

Leaving the Nest and the Social Act of Voting: Turnout among First-Time Voters

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ABSTRACT *Recent studies have indicated that, contrary to common belief, the relationship between age and turnout among the youngest eligible individuals is not monotonically positive, but rather strongly negative – at least for the first few years of adulthood. With a unique dataset from government records for more than 145,000 young adults, we offer a possible explanation for this intriguing pattern – changing social influences as the young adult leaves the family nest. Parental turnout influences the young adults’ turnout, and young adults living at home vote more than those who have moved out on their own. When young adults leave home, the influence of their parents’ strong voting habits decreases while the weaker voting patterns among their peers have a greater impact. This partly explains the surprising negative relationship between age and turnout and indicates that while political socialization indeed matters, part of the parental influence on young adults stems from voting being a social act.*

An analysis of interviews with people of very low motivation who have gone to the polls indicates that the most important force on their behavior is interpersonal influence. (Campbell et al., 1960: 109)

Introduction

Young citizens in established democracies vote substantially less than older citizens (e.g. Phelps, 2004; Sloam, 2007; Wass, 2007b). Understanding youth abstention is important, as voting has strong habitual properties (e.g. Campbell et al., 1960; Denny & Doyle, 2009; Franklin, 2004; Gerber et al., 2003), and failure to mobilize youth can therefore possibly have long-term consequences for political participation. Recent studies have found an intriguing relationship between age and turnout among first-time voters (Bhatti et al., 2012; Konzelmann et al., 2012). Although the young adult on average votes less than eligible citizens in general, there is not a positive,

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linear relationship between age and turnout among young voters as otherwise commonly held in the literature (e.g., Fieldhouse et al., 2007; Wass, 2007a, 2007b). During the first years of eligibility, there is in fact a remarkably strong negative relationship.

This article considers a possible explanation to the surprising relationship. While the previous literature on voting patterns among young adults has examined several aspects of the transitional nature of adult life (Abramson et al., 1998; Highton & Wolfinger, 2001), few studies have thoroughly examined empirically what is possibly the most profound transition in early adulthood – the gradual detachment from parents and increasing influence of peers (Highton & Wolfinger, 2001; Klofstad, 2011; Plutzer, 2002). When the young adult lives at home she is influenced by her parents' strong voting habits (Fieldhouse & Cutts, 2012). If the transmission of this habit is lessened when leaving home and the influence of peers, who have not yet acquired the habit, is increased, turnout may be affected negatively. In this article we examine the extent to which parental influence declines when the young adult leaves the nest, the extent to which peers become more important, and whether these changes in individual social context can explain the turnout decline.

To uncover these effects we employ a unique dataset from the Danish municipal elections in November 2009 to provide insights into the turnout of young, first-time voters. The dataset contains government records for the turnout of all eligible voters in 44 municipalities together with detailed, government-issued socio-demographic information for more than 2.3 million individuals (145,785 of whom were under age 22; that is, first-time voters in municipal elections).¹ This allows for substantially more fine-grained analysis of age and turnout than previously possible and more reliable estimates due to the use of public voting records and government-issued data on the independent variables rather than self-reported voting and other survey instruments, which are known to be prone to systematic bias (Bernstein et al., 2001; Karp & Brockington, 2005). Even more importantly the dataset allows us to match young adults with their parents and the individuals they share residency with. This allows us to untangle the effects of parenthood and residency on voting. The drawback of the dataset is that it is cross-sectional. Thus even though the data contains much more fine-grained and reliable controls than survey based data, our analysis cannot avoid vulnerability to unobserved unit heterogeneity.

We find that the overall effect of leaving the nest on turnout is negative, although strongly conditional on the parental turnout. We also examine the relative influences of parents and peers on those who have actually left home. These young adults seem to be at least as affected by their peers as by their parents. It thus seems as though interpersonal interactions explain much (but not all) of the observed negative relationship between age and turnout during the first years of eligibility. In a broader perspective, the importance of whom you live with indicates that short-term socialization processes (e.g. the social element of the voting act itself, and political discussions before elections) is equally as important for turnout as primary political socialization (Kenny, 1993; Nickerson, 2008).

The Social Act of Voting

Scholars have increasingly recognized political participation as an essentially social act. The primary social network the citizen is engaged in heavily influences whether she turns out or not. Such social networks can be the family, the educational system, and – after leaving the nest – the new household (Lane, 1959: 204). This is hardly a new idea. Half a century ago, Campbell et al. (1960: 109) found that interpersonal relationships are crucial for the act of voting. Lazarsfeld et al. (1968: 137) made a similar observation: “Repeatedly in this study we found indications that people vote ‘in groups’.” This line of argument has recently gained renewed attention as captured by Zuckerman (2005) in his review of “The Social Logic of Politics” (see also Beck et al., 2002; Christakis & Fowler, 2009; Nickerson, 2008; Zuckerman et al., 2007).

The primary social network is not constant over the course of the political lifecycle. One of the most profound changes in social ties during the political lifecycle comes during adolescence. Social ties are disrupted when the young adult leaves the parental home and new social networks are activated. If primary social networks matter, the reconfiguration of social ties should be consequential for turnout. As Eulau (1986: 38) puts it, “Political behavior is likely to vary with the type of groups in which the individual is involved.” That is, at different stages in the political lifecycle different social pressures are at play and thus lead to different political behavior. The gradual detachment from the social influence of parents and the increasing influence of peers, partners, etc. may be consequential for turnout, as leaving the nest often implies being influenced by a new social network in which members vote at a lower rate than the parents did.

In recent years, the empirical investigation of the influence of social networks has gained renewed attention (Christakis & Fowler, 2009; Klofstad, 2011; Nickerson, 2008; Stoker & Jennings, 1995). Nevertheless, to our knowledge, only few studies empirically examine the effect of leaving the family nest on the turnout of young adults (Highton & Wolfinger, 2001; Wolfinger & Wolfinger, 2008). We elaborate further on their findings in the study at hand.

The Electoral System and the Data

Our data is from 44 different local elections held simultaneously across Denmark on November 17, 2009. In all of these municipalities, the entire electoral register has been computerized and subsequently merged with extensive lists of socio-demographic statistics from Statistics Denmark.² Our data is based on actual turnout (full and validated public records) and government-issued, individual-level socio-demographical information, as opposed to self-reported survey data.

The 98 municipalities in Denmark are responsible for most of the welfare services in Danish society (e.g. childcare, elementary schools, care for seniors, libraries, etc.). The municipalities thus administer a total of 27% of the GDP, corresponding to roughly half of all public spending (Bhatti & Hansen, 2011; Mouritzen, 2003).

There are fixed election terms, with simultaneous elections across the country every fourth year in November. The elections are generally not considered to be “second order” (Reif & Schmitt, 1980). All municipalities have a multi-party electoral system with proportional voting – that is, the number of party seats gained by each party is proportional to its share of the popular vote.

We define turnout as the percentage of votes cast divided by the size of the entire eligible electorate (i.e., a complete pool of all potential voters). In Denmark, there is no registration involved in voting – all eligible voters automatically receive a polling card by direct mail with information about the location of the polling station, election date and time of voting. The eligible electorate is all individuals who are at least 18 years old on election day and hold permanent residency in the municipality.³

The data is unique for the purpose. We have a total of 2,315,345 eligible voters (145,785 aged 21 or younger), which corresponds to more than half of the entire electorate.⁴ This allows for analyzing age groups that are usually too small to differentiate between. Furthermore, we have the turnout information, addresses and family ties of all 2.3 million eligible voters, allowing us to match voters with their parents, regardless of whether they live together, as long as they live in one of the 44 municipalities under investigation.

The Negative Age–Turnout Relationship among First-Time Voters

A vast body of literature has documented how young voters abstain more than older voters do in almost all established democracies around the globe (Fieldhouse et al., 2007; Highton & Wolfinger, 2001; Phelps, 2004; Sloam, 2007; Wass, 2007b). The massive empirical evidence is backed by solid theoretical foundations. The linear and positive relationship between turnout and age among the young is in line with adult role theory in which individuals become more participatory as they transition toward adulthood and acquire adult roles (Abramson et al., 1998; Highton & Wolfinger, 2001: 202; Wolfinger & Rosenstone, 1980). The empirical evidence is also backed by Achen & Sinnott’s (2007) learning framework in which the turnout–age relationship can be interpreted as a consequence of political experience and skills (e.g., party attachments) that will be learned over the course of life.

Recent studies have challenged this conventional wisdom. Turnout actually declines with age in the years after the individual becomes eligible (Bhatti et al., 2012; Konzelmann et al., 2012). Figure 1 presents the age–turnout relationship in the 2009 Danish municipal elections.

