Civic Duty and Voter Turnout in the Household

Abstract

This article studies how characteristics of cohabitants relate to citizens' choice to vote or not to vote. While individual and contextual characteristics explaining voter turnout have been studied extensively, less is known about how other household members affect turnout decisions. Psychological research suggests that people are strongly influenced by the norms and opinions of the people they live with. Hence, we hypothesize that the beliefs about voting of other household members are strong predictors of voter turnout. By leveraging a representative cross-sectional survey in the Netherlands that include all household members, we are able to relate turnout decisions to the sense of civic duty of their cohabitants, and to their turnout decisions. We find that cohabitants' beliefs do indeed matter. Particularly, living with a person who holds the norm that voting is a civic duty substantially increases the probability of voting. This effect appears to be mediated by other household members' decision to vote.

Introduction

Household members are an important source of interpersonal influence. We suspect that this is true for most people who live in multi-member households with respect to politics in general and, in particular, with the decision to vote or abstain from voting. Research in different countries finds that the voter turnout rates of two people who live in the same household show extremely high correlations. Sinclair, McConnell, and Green (2012) report that among people who live in households with two registered voters in the US, voter turnout is 67 per cent when one's housemate votes but only 12 per cent when the housemate abstains. In France, Buton, Lemercier, and Mariot (2011) find that people who live together have very similar voter participation patterns over long periods of time and in different types of elections. In the UK, nearly 90 per cent of electors in two-elector households who live with a voter cast a ballot themselves (Cutts and Fieldhouse 2009). The authors of this study estimate that 80 per cent of the variation in voter turnout in two-member households is attributable to the household level, rather than to the individual, postal code, or ward level and they conclude that "the household is by far the most influential electoral context." (2009, 727)

In spite of the evidence that household members affect each other's participation in the electoral process, we know little about how and why interpersonal influence occurs. In part, this is because the study of influence in the household is hindered by data limitations and identification problems. Traditional turnout studies use nationally representative random samples of individuals unconnected to each other; therefore, these are not well suited to examine interpersonal influence. As Nickerson states "Much of the variance in voting behavior may be best explained by peer effects, but studies focused on isolated individuals are incapable of detecting the influence." (2008, 49) A second problem is that the observation of concordant behaviour among cohabitants can arise from self-selection or omitted variables, rather than influence, if people choose spouses who have similar political attitudes and behaviour (Alford et al. 2011).

In this paper, we expand on previous research of interpersonal influence on voter turnout. We argue that the social norm of voting is transmitted and enforced within households. When one household member believes that voting is a civic duty, this belief increases the chances that the other member will vote, compounding or perhaps in spite of his or her own views about voting. This idea implies that some attitudes have externalities. They not only affect the behaviour of the attitude holder but also influence the behaviour of others. To examine this theory, we use questions asked of pairs of adult household members in the Netherlands.

The first section of the paper discusses the theoretical perspective that sees voting as a social norm and outlines why one's attitude towards voting can be expected to influence the turnout decision of the other household member. The next section presents the dataset and the methodological strategy. The third section presents the results of the analyses. The final section discusses the results and the implications of the findings.

Voting as a social norm

From a strictly individual, utilitarian perspective, voting in large electorates is irrational. The rational individual will recognize that her vote is extremely unlikely to decide the outcome of the election, and she will conclude that the optimal choice for her is to abstain. Yet most people vote in national elections with millions of other electors. This is the paradox of voting (Downs 1957; Mueller 2003). An alternative perspective claims that voting is a social norm that is internalized by some and transmitted and enforced through social networks (Abrams, Iversen, and Soskice 2011; Campbell 2006; Coate and Conlin 2004; Feddersen and Sandroni 2006; Gerber, Green, and Larimer 2008; Knack 1992; Riker and Ordeshook 1968). Voting in elections, from this perspective, is a normative act. The belief that voting is a civic duty is a sufficient condition for many people to vote, because they extract satisfaction from fulfilling their duty.

Extensive evidence suggests that an internalized sense that voting is a duty is one of the main reasons why people participate in elections. When people are asked in qualitative studies to reveal

why they vote, the most frequent reason they offer is a normative one: they believe that voting in an election is the right thing to do (Blais 2000, 104). Self-reported civic duty is one of the strongest correlates of political participation (e.g. Opp 2001). Those who feel that it is their moral obligation to vote are also less inclined to think about the benefits and costs of voting (Blais, Young, and Lapp 2000). The evidence is consistent with theories that claim that a substantial percentage of the electorate votes because they feel morally compelled to do their part (Blais and Achen 2011; see also Federsen and Sandroni 2006).

