

Social mobilisation in partisan spaces

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Abstract

Three decades ago Huckfeldt and Sprague found that partisan context constrains information-sharing between neighbours. We develop their theory to identify implications for campaign mobilisation. We argue that GOTV spillover effects should vary with the proportion of rival party supporters in a neighbourhood. We test this expectation using households excluded pre-random assignment from a street-level GOTV experiment, estimating neighbourhood party preferences based on targeting data made available by the UK Labour Party. We find that GOTV spillover effects are larger for Labour supporters where fewer rival partisans reside in a neighbourhood. Rival partisans are mobilized in mixed neighbourhoods, where the probability of spillovers from mixed partisan households is higher. This paper extends Huckfeldt and Sprague’s theory, and demonstrates the importance of social dynamics for parties’ campaign strategies.

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Motivation

As Huckfeldt, Plutzer and Sprague (1993, 366) wrote over a quarter of a century ago, “the central motivation for contextual theories of politics is the idea that patterns of social interaction are influenced by surrounding population distributions”. There has been a lively debate about how political heterogeneity conditions political mobilisation within social networks such as the household and the neighbourhood (Mutz 2006; Klofstad, Sokhey and McClurg 2013; Bello and Rolfe 2014). However, little progress has been made applying Huckfeldt and Sprague’s (1987) insights about how the partisan composition of a social space shapes political interactions, to the question of campaign mobilisation.

According to the social logic of politics, “all turnout is, in a sense, mobilized, with much of the mobilization occurring indirectly” (Rolfe 2012, 121). GOTV spillover experiments show that campaign contact spills over within households (Nickerson 2008; Bhatti, Dahlgaard, Hansen and Hansen 2017), and that it does so even between household members who support different parties (Foos and de Rooij 2017). However, there is mixed causally-identified evidence on GOTV spillover effects between neighbours (Sinclair, McConnell and Green 2012; Gay 2012; Amat, Boix, Munoz and Rodon 2016). Likewise, there is little theory and evidence on whether intra-household mobilization is linked to inter-household mobilization within neighbourhoods. In this paper, we set out to provide theory and evidence to fill this gap. Neighbourhoods, in contrast to households, are usually made up of weak ties (Morey, Eveland and Hutchens 2012), and therefore we follow Huckfeldt and Sprague’s (1987) prediction that information-sharing should be restricted to co-partisans. However, campaign effects can spill over to supporters of rival parties. Even if parties only target their own supporters, rival partisans can be indirectly mobilized if they share a household with supporters of the party that initiates contact. Since we expect a higher share of mixed partisan households in mixed partisan neighbourhoods, we should also expect supporters of rival parties to mobilize neighbours who share their party preferences. This can lead to parties’ mobilization campaigns being ineffective at changing vote shares.

Using targeting data collected by UK Labour Party canvassers and leveraging the spillover effects of a randomized field experiment, we confirm the existence of such mobilisation dynamics that link households to neighbourhoods. The indirect mobilisation effects of a Labour Party leafleting

campaign varied among neighbours conditional on the political composition of neighbourhoods. In homogeneous Labour neighbourhoods, GOTV effects spilled over to Labour supporters who were not initially targeted, while there were no spillover effects to other Labour supporters in neighbourhoods where a majority of residents supported a rival party. Supporters of rival parties were only mobilised in mixed partisan neighbourhoods where spillovers could originate from households where Labour supporters live with rival partisans.

From intra- to inter-household mobilisation

The local area of the neighbourhood is an important site of social interaction (Enos 2017). Even though informal and low intensity in character, the neighbourhood can have a strong impact on social and political outcomes over time (Gay 2012). From prior research, we expect that the partisan context in which election campaigns take place should affect the formation and maintenance of discussion networks within neighbourhoods (Huckfeldt and Sprague 1987). If neighbours prefer to share information with like-minded others, GOTV spillover effects between neighbours should be conditional on shared partisanship.

The network literature suggests that the strength of social ties conditions how willing individuals are to engage with others who disagree with them politically (Morey, Eveland and Hutchens 2012). Household members who support different parties continue to talk politics (Bello and Rolfe 2014) and mobilize each other during election campaigns (Foos and de Rooij 2017). In contrast, when ties are weak, individuals may refrain from sharing information (Mutz 2006). However, the link between household and neighbourhood mobilisation dynamics has rarely been investigated. Parties usually target voters for GOTV who are likely to support them, hence they are unlikely to target households that do not contain at least one pre-identified party supporter. Canvassers are homophilous and are more likely to talk to voters who are similar to themselves (Nall, Schneer and Carpenter 2017). However, from prior research we know that when canvassers speak to supporters who live in mixed partisan households, rival partisans will be mobilized to vote (Foos and de Rooij 2017). Even if parties correctly identify supporters and opponents based on detailed targeting data, citizens are at an information disadvantage. They should be more likely to mis-identify co-partisans in mixed partisan neighbourhoods (Huckfeldt and Sprague 1987). In both cases, even if

the party as well as party supporters intend to exchange information only with co-partisans, targeting mixed neighbourhoods can have the unintended consequence of mobilizing both co-partisans and supporters of rival parties. This logic is displayed in Appendix Figure A.1.