On the surface, Figure 1 presents a classic (e.g., Fieldhouse et al., 2007; Verba & Nie, 1972) curvilinear relationship showing how young voters and the elderly have low turnout. 20–24-year-old eligible voters have a 44% turnout, as opposed to slightly more than an 80% turnout among eligible individuals in their mid-sixties. However, when looking more closely at the very youngest citizens, a surprising relationship emerges. Voters under age 20 have a decidedly higher turnout than their slightly older peers. In fact, from age 18–19, each extra month of age is mirrored by a one percentage-point turnout drop. From age 20, the turnout as a function of age

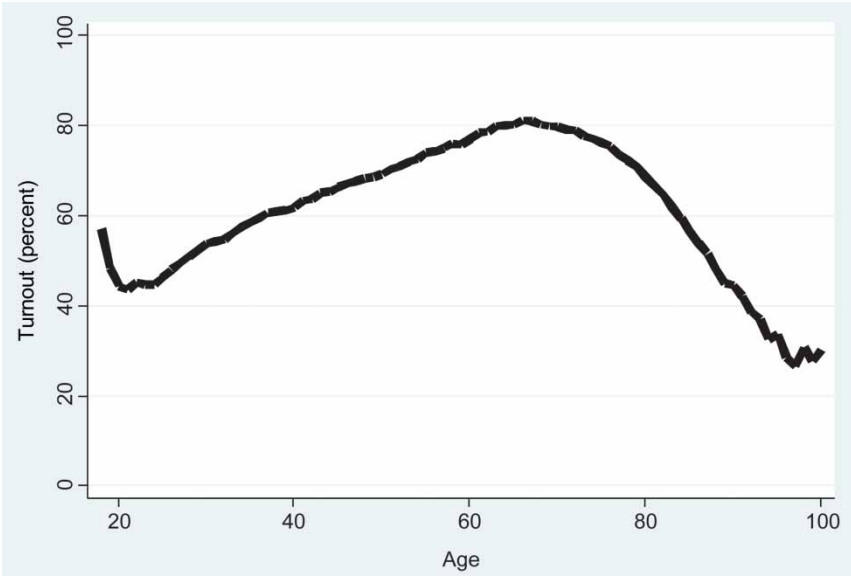


Figure 1. Turnout by age in years (2009).

Notes: Average N per year is 28,151. Lowest N is 190 for 100-year-olds. All of the eligible individuals for the 44 municipalities in the analysis are included.

stops declining. Then, after a small flat section, the turnout begins its expected increase but does not reach the level found among 18-year-olds until age 35. This pattern is not due to sampling variability, since the number of voters is very large. Furthermore, it is based on the full public records of all eligible citizens in the 44 municipalities.

The negative relationship for first-time voters does not appear to be a uniquely Danish phenomenon. It can also be identified in a range of other large scale government records studies. Bhatti et al. (2012) find similar patterns for Finnish elections and in Lubbock, Texas. Additionally, Steinbrecher et al.'s (2007) public record data indicates that 18–21-year-olds turn out about five percentage points more often than those aged 21–25 in more than 17 German elections (see also Konzelmann et al., 2012).

In sum, as recent studies suggest, there appear to be three phases in a lifecycle, not two. The youngest voters actually vote substantially *more* than the slightly older young adults. Besides being empirically surprising, the first phase also challenges the theoretical notion that young adults start out as habitual non-voters and gradually acquire the taste for voting as they acquire other adult roles (Abramson et al., 1998; Plutzer, 2002), in accordance with monotonic, learning-based theories (e.g., Achen & Sinnott, 2007). Thus, we have an intriguing empirical phenomenon that begs explanation. In the remainder of the article we take a first step. We discuss factors that possibly account for the surprising first phase in the lifecycle and point toward the

importance of the reconfiguration of social ties during early adulthood as part of the answer.

Hypotheses

Main Hypothesis: Parental and Peer Influence

A fundamental condition for attributing significance to leaving the nest and reconfiguring one's social ties is that parents have influence on their children. Parents are normally thought to have substantial influence on their children during primary socialization and are thus likely to transfer their turnout habits to the younger generation (e.g., Andolina et al., 2003). That is, reinforcement of the voting norm (or the opposite) among young voters can probably partly be attributed to parents' socialization, as they constitute the young people's primary role models. This claim has empirical backing. Verba et al. (2005) show how parental socio-economic status and turnout are among the most important variables in understanding young adult turnout, while Plutzer (2002) finds that the largest effect among a range of parental variables on first-time voter turnout is parental turnout. Pacheco and Plutzer (2007) also find significant positive effects of parental voting on turnout among Whites and Hispanics, but not in the case of African-Americans. However, the previous studies are based on survey data and might thus be strongly polluted by social desirability causing an over-reporting of turnout, which is not a problem in the present study. The present dataset also contains information about each respondent's legal parents' turnout and socio-demographic characteristics if they live in one of the 44 municipalities under investigation.

In addition to the socialization studies, newer studies have suggested that voting exhibits strong, heritable traits which are genetically transferred from parent to child (Fowler & Dawes, 2008; Fowler et al., 2008). In addition to primary socialization and genes, parents may also have a more immediate influence on their offspring by being their primary social influence due to shared housing; that is, parental influence may have both long-term and short-term components.

H1: The likelihood of voting increases with parental turnout.

Few empirical studies have focused on the effect of residing together with one's parents. Living at home may matter simply because voting is often a social act in which families go to the polls together. Nevertheless, previous studies find a moderate negative effect, supposedly because leaving home is one of the most important steps toward adulthood and thus one step closer to settling down and maturing (Highton & Wolfinger, 2001). If living with parents increases the likelihood of voting (and leaving the nest correspondingly decreases it), this could partly explain the surprising patterns observed in Figure 1. Living at home is operationalized as living at the same address as the parents (i.e., same municipality, same street and same address).⁵

H2: Living “at home” increases the likelihood of voting among young adults.

Whereas the relationship between voting and living at home is analyzed in previous studies as an unconditional effect (Highton & Wolfinger, 2001), a likely pattern would be that the effect of the factors described in H1 and H2 are not independent of each other (see also Plutzer, 2002). Cohabiting with parents should likely increase the influence of the parents’ decision to vote on the young adults living with them.⁶ Second, when a young adult cohabitates with their parents, she is directly confronted with her parents’ decision to vote or not in that specific election. When the two generations live together, the likelihood increases that they will discuss the upcoming election (a short-term effect) and even go to the polling station together (an election day effect); that is, part of the parental influence stems from the immediate social influence through living with the offspring.

H3: The effect of parental voting depends on living with one’s parents.

The hypothesis can easily be operationalized as the interaction between the variables used for H1 and H2. Figure 2 provides some intriguing preliminary, descriptive

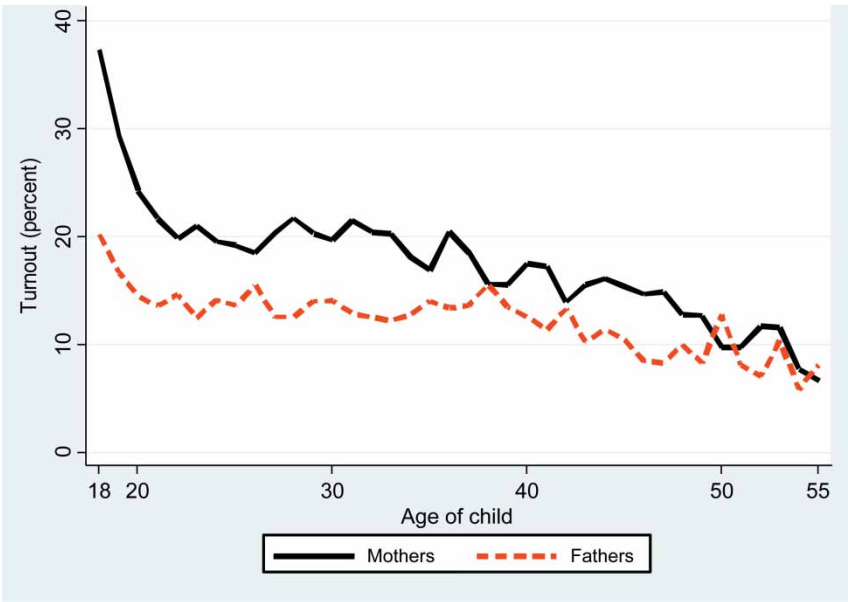


Figure 2. Change in turnout of having a voting father or mother compared to a non-voting parent.

