16	-1.8 [-5.1; 2.5]	-4.3 [-13.0; 5.0]
17	-1.7 [-5.0; 2.7]	-3.9 [-12.7; 5.5]

18	-1.5 [-4.8; 2.9]	-3.6 [-12.3; 5.9]
19	-1.3 [-4.7; 3.1]	-3.2 [-11.9; 6.2]
20	-1.2 [-4.6; 3.3]	-2.9 [-11.6; 6.6]
21	-1.1 [-4.5; 3.5]	-2.7 [-11.3; 6.9]
22	-1.0 [-4.4; 3.7]	-2.4 [-11.1; 7.2]
23	-0.9 [-4.3; 3.8]	-2.2 [-10.8; 7.4]

Note: The numbers in brackets are 95% confidence intervals.

Figure 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) – *CYCLE* Change from 0 to 22.3 (Median)

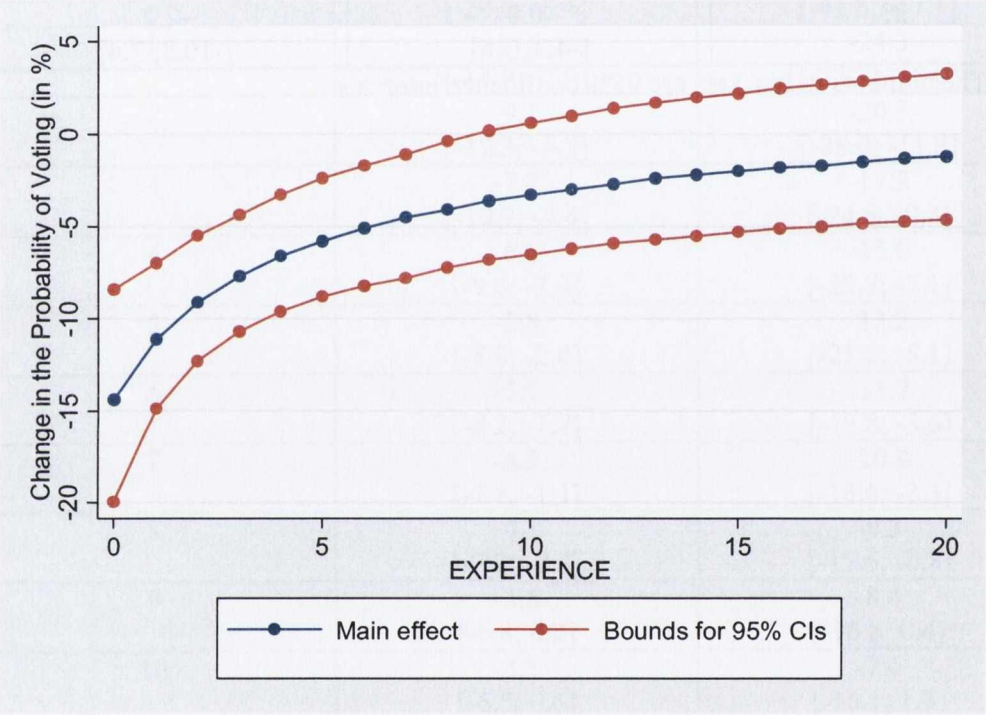

Figure 4. Experience–Conditioned Effects of the Temporal Gap between a European Parliament Election and the Impending National Parliament Election (*CYCLE*) on Turnout by a Median Respondent (1989-2004 European Parliament Elections) – *CYCLE* Change from 0 to 46.9 (Maximum)

