First Impressions - Lasting Impressions? The long-term effects of candidate contact on voting intentions

Florian Foos*†

Abstract

Despite the bourgeoning literature on voter contact, the role of candidates in persuading voters has received little attention, beyond a focus on legislators' home styles. Findings from lab and survey experiments suggest that voters can quickly form impressions about candidates. However, field experimental evidence on candidates' ability to influence voters is rare, and the time frames of existing studies are limited. Drawing on two randomized field experiments, a telephone survey, and a unique panel dataset of individual voting intentions collected by the UK Labour Party, I study how introduction letters and personal meetings with a Parliamentary candidate affect voting intentions. Despite the presence of out-party loyalties, voters update their party preferences. Persuasion effects are non-negligible, last for up to six months, but decay over time. Leveraging the data collection routines of an election campaign, this study provides new insights into the long-term effects of candidate contact in high salience elections.

*Lecturer in Politics, Department of Political Economy, King's College London `florian.foos@kcl.ac.uk`, `www.florianfoos.net`

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Introduction

The study of political interactions and opinion formation in election campaigns has been a staple of political sociology and political behavior dating back to the classic voting studies of the Columbia School (Berelson, Lazarsfeld and McPhee, 1954; Lazarsfeld, Berelson and Gaudet, 1948). However, while important studies of personal interactions between parties and voters have kept their focus on relatively small geographic areas (Holbrook and McClurg, 2005; Huckfeldt and Sprague, 1995), the role of the local candidate in influencing voters' party preferences has received relatively little attention. A clear exception is the bourgeoning literature on legislators' home styles, and constituency service (Butler, Karpowitz and Pope, 2012; Fenno, 1978), which has shown that legislators both influence (Butler and Nickerson, 2011) and are influenced by their constituents (Butler and Broockman, 2017). However, it is an open question whether these persuasion effects would translate to the campaign context, and particularly to high-salience elections.

During General Election campaigns, candidates can directly interact with a non-negligible share of the local electorate. This observation is particularly important in countries such as the United Kingdom, where parliamentary constituencies are relatively small (Parliament, 2017). In the related field of political psychology, researchers have long maintained that voters are quickly able to make up their minds about candidates, often using heuristics related to non-policy attributes to form opinions (Druckman, Jacobs and Ostermeier, 2004; Mattes and Milazzo, 2014). Psychologists assume that first impressions matter (Rabin and Schrag, 1999), particularly in evaluative situations (Dougherty, Turban and Callender, 1994). The same mechanism, it has been argued, may apply to how voters form opinion about candidates (Holbrook, Krosnick, Visser, Gardner and Cacioppo, 2001; Lodge, McGraw and Stroh, 1989).

The empirical evidence on whether interactions that are meant to persuade voters are poweful enough to affect voting intentions, and whether effects last, is mixed. Based on recent advances in laboratory (Mitchell, 2012), survey (Coppock, 2016, forthcoming) and field (Broockman and Kalla, 2016) experiments, we should expect political persuasion, in general, to be possible, at least in the short-term. Moreover, studies by Barton, Castillo and Petrie (2014), Potter and Gray (2008) and Cantoni and Pons (2016) suggest that local

candidates matter in low-salience, local elections. Nevertheless, recent field experiments question the effectiveness of persuasion strategies in high salience elections (Bailey, Hopkins and Rogers, 2016; Kalla and Broockman, forthcoming).

One key limitation of the existing literature is the scarce availability of over-time data, combined with the challenge of drawing causal inferences from these data (Broockman, Kalla and Sekhon, forthcoming; Mitchell, 2012). Most studies define political persuasion as a change in political attitude or preference that can be causally attributed to the intentional, but non-coercive, effort of a political actor (McGraw and Hubbard, 1996; Mutz, Schniderman and Brody, 1996; Perloff, 2003). The challenges that studies face, which rely on non-randomized research designs when drawing causal inferences on the effects of campaign contact, are well documented (Arceneaux, 2010). Political actors strategically target voters who are more likely to support them (Nickerson, Friedrichs and King, 2006), and voters who are successfully contacted, differ on many observed and unobserved characteristics from voters who are not successfully contacted (Arceneaux, Gerber and Green, 2006, 2010). However, even if contact with a political actor is randomly assigned, the challenges of outcome data collection are non-negligible (Bailey et al., 2016).

While specific interactions between candidates and voters have the potetial to influence political preferences (Barton et al., 2014; Cantoni and Pons, 2016), the time frames and the settings in which persuasion field experiments have been conducted, are limited. Even the most advanced campaign field experiments that use repeated outcome measurement, follow experimental units for a maximum of three months (Broockman et al., forthcoming; Broockman and Kalla, 2016; Gerber, Gimpel, Green and Shaw, 2011). In contrast, modern election campaigns tend to start increasingly early, often one or even two years before the election. The duration of treatment effects therefore remains an open question.

In this study, I combine two randomized field experiments conducted in collaboration with a first-time Parliamentary candidate, a telephone survey, and a unique panel dataset of individual voting intentions collected by party canvassers between 2002 and May 2015 to answer the question, whether personalised interactions between the candidate and voters affect voting intentions. Labour Parliamentary candidate Rowenna Davis contacted a sample of voters with hand-written introduction letters 12 month prior, and another sample with introduction letters or on the door-step 10 months before Election Day. The detailed

voting intention data collected by canvassers was provided to me by the UK Labour Party's targeting and analysis team. To validate and supplement these data, I use a non-party affiliated telephone survey administered on the same sample. The unusually long time series of recorded individual-level voting preferences allows me to identify the long-term effects of early persuasion efforts on voting intentions throughout the entire campaign leading up to election day.

By showing that voters update their party preferences after interacting with the candidate, that effects are non-negligible, that they last for several months, but decay before voters go to the polls in the General Election, this paper contributes to our understanding of campaign dynamics and candidate effects in high-stakes elections. These findings are of importance because they suggest that decades of laboratory and survey experimental research can be reconciled with more recent field experiments that question the effectiveness of persuasion strategies in high salience campaigns. Moreover, personalised interactions are shown to be meaningful, no matter if they occur in person, or whether they are mediated by letters. Finally, by measuring voting intentions repeatedly using canvassing interviews, this study introduces a new means of leveraging the existing data collection routines of ongoing election campaigns for the scientific study of political persuasion.

The dynamics of election campaigns in marginal seats

General Election campaigns in the United Kingdom are usually divided into two periods, the "long-campaign", and the "short-campaign", which starts when the Prime Minister calls the election and during which Parliament is suspended. While the Prime Minister and Ministers dedicate themselves full-time to campaigning only during the short campaign, local campaigns in constituencies start increasingly early, often more than one year before the election (Cutts, Johnston, Pattie and Fisher, 2012). In marginal seats, it is no exception that candidates are nominated up to two years before Election Day.

Campaigns are therefore often thought of as two-stage processes, where the first stage is dedicated to voter identification and persuasion, and the second stage focuses on turning supporters out to vote (Enos and Hersh, 2015; Huckfeldt and Sprague, 1992; Johnston, Cutts, Pattie and Fisher, 2012). Most well-identified research on the effects of personalised

campaign contact has focused on the second stage of the election campaign, the weeks directly preceding polling day (Bailey et al., 2016; Barton et al., 2014; Cardy, 2005; Foos and de Rooij, 2017; Kendall, Nannicini and Trebi, 2015; McNulty, 2005; Nickerson et al., 2006). Given that voters are more likely to have made up their minds at the end rather than the beginning of the campaign period, recent field experiments have found that voter persuasion efforts late into a campaign are relatively ineffective (Bailey et al., 2016; Kalla and Broockman, forthcoming). But does this mean that voters are per se unresponsive to candidates' attempts to woo them, or is it just the case that partisan pre-dispositions are increasingly activated towards the end of a campaign (Berelson et al., 1954; Henderson, 2015)?

Persuasion in a partisan environment

Parliamentary candidates attribute great importance to personal interactions with voters. As former Conservative MP and British Prime Minister Theresa May's chief of staff Gavin Barwell writes, "If I was going to maximize my personal vote [...] I needed as many of my constituents as possible to get to know me as a person" (Barwell, 2016). The importance that candidates allocate to personal interactions with voters is often listed as one key aspect of the "personalisation" of politics in majoritarian systems such as the United States, the United Kingdom, Canada and Australia (Zittel, 2015). These personal interactions can both increase the "personal vote" for the candidate, and serve to promote the party the candidate is affiliated with (Karlsen and Skogerbø, 2015).

However, candidates and parties cannot influence voters at will. As Simon (1956) wrote, individual political behavior results from an interaction between individual preferences and the political environment in which the individual is embedded. Candidates operate within the constraints of a party system that has been shaped over decades, and, sometimes, over centuries (Aldrich, 2006). We need to take these constraints to persuasion seriously when thinking about the generalizability of results obtained in the lab, in surveys, or in non-partisan elections, to high-salience General Elections.

Serious candidates for political office affiliate with political parties. According to Aldrich (2006), party affiliation provides candidates with their basis of political support, their starting point in an election campaign. As Green, Palmquist and Schickler (2002,

222) emphasize, a "large fraction of the electorate start each campaign with a strong proclivity to support one candidate or another". The party affiliation of a candidate is often described as the most useful heuristic that the political environment provides to the voter during election campaigns (Arceneaux and Kolodny, 2009; Rahn, 1993; Snyder and Ting, 2002). The existence of parties and party attachments therefore generates "a latent expectation about which candidates a voter will support in a generic election" (Hillygus and Shields, 2008). It is well established that campaigns activate these predispositions in high salience elections by sending partisan cues and signals (Rahn, 1993). However, there is disagreement about the extent to which partisan cues increase individuals' resistance to persuasion efforts. One literature argues that, in high-salience elections, partisans should resist campaign communication if it is associated with a rival party (Campbell, Converse, Miller and Stokes., 1960; Iyengar and Simon, 2002; Zaller, 1992). If this was the case and supporters of parties were filtering messages from candidates who belong to rival parties, then those interacting with a candidate should be no more likely to intend to vote for her than voters who are not contacted by the candidate.