In addition to purely ethical motives, there are selective social incentives to participate if voters are rewarded by the approval of others while non-voters are shunned or criticized (Abrams, Iversen, and Soskice 2011; Green and Gerber 2010). While most people may be aware of the social norm of voting, this does not imply that everyone is inclined to comply with the norm under any circumstances. Compliance with behaviours that are considered normative or desirable ranging from voting to sharing money, recycling, or not littering can vary substantially depending on whether a) others comply with the norm, b) the behaviour is visible to others, and c) compliance can be rewarded and non-compliance can be punished (Fehr and Fischbacher 2003; Fehr and Gächter 2000; Cialdini et al. 2006).

First, individual propensity to comply with a norm increases if others comply as well. In a laboratory experiment, people who see that other people have voted are more likely to vote themselves (Großer and Schram 2006). Gerber and Rogers (2009) find that citizens are more inclined to say that they would vote in an upcoming election if they are told that "more and more citizens are voting" than if the message is "turnout has been declining."

Second, compliance with social norms is enhanced if the behaviour is visible to others. In a field experiment, Gerber, Green, and Larimer (2008) show that telling people that other members of their household or their neighbours will be informed about whether they vote in a low saliency election has a large impact on participation. Panagopoulous (2011) report that telling people that the names of non-voters would be published increases turnout. Funk (2010) estimates that the

introduction of postal voting in Switzerland reduced voter turnout by seven percentage points in rural cantons, but the effect was positive in large communities. In rural areas postal voting made voting (and abstaining) invisible to others, thereby reducing the social pressure to vote.

Relatedly, the possibility of receiving rewards and sanctions increases compliance. Behavioural economics experiments demonstrate that people who have social preferences engage in the costly punishment of others for deviating from the social norm to which they subscribe (e.g. Wilson 2011). If voting is considered a norm in a social network, compliance will be rewarded and non-compliance sanctioned. Abrams, Iversen, and Soskice (2010) asked survey respondents if their friends and family would disapprove of their non-voting, and they find that social disapproval increases voter turnout.[1]

In spite of the increasing recognition that ethical and social motives are important to understand why people vote in elections, we know little about where civic duty comes from and how and where the social norm of voting is actually enforced. Campbell (2006) shows that living in a politically homogeneous environment and studying in a school with a vibrant civic life both affect one's sense of moral obligation to participate and voter turnout later in life. We suspect, however, that much of the transmission and enforcement of the duty to vote takes place in the household.

The household as a context of norm transmission and enforcement

Among all social contexts, the household is probably the most relevant setting in which voting behaviour is monitored and social pressure to vote is most effective. However, no studies so far have examined whether the attitudes of one household member influence the political behaviour of the other. The previous discussion about the factors that affect compliance with social norms

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[1] This design, which relies on self-reports of the reactions of others in a survey is problematic. Extensive evidence suggests that people who believe in a social norm are more likely to overestimate the expected sanction for non-compliance. For example, Scholz and Pinney (1995) show that the subjective risk of getting caught for not paying taxes is more closely related to perceptions of duty than to objective risk factors.

suggests several reasons why living with a person who thinks that voting is a civic duty will make the other household member more likely to vote.

First, people who believe that voting is a civic duty will encourage others to vote. Social norms are social because they encapsulate expectations about how *others* should behave (Elster 1989). Cohabitants who think that voting is a civic duty will encourage the other partner to act "as a good citizen." Encouragement can occur through casual conversation or through a direct proposal to go to the polls together. While no studies have examined whether people go to the polls alone or with others, there is anecdotal evidence that many couples vote together. Partners who believe that voting is a civic duty should be prone to propose voting as a joint activity, both because they are more likely to vote themselves and because they are more likely to consider that the other person should also vote.