Notes: The lines depict the coefficients representing the difference between the parent voting compared to not voting from logistic regressions with turnout among the young adults regressed on mothers’ and fathers’ turnout (N = 564,461).

evidence for this hypothesis. The average influence of the parents on their offspring declines substantially during the years when the children leave home. Thus, if turnout drops when the offspring leaves home, this could be due to the decline in parental influence.

Parents are not the only possible influence on young voters. Political scientists have increasingly focused on peer effects on voting in recent years (e.g., Fieldhouse & Cutts, 2009, 2012; Fowler, 2005; Klofstad, 2011; Nickerson, 2008). When a child grows older, peer groups, including friends, co-workers, partners, etc., may become increasingly influential as parents lose influence (Plutzer, 2002). Young citizens who are not living at home might be particularly influenced by the non-family residents of their household. Friends or other roommates are theoretically interesting, as they do not affect primary socialization as parents do. Instead, they have an influence on the young adult through political debate and to the extent that voting itself is a social event (Lane, 1959: 208). If peers influence the young adult after leaving their parents, this may explain a possible negative effect of leaving the nest, since peers (who are typically young) have a lower propensity to vote than parents.

H4: After leaving home, the likelihood of voting is related to the turnout of other members of the new household.

To examine this hypothesis, we specifically examine those individuals who are neither cohabitating with their parents nor living alone. The turnout of the other members of the new household is found by taking the mean tendency to vote among all members of the household, eliminating the respondent herself.

Effects of Other Key Social Demographics

In addition to the main hypotheses, we control for a range of factors, most of which are commonly discussed in the literature and interesting in themselves. First, separate estimates of fathers and mothers for H1 and H3 allow comparing the relative influence of the two parents. From classical studies based on data from the 1960s, it has been suggested that fathers have stronger influence than mothers when it come to their offspring's political identity and participation (Jennings & Langton 1969; Jennings & Niemi, 1971). However, recent studies suggest that in today's society the relative influence has been reversed (Coffe & Voorpostel, 2010; Elder & Greene, 2012). It has also been suggested that women are more likely to be affected by the opinions of others than men (Lane, 1959; Wolfinger & Rosenstone, 1980: 40). We therefore include interactions between gender and parental voting.

An alternative to H3 would be that becoming older in itself diminishes the parental influence on young adult turnout. This could possibly explain the relationship illustrated in Figure 2. The young adult simply happens to leave home as she becomes older. To take this alternative into account, we include the interaction between parental voting and age.

A wide body of literature indicates that residential mobility matters (e.g., Highton & Wolfinger, 2001; Milbrath & Goel, 1977: 113; Verba & Nie, 1972: 145). Residential mobility/stability is operationalized as the days the respondent has lived at her current address. We also include a measure for the time of residence in the municipality (Bhatti & Hansen, 2012a). This allows us to test whether moving from one municipality to another matters more than merely moving, even when there is no voter registration at issue, due to less familiarity with the political context of the new municipality.

Several studies (e.g., Highton & Wolfinger, 2001; Wolfinger & Rosenstone, 1980: 57) consider the influence of leaving education on voting (i.e., completing school or university). On the one hand, leaving the educational system possibly represents a step toward adulthood. On the other hand, the educational institutions likely encourage young adults to vote via social pressure and easier access to political information. We examine both issues by including the type of ongoing education in the regression.

Additionally, we control for the effect of completed education and parents' education, marriage, income, as well as parents' income, ethnicity and citizenship. The effect of the individual's education and income is well established. Parents' education and income is included, even though we control for the direct effect of parents' voting. Resourceful parents possibly provide their children with competences that limit the cost of voting, irrespective of their own voting behavior. This is in line with Plutzer (2002: 54), who concludes that parental socio-economic and political resources largely determine first-time-voter turnout. As for ethnicity, minorities often participate substantially less than the majority population (e.g., Togeby, 1999, 2008; Verba & Nie, 1972: 161).

We also include the individual's average elementary school grades from the ninth grade (at approximately age 15), which is the last year of compulsory education in Denmark. School grades are an important control, since they are a strong indicator of ability or intelligence (Highton, 2009), which would likely be correlated with our key variables of interest (Denny & Doyle, 2008). Finally, we include the individual's age in days older than 18 (as well as age squared) in order to take into account the effect of age per se, which most existing studies find to have an independent impact irrespective of the specification (Wass, 2007b).

Results: Leaving the Nest and the Social Act of Voting

We divide our analysis into two parts. First, we examine all young adults in order to examine H1–H3 on parental effects and leaving home. In the second part of the analysis, we restrict our attention to young adults not living at home in order to address H4 about the relative effect of parents and peer groups. All of our models are cross-sectional. As should be clear from the above, however, we have access to controls which are rarely available to researchers.

Leaving the Nest and the Influence of Parents on their Offspring

Table 1 presents the models for all young adults with parents in the sample (see appendix, Table A1, for descriptive statistics).⁷ The first model only includes main effects, whereas the second and third also include relevant interactions.

Model 1 in Table 1 provides strong evidence supportive of H1, namely that if parents vote it is more likely that the young adult will also do so (and vice versa). As depicted by the predicted probabilities, a voting father (as opposed to a non-voting father) will increase the young adult's turnout by 18 percentage points when all other variables in the model are held at their means.⁸ In the case of a voting mother, the effect is about 30 percentage points. In other words, mothers appear to matter more than fathers. This is possibly because women on average are still more in contact with their children during their primary socialization. It should be noted that though we would expect parents to influence their offspring more than vice versa, we cannot preclude that the young adult also affects her parents' turnout by her own participation.

Most importantly, Model 1 also provides evidence that leaving home contributes to the turnout decline among young adults. If living with the father, the probability to vote increases by four percentage points when compared to young adults having moved out. Again, the figure related to the mother is higher: seven percentage points if living with the mother. This can explain part of the surprising negative relationship between age and turnout, as the young adults leave the family nest around age 18–21. The results are surprising in light of the findings of the (few) previous studies on the topic which find a moderate negative effect (Highton & Wolfinger, 2001). It should be noted that the effect of leaving home occurs even though residential mobility is controlled for.⁹ Thus, the total effect of moving away from one's parents is even greater, since leaving the nest also implies a shift in residence.

H1 and H2 demonstrated that parents matter, as does moving away from them. The negative effect of moving could be because the influence of the parents is weakened when the child leaves the nest. Interactions are included in Model 2 in order to evaluate Hypothesis 3. Since interaction terms in logistic regression are notoriously difficult to interpret, Figure 3 provides the predicted likelihood of voting for various groups when all other variables are held at their respective means.

Model 2 and Figure 3 reveal an interesting pattern. The main effect of living at home is negative, while there is a very strong interaction between the parental voting variables and living at home. In other words, if the parents are not voting, living with them reduces the likelihood of voting. If the parents are voting, the positive effect of living with them is quite substantial. Figure 3 illustrates this effect, where the differences between the blue bars (no parents voting) and purple bars (both parents voting) is substantially greater when the young individual cohabitates with both parents as opposed to neither of the parents. The results strongly support H3 and make intuitive sense, since young adults who are not living at home are affected by their parents by primary socialization but are only confronted by their parents' decision to vote in the election in question to a limited extent. In other

Table 1. Logit model on turnout – eligible voters under age 22 (2009)

	(1)		(2)	(3)
	Logistic coef.	% effect		
Mother voted	1.26*** (0.02)	30	0.89*** (0.03)	1.15*** (0.07)
Father voted	0.74*** (0.02)	18	0.44*** (0.03)	0.56*** (0.06)
Lives with mother	0.30*** (0.02)	7	-0.37*** (0.04)	-0.31*** (0.04)
Lives with father	0.14*** (0.02)	4	-0.32*** (0.04)	-0.30*** (0.04)
Mother voted*lives with mother	-	-	0.88*** (0.04)	0.81*** (0.04)
Father voted*lives with father	-	-	0.58*** (0.04)	0.56*** (0.04)
Mother voted*male	-	-	-0.30*** (0.04)	-0.30*** (0.04)
Father voted*male	-	-	0.09* (0.04)	0.09* (0.04)
Age*mother voted	-	-	-	-0.55** (0.19)
Age^2*mother voted	-	-	-	0.24 (0.13)
Age*father voted	-	-	-	-0.26 V
Age^2*father voted	-	-	-	0.10 (0.12)
<i>Current, ongoing education (base = none)</i>				
Primary school	0.23 (0.18)	6	0.25 (0.18)	0.26 (0.19)
High school	0.75*** (0.03)	18	0.77*** (0.03)	0.77*** (0.03)
Technical training	0.12*** (0.02)	3	0.13*** (0.02)	0.13*** (0.02)
Higher education (four years or less)	0.58*** (0.03)	14	0.61*** (0.03)	0.60*** (0.03)
Higher education (five years or more)	0.29 (0.30)	7	0.33 (0.30)	0.32 (0.29)
Residential stability in 1,000 days at current address	0.02*** (0.00)	0	0.01** (0.00)	0.01** (0.00)
Municipal stability in 1,000 days in current municipality	0.04*** (0.00)	1	0.04*** (0.00)	0.04*** (0.00)
Gender (male)	-0.13*** (0.02)	-3	0.03 (0.04)	0.03 (0.04)
Age in 1,000 days	-0.86*** (0.08)	-	-0.90*** (0.08)	-0.30 (0.18)
Age in 1,000 days^2	0.43*** (0.05)	-	0.46*** (0.05)	0.21 (0.12)