However, others maintain that the "perceptual screen" is incomplete (Fiorina, 1981), and are "sceptical of the notion that partisans ignore or reinterpret discordant information" (Green et al., 2002, 7). Lavine, Johnston and Steenbergen (2012) show that a significant share of partisans like candidates from other parties. The fact that party and candidate preferences do not always align has both been documented in the case of US Presidential candidates (Lavine et al., 2012) and for local constituency candidates (Blais and Daoust, 2017). Indeed, there is mixed evidence on whether partisans refuse to receive, and update their candidate evaluations, and to what extent these evaluations are traded-off againt other important considerations and identities, such as long-standing partisan attachments. As Gerber and Green (1998) have demonstrated, subjects can both hold strong partisan preferences, and update these preferences if they receive new, useful information. More recently, Coppock (forthcoming) has shown that there is little systematic heterogeneity in how subjects respond to persuasive messages in survey experiments.

But how can it both be true that voters update their candidate preferences based on new information, and that they are extremely likely to vote in line with their partisan predispositions? Going back to Berelson et al. (1954), political scientists have considered

the idea that the influence of long-term predispositions on voting intentions increases towards the end of an election campaign. As Berelson et al. (1954, 143) write "most of the campaign build-up of the majority is composed of previous defectors "returning home"". This means that while voters might consider switching parties based on their candidate evaluations, their partisan predispositions tend to, eventually, outweigh these short-term considerations. There is recent systematic evidence from US Presidential Elections that would support this theory (Henderson, 2015).

Face-to-face versus mediated interactions

"Persuasion involves the transmission of a message" (Perloff, 2003, 11). According to most definitions of persuasion, the message neither needs to be sophisticated, nor reasonable (Perloff, 2003). Both personal and mediated interactions can provide new, useful information to voters, for instance about candidate qualities, or policy positions (Gerber and Green, 1998). This information can either be transmitted via verbal content or via non-verbal heuristics and signals (Perloff, 2003; Potter and Gray, 2008). Due to self-selection into politics, candidates, on average, should be better skilled at campaigning, and at interacting with voters, than the average citizen. Moreover, Galasso and Nannicini (2011) show that parties nominate higher quality candidates in close electoral races.

In general, the literature would suggest that face-to-face interactions are more powerful at persuasion than mediated interactions (Green, Aronow and McGrath, 2013). This view is also widely shared by political candidates (Barwell, 2016). However, the mechanism that would lead face-to-face interactions to be more persuasive than mediated interactions is still unclear (Broockman and Kalla, 2016).

Moreover, there is some evidence from both survey and field experiments that would challenge this view. Survey experiments show that voters respond to photographs (Mattes and Milazzo, 2014), and other non-policy cues. Moreover, multiple authors argue, based on field experimental evidence, that it is not the face-to-face nature of the interaction that matters, but perceived effort (Potter and Gray, 2008) and the noticeability of the intervention, which is often correlated with personal interaction (Dale and Strauss, 2009).

To allow for a fair test, I therefore use hand-written letters that display effort on behalf of the candidate, or include visual cues such as photos. On these two dimensions,

mediated interactions hence match face-to-face interactions with the candidate. While this choice does not allow to disentangle the specific mechanism that may lead to the observed treatment effects, considering the over-time dimension of the study, I traded a design that would allow for a more finely-grained analysis for maximum impact.

A typical first time candidate in a marginal seat

The study took place in the Southampton Itchen Parliamentary constituency, a Labour-Conservative marginal seat in the South of England. By studying the dynamics of opinion formation in detail within the geographical boundaries of a specific locality, this study applies a similar research strategy as some of the best-known classics of the opinion formation literature (Berelson et al., 1954; Holbrook and McClurg, 2005; Huckfeldt and Sprague, 1995).

Until the 2015 General Election, Southampton Itchen was represented by retiring former Labour cabinet minister John Denham. Southampton Itchen was a target seat for the Conservative Party. Labour candidate Davis, a former journalist and local councillor, was seen as a strong candidate to succeed Denham and was tied or leading in constituency polls throughout most of the campaign (Ashcroft, 2014). Nevertheless, on an unexpected national swing against Labour, she lost the seat by a margin of 5.2 percentage points.

Davis was a typical first time Labour parliamentary candidate. 33% of Labour candidates, and 41% of newly elected Labour MPs were, like Davis, younger than 40 years (Lamprinakou, Morucci, Campbell and van Heerde-Hudson, 2017). 52% of Labour candidates in marginal seats were women (van Heerde-Hudson, 2015). Moreover, like Davis, a large majority of candidates and MPs of all parties was university educated, and a large share had a background in a politics-related field, journalism in Davis' case (Lamprinakou et al., 2017).

Limitations and data-related challenges

During an election campaign, there are many factors that compete for voters' attention with local constituency candidates: the state of the national economy, the salience of political issues that may favor one party over another, and the popularity of the party leaders

(Vavreck and Sides, 2014). All of these factors appear to have played a role in the 2015 UK General Election (Cowley and Kavanagh, 2016). Moreover, any interaction between a randomly assigned intervention and time is a treatment-by-covariate interaction, and therefore, multiple potential explanations for observed patterns of stability or decay may be highly correlated, and indeed, confounded. We should therefore show extreme caution when speculating about the causes of stability or decay. If we are unwilling to impose very strong assumptions, it is impossible to disentangle time-effects from the influence of contextual factors that vary over time. However, the unusually long time series in pre- and post-treatment voting intentions should help in disentangling the two theories of opinion formation discussed in this paper; a general resistance to taking messages from rival parties into account versus a conception of party support, which does not prevent individuals from taking discordant information into account, but which leads them to increase the weight of long-term dispositions towards the end of a campaign.

Moreover, researchers face specific challenges when attempting to identify the effects of campaign contact on voting intentions in real-world elections. Persuasion is more difficult to study than mobilization (Nickerson et al., 2006). While turnout records are public and easily accessible in the United States and in Britain, vote choice, of course, is secret. This poses multiple challenges to campaigns and researchers alike. First, they either need to rely on self-reports or aggregate data. When relying on individual-level data, researchers struggle with the twin challenges of low response rates to post-treatment surveys and the high costs of conducting such surveys. It is well-known that response rates to telephone surveys are in decline. Online panel surveys in this regard provide some help. They are a more cost-effective means of studying persuasion at the individual level (Broockman et al., forthcoming), but equally prone to generalizability challenges. Since online panel recruitment usually precedes the experiment and only subjects willing to respond to the survey will be part of the experimental sample, it is an open question whether results are generalizable to the great majority of non-respondents. Aggregate data allow researchers to measure vote share without non-response bias (Pons, 2016; Rink, 2017), but also have important drawbacks. When studying the duration of persuasion effects, this approach is unworkable because it limits the researcher to measuring vote shares at one time point during the election cycle.

Using canvassing data for in-cycle experimentation

By introducing and validating a voting intention measure based on canvassing interviews, this paper demonstrates that 'embedded' persuasion experiments can be conducted at low cost and during the election cycle. Canvassing data is self-reported voting intention data collected by party volunteers in door-to-door visits or phone conversations, mainly for the purpose of targeted GOTV. While canvassing data has been used in field experiments as a pre-treatment covariate (Foos and de Rooij, 2017), this paper is the first to employ it as an outcome variable.

In addition to its low monetary costs to the researcher, the unobtrusive nature of the data generation process has unique advantages: In marginal constituencies, canvassing data is available for a large share of constituents, and is updated every time a campaign succeeds at contacting a constituent. British voters are used to volunteering their voting intentions to canvassers affiliated with political parties. It is widely known that political parties in the UK use canvassing data to target their GOTV efforts (Anstead, 2017). As Barwell writes, "Canvassing may look like door-to-door selling, but in fact it's opinion research. We don't knock on people's doors to persuade them to vote Conservative. We do it to get accurate information about how people are likely to vote" (Barwell, 2016, chapter 6). Thanks to standardized reporting procedures coordinated by party headquarters, the data is comparable across constituencies within parties, and to a lesser extent across parties that follow similar reporting procedures, such as the UK Labour Party and the UK Conservative Party. Canvassing data is usually stored in the party's targeting database that is updated whenever a volunteer contacts a specific household. In competitive marginal seats such as Southampton Itchen, contact rates with eligible voters are high, and voting intentions are available for a large proportion of the local electorate, often for multiple election cycles.

I rely on a unique dataset of time-stamped voting intentions collected by canvassers in the Southampton Itchen Parliamentary constituency between May 2002 and 7 May 2015, the day of the 2015 UK General Election. The complete, anonymised dataset includes 135'203 records of individuals' voting intentions during this period. The data is best described as an unbalanced panel, meaning that some individuals are observed repeatedly, while others drop in and out of the panel, for instance because they move away, or they

become eligible to vote. The data on voting intentions is supplemented with official turnout records from the public register, for the period between 2010 and 2013. Finally, I match these data to treatment assignment via a unique person and household number.

Table 1: Correlation between Labour vote intention in year *t (rows)* and Labour vote intention in year *t+n (columns)*

	t+n				
t	2010	2011	2012	2013	2014
2009	.75 (723)	.74 (717)	.71 (889)	.69 (294)	.64 (555)
2010		.76 (3723)	.77 (4649)	.71 (1364)	.69 (3046)
2011			.81 (4651)	.81 (1407)	.73 (2962)
2012				.86 (2362)	.80 (4594)
2013					.82 (1730)

Note: polychoric correlation coefficients. All results are significant with p<0.001. N in parentheses.

Table 1 assesses the reliability of the data by looking at the polychoric correlations between reported Labour voting intentions as measured in year t and Labour voting intentions in successive years at $t+n$. As shown in Table 1 correlations between successive election cycles are strong, ranging from .75 between 2009 and 2010, to .86 between 2012 and 2013. As one would expect, correlations get weaker with time, but remain strong throughout. The correlation between Labour voting intentions in 2009 and Labour voting intentions in 2014 is .64.

Table 2 compares respondents and non-respondents to Labour canvassing and to a non-affiliated telephone survey on pre-treatment voting intentions and turnout in the years pre-dating the experiment. Since the experimental sample targeted mainly supporters of rival parties, registered Labour voting intentions in both the telephone and the canvassing samples are relatively low. As Table 2 shows, canvassing interviews are more likely to sample subjects who, in previous election cycles, were more sympathetic to the Labour Party. The difference to non-respondents, on average, is around 15 percentage-points.