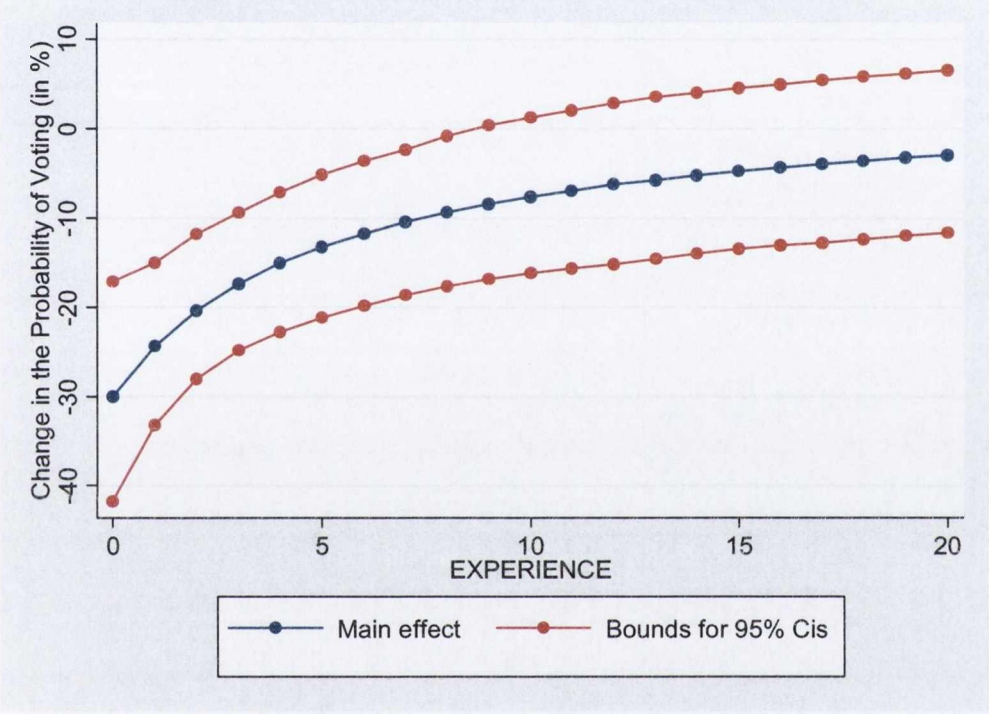

Table 10. Predictors of Individual-Level Voter Turnout in the European Parliament Elections (1989-2004): Logistic Regression Estimates

	Coef.	Robust SE
CYCLE	-0.0337*	0.0165
Ln(Age in Years)	0.9140**	0.1516
***CYCLE* X Ln(Age in Years)**	0.0061	0.0047
EU Membership – Good Thing	0.4711**	0.0447
EU Membership – Bad Thing	-0.2359**	0.0800
Very of Fairly Close to a Party	0.5612**	0.0574
Still in Full-Time Education or Finished Education Later than the Age of 18	0.2799**	0.0566
Trade Union Membership	0.0533	0.0737
Middle Class (Self –Perceived)	0.1236	0.1004
Working Class (Self-Perceived)	-0.1590	0.1059
Female	-0.1032**	0.0285
Compulsory Voting (*COMPULS*)	1.1937**	0.1957
Turnout in the Preceding National Parliament Election (in %)	0.0283**	0.0111
1994 EP Election	0.3276	0.2102
1999 EP Election	0.0487	0.2358
2004 EP Election	0.1921	0.2322
New EU Member State (2004)	-0.7661**	0.1577
Constant	-5.2168**	1.0016

Log Likelihood (Average)	-33,421.1990
McFadden R^2 (Average)	0.1067
N	58,953

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

Note: Standard 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.

Table 11. European Election Studies 1989-2004 – Descriptive Statistics

Variable	Distribution Statistics
Electoral Participation	0.667 (0.471)
COMPULS	0.119 (0.324)
CYCLE	21.983 (12.777)
EXPERIENCE	6.458 (4.225)
EU Membership – Good Thing	0.613 (0.4870
EU Membership – Bad Thing	0.114 (0.318)
Very of Fairly Close to a Party	0.334 (0.472)
Still in Full-Time Education or Finished Education Later than the Age of 18	0.528 (0.499)
Trade Union Membership	0.229 (0.420)
Middle Class (Self –Perceived)	0.682 (0.466)
Working Class (Self –Perceived)	0.298 (0.457)
Female	0.517 (0.500)
Turnout in the Preceding National Parliament Election (in %)	75.620 (9.898)
1994 EP Election	0.205 (0.406)
1999 EP Election	0.220 (0.414)
2004 EP Election	0.402 (0.490)
New EU Member State (2004)	0.139 (0.346)

Note: Main entries are means and the numbers in parentheses are standard deviations.