Education, completed (base = primary school)

High school	0.16*** (0.03)	4	0.17*** (0.03)	0.17*** (0.03)
Technical training	0.20*** (0.04)	5	0.21*** (0.04)	0.22*** (0.04)
Higher education (four years or less)	0.31 (0.21)	7	0.32 (0.20)	0.31 (0.20)
Elementary school grade average	0.12*** (0.01)	3	0.12*** (0.01)	0.12*** (0.01)
Income in DKK 100,000	-0.12*** (0.02)	-3	-0.12*** (0.02)	-0.12*** (0.02)
Married	0.23 (0.17)	6	0.17 (0.17)	0.16 (0.16)

Ethnicity (base = Danish)

Non-Danish, Western ethnicity (e.g., Europe, US)	-0.23 (0.15)	-6	-0.22 (0.15)	-0.23 (0.15)
Non-Danish, non-Western ethnicity (e.g., Middle East)	-0.44*** (0.04)	-11	-0.44*** (0.04)	-0.44*** (0.04)

Citizenship (base = Danish)

Non-Danish, Western citizenship	0.04 (0.14)	1	0.07 (0.14)	0.07 (0.14)
Non-Danish, non-Western citizenship	0.16* (0.06)	4	0.18** (0.06)	0.18** (0.06)
Mother's age	-0.05 (0.05)	-	-0.04 (0.05)	-0.05 (0.05)
Mother's age ²	0.00 (0.00)	-	0.00 (0.00)	0.00 (0.00)

Mother's education, completed (base = primary school)

High school	-0.01 (0.04)	0	-0.01 (0.04)	-0.02 (0.04)
Technical training	-0.02 (0.02)	-1	-0.02 (0.02)	-0.02 (0.02)
Higher education (four years or less, e.g., BA)	0.13*** (0.02)	3	0.14*** (0.03)	0.14*** (0.03)
Higher education (five years or more, e.g., MA)	0.25*** (0.04)	6	0.26*** (0.04)	0.25*** (0.04)
Mother's income in DKK 100,000	-0.00 (0.00)	0	-0.00 (0.00)	-0.00 (0.00)
Father's age	0.02 (0.04)	-	0.03 (0.04)	0.03 (0.04)
Father's age ²	-0.00 (0.00)	-	-0.00 (0.00)	-0.00 (0.00)

Father's education, completed (base = primary school)

(Continued)

Table 1. Continued

	(1)		(2)	(3)
	Logistic coef.	% effect		
High school	-0.00 (0.04)	0	-0.00 (0.04)	-0.00 (0.04)
Technical training	-0.05* (0.02)	-1	-0.05* (0.02)	-0.05* (0.02)
Higher education (four years or less)	0.06* (0.03)	1	0.06* (0.03)	0.06* (0.03)
Higher education (five years or more)	0.19*** (0.03)	5	0.18*** (0.03)	0.18*** (0.03)
Father's income in DKK 100,000	-0.00* (0.00)	0	-0.00 (0.00)	-0.00 (0.00)
Constant	-2.28*** (0.27)	-	-1.94*** (0.27)	-2.16*** (0.28)
N	89,060		89,060	89,060
McFadden's R ²	0.18		0.19	0.19
Chi2/Log Likelihood	15,166/-50,420		16,364/-49,925	16,444/-49,907

Notes: *p < 0.05, **p < 0.01, ***p < 0.001. Standard errors in parentheses are clustered by household. Forty-three municipal dummies included but not shown. The effect sizes in column 2 (calculated by SPost for Stata) depict the percentage point change from a change from the value 0 to the value 1 on dummy variables. For continuous variables, the value depicts the corresponding effect from changing the variable in question a half unit below to a half unit above the mean with other variables held at their mean (age², mother's age² and father's age² are held at the mean of age squared, mother's age squared, and father's age squared, respectively).

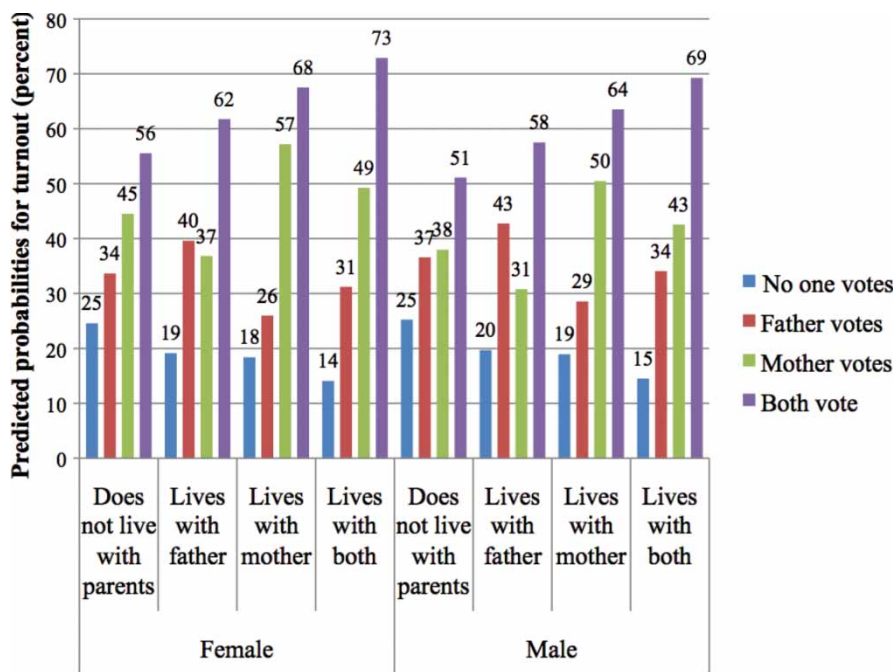


Figure 3. The predicted probabilities for turnout under different conditions (percent) when all other variables are held at their means.

words, part of the parental influence on children stems from socialization and part from living under the same roof, since voting is also a social phenomenon. The results also correspond nicely to Figure 2, where the effect of parental voting declines dramatically around the time the child moves, after which it levels out. Model 3 also reveals how the conclusion cannot be explained by parental influence on children declining by age.

In addition to the main hypotheses, Model 2 and Figure 3 show how while mothers on average influence their children more than fathers do (Coffe & Voorpostel, 2010; Elder & Greene, 2012), the size of the difference depends on the gender of the child. The interaction with “father voted” and “male” is positive, while the interaction is negative for boys and their mothers. This is possibly due to young adults being relatively more influenced by their same-gender parent as role models. Since the positive father*male interaction is smaller than the negative mother*male interaction, young women appear to be slightly more influenced by their parents than young men.

Residential mobility matters, even though there are no registration costs in Denmark. This is in accordance with Highton’s (2000) work that moving can lower turnout due to the disruption of community ties. We also find evidence that moving to a new municipality has an impact. This indicates that the importance of residential mobility is partly a consequence of societal ties and partly due to

familiarity with the political system being a function of residential stability. Being a student and thus part of an educational community provides easy access to political information, and it also involves a social network and social pressure to turn out (Wolfinger & Rosenstone, 1980: 57). We find a substantial education effect, even though we control for elementary school grades (ability), which should account for a major part of the education selection. Students vote more than non-students. One last, interesting result is the direct effect of the parents' socio-economic background – that is, children of well-educated parents vote more than others, even when taking their parents' tendency to vote into account. Thus, parental resources matter, irrespective of whether the parents themselves vote.

Age and age-squared remain significant and strong in magnitude. This indicates that the models do not explain all of the observed variation in turnout as a function of age. Nevertheless, the effect of age and age squared when going from 18 years of age to 22 years in Model 2 is only eight percentage points compared to 18 percentage points in a model including only age and age squared. Thus the variables included in the model account for more than half of the age–turnout differences among first time voters with a substantial residual remaining. An interpretation of the remaining effect of age per se would be that there is something special about becoming eligible close to an election – perhaps because voting then becomes one of the first opportunities to exercise newly acquired adult rights.