Second, the fact of having one's behaviour observed should motivate some people to vote who would otherwise choose to abstain. Household members can monitor if the other person has voted or not. The decision to vote or to abstain is often visible within a household. Cohabitants tend to see and talk to each other daily and it is easy for most to see, for instance, if the other household member has left home at a certain time. Asking whether or not the other person has voted may be a natural topic of conversation on Election Day. By contrast, the voting behaviour of people who do not live together, such as co-workers or neighbours is harder to monitor. Cohabitants who feel that voting is a civic duty are in a unique position to reward compliance and sanction non-compliance with the norm. Not only can they monitor compliance easily, but social sanctions or praise are more effective if they come from a person with whom one has a personal relationship (Campbell 2009, 26).

Voting is also an easy and inexpensive way of making the dutiful partner happy. According to the efficient household model (Browning and Chiappori 1998), spouses need to compromise to accommodate their divergent interests and preferences. An action by one that makes the other happy can be repaid in subsequent iterations. If one person values the act of voting, the second

can vote as a sign of good will and respect for the other person's conviction. After all, voting is not a very costly act to perform. The "nice" gesture may be returned on a later occasion.

In summary, we theorize that people who believe that voting is a civic duty encourage their cohabitants to vote, monitor whether they have actually voted, and reward or sanction them for complying or failing to comply with the norm. Such pressures should be sufficient to motivate some people who would otherwise not have voted to "do their civic duty," especially when the cost of voting is low. Thus, the prediction is that having a partner who believes that voting is a civic duty increases the likelihood that one votes.

Data

The Longitudinal Internet Studies for the Social sciences (LISS) panel is a high quality online survey administered to a random probability sample of Dutch households (Scherpenzeel 2011). The LISS panel is particularly appropriate for this study because it collects data from all members of the household aged 16 or more (we focus here on those aged 18 or more, who are eligible to vote). The questions in the LISS panel together with questions included by ourselves provide an opportunity to investigate the role that the behaviour and opinions of other household members play in a person's decision to vote.

The study started in 2007, and the participants are invited to respond to an online questionnaire every month. LISS provides computers and internet connection to the elected households that do not have them, thus ensuring that the panel includes non-internet users. Respondents are paid to participate and multiple reminders are sent for each wave to achieve high response rates, which range between 60 and 80 per cent.

The day after the Dutch national Parliamentary elections held on June the 9th 2010, a sample of 5055 respondents was presented with a questionnaire about the elections, including a replication of several questions from the Dutch Parliamentary Election Study (DPES), such as caring about the election, party identification, and turnout decision. The response rate was 74 per cent (n =

3757). In this module, we included questions on voters' sense of duty. In addition, the LISS panel provides other information about the respondents; we use background variables, a personality scale, and a pre-election questionnaire asked one month before the elections. We restrict ourselves to two-member households with respondents of voting age. Our final sample consists of 2123 people living in two-member households. For those two-person households with only one respondent, the values of the missing partner were multiply imputed (see the appendix).

The LISS panel is based on a random probability sample of the Dutch population of households and takes every effort to convert refusals and prevent survey errors. In spite of these efforts, sample descriptives for several variables differ from known population totals for voters. For example, the reported average turnout in the 2010 elections was 87 percent, while the actual turnout was only 75 percent. The age distribution also differs from population totals that can be obtained from Statistics Netherlands. A common solution to this problem is to calculate poststratification weights such that the weighted mean turnout and age distributions correspond to the known population marginals. Weights are adjusted iteratively so that finally the marginal distributions for both variables are as close as possible to the known population distribution in a process known as "raking" (Kalton and Flores-Cervantes, 2003).

While calibrating poststratification weights to known turnout and age groups may increase the efficiency and possibly remove bias in the estimation of means, totals, and other statistics based on marginal distributions, there is no guarantee that weighting schemes that work well for the estimation of means will also work well for the estimation of cross-tables and logistic regression, as is our goal here. Weights should correlate with the estimating function of the logistic regression rather than the mean turnout (Lumley, Shaw and Dai 2011). One method of weighting is by calibrating not to population marginals, but to population cross-tables (joint distributions) of voter turnout with auxiliary variables. This study calibrates the weights to reproduce not only the marginal distribution but also the cross-tables between voting and age groups, voting and gender, and voting and urban residence. The population cross-tables were obtained from Statistics

Netherlands' CBS Statline and the weights calculated using Lumley's (2012) survey package in R 2.15 (R Core Team 2012). We calibrate these distributions separately for voters and their cohabitants, thus reducing any bias due to nonresponse of one member of a two-person household. The resulting post-stratification weights have been used to produce all descriptives as well as the regression analyses. Standard errors were obtained with a jackknife procedure clustered by household (Lumley 2012).