Conclusion

Despite the apparent irrationality of voting from an individual's viewpoint (Riker and Ordeshook 1968), this activity seems to be "attractive" enough to engage many citizens of the democratic polities. Moreover, at the individual level, electoral participation (and abstention) are characterised by consistency over time. In other words, people tend to engage in either consistent participation or consistent abstention (Milbrath 1965; Miller and Shanks 1996). Why do so many people engage in the seemingly irrational act of electoral participation? More importantly, why does the decision to participate (as well as the decision to abstain) is so predictable on the basis of a person's past behaviour? Finally, how can those asking the former question benefit from the answers provided to the latter one? The developmental model of voter turnout – the concept of habitual of voting - systematically developed by Plutzer (2002) and Franklin (2004), can help electoral behaviour students find answers to these questions. The theory of habitual voting is a concept providing a holistic explanation of the phenomenon of electoral participation. It explains the emergence of a stable predisposition to vote or abstain, a predisposition acquired in young adulthood (Plutzer 2002). This "habit" tends to persist, with all the consequences for turnout regularities, whether they would be analysed in micro (individual-level) or macro (aggregate-level) scale. Here, I have presented three papers, trying to contribute to our knowledge on both the origins and the consequences of habits in electoral behaviour.

In paper 1, I have attempted to provide a comprehensive and profound analysis of the history of reflection on habitual turnout and party choice. I have delved deeper into the theoretical nuances of the concept. This has led me to propose that self-

perception (Bem 1967; Bem 1972; Tyler 1990) could be the mechanism behind the self-reinforcement of voting behaviour and the processes of habit acquisition. I emphasised that our "conversion" to the behaviourist stance should not lead us to view habits in voting behaviour as some "automatically" operating fixed properties (Aldrich et al. 2007). I thus advocated the probabilistic view of habit and illustrated this concept with reference to the notion of entropy (Lambert 2002; Shannon 1948). I then extended the concept of habitual voting, proposing a link between habitual turnout and habitual party loyalty. My test of the extended theory has failed to deliver convincing empirical evidence. While it might well be that the extended theory is not "true", a number of considerations (regarding the imperfection of the data used in paper 1) have led me to claim that further tests of the theory are worth an effort.

Papers 2 and 3 deliver consistent and strong evidence supporting Franklin's (2004) claim that the effects of electoral context on turnout are largely limited to the youngest cohorts of citizens, i.e. those who have not experienced too many elections in their lifetime. As electoral experience increases, the impact of context on turnout declines. For the more established cohorts, the corresponding effects are weaker and often statistically insignificant. This evidence is extremely important from both individual- and aggregate-level viewpoint. Individual-level analyses of the impact of context on turnout, if seriously taking the concept of habit, should more and more frequently ask a question on whether the effect searched for is (or is not) conditioned by electoral experience. Analyses presented in papers 2 and 3 suggest that electoral experience is a crucial mediating factor here. From the aggregate-level viewpoint, the impact of context on turnout should be considered from a long-tem rather than a short-

term perspective. It might seem from the short-term viewpoint that the effects of context, e.g. closeness (Cox and Munger 1989), on turnout are quite miniscule. However, these effects tend to be concentrated in the youngest politically eligible cohorts. Then, assuming permanent change in context (e.g. persistently declining competitiveness) and given the impact of cohort replacement on aggregate turnout trends, the long-term effects of changing context might be considerable. Evidence clearly pointing to such a possibility is probably the most important contribution made here.

Summarising, the contributions made by this study are threefold. First, I believe I provide a clear theoretical formulation of the concept of habitual voting. In particular, the probabilistic view of habit is perfectly consistent with the empirical evidence obtained by Plutzer (2002) and Franklin (2004). Second, my study of experience-conditioned impact of an important element of electoral context – election closeness – on voter turnout is a step forward in comparison to the more methodologically problematic Franklin's (2004) study. Third, I have found suggestive evidence of experience-conditioned effects of the context of the EP elections - in particular the effects of the placement of an EP election within a country's national election cycle - on turnout. All the above aspects of my research will hopefully be extended in future. My claim that the acquisition of the propensity to vote should be related to party loyalty formation is certainly worth further empirical examination. This can be done using future waves of the BHPS data set (used in paper 1) or with other data sets. A different but related task is to examine experience-conditioned effects of electoral context on party choice. I propose such a test with respect to party choice in the EP elections (see

Conclusion to paper 3). Students of experience-conditioned impact of electoral context on turnout should go beyond the topic of electoral competitiveness. The example of weather as context (see Conclusion to paper 2) is certainly one of the possible extensions. Finally, Franklin and Hobolt (2010) have already started applying the concept of voting as habit to explain why the introduction of the EP elections has been a factor depressing turnout in high-salience national elections. This can surely be a milestone on the way to better understanding of both turnout trends in the EU countries and the phenomenon of democratic turnout in general. .

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