After Leaving the Nest: The Influence of Peers and Parents

As should be evident from Table 1 and Figure 3, parents matter. It is also clear that when young adults leave home, their parents matter less and their turnout propensity declines. The two things seem to be related. Turnout may decline when young adults leave the nest because they are less influenced by their parents' (average) high tendency to vote and become more influence by their peers low tendency to vote. In Table 2, we consider the influence of peer (household) voting for those individuals who are not living in the parental home and not living alone.

Table 2 supports Hypothesis 4 by casting light on the importance of other persons' voting habits (e.g., a partner or a roommate) in the respondent's new household. The voting habits of other household members mean more than the parents' voting combined.¹⁰ This is interesting, since the members of the new household will rarely be genetically related to the individual or have had influence over them during their primary socialization. This indicates that what happens around the election itself may be very important (people in the same household may discuss the election, encourage/discourage each other to vote, or even go to the polls together). The effect is illustrated in Figure 4, where we vary the average turnout of the household (the respondent herself excluded) when all other variables in the specification are held at their respective means. As Table 2 also illustrates, the effect is substantial.¹¹

Replacing parental influence with the influence of peers has substantial consequences for the turnout among young adults. The 19,517 young adults included in

Table 2. Logit model for turnout – eligible adults under 22 not living at home (2009)

	(4)	
	Logistic coef.	% effect
Average household vote	2.64*** (0.047)	56
Mother voted	0.64*** (0.047)	15
Father voted	0.40*** (0.046)	9
<i>Current, ongoing education (base = none)</i>		
Primary school	0.17 (0.45)	4
High school	0.35*** (0.080)	8
Technical training	0.037 (0.057)	1
Higher education (four years or less)	0.45*** (0.055)	11
Higher education (five years or more)	0.48 (0.49)	12
Residential stability in 1,000 days at current address	0.040 (0.046)	1
Municipal stability in 1,000 days in current municipality	0.037*** (0.0056)	1
Gender (male)	-0.17*** (0.040)	-4
Age in 1,000 days	0.11 (0.25)	-
Age in 1,000 days ²	-0.036 (0.14)	-
Constant	-2.96*** (0.63)	-
N	19,517	
McFadden's R ²	0.31	
Chi ² /Log Likelihood	4,677/-9,266	

Notes: *p < 0.05, **p < 0.01, ***p < 0.001. Standard errors in parentheses. Standard errors are clustered by households. The effect sizes in column 2 (calculated by SPost for Stata) depict the percentage point change from a change from the value 0 to the value 1 on dummy variables. On continuous variables, the value depicts the corresponding effect from changing the variable in question a half unit below to a half unit above, the mean with other variables held at their mean (age², mother's age², and father's age² are held at the mean of age squared, mother's age squared and father's age squared, respectively). For the sake of space, we have omitted the following controls: Completed education (three dummies), elementary school average grade, married (one dummy), ethnicity (two dummies), citizenship (two dummies), mother's age, mother's age², mother's education (four dummies), mother's income, father's age, father's age², father's education (four dummies), father's income, average household age, average household income, average household completed education (four variables), average household ongoing education (four variables), and municipal fixed effects (42 dummies). Two cases omitted due to perfect prediction.

Table 2 lived in households with average turnouts of 46%, compared to a 70% turnout among their fathers and 71% among their mothers. In other words, when the young adult leaves home, she comes under the influence of low-voting peers rather than high-voting parents.¹² This seems to contribute substantially to the decline in observed turnout among those leaving the parental home.

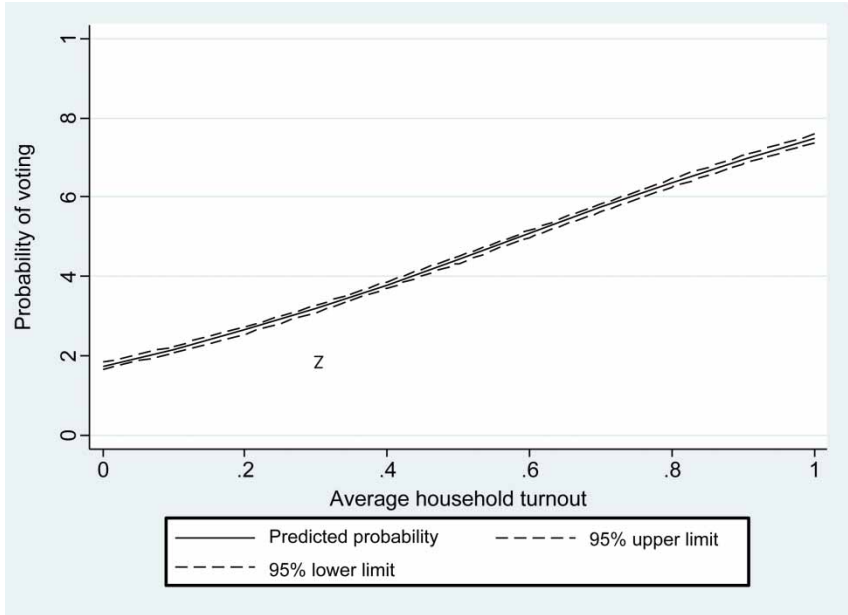


Figure 4. Probability of voting as a function of average turnout in the household for individuals living away from the parental home.

Discussion: Leaving the Nest as a Reconfiguration of the Social Ties of Voting

Young voters enfranchised close to election day vote more often than their slightly older peers. From age 18 until about age 20, turnout falls off. In this article we have attempted to contribute to a first explanation of this surprising pattern. Although we are limited by the cross-sectional nature of our data, we are able to find a number of interesting patterns. Part of the explanation appears to be residential patterns. At age 18, 81% (with living parents) live at home. Four years later, the corresponding figure is a mere 15%. As the young adults leave the nest, the positive influence of their parents starts to wear off. If both parents vote, for instance, the predicted probability of voting drops 18 percentage points when the young individual leaves home (see Figure 3). At the same time, as the parents’ influence diminishes, the young adults are heavily influenced by their low-voting peers. In other words, this study indicates that the participation norms met by young adults are highly variable across adolescence – and not simply low, as suggested previously (Plutzer, 2002). Hence, while our study does not question previous findings that those over age 21 increasingly vote when they start to settle down, have families of their own, etc., it does suggest that there is a phase before that – a phase of detachment from parents in which the likelihood of voting actually decreases.

What is especially interesting from our findings is how the influence from family and peers seems strong among the young voters and also how changing relationships

with family and peers partly can explain why 18–19-year-olds vote more often than 20–21-year-olds. Before the young voters leave the nest they are positively influenced by their parents, but as they leave the nest the probability of voting decreases as the households in which these young people become imbedded loom larger and take on heightened importance relative to the household they left.

Some limitations of this present study should be emphasized. First, it is based on cross-sectional data and thus, even with excellent quality controls, vulnerable to unobserved unit heterogeneity. A particular concern is the difficulty of taking into account selection into households with like-minded occupants when examining those who have left their parents' home. Second, we cannot preclude reverse causality – children may influence their parents and if social networks in general matter each individual simultaneously affects and is affected by her household. Third, while the models in this study explain a large part of the turnout decline, they do not explain it all. A residual effect of age remains. One possible explanation that has previously been suggested to explain decline in turnout has been that past eligibility decreases the likelihood of voting (Konzelmann et al., 2012; Metje, 1991) or that there is a special “hype” when voting for the first time – a first-time boost. This may well play a part in the explanation. We experimented with eligibility dummies for other types of elections and found that eligibility for a European Parliament election held six months before the municipality election had some effect on municipality turnout. Nevertheless, the residual effect of age remained the same.

The findings of the study feed into the debate about the age of eligibility. If leaving the nest of the parents indeed decreases turnout, this could support Franklin's (2004) argument that turnout would not necessarily decrease if the age of eligibility was lowered. When living at home the voting habit of the parents is simply transmitted more strongly from parent to offspring. Today when voters become eligible at 18 years of age, most young voters have had none or few participatory opportunities before leaving home. A younger voting age would create more opportunities for acquiring the habit of voting before leaving home.

In a theoretical perspective, the effect of leaving the nest and subsequent peer effects are interesting, as they indicate that while primary socialization matters, sharing a roof with someone matters at least as much. Short-term factors seem to matter at least as much as long-term factors. The study can also indirectly feed into the literature on the effect of marriage or of other relationships where it is commonly found that “social networks” matter (e.g., Klofstad, 2011; Nickerson, 2008; Stoker & Jennings, 1995). This study suggests that living with someone can be a large part of the reason why close relationships matter. People living together may well discuss the upcoming election as part of everyday personal relations. Even more importantly, they may go to the polls together. In that sense, voting is essentially a social act.