Household dynamics have implications for political mobilisation within neighbourhoods because political information flows between citizens depend on the strength of personal ties between supporters of different parties, i.e. whether they share the same household. When Labour canvassers mobilize Labour voters in homogeneous households, the contacted individual not only mobilises her household member, but this contact also spills over to other Labour partisans in neighbouring households. When canvassers target mixed partisan households, partisans of all stripes are mobilised. In this case, even if spillover between households in a neighbourhood flows between co-partisans, rival partisans who are indirectly mobilised within the household can mobilize their co-partisans within the neighbourhood. This is the opposite of the intended effect of a partisan GOTV campaign.

Experimental set-up

To test these expectations, we use data on individuals excluded pre-random assignment from a partisan GOTV experiment that we previously conducted in collaboration with the UK Labour Party during the 2014 European and local election campaign in England.¹ We compare the turnout rates of non-experimental subjects living in streets assigned to treatment to the turnout rates of non-experimental subjects who live in control streets. We also use geo-coding to investigate whether treatment effects vary conditional on whether the members of the closest household support Labour or a rival party. The analysis focuses on the indirect mobilisation effects of a GOTV leafleting campaign conducted by the UK Labour Party. The treatment in the original experiment was a partisan leaflet that highlighted either the Conservative government’s failure on the NHS or on crime and policing, and which was put through the door by local Labour Party volunteers. Besides the issue specific content, all leaflets included an appeal to vote Labour in the local and European elections on 23 May 2014. The treatment materials are displayed in Appendix Figure A.2. As specified in the pre-analysis plan, to maximise statistical power for the spillover analysis, we combine

¹See appendix for pre-registered hypotheses and the de-identified PAP: <http://egap.org/registration-details/4388>

both treatment arms into one treatment. Validated turnout was obtained at the individual level from the public register, then merged with the random assignment and pre-treatment covariates.

The original set-up of the randomised field experiment lends itself to the analysis of social influence between neighbours because, initially, large numbers of households were excluded from the experiment based on legal (individuals on no-contact lists) and feasibility considerations (the share of households which could realistically be targeted within the budget). We use two strategies to identify spillover effects between neighbours. First, we operationalise the larger neighbourhood of each subject as the street on which the subject lives. We then compare individuals living in households excluded from the original experiment located in treatment streets to individuals living in excluded households located in control streets, under the identification assumption that spillovers occur within but not between streets. Second, we define the immediate neighbours of each individual as those voters living in the most proximate household on the same street. We obtain the location (latitude and longitude) of experimental and non-experimental households by geocoding the household addresses through their Google Maps API. For each non-experimental household, we use the location to identify the closest household on the same street where closest refers to Euclidean distance. The dataset contains individual-level information on the party preferences of 9630 experimental subjects and 14759 non-experimental subjects living on 622 streets.

Partisan heterogeneity

As pre-registered, we define partisan heterogeneity as the share of rival party supporters who live on the same street (analysis 1), and the share of rival party supporters who live in the most proximate household (analysis 2). There are of course many reasonable alternative ways of how we could define partisan heterogeneity (e.g. the proportion of Labour supporters), and how we could define a neighbourhood (e.g. by zip-code), and this is the reason for why we registered our preferred definition in the pre-analysis plan. The data on party preferences used to estimate the share of rival party supporters per street and most proximate household is estimated based on pre-treatment targeting data collected by Labour Party canvassers. For an extensive validation of the canvassing-based voting intention measure used in this paper, see Foos (2018) who uses the same measurement instrument. The distribution of rival party supporters per street is displayed

in Figure A.3 in the Appendix, which shows that the share of rival partisans in a neighbourhood is approximately normally distributed. Figure A.4 in the Appendix shows the correlation between the partisan composition of neighbourhoods and the partisan composition of the most proximate household, the two measures used in this paper. Mixed partisan neighbourhoods have a significantly larger share of mixed partisan households. That means that in line with Figure ??, individuals who live in mixed partisan neighbourhoods are also more likely to live next to a mixed partisan household.

Analysis

We estimate the following linear models, clustering standard errors at the level of assignment, the street level:

$$Y_i = \alpha + \beta Z_i + \epsilon_i \quad (1)$$

$$Y_j = \alpha + \beta Z_j + \epsilon_i \quad (2)$$

$$Y_j = \alpha + \beta_1 Z_j + \beta_2 X_{1ij} + \beta_3 X_{1ij} * Z_j + \epsilon_{ij} \quad (3),$$

where Y_i is validated individual-level turnout (1 or 0) for subjects living in households originally included in the experiment, Y_j is validated individual-level turnout for subjects living in households originally excluded from the experiment, α is the turnout rate in the experimental or non-experimental control group, Z is location on a treatment (1) or control (0) street, X_1 is the share of rival party households in a street, and ϵ is the error term. All models also include fixed effects for experimental blocks (electoral wards).

Departures from pre-analysis plan

We also pre-registered the following equation, which identifies indirect mobilisation effects conditional on the partisan composition of the most proximate household:

$$Y_j = \alpha + \beta_1 Z_j + \beta_2 X_{2ij} + \beta_3 X_{2ij} * Z_j + \beta_4 X_{3ij} + \beta_5 X_{3ij} * Z_j + \beta_6 X_{2ij} * X_{3ij} + \beta_7 X_{2ij} * X_{3ij} * Z_j + \epsilon_{ij},$$

where X_2 is the share of rival party supporters within the most proximate household, and X_3 is the Euclidean distance to the closest household. Since linear interaction terms lack common support, we diverge from our PAP and estimate the interaction effects using the binning method proposed by Hainmueller, Mummolo and Xu (forthcoming).