This is not the case with the telephone survey, where respondents are equally likely to have supported Labour in the past as non-respondents. These numbers suggest that, unsurprisingly, campaigns behave strategically in relation to who they interview. Both Labour canvassers and telephone interviewers were more likely to collect outcome data from subjects who are more politically engaged. Based on turnout in prior local and national

Table 2: Attributes of Respondents and Non-Respondents

	Telephone Survey		Canvassing Interviews	
	Respondents	Non-Respondents	Respondents	Non-Respondents
Labour 2014	0.0%	0.0%	2.9%	0.8%
Labour 2013	0.9%	1.2%	4.5%	1.0%
Labour 2012	5.5%	4.3%	11.6%	3.6%
Labour 2011	5.5%	5.3%	13.8%	4.1%
Labour 2010	7.3%	8.0%	13.2%	4.9%
Turnout 2013 LE	25.5%	18.7%	24.2%	11.8%
Turnout 2012 LE	33.6%	30.8%	36.8%	21.4%
Turnout 2010 GE	80.9%	74.1%	85.1%	53.8%
N	110	487	818	617

Note: LE = Local Election, GE = General Election. Experimental sample excludes Labour voters. Canvassing sample includes household members.

elections, respondents to the canvassing survey were between 12 (2013 local election) and 31 percentage-points (2010 General Election) more likely to vote than non-respondents. The same pattern can be observed in the telephone survey, however, differences are not as large.

Compared to online panels, canvassing data is more likely to oversample subjects who are unrepresentative of the larger electorate in relation to their voting intentions, and they are equally likely to oversample subjects who are more politically engaged (Broockman et al., forthcoming, 46).[1] While relying on canvassing interviews therefore comes with limitations in relation to the generalizability of the results to the entire population of eligible voters, the internal validity of the experiment remains unaffected. Following Bailey et al. (2016), differential attrition tests using randomization inference (Gerber and Green, 2012) show that in both experiments, treatment assignment does not significantly predict whether voting intention data will be observed or unobserved following treatment.[2]

Finally, I compare post-treatment voting intentions as recorded by party canvassers to post-treatment voting intentions as recorded in the non-party affiliated telephone survey. Overlapping canvassing and telephone data is available for a total of 100 subjects that were part of the first experiment. Out of 100 subjects, 80% were classified as belonging to the same category (Labour or not Labour) using these two different methods of outcome

[1] For comparison, the method proposed by Broockman et al. (forthcoming) resulted in an experimental sample, where turnout was 20 percentage-points higher among respondents than among non-respondents in the 2014 US midterm election, and 11 percentage-points higher in the 2012 US Presidential election.

[2] See Figures A.5 and A.6 in the Supporting Information.

data collection. Importantly, there is no differential misclassification. 81% of subjects were classified as belonging to the same category in the treatment group, and 79% of subjects were classified as belonging to the same category in the control group. This difference is not statistically significant. Assuming that respondents had no incentive to answer untruthfully to non-partisan interviewers, after having been contacted, subjects in the treatment group were no more likely than subjects in the control group to misstate their voting intentions.

Experimental Design

The aim of both experiments was to test whether Davis was able to persuade voters who supported parties other than Labour (experiment 1) as well as undecided voters (experiment 2) using letters and face-to-face contact.[3] The target samples for both experiments were determined in collaboration with the candidate and her campaign team.

Experiment 1: Hand-written letters

The first experiment aimed at persuading voters of the major rival party, the UK Conservative Party, and voters of smaller parties, particularly of the UK Independence Party (UKIP), the Liberal Democrats (LibDem), and the Green Party to switch their support to Labour. The original experimental design had two stages. In the first stage subjects who were on record to support a party other than Labour were randomly assigned to receive a hand-written letter from the Labour candidate introducing herself and offering to meet the constituent for tea, or to control (no letter). The letter was accompanied by a business card with her contact information. The second stage consisted of a meeting between the candidate and the constituent. Since only three subjects met Davis for tea, it is impossible for the registered effects to have occurred mainly from personal meetings.

The experimental sample included 597 households. There were three conditions that needed to be satisfied for a household to be included in the experimental sample. First, the sample was restricted to households that had an available landline number. This restriction was important because subjects were interviewed by telephone in the month following the treatment. Second, all households that included a Labour voter or where no data on

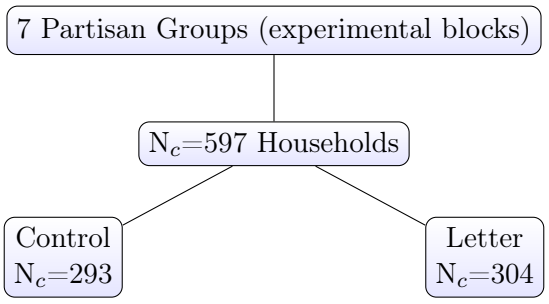
[3]The research was approved by the Research Ethics Committee of the Department of Sociology at the University of Oxford.

past voting intentions was available were excluded from the experimental sample. This information was based on the local party's canvassing of constituents over the past years. I then randomly chose one person per household to be the experimental subject. The letter would be personally addressed to this subject. Experimental subjects and their household members were then grouped by the experimental subject's voting intention into seven distinct experimental blocks: Conservative supporters, Liberal Democrats, Green Party supporters, UKIP supporters, voters that volunteered that they were 'against Labour', and those who were undecided, or refused to volunteer their party support, but were on record to have supported parties other than Labour in the past. Table A.1 in the Supporting Information displays the breakdown of party preferences in the experimental sample.

Treatments

Within these seven partisan blocks, I randomly assigned subjects with a probability of around .5 (depending on whether the numbers in each partisan block were odd or even) to either receive a hand-written letter accompanied by a business card or to receive nothing. The random assignment is displayed in Figure 1 and the letters and business cards that were sent to respondents are shown in Figures A.1 and A.2 in the Supporting Information.[4]

Figure 1: Experiment 1 – Block and Cluster Random Assignment



[4]Subjects who were assigned to treatment were then reassigned using a 2x2 factorial design. Factor 1 slightly varied one sentence in the letter and factor 2 varied if the business card included a photograph of the candidate, or not. The random assignment therefore resulted in 5 experimental conditions: control, and 4 combinations of letters and business cards. Since the factorial analysis would be underpowered, I restrict the analysis to the simple treatment versus control comparison.

Collection of Outcomes

I use two types of outcome data to measure post-treatment voting intentions: voting intentions based on a telephone survey that was not associated with the Labour Party, and voting intentions as recorded by Labour canvassers who were unaware of treatment assignment. The telephone survey was fielded three weeks after the introduction letters were sent on 15 April 2014, and was completed on 20 May 2014. 21% (120 subjects) agreed to take part in the survey. 110 subjects answered the voting intention question for the General Election (58 in the control group, and 52 in the treatment group). This response rate is comparable to other telephone surveys (Barton et al., 2014). In contrast to Bailey et al. (2016), the difference in response rates between treatment and control group is not statistically significant (p-value of .38).

Experiment 2: Personal visits

The second randomized field experiment took place in April and May 2014. The goal was to test whether Davis was effective at convincing undecided voters to support her candidacy, and whether she was more effective in doing so than party volunteers, or a letter, which made the case for her candidacy. Another explicit aim of the candidate's doorstep visits and letters was to build support for Labour candidates in the 2014 Southampton City Council Election, which took place on 22 May 2014. Before the candidate and her team started canvassing for 200 hours, I block- and cluster-randomly assigned 3'376 households located in 6 electoral wards to one of four experimental conditions: a personal campaign visit by the candidate (+letter), a personal visit by a campaign volunteer (+letter), the same letter without a personal visit, or nothing (control). In both door-to-door treatments, campaign contact consisted of the candidate introducing herself or being introduced by the volunteer, and of an ensuing unscripted conversation centering around local and national issues. The script is displayed below, and she describes her canvassing experience in the Supporting Information.

> RD: Good morning/afternoon, sorry to trouble you! My name's Rowenna and I'm your Labour parliamentary candidate for the elections next year. We're just calling around to see if you had any issues or concerns you might like to

raise in the community?

(If answers yes, pursue, if answers no, continue)

Yes, it does seem like a lovely area!

Do you know your MP John Denham at all?

(they almost always do)

Well he's retiring next year after 23 years service, so I'm "the new John Denham"! It's just nice to say hello.

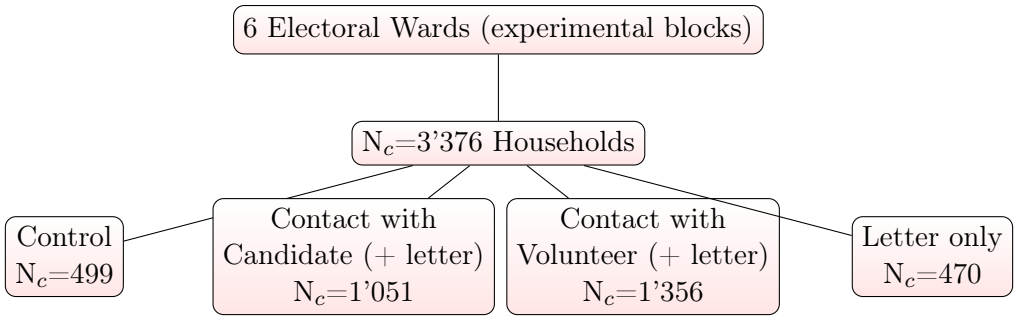
Also, do you know you have local elections coming up in May? Your candidate is XY. He's/she's a lovely man/woman who works very hard.

If there's anything else we can do for you, please do get in touch. My details are on the letter.

Thanks so much for your time. Have a lovely day!

The letter, which was signed by Davis and included her photo, provided information about the candidate and her motivations for running for Parliament. It is displayed in Figure A.3 in the Supporting Information. Treatment assignment is displayed in Figure 2 below.

Figure 2: Experiment 2 – Block and Cluster Random Assignment



It is important to emphasize that post-treatment outcome data were collected by Labour canvassers as part of the campaign's routine voter identification operation. Canvassers were unaware of treatment assignment, and did not know that the experiment had taken place.