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Notes

1. In Denmark it is the municipalities that manage the voter lists. Therefore, acquiring the lists requires the collaboration of each individual municipality. All 98 municipalities were asked to participate in the study and 44 accepted. If a municipality accepted, information for all voters in that municipality was provided. Individuals did not self-select into the study (the few exceptions are described in Bhatti and Hansen (2012b): note 6). The 44 municipalities vary substantially in electoral size from 2,580 in Fanø to 427,940 in Copenhagen. The participating municipalities had a similar turnout to the non-participating: less than two percentage points lower. The slight difference is mainly due to the fact that the four biggest municipalities participated (Bhatti & Hansen, 2010). We have no reason to believe that the causal patterns should be different in participating and non-participating municipalities. Municipal fixed effects are included in all analyses to take into account unexplained systematic variation in turnout rates between them.
2. Statistics Denmark is the official census bureau funded by the state and responsible for compiling statistics from various Danish authorities on all levels.
3. Furthermore, at least one of the following requirements must be met: a) The person is a Danish citizen; b) the person is a national of another EU member state; c) the person is a national of Iceland or Norway; or d) the person has held uninterrupted residence in Denmark for the past three years prior to the election. Those under guardianship are disenfranchised.
4. For previous pioneer Danish studies employing similar data (see Elklit & Togeby, 2009; Elklit et al., 2000, 2005).
5. These official addresses can be considered as highly reliable as individuals are obliged by law to notify the authorities at the latest five days after moving to a new permanent address.
6. Similar ideas can be found in Fieldhouse and Cutts (2012). Stoker and Jennings (1995) present a similar idea for marriage – the effect of marriage is conditional upon whether the spouse votes.
7. In the regression, we lose about one-third of the original sample. This is primarily due to two factors. First, more than 40,000 individuals drop out because at least one of the parents does not live in any of the 44 municipalities for which we have complete turnout information. This possibly produces an over-representation of individuals that move within a municipality as opposed to from one municipality to another. If anything, this ought to suppress a negative finding of leaving the nest in Table 1. Since we do have socio-demographical information for all living citizens, we re-estimated the model excluding the parental turnout variables for the full sample and for the sample used in Table 1. The results were almost identical, with slightly more negative effects for leaving the nest in the full sample (as expected). None of the other variables of interest yielded substantially different results. Second, a smaller group of individuals drop out due to at least one of the parents being dead or not having the right to vote in the country. We can include this group by excluding all parental variables. Again, the coefficients were almost identical, with slightly higher negative coefficients for leaving the nest in the model that includes young adults with dead parents.
8. For the sake of simplicity, we did not include interactions between the two parents. The interaction between “lives with mother” and “lives with father” has a negative tendency. The interaction between “father voted” and “mother voted” is also negative, and the main effects increase. This

implies that it is particularly important that the young adult is subjected to the voting norm from at least one of the parents; however, one does not get the full double effect when both vote.

9. This means that the effect of leaving home is not caused by relocating per se. However, we cannot from our models preclude that moving for the first time creates bigger turmoil than moving in general. If this is true, part of the effect of moving from the parents would be due to changing social networks and part of it could be a turmoil effect.
10. We cannot, of course, interpret the entire coefficient for household voting as a causal effect, since the respondent herself presumably also affects her peers. Even if half of the effect is accounted for by reverse causation, however, peers are still as influential as parents are (the parents' coefficients are probably somewhat less affected by the potential endogeneity problem). The wide range of socio-demographic controls should limit the selection problems somewhat. However, as mentioned previously the study is cross-sectional and we cannot preclude that people move in together due to unobserved selection effects based on political interest.
11. We also experimented with an interaction between residential stability and household voting. The effect was positive but substantively unimportant. This implies that even though the effect of living with someone increases slightly over time, living with someone or not is what matters.
12. We also ran a model similar to the one in Table 2, but where all young individuals living with others were included (including those living in the parental home). We added an indicator for living with parents and an interaction between living at home and household voting in order to examine the relative effect of the household when living with parents and peers. The interaction was small and had a negative tendency indicating that the effect of the household is not lower when living with peers compared to when living with parents.

References

- Abramson, Poul R., Aldrich, John H. & Rohde, David W. (1998) *Change and Continuity in the 1996 Elections* (Washington, DC: CQ Press).
- Achen, Christopher H. & Sinnott, Richard (2007) Taking sides: learning and voting, Prepared for presentation at the Annual Meeting of the Midwest Political Science Association, Chicago, 12–15 April 2007.
- Andolina, Molly, Jenkins, Krista, Zukin, Cliff & Keeter, Scott (2003) Habits from home, lessons from school: influences on youth civic engagement. *PS: Political Science and Politics*, 36(2), pp. 275–280.
- Beck, Poul A., Dalton, Russel J., Green, S. & Huckfeldt, Robert (2002) The social calculus of voting. *American Political Science Review*, 91(1), pp. 57–73.
- Bernstein, Robert, Chadha, Anita & Montjoy, Robert (2001) Overreporting voting: why it happens and why it matters. *Public Opinion Quarterly*, 65(1), pp. 22–44.
- Bhatti, Yosef & Hansen, Kasper M. (2010) Valgdeltagelsen ved kommunalvalget 17. november 2009. Beskrivende analyser af valgdeltagelsen baseret på registerdata. Working paper no. 3. Copenhagen: University of Copenhagen, Department of Political Science.
- Bhatti, Yosef & Hansen, Kasper M. (2011) Who “marries” whom? The influence of social connectedness, economic and political homogeneity, and population size on jurisdictional consolidations. *European Journal of Political Research*, 50(2), pp. 212–238.
- Bhatti, Yosef & Hansen, Kasper M. (2012a) Public employees lining up for the polls – the conditional effect of living and working in same district. *Public Choice*, forthcoming.
- Bhatti, Yosef & Hansen, Kasper M. (2012b) Retiring from Voting: Turnout among Senior Voters. *Journal of Elections, Public Opinion and Parties*, 22(4).
- Bhatti, Yosef, Hansen, Kasper M. & Wass, Hanna (2012) The relationship between age and turnout: a roller-coaster ride. *Electoral Studies*, 31(3), pp. 588–593.
- Campbell, A., Converse, P., Miller, W & Stokes, D. (1960) *The American Voter* (New York: Wiley).
- Christakis, Nicholas A. & Fowler, James H. (2009) *Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives* (New York: Little, Brown and Company).