Variables and descriptive analysis

Central to our analyses are whether the person and their cohabitant voted and whether each sees voting as a civic duty. Sense of duty was measured using the question "Do you personally feel that voting in elections is primarily a civic duty or a choice?" (Blais and Achen 2011). It has two response options: Civic duty (coded 0) and Choice (coded 1) endorsed at 49% and 51% (±1.7%), respectively. Other key variables are whether or not the respondent claimed to care about the election ("care"), and whether there was a party that the respondent felt closer to than to other parties ("close"). About 56% (±1.8%) of respondents said they care about the elections, while about 63% (±1.6%) indicate that there is a party they feel particularly close to. Due to the poststratification weights, the estimated turnout was exactly equal to the population turnout of 75%.

Table 1 about here

Table 1 tabulates the relationship between a person's decision to vote and their cohabitant's decision to vote. The log-odds ratio in this table is 3.46 (±0.134), a very strong relationship. Turnout is 91% among those whose partner voted, against 25% among those whose partner abstained. This relationship may be due to many different factors, including the tendency of similar people to cohabit. However, one other possible explanation is that the voting decision is affected not just by a person's sense that voting is a duty, but also by the other, cohabiting, person's sense of duty. This idea is explored in Table 2.

Table 2 about here

Table 2 shows that the proportion of voters in the 2010 election rises from 62% for people living with a cohabitant who believes voting is a "choice" to 89% for those whose cohabitants indicated they see voting as a "duty". There thus appears to be a strong overall relationship between Duty-other and Voting. This relationship is also present within categories of Duty-self. For example, of respondents who themselves see voting as a choice, 77% (slightly above the average) vote anyway when their cohabitant believes it is a duty, while cohabitant agreement that is a choice reduces this proportion to only 54% (well below the 75% average). As is to be expected, an even stronger relationship exists between Duty-self and voting. The following analyses demonstrate that this finding is not removed by controlling for other factors explaining the turnout decision.

Results

For each case, we obtain the "sense of duty" for the other person in the household and perform a logistic regression of the individual's turnout choice on this variable as well as on the person's own sense that voting is a duty, caring about the elections, feeling close to a particular party, and background variables. Table 3 presents the results of adding these groups of variables to the model in a step-wise manner. Poststratification weights calibrated to the bivariate joint distributions of vote with age, gender, and urbanicity are included in the analysis and the household identifier is used in the calculation of jackknifed standard errors.

Table 3 about here

The results in Table 3 show that, while the coefficient estimate of duty-other drops somewhat with the addition of control variables, its coefficient remains sizeable and statistically significant after controlling for other factors that explain turnout. The individual's own sense that voting is a duty is a stronger predictor of voting than that of the cohabitant with an odds ratio of $exp(-1.59) = 0.20$ ($t = -4.8$); however, even after controlling for "care", "close", and background variables, the coefficient for duty-other still corresponds to an odds ratio of 0.39 ($t = -3.2$).

Figure 1 about here

To illustrate the size of these effects on a probability scale, the marginal effects plot in Figure 1 shows how turnout is expected to increase as a function of both Duty-self and Duty-other. The Figure, based on the final logistic regression model including various control variables, mostly serves to confirm the simple descriptive analysis shown in Table 2. The estimated increase in probability to vote due to Duty-other is relatively large for people who do not themselves think voting is a duty: 21% more people in this group are predicted to vote when the other person in the household believes voting is a duty. For people who already believe that voting is a duty, living together with another person who is of the same opinion makes a 8 percent point difference. Compared with the effects of other variables on turnout in the literature, these estimated differences can be considered large.

The most obvious cue observable by household members that their cohabitant possesses the civic duty norm is their voting decision. Thus, a possible explanation for the relationship between cohabitant's sense of duty and voting is that it is mediated by the cohabitant's voting behaviour. Under this hypothesis, the regression coefficient of Duty-other should drop to near zero after including Voting-other as a control variable (MacKinnon, Fairchild & Fritz 2007). Performing this mediation analysis yields a logit coefficient estimate for Voting-other of 3.6 ($t = 9.4$) and for Duty-other of -0.40 ($t = -0.92$, n.s.). Since the other coefficients exhibit little qualitative change, they are not reproduced here. This finding is in line with the mediation hypothesis - the idea that the cohabitant's sense of duty affects the voting decision through the voting decision of the cohabitant, by acting out the perceived norm of voting.