Moreover, we further diverge from our pre-analysis plan by restricting our sample to subjects for whom the Labour Party collected pre-treatment data on party preferences. We did not anticipate that these data would be missing for around 50% of our sample. We present the main analysis for the complete sample including those subjects that do not identify with any party in Figure A.7. Finally, we report the results of the analyses conditioning on the partisan composition of the neighbourhood and the partisan composition of the household as pre-specified for the full sample of party supporters, and separately for Labour and rival party supporters. As pre-specified we report both unadjusted and covariate-adjusted ITTs. We report the covariate-adjusted analyses (turnout in the 2013 local election, household size, and gender) in Appendix Tables A.8 and A.9.

Results

We conduct differential attrition checks and balance checks using randomization inference. The p-value of .55 indicates that there is no evidence of differential attrition as a function of treatment assignment (for a full explanation of the procedure see Figure A.5 in the Appendix). Table A.1 shows balance on available pre-treatment covariates, gender, turnout in the 2013 local elections, as well as party identification. We also conduct a balance test using randomization-inference, which shows that in 1100 of 5000 simulated random assignments, imbalances between treatment and control groups were larger or as large as in our dataset, which corresponds to a two-tailed p-value of .22 (see Figure A.6 in the Appendix).

First, Table 1 shows that the leaflets successfully mobilised voters to turn out. Both experimental and non-experimental subjects on streets assigned to treatment were around three percentage points more likely to vote.

Table 1: ITT of leaflet on turnout of experimental and non-experimental households

	Direct effects	Indirect effects
Leaflet	.026 (.018)	.025 (.014)
Control mean	.425	.336
Block fixed effects	Yes	Yes
Cluster standard errors	Yes	Yes
N individual	9630	14759
N cluster	622	613

Note: Standard errors clustered at the street level (CR2). Inverse probability weights for differential probabilities of assignment to treatment between experimental blocks.

Table 2 displays the indirect Intent-to-Treat (ITT) effects of the Labour GOTV leaflet on validated turnout among individuals living in households that were initially excluded from the experiment, first for all party supporters (columns 1 and 2), and then separately for identified Labour supporters (columns 3 and 4), and identified supporters of rival parties (columns 5 and 6). Columns 1, 3, and 5 display the main effects, and columns 2, 4, and 6 introduce the interactions between the treatment and the pre-treatment share of rival party supporters identified to live on a street. This is a treatment-by-covariate interaction, which is not causally identified (Gerber and Green 2012), meaning that we cannot be sure that Conditional Average Treatment Effects arise *because* of the share of rival party supporters. The pre-treatment covariate could be correlated with other unobserved street-level confounders.

Table 2: ITT of leaflet on turnout of non-experimental subjects conditional on partisan composition

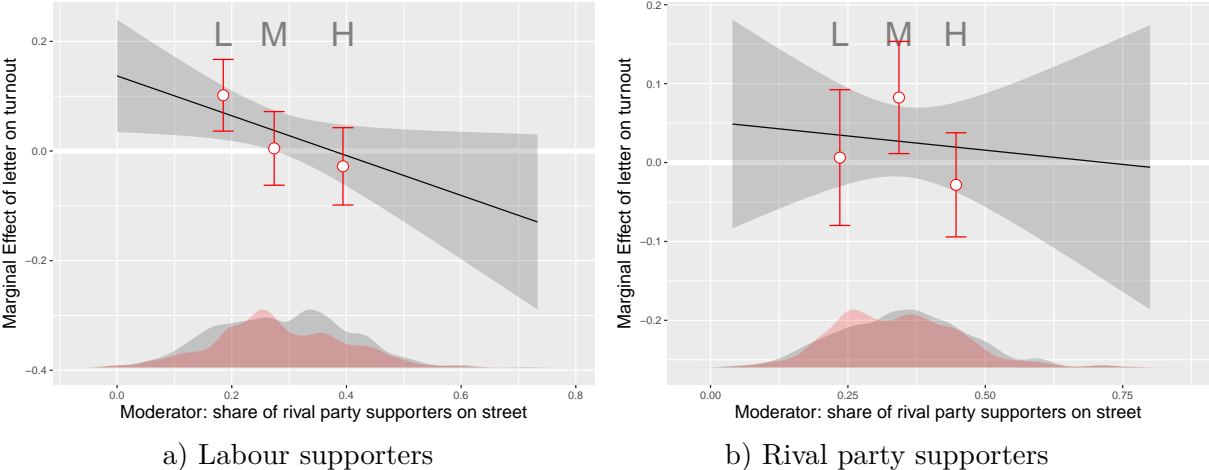
	All partisans		Labour		Rival party	
	I	II	III	IV	V	VI
Control mean	.402		.424		.380	
Leaflet	.029	.097	.031	.137	.024	.052
	(.017)	(.045)	(.021)	(.054)	(.024)	(.080)
% street rival partisan		.320		.489		.264
		(.111)		(.149)		(.178)
% street rival partisan x leaflet		-.210		-.363		-.072
		(.134)		(.180)		(.212)
Block fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Cluster standard errors	Yes	Yes	Yes	Yes	Yes	Yes
N individual	9762		5683		4079	
N cluster	598		562		543	

Note: Standard errors clustered at the street level (CR2). Inverse probability weights for differential probabilities of assignment to treatment between experimental blocks.