- Coffe, Hilde & Voorpostel, Marieke (2010) Young people, parents and radical right voting. The case of the Swiss People's Party. *Electoral Studies*, 29(3), pp. 435–443.
- Denny, Kevin & Doyle, Orla (2008) Political interest, cognitive ability and personality: determinants of voter turnout in Britain. *British Journal of Political Science*, 38, pp. 291–310.
- Denny, Kevin & Doyle, Orla (2009) Does voting history matter? Analysing persistence in turnout. *American Journal of Political Science*, 53(1), pp. 17–35.
- Elder, Laurel & Greene, Steven (2012) The politics of parenthood: parenthood effects on issue attitudes and candidate evaluations in 2008. *American Politics Research*, 40(3), pp. 419–449.
- Elklit, Jørgen & Togeby, Lise (2009) Where turnout holds firm: the Scandinavian exceptions, in: J. DeBardleben & J. H. Pammett (eds) *Activating the Citizen: Dilemmas of Citizen Participation in Europe and Canada* (New York: Macmillan), pp. 83–105.
- Elklit, Jørgen, Møller, Birgit, Svensson, Palle & Togeby, Lise (2000) *Hvem stemmer—og hvem stemmer ikke? En analyse af valgdeltagelsen i København og Århus ved kommunal-bestyrelsesvalgene i 1997* (Aarhus: Magtudredningen—The Danish Democracy and Power Study).
- Elklit, Jørgen, Møller, Birgit, Svensson, Palle & Togeby, Lise (2005) *Gensyn med Sofavælgerne. Valgdeltagelse i Danmark* (Århus: Aarhus University Press).
- Eulau, Heinz (1986) *Politics, Self, and Society: A Theme and Variations* (Cambridge, MA: Harvard University Press).
- Fieldhouse, Edward & Cutts, David (2009) What small spatial scales are relevant as electoral contexts for individual voters? The importance of the household on turnout at the 2001 general election. *American Journal of Political Science*, 53(3), pp. 726–739.
- Fieldhouse, Edward & Cutts, David (2012) The companion effect: household and local context and the turnout of young people. *The Journal of Politics*, 74(3), pp. 856–869.
- Fieldhouse, Edward, Tranmer, Mark & Russell, Andrew (2007) Something about young people or something about elections? Electoral participation of young people in Europe: evidence from a multilevel analysis of the European Social Survey. *European Journal of Political Research*, 46(6), pp. 797–822.
- Fowler, James (2005) Turnout in a small world, in: A. Zuckerman (ed.) *Social Logic of Politics* (Philadelphia: Temple University Press), pp. 269–287.
- Fowler, James & Dawes, Christopher (2008) Two genes predict voter turnout. *The Journal of Politics*, 70(3), pp. 579–594.
- Fowler, James, Baker, Laura & Dawes, Christopher (2008) Genetic variation in political participation. *American Political Science Review*, 102(2), pp. 233–248.
- Franklin, Mark (2004) *Voter Turnout and the Dynamics of Electoral Competition in Established Democracies Since 1945* (New York: Cambridge University Press).
- Gerber, Alan S., Green, Donald P. & Shachar, Ron (2003) Voting may be habit forming: Evidence from a randomized field experiment. *American Political Science Review*, 47(3), pp. 540–550.
- Highton, Benjamin (2000) Residential mobility, community mobility, and electoral participation. *Political Behavior*, 22(2), pp. 109–121.
- Highton, Benjamin (2009) Revisiting the relationship between educational attainment and political sophistication. *Journal of Politics*, 71(4), pp. 1564–1576.
- Highton, Benjamin & Wolfinger, Raymond E. (2001) The first seven years of the political life cycle. *American Journal of Political Science*, 45(1), pp. 202–209.
- Jennings, M. Kent & Langton, Kenneth P. (1969) Mothers versus fathers – formation of political orientations among young Americans. *Journal of Politics*, 31(2), pp. 329–358.
- Jennings, M. Kent & Niemi, Richard G. (1971) Division of political labor between mothers and fathers. *American Political Science Review*, 65(1), pp. 69–82.
- Karp, Jeffrey & Brockington, David (2005) Social desirability and response validity: a comparative analysis of overreporting voter turnout in five countries. *Journal of Politics*, 67(2), pp. 825–840.
- Kenny, Christopher B. (1993) The microenvironment and political participation. *American Politics Quarterly*, 21(2), pp. 223–238.
- Klofstad, Casey A. (2011) *Civic Talk: Peers, Politics, and the Future of Democracy* (Philadelphia, PA: Temple Press).

- Konzelmann, Laura, Wagner, Corina & Rattinger, Hans (2012) Turnout in Germany in the course of time, life cycle and cohort effects on electoral turnout from 1953 to 2049. *Electoral Studies*, 31(2), pp. 250–261.
- Lane, Robert E. (1959) *Political Life* (New York: The Free Press of Glencoe).
- Lazarsfeld, Poul F., Berelson, Bernard & Gaudet, Hazel (1968) *The People's Choice*, 3rd edn. (New York: Columbia University Press).
- Metje, Matthias (1991) Die Beteiligung von Frauen und Männern an Bundestagswahlen. Eine Untersuchung der Alters- und Generationseffekte. *Zeitschrift für Parlamentsfragen*, 22, pp. 358–376.
- Milbrath, Lester W. & Goel, Madan L. (1977) *Political Participation. How and Why do People Get Involved in Politics?*, 2nd edn. (Lanham: University Press of America).
- Mouritzen, Poul E. (2003) Kommunestyret i Danmark - bæredygtighed og demokrati, in: P. E. Mouritzen & U. Kjær (eds) *Kommunestørrelse og lokalt demokrati* (Odense: University Press of Southern Denmark), pp. 31–43.
- Nickerson, David W. (2008) Is voting contagious? Evidence from two field experiments. *American Political Science Review*, 102(1), pp. 49–57.
- Pacheco, Julianna S. & Plutzer, Eric (2007) Stay in school, don't become a parent – teen life transitions and cumulative disadvantages for voter turnout. *American Politics Research*, 35(1), pp. 32–56.
- Phelps, Edward (2004) Young citizens and changing electoral turnout, 1964–2001. *Political Quarterly*, 25(3), pp. 238–248.
- Plutzer, Eric (2002) Becoming a habitual voter: inertia, resources, and growth in young adulthood. *American Political Science Review*, 96(1), pp. 41–56.
- Reif, Karl-Heinz & Schmitt, Hermann (1980) Nine second-order national elections: a conceptual framework for the analysis of European election results. *European Journal of Political Research*, 8(1), pp. 3–44.
- Sloam, James (2007) Rebooting democracy: youth participation in politics in the UK. *Parliamentary Affairs*, 60(4), pp. 548–567.
- Steinbrecher, Markus, Huber, Sandra & Rattinger, Hans (2007) *Turnout in Germany. Citizen Participation in State, Federal and European Elections since 1979* (Baden-Baden: Nomos).
- Stoker, Laura & Jennings, M. Kent (1995) Life-cycle transitions and political participation: the case of marriage. *American Political Science Review*, 89(2), pp. 421–433.
- Togeby, Lise (1999) Migrants at the polls. An analysis of immigrant and refugee participation in Danish local elections. *Journal of Ethnic and Migration Studies*, 25(4), pp. 665–684.
- Togeby, Lise (2008) The political representation of ethnic minorities. Denmark as a deviant case. *Party Politics*, 14(3), pp. 325–343.
- Verba, Sidney & Nie, Norman N. (1972) *Participation in America: Political Democracy and Social Equality* (Chicago: University of Chicago Press).
- Verba, Sidney, Schlozman, Kay L. & Burns, Nancy (2005) Family ties: understanding the intergenerational transmission of participation, in: A. S. Zuckerman (ed.) *The Social Logic of Politics: Personal Networks as Contexts for Political Behavior* (Philadelphia: Temple University Press), pp. 95–114.
- Wass, Hanna (2007a) Generations and socialization into electoral participation in Finland. *Scandinavian Political Studies*, 30(1), pp. 1–19.
- Wass, Hanna (2007b) The effects of age, generation and period on turnout in Finland 1975–2003. *Electoral Studies*, 26(3), pp. 648–659.
- Wolfinger, Raymond E. & Rosenstone, Steven J. (1980) *Who Votes?* (New Haven: Yale University Press).
- Wolfinger, Nicholas H. & Wolfinger, Raymond E. (2008) Family structure and turnout. *Social Forces*, 8(4), pp. 1513–1528.
- Zuckerman, Alan S. (2005) Returning to the social logic of political behavior, in: A. S. Zuckerman (ed.) *The Social Logic of Politics: Personal Networks as Contexts for Political Behavior* (Philadelphia: Temple University Press), pp. 3–19.
- Zuckerman, Alan S., Dasovic, Josip & Fitzgerald, Jennifer (eds) (2007) *Partisan Families: The Social Logic of Bounded Partisanship in Germany and Britain* (New York: Cambridge University Press).

Table A1. Descriptive statistics for Table 1

	Mean	SD	Min.	Max.	N
Voted	0.542	0.498	0	1	89,060
Mother voted	0.754	0.431	0	1	89,060
Father voted	0.745	0.436	0	1	89,060
Lives with mother	0.614	0.487	0	1	89,060
Lives with father	0.527	0.499	0	1	89,060
<i>Current, ongoing education (base = none)</i>					
Primary school	0.002	0.043	0	1	89,060
High school	0.266	0.442	0	1	89,060
Technical training	0.198	0.398	0	1	89,060
Higher education (4 years or less)	0.138	0.345	0	1	89,060
Higher education (5 years or more)	0.001	0.026	0	1	89,060
Residential stability (in 1,000 days at current address)	2.953	2.872	0	8.035	89,060
Municipal stability (in 1,000 days in current municipality)	5.278	2.833	0	8.035	89,060
Gender (male)	0.507	0.500	0	1	89,060
Age in 1,000 days more than 18 years	0.694	0.417	0	1.46	89,060
<i>Education, completed (base = primary school)</i>					
High school	0.349	0.477	0	1	89,060
Technical training	0.045	0.208	0	1	89,060
Higher education (four years or less)	0.002	0.041	0	1	89,060
Elementary school average grade	6.169	2.048	-3	12	89,060
Income in DKK 100,000	0.753	0.663	-7	40.7	89,060
Married	0.002	0.046	0	1	89,060
Non-Danish, Western ethnicity	0.003	0.058	0	1	89,060
Non-Danish, non-Western ethnicity	0.079	0.269	0	1	89,060
Non-Danish, Western citizen	0.005	0.067	0	1	89,060
Non-Danish, non-Western citizen	0.026	0.159	0	1	89,060
Mother's age	11.135	1.738	5.15	40.69	89,060
<i>Mother's education, completed (base = primary school)</i>					
High school	0.052	0.222	0	1	89,060
Technical training	0.371	0.483	0	1	89,060
Higher education (four years or less)	0.303	0.460	0	1	89,060
Higher education (five years or more)	0.072	0.258	0	1	89,060
Mother's income in DKK 100,000	3.319	2.535	-27.8	503.2	89,060
Father's age	12.145	2.066	5.52	24.49	89,060