Balance checks

In order to check for balance on pre-treatment covariates, I follow the standard randomization inference procedure outlined at length in Gerber and Green (2012) and Aronow and Samii (2012). I test whether any existing covariate imbalances between the experimental groups in the telephone survey and the canvassing interview based outcome samples are likely to have occurred due to random sampling variability. Figures A.7 and A.8 in the Supporting Information show that treatment assignment in both field experiments is not significantly related to pre-treatment covariates. The pre-treatment covariates used in both balance checks are turnout in the 2010 General Election, and the 2011, 2012, and 2013 local elections. Moreover, in the first experiment, I use available covariate data on gender, age, and electoral ward. For the second experiment, which was blocked on electoral ward, and for which age and gender data are not available, I use pre-treatment voting intentions based on canvassing interviews from 2002-2014.[5] I include dummies for experimental blocks in both analyses. To conduct the balance checks I use linear regression to regress treatment assignment on all available pre-treatment covariates, and estimate the f-statistic. Next, I compare the f-statistics to the mean of the f-statistics that I obtain after re-assigning subjects to treatment or control group 10'000 times. The p-value of the balance check is the share of random assignments that results in a f-statistic that is larger than the one that I obtain from my assignment.

Results

Table 3 reports the effects of the hand-written letters on voting intentions collected by non-partisan telephone interviewers, and 4 shows the effects estimated using post-treatment canvassing interviews. Figure 4 displays the effects of the door-to-door visits and the letters from the second experiment on subsequent Labour voting intentions as recorded during canvassing interviews.

Since it was impossible to know whether subjects opened the letter, all effects displayed in Table 3 are Intent-to-Treat (ITT) estimates. Column 1 presents the manipulation check

[5] I cannot use voting intention data for the first experiment because random assignment was blocked on the subjects' most recent recorded voting intention.

Table 3: Telephone survey – Effects on recall, candidate evaluations & voting intentions

	Recall contact from Davis	Eval. Davis (LAB) positiv.	Eval. Smith (CON) positiv.	LAB voting int. LE	LAB voting int. GE
Control	29.3%	16.4%	58.3%	4.9%	5.5%
Letter	44.0%	27.6%	56.5%	9.8%	13.6%
ITT	15.2*	11.1	-1.7	4.9	8.2
95% CI	[-2.6, 32.9]	[-4.3, 26.9]	[-18.5, 15.2]	[-6.3, 14.5]	[-2.6, 19.6]
Cov-adj ITT	19.7*	7.8	-1.8	10.1*	9.9
95% CI	[0.9, 39.2]	[-8.5, 24.2]	[-20.7, 15.1]	[-0.7, 21.1]	[-1.9, 22.8]
N	115	116	115	102	110

Note: **p<0.01, *p<0.05 (based on one-tailed hypothesis tests using randomization inference), accounts for block random assignment. LE = Local Election May 2014, GE = General Election May 2015.

administered in the post-treatment telephone survey. Subjects were asked whether they had been contacted in the previous month by the Labour Parliamentary candidate. No reference was made to letters, or to the field experiment. This manipulation check is hence a conservative test of whether the letter from the Labour candidate left an impression with subjects. Table 3 shows that subjects in the treatment group were 15 percentage-points more likely to recall contact by the Labour candidate, compared to subjects in the control group. When adjusting for pre-treatment covariates, the ITT estimate amounts to 20 percentage-points.[6] Both estimates are significantly different from zero, with p=0.04 and p=0.03, using a one-tailed test. This result shows that the intervention was memorable, at least in the short-term.

Columns 2 and 3 reports the ITT effects of the letter on candidate evaluations as recorded in the telephone survey. Positive evaluations of Davis are 11 percentage-points higher in the treatment group than in the control group. The ITT effects are substantially large, but not significantly different from zero using conventional standards. Evaluations of Smith, the Conservative candidate, remained unaffected by the treatment. Finally, as displayed in columns 4 and 5, the letter appears to have positively affected Labour Party voting intentions for the local and the General Election by around 10 percentage-points (covariate-adjusted). These results should be treated as suggestive given the relatively small effective sample size of the telephone survey. Their main purpose is to serve as benchmarks against which to compare results based on canvassing interviews.

[6] I use the same pre-treatment covariates in the analysis as specified in the balance section.

Table 4 shows the effects of the hand-written letters on Labour voting intentions as recorded during post-treatment canvassing interviews between the day the letters were posted, and the day of the General Election, 13 month later. All voting intentions were recorded by Labour canvassers who were entirely unaware of subjects' treatment status. The results for the complete sample are displayed in Table 4, column 3. To estimate the short- and long-term effects of the treatment, I use the mean number of the days between the treatment and the 2015 General Election, to split the sample into two time periods. The results are robust to splitting the sample into two equally sized subsamples instead (see Table A.2 in the Supporting Information). The voting intentions in Table 4 column 1 were collected between April 2014 and October 2014, and the outcomes in column 2 were measured between November 2014 and May 2015.

Table 4: Experiment 1 – Effects of letter on Labour voting intentions (canvassing interviews)

	April - Oct 2014	Nov 2014 - May 2015	April 2014 - May 2015
Labour Control	12.0%	20.3%	18.3%
Labour Letter	25.9%	23.9%	24.7%
ITT	13.8*	3.7	6.5
95% CI	[1.7, 25.8]	[-7.6, 14.9]	[-3.2, 16.0]
Cov-adj ITT	17.1**	6.0	8.0*
95% CI	[3.4, 30.7]	[-4.9, 16.8]	[-1.6, 17.2]
N	207	611	818

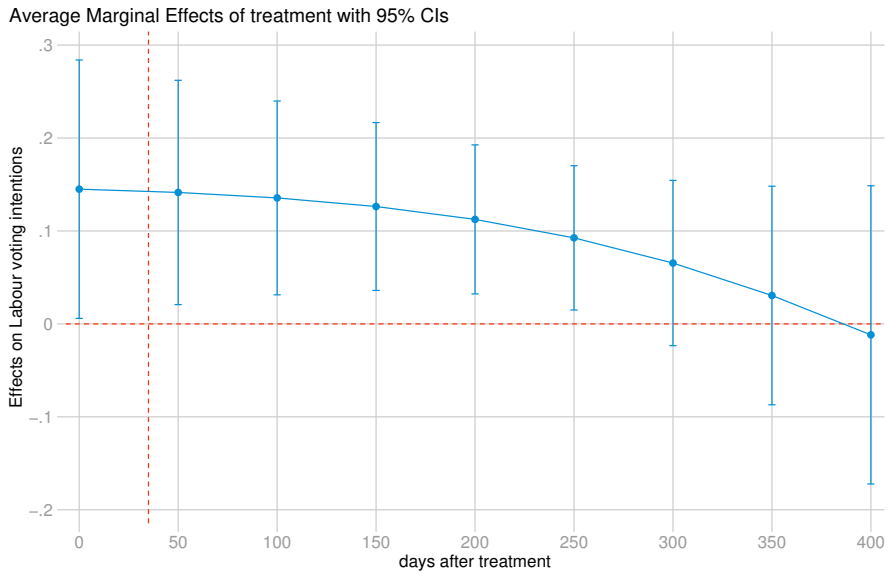
Note: **p<0.01, *p<0.05 (based on one-tailed hypothesis tests using randomization inference), accounts for block and cluster random assignment.

In period 1, the canvassing-based measure results in an unadjusted ITT estimate of 14 percentage-points. Covariate-adjustment moves the point estimate of the ITT slightly upwards. Both estimates are significantly different from zero with p=0.02 (unadjusted) and p<0.01 (covariate-adjusted). In period 2, however, the point estimates are much smaller than in period 1. Both unadjusted and covariate-adjusted treatment effects decline by around 10 percentage-points compared to the first period, and are no longer distinguishable from zero in statistical terms.

Figure 3 plots the changes in predicted Labour voting intentions between April 2014 and May 2015, based on a logistic regression model, which estimates Labour voting intention as a function of assignment to treatment or control, the day of outcome measurement via canvassing (where 0 is the day the treatment was administered), the interaction between the

two variables, dummies for experimental blocks, and the full set of pre-treatment covariates.[7] Standard errors are clustered at the level of treatment assignment, the household. The dotted vertical line marks the day of the 2014 UK local elections, which were held on the same day as the European elections.

Figure 3: Letter experiment – Decay of persuasion effects



Note: 95% Confidence Intervals, covariate-adjusted, dotted vertical line indicates date of the UK local elections (22 May 2014).

Figure 3 confirms that the treatment effect of the letter is long-lasting, and that differences in voting intentions between the treatment and the control group only become statistically undistinguishable from zero approximately 250 days after the treatment. The predictions based on the logistic regression model suggest that the letter affected voting intentions at the time of the 2014 UK local elections. Nevertheless, the effects are predicted to entirely disappear at the end of the General Election campaign. The formal interaction between the treatment and the day of measurement results in a p-value of 0.07 using a two-tailed test (see Table A.4 in the Supporting Information). Figure A.9 shows the same plot based on logistic regression without pre-treatment covariates. The statistical and substantive interpretation of the results remains unchanged.

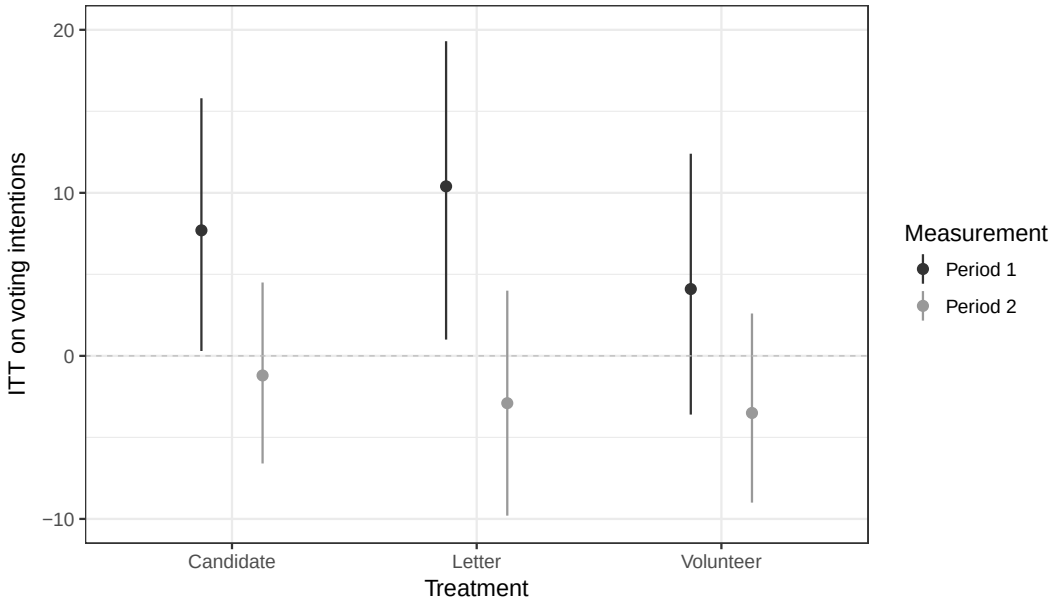
Figure 4 and Table A.3 show the effects of the door-to-door visits and letters on voting intentions as recorded post-treatment by canvassers. The first period of outcome

[7] Plots are done in STATA 14 using the plottig figure scheme (Bischof, forthcoming).

measurement spans the six months from May 2014, when the treatments were administered, to November 2015, and the second period includes the six months between December 2014 and 7 May 2015, the day of the 2015 UK General Election.