Keeping this caveat in mind, Table 2 and Figure A.7 in the Appendix show that the higher the share of rival party supporters in a neighbourhood, the lower the effects of the GOTV leaflet, which is in line with our expectations of how information sharing between partisans in neighbourhoods should translate into campaign mobilisation. Figure 1 and Appendix Figure A.8 plot the interaction between the treatment and the share of rival party supporters in the neighbourhood separately for Labour party supporters and rival party supporters using the method proposed by Hainmueller, Mummolo and Xu (forthcoming). We divide each sample into three equally sized bins (low “L”, medium “M” and high “H” proportion of rival partisans per street), and estimates the

ITT of the leaflet within each bin separately. For Labour supporters, spillover effects are positive and significantly different from zero if they reside in predominantly Labour areas. However, the treatment effects are no longer significant once the share of rival party supporters passes 30% of all neighbours. In contrast, spillover effects are estimated to be zero for rival party supporters who reside in neighbourhoods dominated by either party. They only materialise in neighbourhoods that have a mix of Labour and rival party supporters.

Figure 1: Marginal effects of leaflet conditional on partisan composition of the neighbourhood



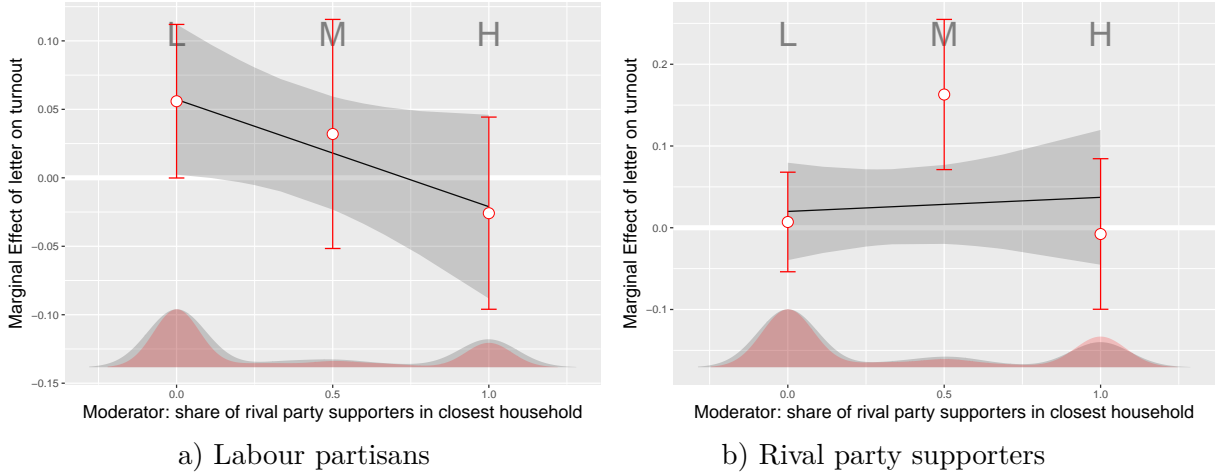
Partisan composition of closest household

Having shown that indirect mobilisation effects from a GOTV campaign vary with the partisan composition of the street on which a voter lives, we now consider whether they also vary if we look at the partisan preferences of the closest neighbouring household. Figure 2 plots the marginal effect of the linear interaction between the treatment and the share of rival party supporters in the most proximate household. Figure 2 shows that for Labour Party supporters mobilisation patterns are linear, meaning the larger the share of rival party supporters in the most proximate household, the smaller the spillover effects of the GOTV treatment. The mobilisation patterns for rival party supporters are non-linear. They mobilise if the closest household contains a mix of party supporters.

Discussion and Conclusion

This paper shows that the partisan composition of neighbourhoods predicts indirect, social, campaign mobilisation. We use a combination of experimental and targeting data to test the predic-

Figure 2: Marginal effects of leaflet conditional on partisan composition of the closest household



tion that indirect mobilisation between neighbours should be more likely to occur in neighbourhoods dominated by supporters of the party that targets voters. This is because spillovers are more likely to materialise between co-partisans who exchange political information (Huckfeldt and Sprague 1987). Uniquely, we link mobilisation dynamics within neighbourhoods to inter-household spillovers. Based on our theory and analysis, effects between supporters of the party that targets a neighbourhood, spill over if the neighbourhood is dominated by its supporters. However, indirect mobilisation patterns differ for supporters of rival parties. Consistent with previous evidence on intra-household spillovers, we show that inter-household spillovers to rival party supporters materialise in mixed neighbourhoods where the proportion of mixed partisan households is higher. The results of this paper match the intuition common among canvassers that they should target neighbourhoods that are dominated by party supporters, and avoid mixed partisan households that could trigger an unintended chain of mobilisation among supporters of rival parties. It also confirms that mobilisation patterns within heterogeneous political networks differ by the type of social setting, a common assumption that has rarely been tested empirically. While partisans who share the same household mobilise each other irrespective of partisanship, neighbours prefer to mobilise like-minded others. Understanding the interaction between these intra and inter-household spillovers in different partisan contexts contributes to the success or the failure of a party’s GOTV strategy.