Discussion and conclusions

This study was able to leverage the LISS survey's design including all members of each household in a large-scale representative probability sample of Dutch households. By focusing on the relationship between characteristics of people in the same two-person household, we were able to show that, even after controlling for other characteristics that explain turnout, there is a strong relationship between a person's decision to vote and their cohabitant's sense that voting is a civic duty. Having a sense of civic duty therefore appears to affect not just one's own behaviour (Blais and Achen 2011), but also the behaviour of other members of the household.

The challenge is now to document more precisely how any influence of cohabitants' norms might take place. One hypothesis for the explanation of this relationship is that it is mediated by the cohabitant's decision to vote, suggesting that the observable turnout decision of the other person is taken as a cue to their norm. This study performed a mediation analysis whose results corroborate that hypothesis. This suggests that individuals are influenced by their partners' norms only to the extent that the norm is backed up by consistent behaviour. That being said, we still need to know how concretely the civic duty norm is expressed in the household and what kinds of rewards and/or threats the dutiful use to convince their non dutiful cohabitants that they should vote.

In this study we have taken every effort to control for person and household characteristics. In spite of these efforts, selection effects cannot be ruled out in any cross-sectional study. Another possible source of error was cohabitant nonresponse; to counter this effect we leveraged external data provided by Statistics Netherlands by employing a poststratification weighting scheme that calibrated not just univariate tables, but also bivariate joint distributions of voting to known population bivariate distributions. This method can be expected to yield better results than calibration to univariate marginal tables.

Much remains to understand the relationship between turnout and cohabitants' sense of civic duty. Our research does show, however, that it matters whether people around us believe that voting is

a duty or a choice. This suggests that we need to bring the household into the picture if we wish to properly understand the voting decision.

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Table 1. Crosstables of voting for two people in the same two-person household, and of Duty-self, Duty-other, and Voting. Weights have been applied so both column and row percentages in the voting table correspond to known population turnout in 2010 (75%).

| *Vote-self* | *Vote-other* | | | |
	Did not vote	Voted	Sum	%
Did not vote	397	136	533	25%
Voted	133	1456	1590	75%
Sum	531	1593	2123	
%	25%	75%		100%

Table 2. Cross-tabulation of a person's sense of duty (Duty-self) with that person's decision to vote, for different levels of the cohabiting person's sense of duty (Duty-other).

Duty-self	Duty-other: Duty				Duty-other: Choice			
	Duty	Choice	Sum		Duty	Choice	Sum	
Did not vote	39	66	105	11%	59	370	429	38%
Voted	669	218	887	89%	274	429	703	62%
Sum	708	284	992	100%	333	799	1132	100%

Table 3. Logistic regression of turnout decision. Estimates and jackknifed standard errors with weights calibrated to population joint distributions of voting with age groups, gender, and urbanicity.

	Est.	S.E.	T	Est.	S.E.	T	Est.	S.E.	T
(Intercept)	2.27	0.261	8.70	2.76	0.318	8.66	1.12	0.669	1.67
Duty-self	-1.87	0.321	-5.84	-1.48	0.320	-4.64	-1.59	0.333	-4.76
Duty-other				-1.14	0.273	-4.18	-0.95	0.298	-3.18
Closeness							-1.13	0.268	-4.23
Care							1.00	0.291	3.42
Age (reference cat.: 18-25)									
(25,35]							0.95	0.430	2.20
(35,45]							1.48	0.426	3.47
(45,55]							1.39	0.405	3.42
(55,65]							1.28	0.420	3.06
(65,75]							1.29	0.578	2.23
(75,							0.16	0.707	0.23
Female							0.30	0.157	1.89
Education (Primary)									
VMBO							0.19	0.604	0.32
HAVO/VWO							0.65	0.622	1.04
MBO							0.22	0.608	0.36
HBO							0.21	0.640	0.33
WO							-0.06	0.727	-0.09
Other							0.63	0.927	0.68
Log(Net income)							0.07	0.065	1.12
Urbanicity (Extremely)									
Very							-0.07	0.243	-0.30
Moderately							0.63	0.256	2.44
Slightly							-0.25	0.231	-1.07
Not urban							-0.02	0.291	-0.07
Occupation (Employed)									
Homemaker							-0.49	0.440	-1.10
Retired							-0.45	0.439	-1.02
Student							0.01	0.713	0.02
Unemployed							-0.80	0.397	-2.02