The results of the canvassing and letter experiment are substantively similar to the results of the letter experiment reported in Table 4. In spring, summer and fall 2014, Labour voting intentions were significantly higher among subjects contacted by the candidate personally, and among subjects who received the letter introducing the candidate, than among subjects in the control group that were not contacted.

Figure 4: Effects of canvassing and letters on voting intentions

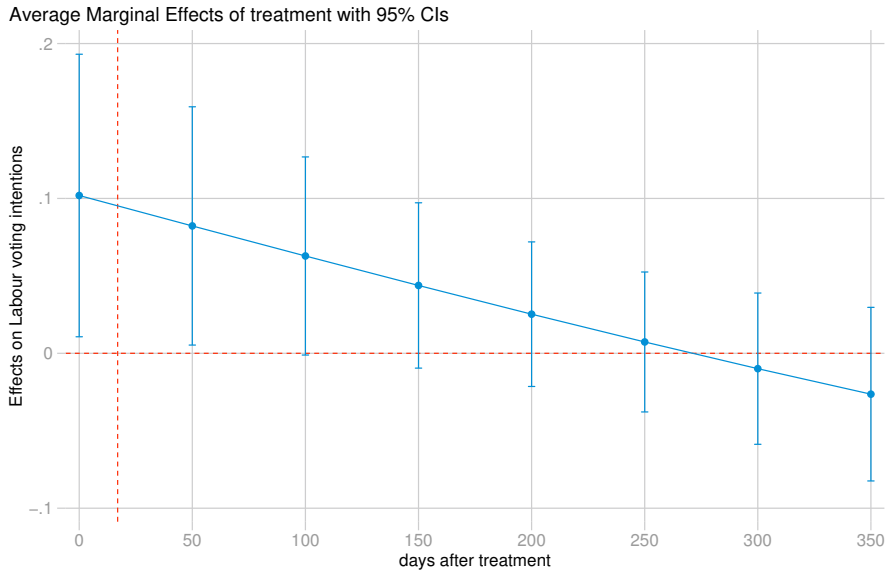


Note: 95% Confidence Intervals, covariate-adjusted.

As Figure 4 shows, in the first six months following treatment, ITT estimates range from 6 percentage-points for the candidate's door-to-door visit, to 10 percentage-points for the letter. While the ITT effects of the letters are slightly larger in terms of the magnitude of the point estimate than the ITT of the door-to-door visits, the effects are not significantly different from each other. The magnitude of the effects of the letter may at first appear surprising. However, it is important to recall that letters were designed to be as personal as possible. In contrast, campaign volunteers were ineffective at persuading a significant number of subjects to change their voting intentions. This null result may be a function of the low volunteer contact rate (17.1% compared to 42.4% for the candidate).

If we look at compliers, households that were successfully contacted (see Supporting Information Table A.3), a conversation with the candidate resulted in a CACE of 17 percentage-points (unadjusted) or 20 percentage-points (covariate-adjusted). That means that 2 in 10 subjects who had a conversation with Davis initially changed their voting intention to Labour. In contrast, treatment effects are substantially small, and indistinguishable from zero during the second period during which outcome data was collected. Following the analysis of the previous experiment, Figure 5 plots the marginal changes in predicted probabilities based on a logistic regression of Labour voting intentions on assignment to either the candidate or the letter treatment, or to the control group, the day of the outcome measurement (where 0 is the day the treatment was administered), the interaction between treatment assignment and day of measurement, experimental block dummies, and the full set of pre-treatment covariates. Covariate-adjusted predictions are visualised in Figure A.10, and the results of the logistic regression models are reported in Table A.4.

Figure 5: Letter and canvassing experiment – Decay of persuasion effects



Note: 95% Confidence Intervals, covariate-adjusted, dotted vertical line indicates date of the local election (22 May 2014).

The results from Figure 5 confirm the findings of the letter-writing experiment. The treatment effects are predicted to decay over time, and the interaction with day of outcome

measurement is significant with p=0.03, using a two-tailed test (see Table A.4 in the Supporting Information). The results of both experiments, conducted on independent samples, suggest that, initially, the candidate's persuasion efforts were highly effective at changing subjects' voting intentions. As the vertical line in Figure 5 indicates, the effects are predicted to have lasted long enough to impact subjects' party choice in the 2014 Southampton City Council election, which took place around three weeks after letters were delivered, and the candidate contacted voter. Aiding Labour's chances of retaining their majority in Southampton City Council was an explicit secondary aim of the canvassing campaign, which was likely met. However, as the General Election campaign heated up in winter 2014/2015, the effects of candidate contact decayed.

Discussion and conclusion

This paper provides systematic evidence on the short- and long-term effects of interactions between a first time parliamentary candidate and constituents on voting intentions over the course of an entire General Election campaign. By introducing herself to voters in person or via personalised letters, the candidate left a positive first impression with voters. This impression lasted for multiple weeks, and in the case of the hand-written letter, for multiple months. At the same time, effects decayed before election day, leading to the conclusion that, although voters took the interaction with the candidate into account when forming party preferences, impressions did not last long enough to impact their voting decisions in the General Election.

This paper makes several contributions. First, the consistent results from both experiments strongly suggest that partisans do not ignore messages from candidates who belong to a rival party. At least for a period of time, they update their voting intentions, even if they hold strong prior beliefs in the form of partisan predispositions. The results that letters and door-to-door meetings affected subjects' voting intentions is the more remarkable because all communication included clear partisan cues. Since updating happened in a highly partisan and highly competitive electoral environment, this study confirms results from survey and online experiments that show that individuals do in fact update their priors based on new information (Coppock, 2016; Mitchell, 2012). The recorded

effects on voting intentions are long-lasting, and hence similar to the effects reported in persuasion field experiments that concentrate on political issues rather than elections (Broockman and Kalla, 2016). At the same time, this paper also confirm results from field experiments conducted in high salience elections, which question the effectiveness of persuasion strategies in General Elections (Bailey et al., 2016; Kalla and Broockman, forthcoming). By showing that the findings of both literatures can be reconciled, that voters can both update their preferences, and constituency contact can be ineffective at impacting vote choice, this study contributes to a more nuanced understanding of opinion formation in dynamic political environments. The decay of effects raises questions about how voters process information in partisan environments. My results are in line with an impression-driven model of opinion formation, where impressions are stored in a running tally and updated as voters receive more information, especially at the end of the campaign. They also fit with a conception of partisanship, which allows for individuals to accept information from rival campaigns. Long-term partisan considerations, according to this conception, may become more important relativey to candidate evaluations as election day approaches.

Second, the findings raise intriguing questions in line with Mitchell (2012)'s earlier laboratory study. How many repeated contacts would be necessary to make impressions last long enough to impact vote choice, and would repeated contact be cost-effective? While the current study cannot answer many questions arising from these results, the method of measuring voting intentions based on canvassing data has the potential of addressing at least some of them in the future. One could easily imagine embedded experiments, where candidates contact subjects at randomly-assigned time points, and where a randomly-assigned number of follow-up contacts occur, all while campaigns follows their usual data collection routines independently of the experiment. Moreover, nationally standardised reporting procedures within parties allows for future comparative research, where organisational and institutional variables can be measured to sytematically predict the strength and duration of persuasion effects. Some of these potential moderators might even be subject to experimental or quasi-experimental manipulation.

Finally, since campaigns collect voting intention data as part of their usual routine, using these data for persuasion experiments is the most cost-effective way of studying

persuasion in the context of real-world campaigns. The costs of persuasion field experiments, even if they can be significantly reduced (Broockman et al., forthcoming), are still non-negligible, and the financial resources necessary to collect outcome data restrict access to field experimentation. The use of canvassing interview data can enable campaigns operating outside the United States, as well as graduate students and early career researchers, to use field experiments for the study of political persuasion in campaign environments. Importantly, as this paper shows, canvassing-based voting intention measures can be validated and benchmarked against other measurement instruments such as telephone or online surveys. Outcome data based on canvassing interviews are therefore meant to complement existing methods of studying political persuasion, not replace them.

Knowing if, and under which conditions, candidates and campaigns can persuade voters, requires a much larger number of field experiments. By introducing and validating a novel measurement instrument for voting intentions, which is widely used by election campaigns, this paper seeks to contribute to a significant increase in the number of embedded persuasion field experiments. The use of canvassing data directly addresses two of the key challenges of embedded experimentation as identified by Loewen, Rubenson and Wantchekon (2010, 167). Political actors are more likely to collaborate on experiments that align with the timeline of a campaign, and that are as non-intrusive as possible. Since canvassing data can be used to conduct campaign experiments in-cycle, the incentives for political campaigns to collaborate with researchers should increase. Relying on an existing data generation process is the least disruptive means of conducting persuasion experiments within high stakes environments because it does not require the set up of new measurement instruments. Although the use of canvassing data certainly raises challenges such as self-selection of party supporters into the sample, limitations need to be weighted against these potential gains. The value of this paper therefore does not only lie in its findings, but also in a blue-print it provides for future, embedded, in-cycle experimentation.