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A Appendix

We pre-registered the following hypotheses:

- **H1 - one-sided hypothesis: Neighbourhood effects hypothesis** : *Subjects living in non-experimental households in treated streets are more likely to turn out than subjects living in non-experimental households in control streets.*
- **H2: Partisan mobilisation hypothesis** : *The more politically heterogeneous the street, the weaker the spillover effects between experimental and non-experimental households.*
- **H3: Partisan competition hypothesis** : *The more politically heterogeneous the street, the stronger the spillover effects between experimental and non-experimental households.*
- **H4 - one-sided hypothesis: Neighbourhood effects hypothesis** : *The closer the distance between non-experimental households and experimental households in treated streets, the more likely subjects living in non-experimental households are to turn out compared to non-experimental households living at the same distance to experimental-households in control streets.*
- **H5: Partisan mobilisation hypothesis** : *The closer the distance between non-experimental households and experimental households of the same partisan identity in treated streets, the more likely subjects living in non-experimental households are to turn out compared to non-experimental households living at the same distance to experimental-households in control streets.*
- **H6: Partisan competition hypothesis** : *The closer the distance between non-experimental households and experimental households of a rival partisan identity in treated streets, the more likely subjects living in non-experimental households are to turn out compared to non-experimental households living at the same distance to experimental-households in control streets.*

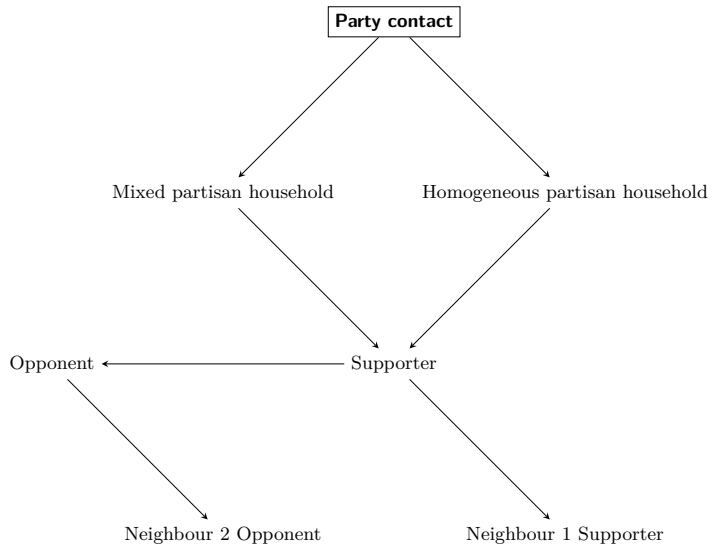


Figure A.1: *Link between inter- and intra- household mobilization*

CAN YOU AFFORD 10 YEARS OF A TORY-RUN NHS?

Within 4 years in **the cracks have begun to show in the NHS**. It is harder to see a GP, nurse numbers have been cut and NHS waiting lists are rocketing.

"NHS waiting times are at highest for six years with 2.8 million waiting for surgery or other hospital procedures."
– Daily Mail, 18 April 2014

- Your guarantee of a GP appointment within 24 hours has been scrapped
- Thousands of nurses and NHS frontline staff have been cut

On May 23rd vote Labour.

A vote for the Labour Party is a vote to safeguard and restore the NHS.

CAN YOU AFFORD 10 YEARS OF A TORY-RUN POLICE SERVICE?

Within 4 years in **the cracks have begun to show in the police services**. Police numbers have been cut, 999 response times have gone by up, and action against serious crimes is being cut.

"The number of police officers in England and Wales fell by almost 3,500 last year to the lowest level in more than a decade."
– Daily Mail, 30 January 2014

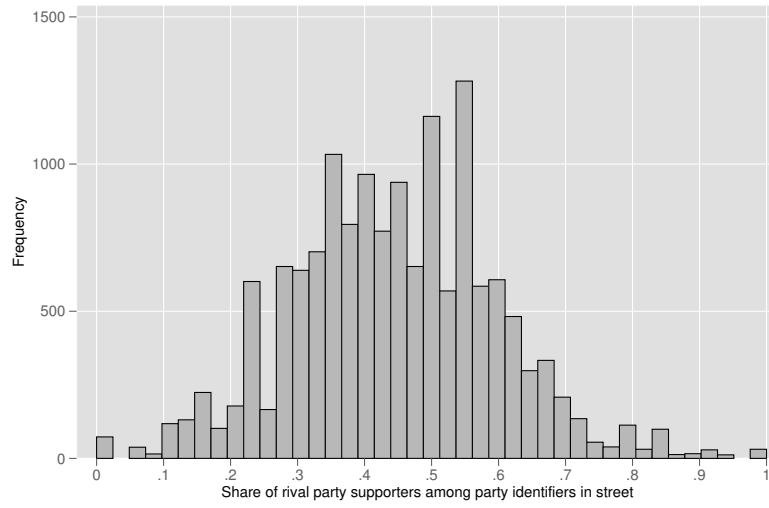
- Some towns have lost their neighbourhood police altogether.
- 999 response times have gone up so people are waiting longer in an emergency

On May 23rd vote Labour.

A vote for the Labour Party is a vote to safeguard and restore the Police Service.