(Continued)

Table A1. Continued

	Mean	SD	Min.	Max.	N
<i>Father's education, completed (base = primary school)</i>					
High school	0.051	0.220	0	1	89,060
Technical training	0.411	0.492	0	1	89,060
Higher education (four years or less)	0.212	0.409	0	1	89,060
Higher education (five years or more)	0.114	0.318	0	1	89,060
Father's income in DKK 100,000	4.673	7.587	-149.0	580.4	89,060

Notes: Variables have the register date January 1, 2009. Exceptions are education (register date January 1, 2010 to ensure the correct school year is utilized), residency (register date November 17, 2009), and income (register date January 1, 2008 as no newer income information is currently available).

Table A2. Descriptive statistics for Table 2 and A3

	Mean	SD	Min.	Max.	N
Voted	0.443	0.497	0	1	19,519
Average household vote	0.460	0.470	0	1	19,519
Mother voted	0.707	0.455	0	1	19,519
Father voted	0.701	0.458	0	1	19,519
<i>Current, ongoing education (base = none)</i>					
Primary school	0.098	0.297	0	1	19,519
High school	0.177	0.382	0	1	19,519
Technical training	0.289	0.453	0	1	19,519
Higher education (four years or less)	0.002	0.039	0	1	19,519
Higher education (five years or more)	0.098	0.297	0	1	19,519
Residential stability in 1,000 days at current address	0.288	0.395	0	7.949	19,519
Municipal stability in 1,000 days in current municipality	3.557	3.387	0	8.035	19,519
Gender (male)	0.401	0.490	0	1	19,519
Age in 1,000 days	0.942	0.362	0	1.46	19,519
<i>Education, completed (base = primary school I)</i>					
High school	0.487	0.500	0	1	19,519
Technical training	0.070	0.256	0	1	19,519
Higher education (four years or less)	0.004	0.062	0	1	19,519
Elementary school average grade	6.111	2.098	-3	11.5	19,519

(Continued)

Table A2. Continued

	Mean	SD	Min.	Max.	N
Income in DKK 100,000	1.020	0.687	-2.211	35.20	19,519
Married	0.007	0.084	0	1	19,519
Non-Danish, Western ethnicity	0.004	0.060	0	1	19,519
Non-Danish, non-Western ethnicity	0.119	0.323	0	1	19,519
Non-Danish, Western citizenship	0.006	0.078	0	1	19,519
Non-Danish, non-Western citizenship	0.039	0.195	0	1	19,519
Mother's age	11.162	1.825	5.69	18.8	19,519
<i>Mother's education, completed (base = primary school)</i>					
High School	0.052	0.221	0	1	19,519
Technical training	0.347	0.476	0	1	19,519
Higher education (four years or less)	0.281	0.450	0	1	19,519
Higher education (five years or more)	0.071	0.257	0	1	19,519
Mother's income in DKK 100,000	3.164	1.868	-13.17	71.56	19,519
Father's age	12.233	2.144	5.515	23.75	19,519
<i>Father's education, completed (base = primary school)</i>					
High school	0.051	0.219	0	1	19,519
Technical training	0.391	0.488	0	1	19,519
Higher education (four years or less)	0.198	0.398	0	1	19,519
Higher education (five years or more)	0.111	0.314	0	1	19,519
Father's income in DKK 100,000	4.374	7.258	-67.29	528.4	19,519
Average household age	2.967	3.436	0.001	25.78	19,519
Average household income in DKK 100,000	1.654	1.483	-11.68	100.2	19,519
<i>Proportion household with a given completed education (base = primary school)</i>					
High school	0.378	0.460	0	1	19,519
Technical training	0.184	0.359	0	1	19,519
Higher education (four years or less)	0.070	0.228	0	1	19,519
Higher education (five years or more)	0.017	0.110	0	1	19,519
<i>Proportion household with a given ongoing education (base = none)</i>					
Primary school	0.001	0.026	0	1	19,519
High school	0.048	0.199	0	1	19,519
Technical training	0.117	0.304	0	1	19,519
Higher education (four years or less)	0.228	0.398	0	1	19,519
Higher education (five years or more)	0.021	0.131	0	1	19,519

Notes: variables have the register date January 1, 2009. Exceptions are education (register date January 1, 2010 to ensure the correct school year is utilized), residency (register date November 17, 2009), and income (register date January 1, 2008 as no newer income information is currently available).

Table A3. Full model for Table 2 (excluding 43 municipal dummies)

	Logistic coef.	% effect
Average household vote	2.64*** (0.047)	56
Mother voted	0.64*** (0.047)	15
Father voted	0.40*** (0.046)	9
<i>Current, ongoing education (base = none)</i>		
Primary school	0.17 (0.45)	4
High school	0.35*** (0.080)	8
Technical training	0.037 (0.057)	1
Higher education (four years or less)	0.45*** (0.055)	11
Higher education (five years or more)	0.48 (0.49)	12
Residential stability in 1,000 days at current address	0.040 (0.046)	1
Municipal stability in 1,000 days in current municipality	0.037*** (0.0056)	1
Age in 1,000 days	0.11 (0.25)	-
Age in 1,000 days ²	-0.036 (0.14)	-
<i>Education, completed (base = primary school)</i>		
High school	0.097 (0.064)	2
Technical training	0.12 (0.078)	3
Higher education (four years or less)	-0.14 (0.28)	-3
Elementary school grade average	0.12*** (0.013)	3
Income in DKK 100,000	-0.071* (0.033)	-2
Married	0.056 (0.20)	1
<i>Ethnicity (base = Danish)</i>		
Non-Danish, Western ethnicity (e.g., Europe, US)	-0.35 (0.34)	-8
Non-Danish, non-Western ethnicity (e.g., Middle East)	-0.35*** (0.085)	-8
<i>Citizenship (base = Danish)</i>		
Non-Danish, Western citizenship	0.098 (0.27)	2
Non-Danish, non-Western citizenship	0.042 (0.13)	1
Mother's age	-0.027 (0.11)	-
Mother's age ²	0.0015 (0.0048)	-
<i>Mother's education, completed (base = primary school)</i>		
High school	-0.16 (0.092)	-4
Technical training	-0.092 (0.050)	-2
Higher education (four years or less, e.g., BA)	0.16** (0.057)	4
Higher education (five years or more, e.g., MA)	0.35*** (0.096)	9
Mother's income in DKK 100,000	-0.0079 (0.011)	0
Father's age	0.018 (0.084)	-
Father's age ²	-0.00068 (0.0032)	-

(Continued)

Table A3. Continued

	Logistic coef.	% effect
<i>Father's education, completed (base = primary school)</i>		
High school	0.014 (0.091)	0
Technical training	-0.064 (0.048)	-2
Higher education (four years or less)	0.013 (0.061)	0
Higher education (five years or more)	0.14 (0.082)	4
Father's income in DKK 100,000	-0.0049* (0.0023)	0
Avg. age of household	-0.032 (0.018)	-
Avg. age of household ²	-0.00094 (0.00099)	-
Avg. household income in DKK 100,000	-0.076*** (0.020)	-2
<i>Education, completed (base = primary school)</i>		
Proportion of household, high school	-0.014 (0.063)	0
Proportion of household, technical training	-0.048 (0.064)	-1
Proportion of household, higher education (four years or less)	-0.017 (0.11)	0
Proportion of household, higher education (five years or more)	0.14 (0.19)	3
<i>Current, ongoing education (base = none)</i>		
Proportion of household, primary school	0.67 (0.58)	17
Proportion of household, high school	-0.043 (0.10)	-1
Proportion of household, technical training	0.037 (0.065)	1
Proportion of household, higher education (four years or less)	-0.023 (0.063)	-1
Proportion of household, higher education (five years or more)	-0.17 (0.17)	-4
Constant	-2.96*** (0.63)	-
N	19,517	
McFadden's R ²	0.31	
Chi ² /Log Likelihood	9,266/4,677	