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Supporting Information

Figure A.1: Experiment 1 – Letters

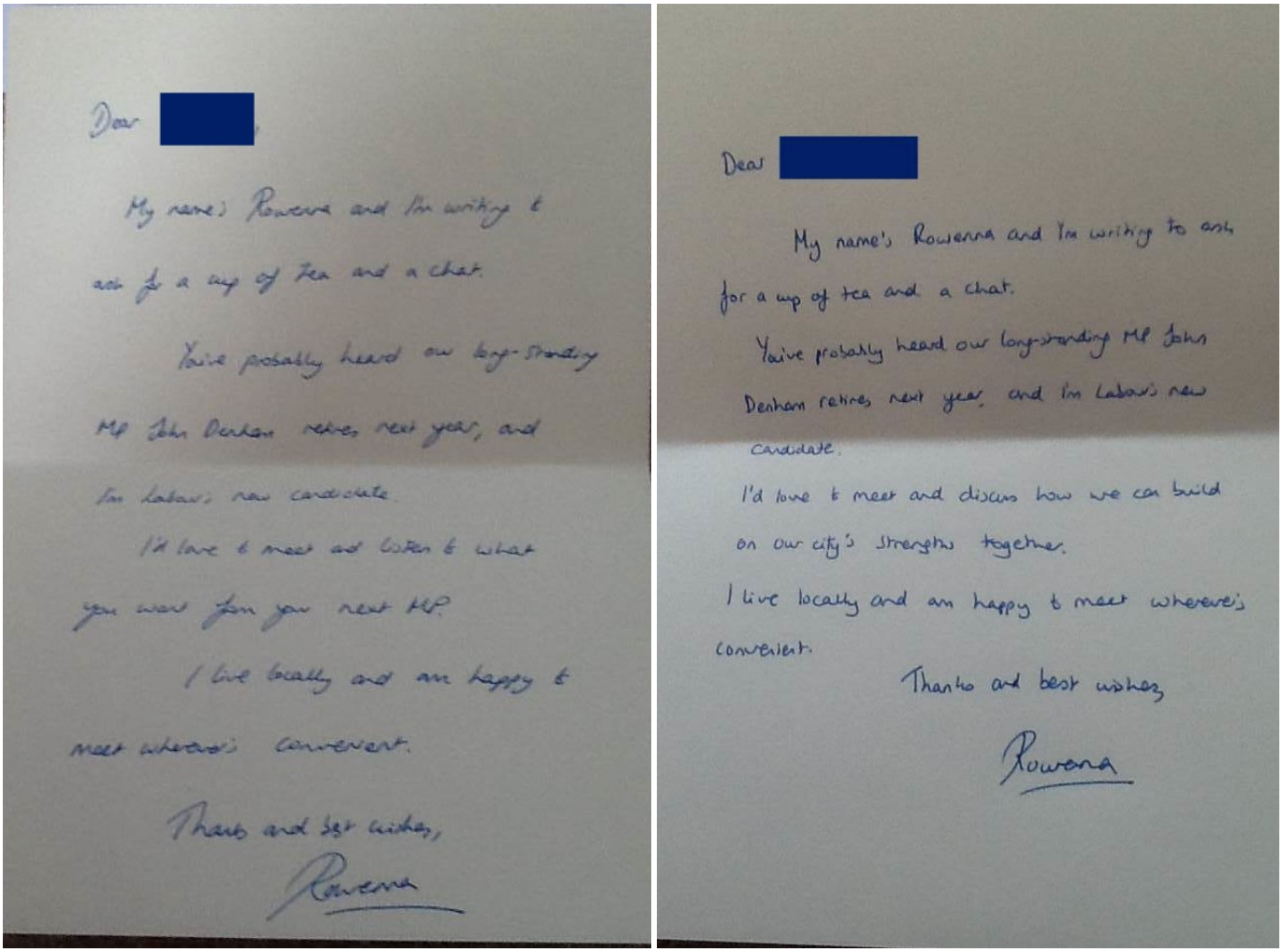


Figure A.2: Experiment 1 – Business cards

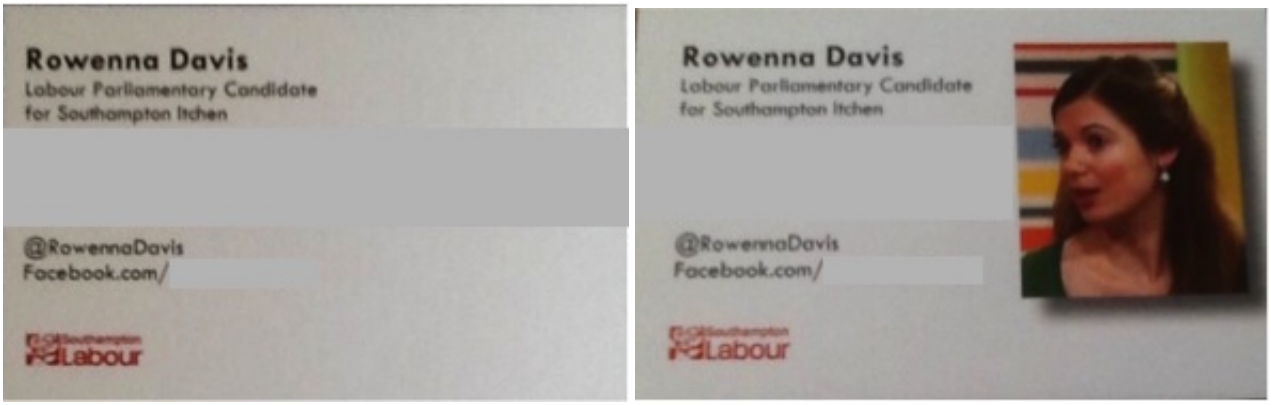


Figure A.3: Experiment 2 – Letter handed out to voters

Dear _____

My name's Rowenna, and I'm hoping to be your next Labour MP when John Denham stands down next year.

I knocked on your door today to listen to what you want for the future of Southampton.

There's a lot of anger and disappointment with politicians out there.

That's why I'm spending 200 hours over the next month knocking on doors listening to what you and your neighbours have to say.

I'm pretty tired, but I'm still going!

I've been asked what we stand for. Labour stands for well paid jobs, compassion for those genuinely in need and pride in our community and country.

But working at the foodbank near my home in Bitterne Park I've seen first hand how far we are from those goals. I want to work with you to change that.

The national election isn't until next year, but as I'm sure you know, the local elections are very close – on Thursday 22nd May.

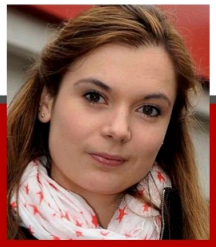
Your Labour candidate for the local elections is _____ and would be happy to hear from you.

Thank you for taking the time to read this letter.

Best wishes,

Rowenna Davis

P.S. *I'm only too happy to come back and see you when you have time. Just let me know.*



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[redacted]
[redacted]
@RowennaDavis
facebook.com/[redacted]
20-22 Southampton Street, Southampton, SO15 2ED

Rowenna Davis
Labour Southampton

Figure A.4: Canvassing interviews – post-treatment distributions

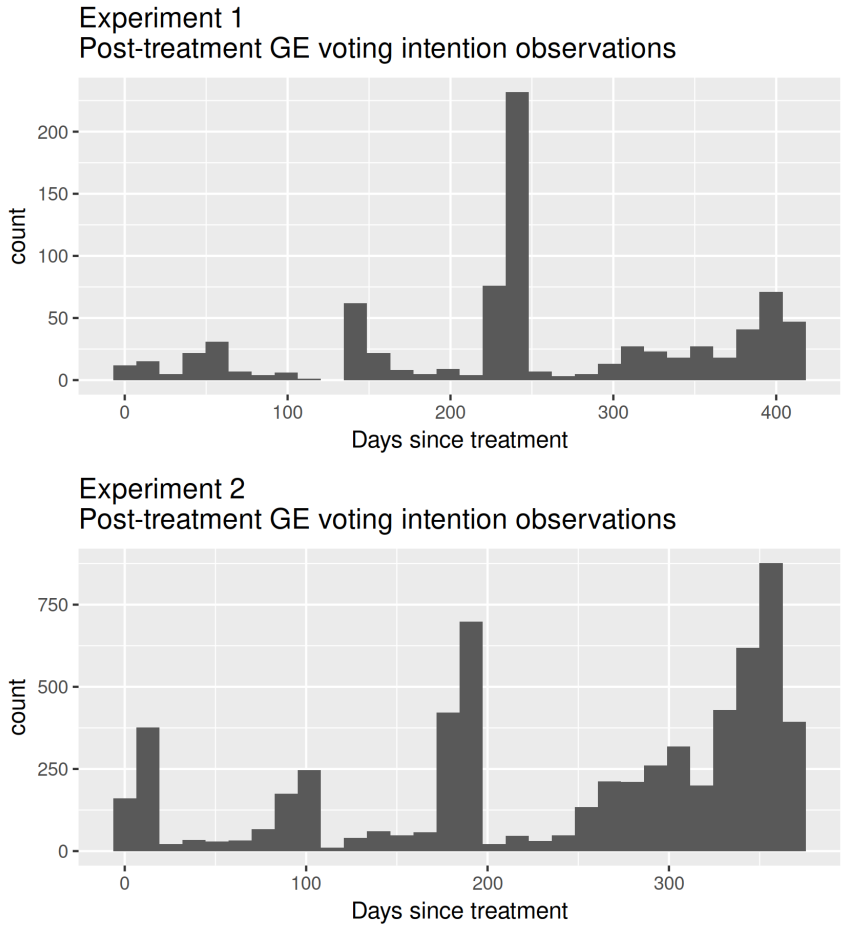
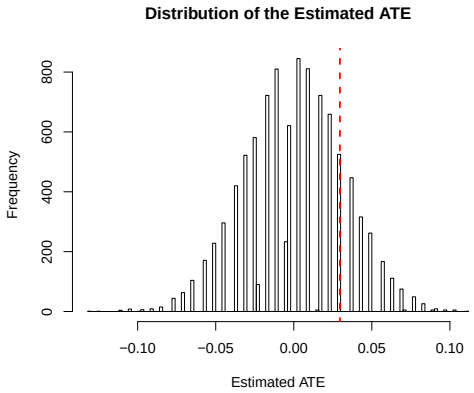
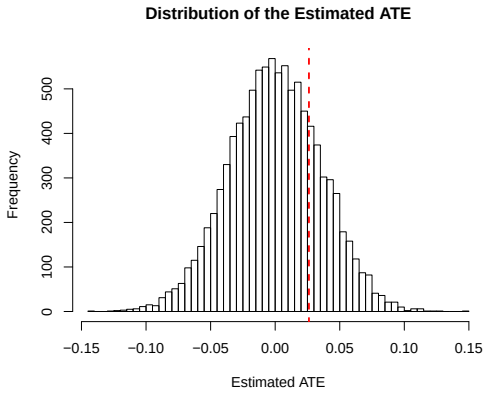