Figure A.2: a) Healthcare-themed GOTV leaflet b) Crime- and policing-themed GOTV leaflet

Figure A.3: Distribution of neighbours who support a rival party



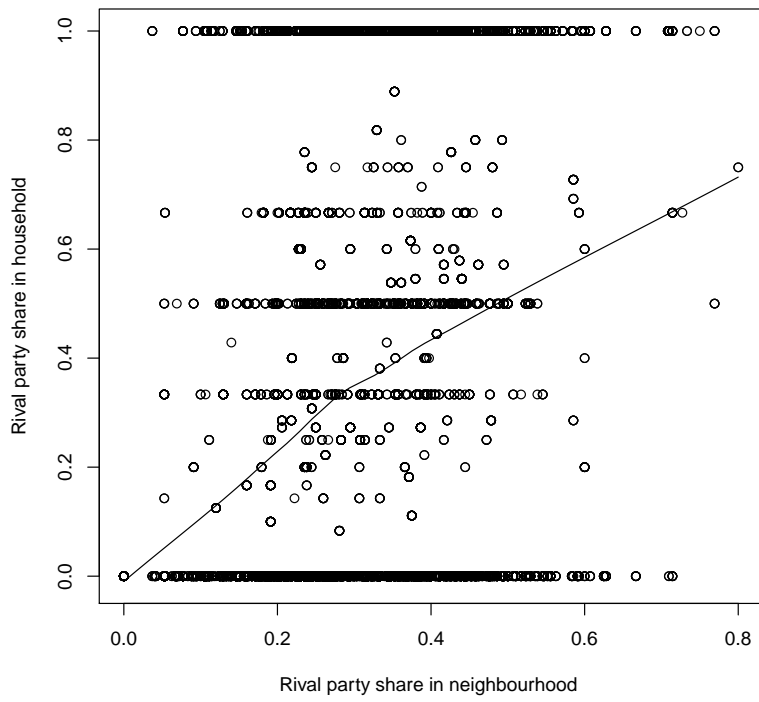
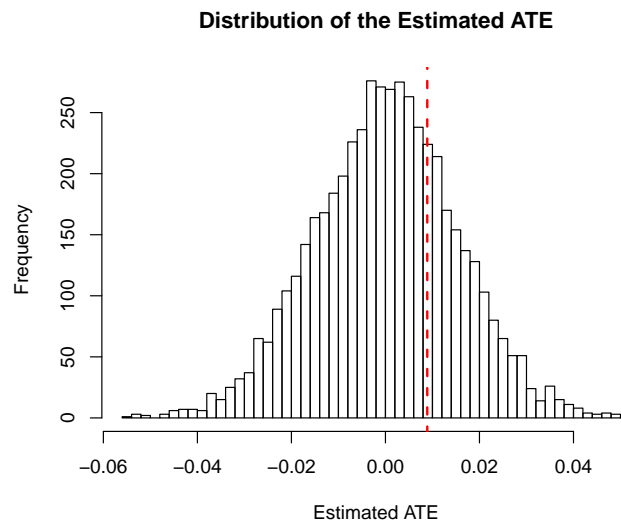


Figure A.4: *Correlation between inter- and intra- household heterogeneity (kernel smooth function)*

To check whether individuals in treatment streets are more likely to attrite than individuals in control streets, we estimate the F-statistic from regressing missingness in the outcome variable on assignment to treatment or control streets. We then simulate assignment to treatment and control 5,000 times under the sharp null hypothesis and compare the mean of the f-statistics we obtain under the sharp null to the actual f-statistics from our random assignment.

Figure A.5: Attrition figure

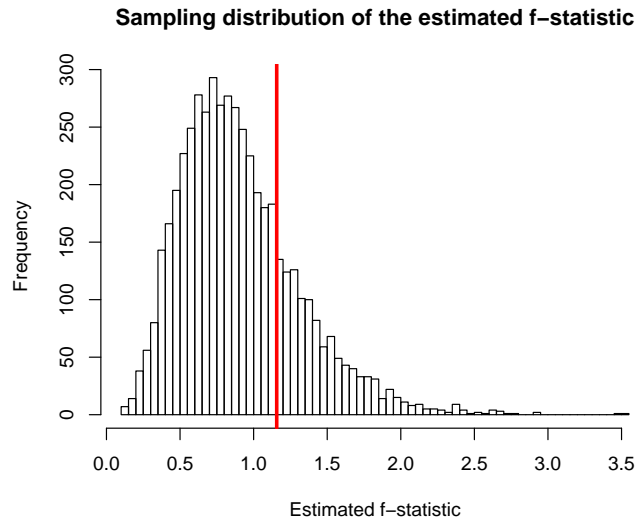


a) Ri-test for differential attrition (p-value: 0.55)