Figure 1. The marginal effect of duty-other on predicted turnout for different values of duty-self from the final model. The model suggests that the effect of living with another person who believes voting is a duty is considerable for those who do not themselves think so.
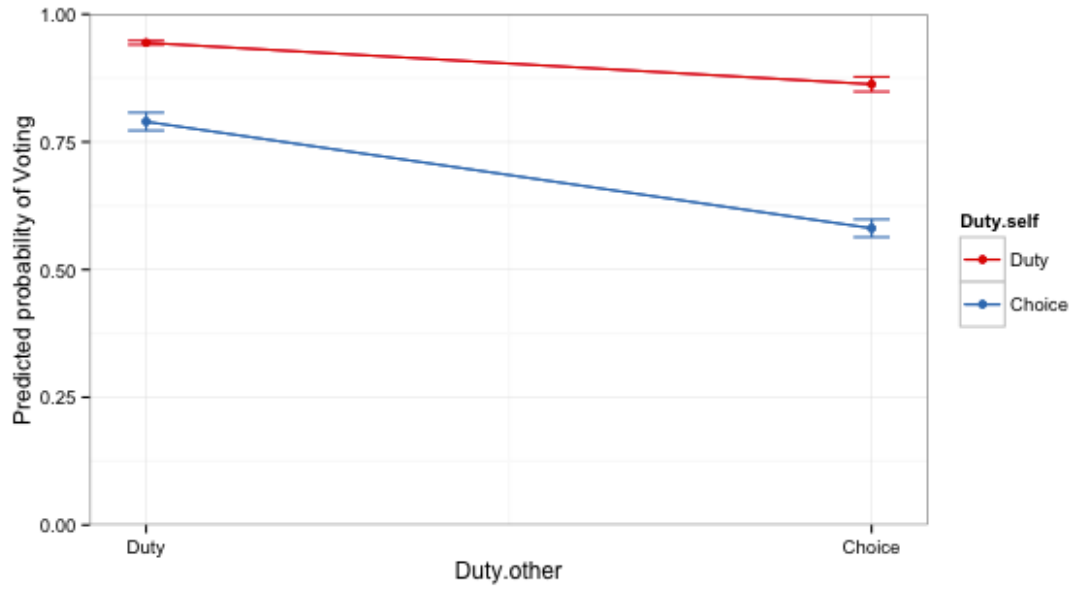
Appendix: treatment of missing data

The final sample included 2123 people of voting age who lived in 1384 unique two-person households. This means that 1384×2 – 2123 = 2768 – 2123 = 645 cohabitants were nonrespondents. Beyond this missingness, there was also item nonresponse on several of the study variables. If listwise deletion were applied, only 146 of 2123 observed cases would remain, a situation that was shown by Little and Rubin (1989) to severely bias analyses.

In spite of the sparseness of fully complete cases, enough information is available on the pairwise relationships between the variables to estimate prediction models for each of the variables. Therefore, we proceeded by first multiply imputing the missing values in each variable, conditional on the other variables, and then estimating the models while taking the uncertainty caused by the imputations into account. All prediction models included the study variables as well as voting in the previous 2006 election, obtained from an earlier wave of the panel.

The prediction models were estimated iteratively by the procedures outlined in Rubin (1987, chapter 3) and implemented in the *mice* package in R (van Buuren and Groothuis-Oudshoorn, 2011). This so-called "chained equations" approach estimates each prediction model conditional on the imputations at the previous iteration, and then generates a new random random imputation. In this way we ran 100 iterations, obtaining ten multiply imputed datasets.

In addition to the multiple imputation procedure, poststratification weights were calculated such that not only the univariate marginals, but also the bivariate joint distributions between voting and age, sex, and urbanicity, matched the population distributions obtained from Statistics Netherlands. Calibrating to bivariate tables is more likely to affect second-order statistics such as logistic regression coefficients than calibration on only the univariate distributions. Calibration was performed for the Vote-self and Vote-other variables simultaneously, in an effort to correct cohabitant nondifferential nonresponse.