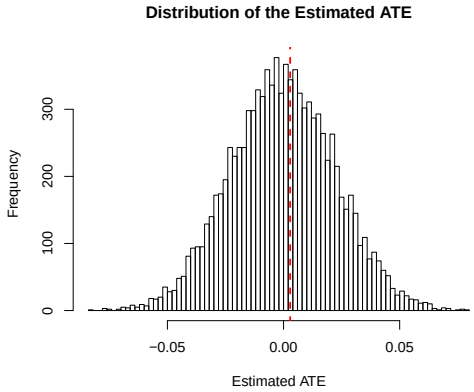
Figure A.5: Attrition checks experiment 1 –treatment assignment on missingness



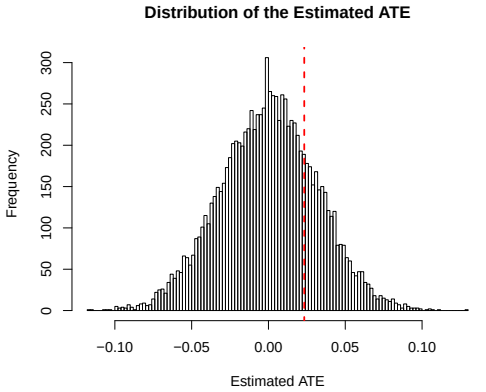
a) Telephone survey: ATE=0.03, p=0.38



Canvassing interviews: ATE=0.03, p=0.46

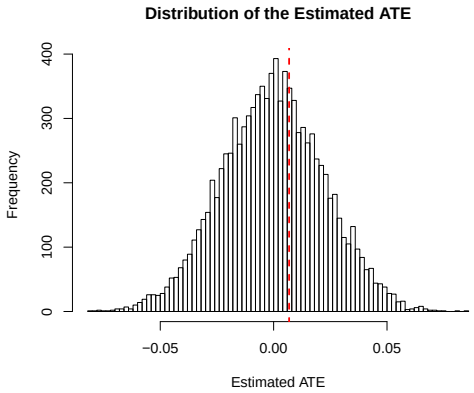


c) Canvassing period 1: ATE=0.00, p=0.90

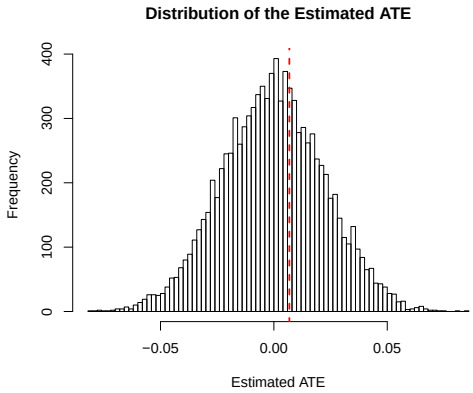


d) Canvassing period 2: ATE=0.02, p=0.46

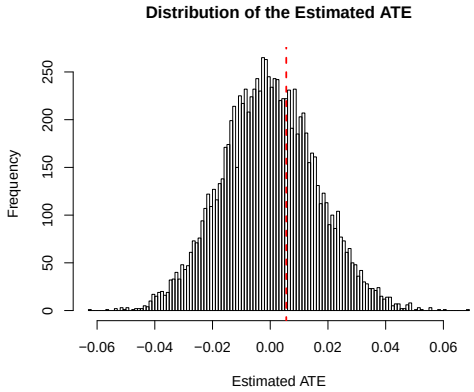
Figure A.6: Attrition checks experiment 2 –treatment versus control on missingness



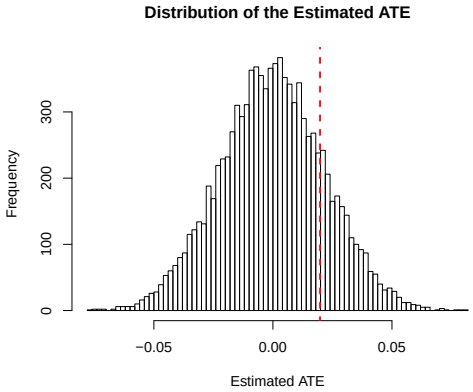
a) Candidate period 1: ATE=0.01, p=0.61



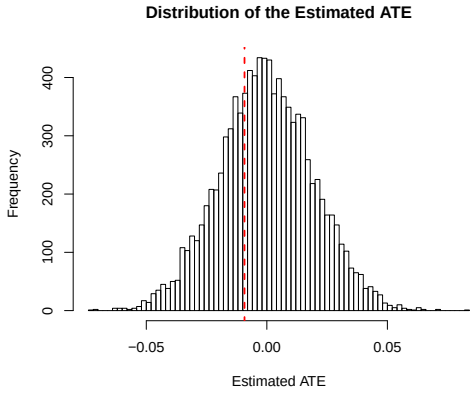
b) Candidate period 2: ATE=0.01, p=0.76



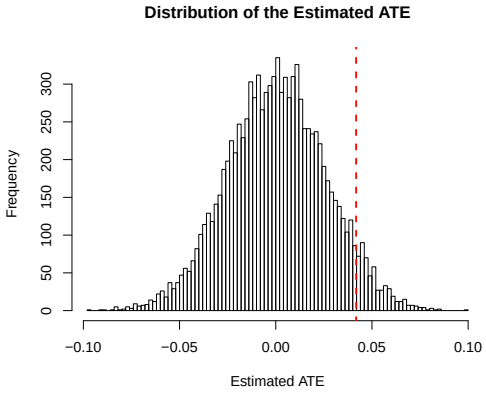
b) Volunteer period 1: ATE=0.01, p=0.73



c) Volunteer period 2: ATE=0.02, p=0.37

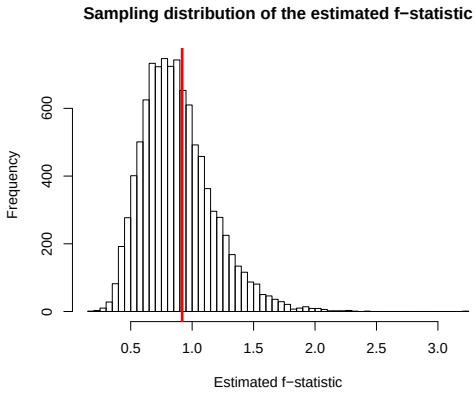


d) Letter period 1: ATE=-0.01, p=0.63

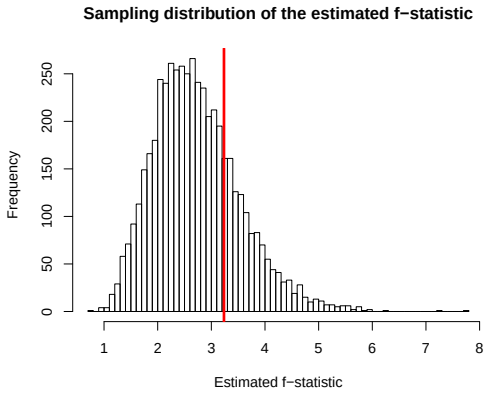


e) Letter period 2: ATE=0.04, p=0.10

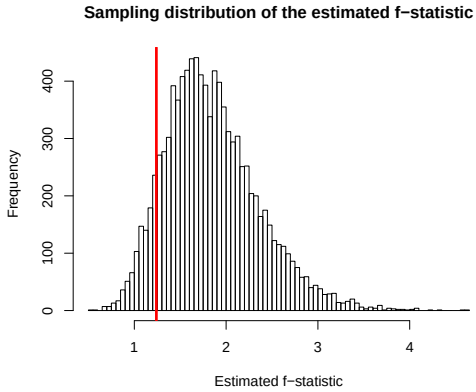
Figure A.7: Balance checks experiment 1 –treatment assignment on missingness



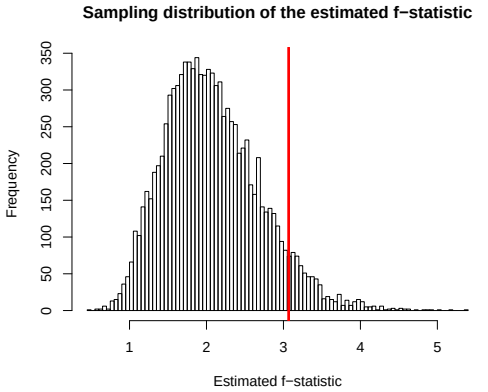
a) Telephone survey exp. 1: p=0.40



Canvassing interviews exp. 1: p=0.24

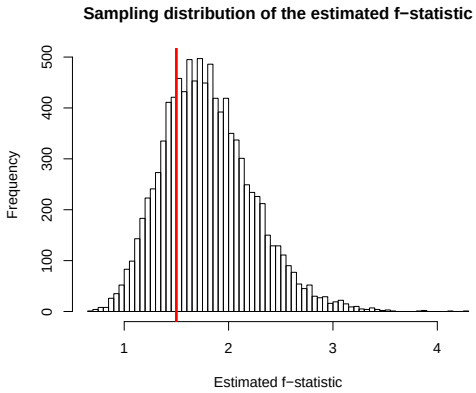


c) Canvassing interviews period 1: p=0.90

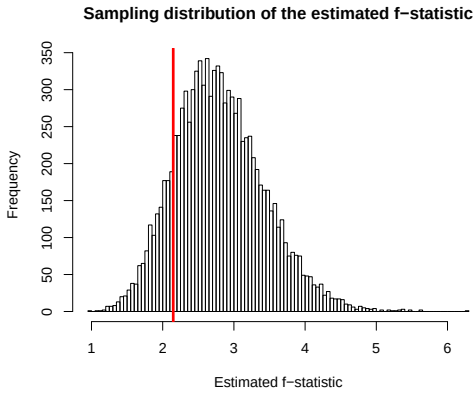


d) Canvassing interviews period 2: p=0.07

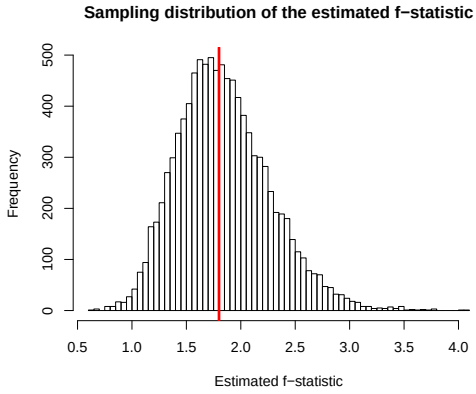
Figure A.8: Balance checks experiment 2 –treatment assignment on missingness