Table A.1: Balance table

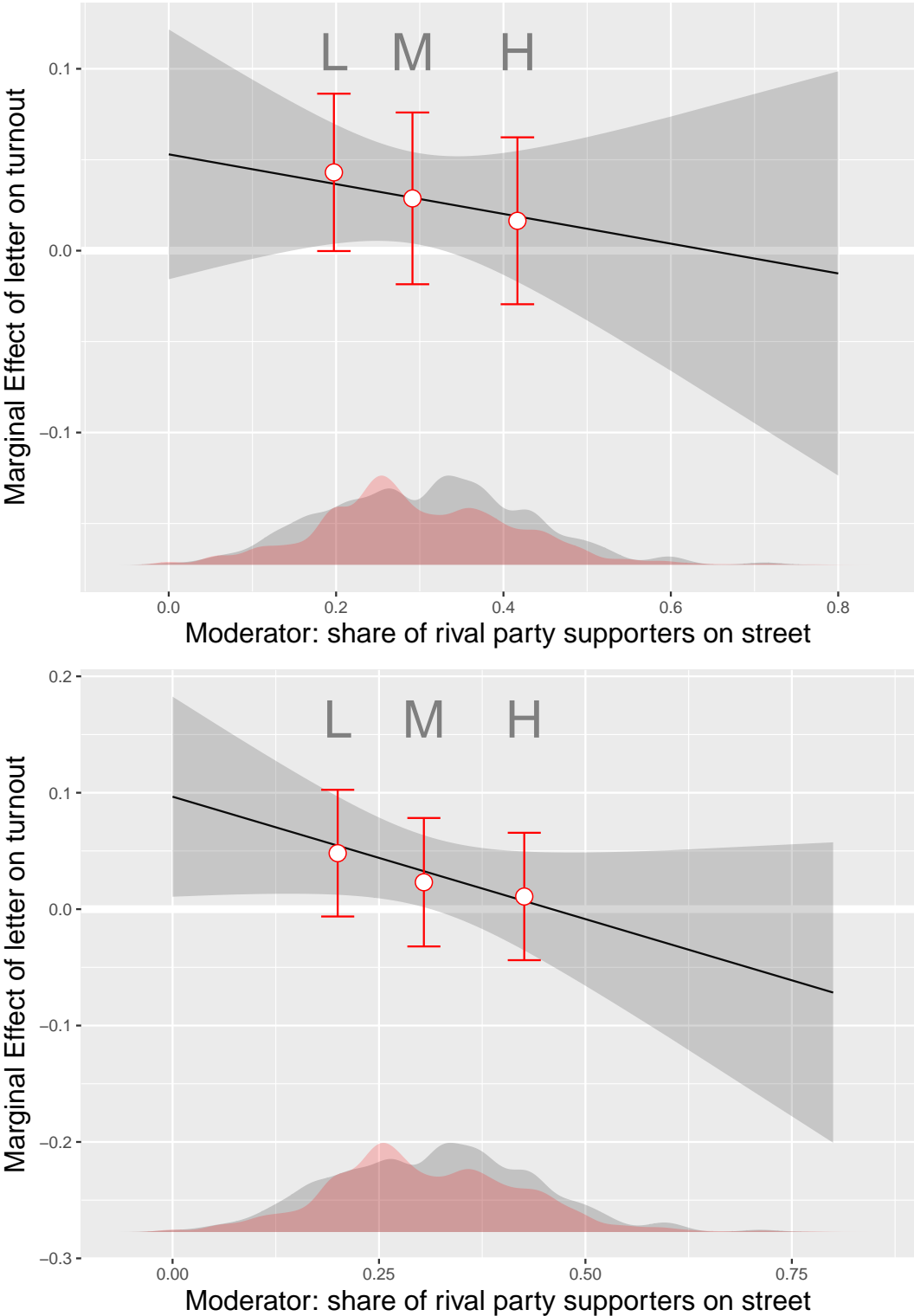
	Control streets	Treatment streets
Male	47.4%	46.5%
Voted 2013	35.3%	36.5%
Labour id	56.2%	59.0%
Conservative id	7.7%	7.7%
Rival Party id	36.1%	33.3%

Figure A.6: Balance figure



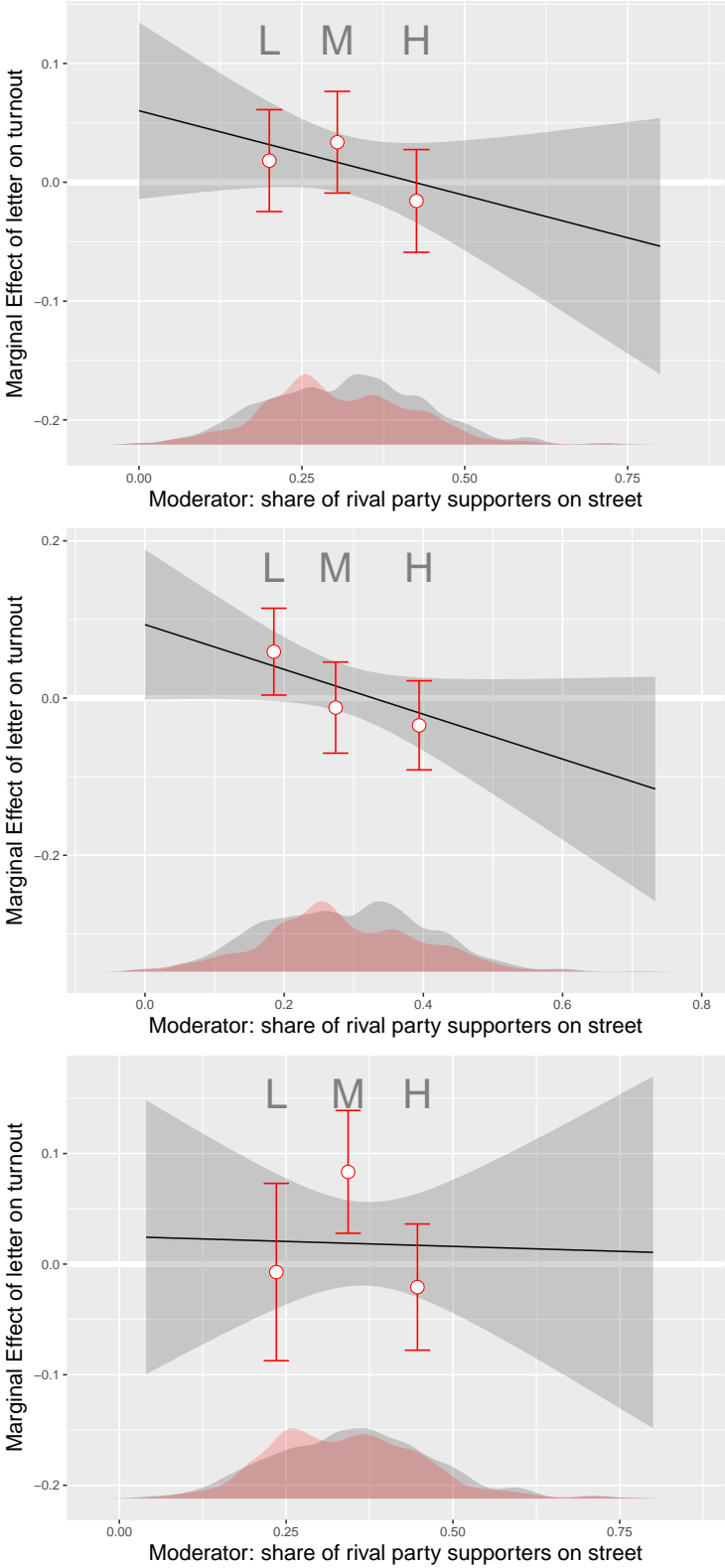
Ri-test for imbalance on pre-treatment covariates (p-value: 0.22)

Figure A.7: Marginal effects of leaflet conditional on partisan composition of the neighbourhood - all partisans



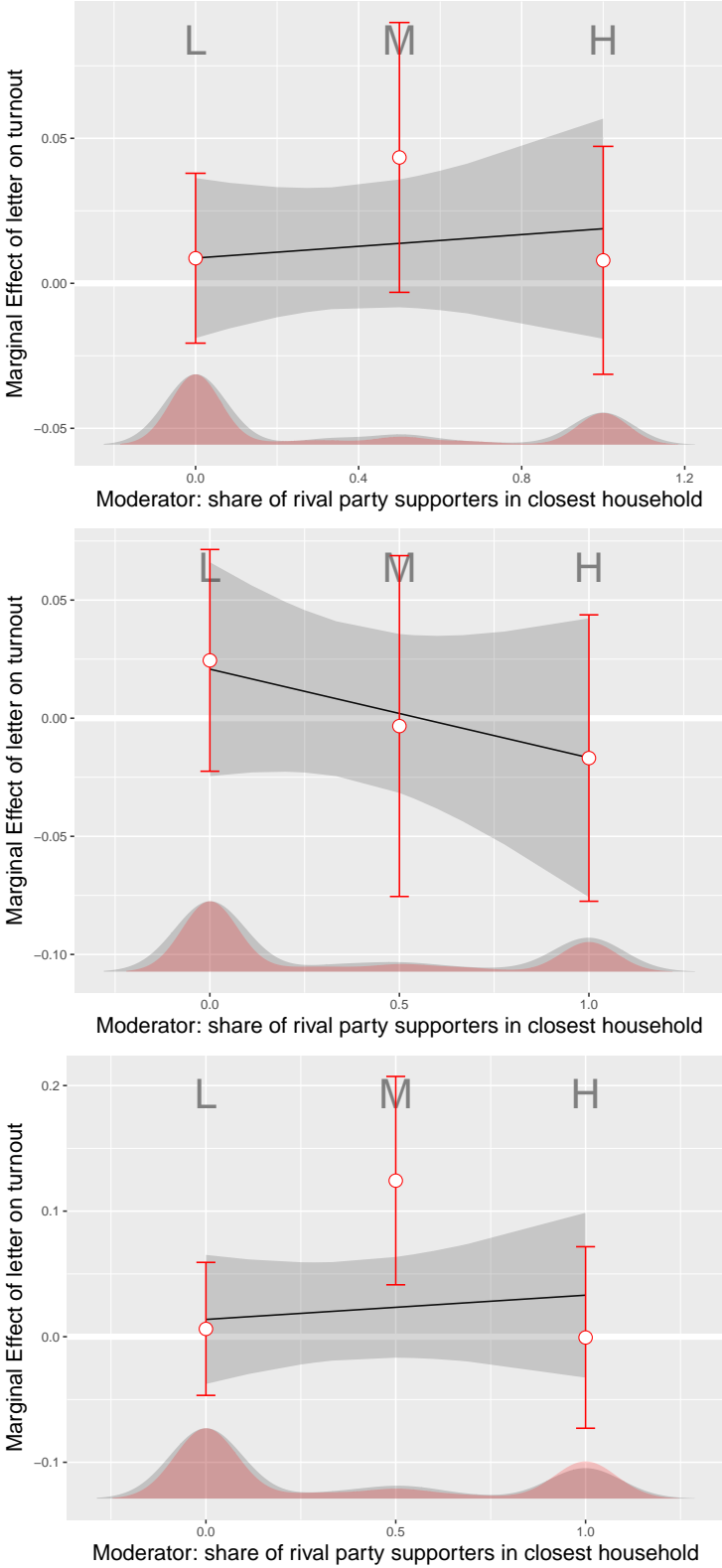
a) including non-identifiers (top) b) all party supporters (bottom)

Figure A.8: Marginal effects of leaflet conditional on partisan composition of the neighbourhood - covariate-adjusted



a) all partisans (top) b) Labour supporters (middle row) c) Rival party supporters (bottom)

Figure A.9: Marginal effects of leaflet conditional on partisan composition of closest household - covariate-adjusted



a) all partisans (top) b) Labour supporters (middle row) c) Rival party supporters (bottom)