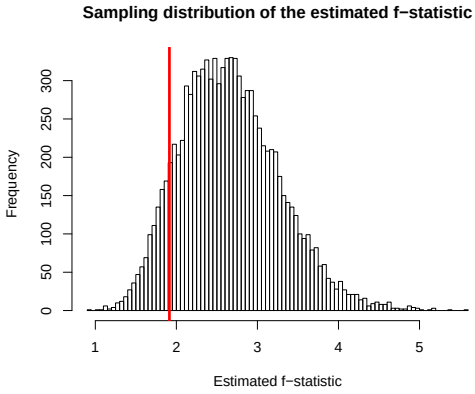
a) Candidate period 1: p=0.75



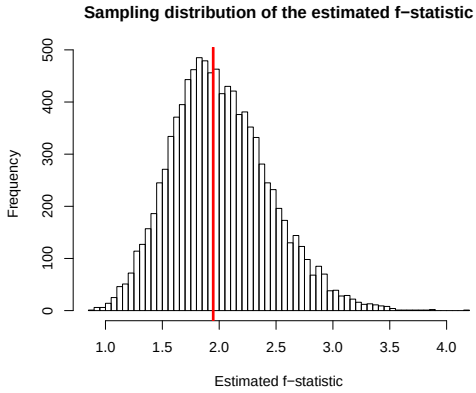
b) Candidate period 2: p=0.86



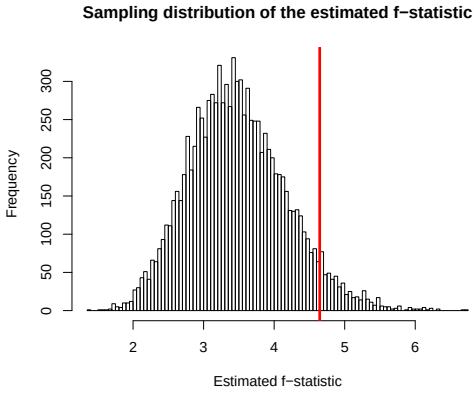
c) Volunteer period 1: p=0.51



d) Volunteer period 2: p=0.90



e) Letter period 1: p=0.53



f) Letter period 2: p=0.06

Figure A.9: Experiment 1 – Decay of persuasion effects, unadjusted

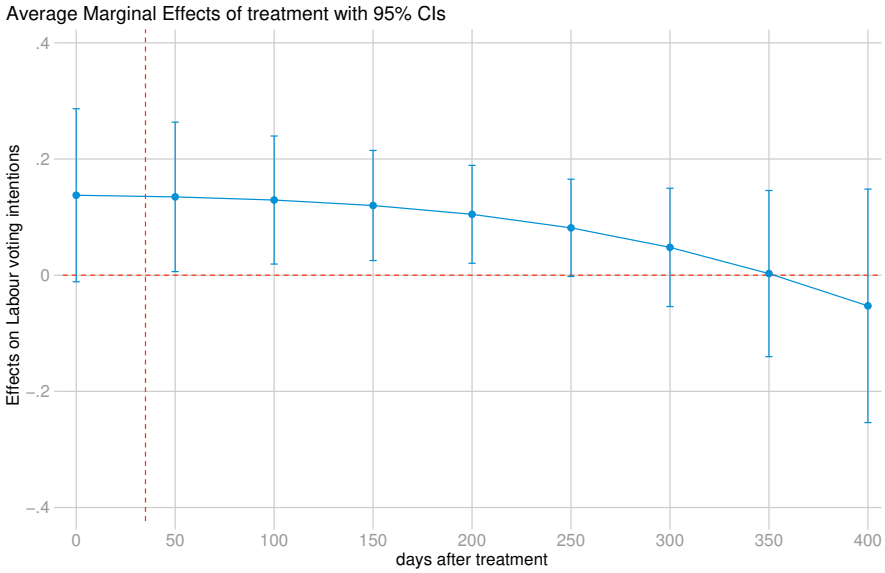


Figure A.10: Experiment 2 – Decay of persuasion effects, unadjusted

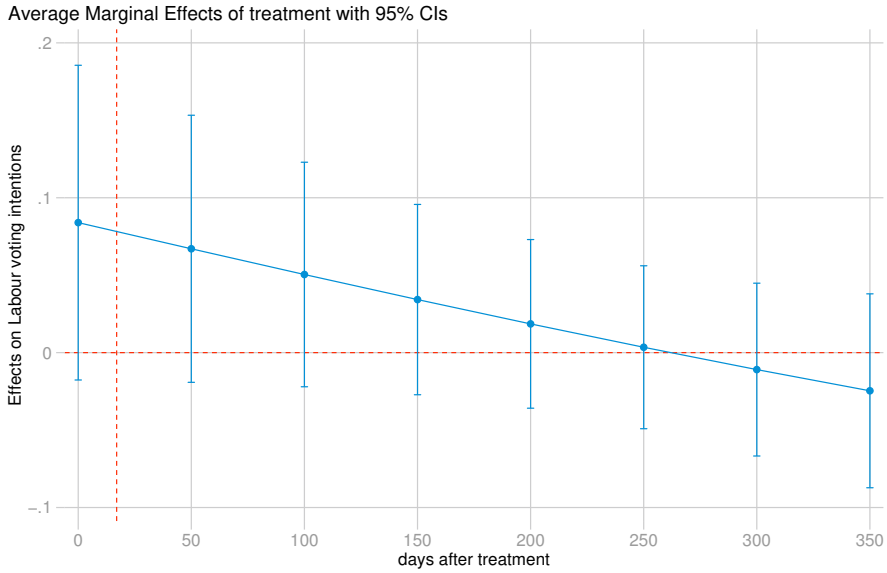


Table A.1: Latest recorded pre-treatment voting intention of experimental subject

Recorded voting intention	Share of experimental sample
Conservative	49.9%
Against Labour	17.8%
Liberal Democrat	9.9%
United Kingdom Independence Party	9.5%
Undecided (previously Con, LibDem, Green, UKIP, Against)	7.8%
Refused (previously Con, LibDem, Green, UKIP, Against)	3.9%
Green Party	1.3%
N	597

Table A.2: Robustness check – Effects of letter on Labour voting intentions (canvassing interviews)

	Below median N	Median N or above	Entire period
Labour Control	9.3%	27.8%	18.3%
Labour Letter	19.9%	29.2%	24.7%
ITT	10.6**	1.5	6.5
95% CI	[2.1, 19.0]	[-13.9, 16.9]	[-3.2, 16.0]
Cov-adj ITT	12.3**	3.5	8.0*
95% CI	[3.6, 21.1]	[-11.7, 18.8]	[-1.6, 17.2]
N	386	432	818

Note: ** p<0.01, * p<0.05 (based on one-tailed hypothesis tests using randomization inference), accounts for block and cluster random assignment.

Table A.3: Experiment 2 – Effect of canvassing and letters on labour voting intentions

	Candidate t+1	Candidate t+2	Volunteer t+1	Volunteer t+2	Letter t+1	Letter t+2
Control mean	61.3%	69.9%	60.9%	69.7%	61.5%	69.9%
Contact rate	37.7%	43.7%	13.8%	18.5%		
ITT unadjusted	6.3 [-2.2, 15.1]	-1.1 [-7.1, 5.1]	-0.2 [-8.9, 8.7]	-5.0 [-10.9, 1.1]	9.8* [-0.2, 19.4]	-3.2 [-10.7, 4.0]
CACE unadjusted	16.7 [-7.8, 41.2]	-2.6 [-17.0, 11.8]	-1.4 [-67.0, 64.2]	-28.0 [-62.1, 6.1]		
ITT covariate-adj.	7.7* [0.3, 15.8]	-1.2 [-6.6, 4.5]	4.1 [-3.6, 12.4]	-3.5 [-9.0, 2.6]	10.4* [1.0, 19.3]	-2.9 [-9.8, 4.0]
CACE covariate-adj.	20.1* [-0.5, 40.7]	-2.7 [-15.3, 9.9]	28.4 [-25.2, 82.0]	-18.9 [-48.7, 10.9]		
N	818	2133	979	2484	549	1324

Note: **p<0.01, *p<0.05, (based on one-tailed hypothesis tests), accounts for block and cluster random assignment. 95%-Confidence Intervals in brackets.

Table A.4: Logistic Regression Results – Log ods of Labour voting intention as function of treatment, conditional on time of outcome data collection

	Letter		Candidate & letter	
	Model I	Model II	Model III	Model IV
Treatment	1.845*	1.835*	.371	.538*
	(.800)	(.770)	(.232)	(.250)
Days	-.008**	.007**	.002**	.003***
	(.002)	(.002)	(.000)	(.001)
Treatment x Days	-.005	-.005	-.001	-.002*
	(.003)	(.003)	(.001)	(.001)
Covariates	No	Yes	No	Yes
N	818		3821	

Note: ***p<0.001, **p<0.01, *p<0.05, based on two-tailed tests. Standard errors clustered at the household level in parentheses. Covariates are turnout in four previous elections, and voting intentions between 2002 and 2013. Includes dummies for experimental blocks.

Rowenna Davis' canvassing experience

"I've now been on the road for ninety hours. That means I'm almost half way through my promise to spend 200 hours knocking on doors in Southampton in the run up to the local elections. So what keeps me going? It's the people. Knocking on a door and asking about politics leads to all kinds of conversations. They can be moving, frightening and funny. There was the woman who opened the door and explained she had dedicated her life to community work, and now has a terminal illness. Obviously a strong woman, she was still moved to tears to talk about how she can't continue her work, and hopes I can work with others in her place. Then there were the mums at the school gates who were angry about dog poo and pot holes. Or the older lady last night, a life long Labour supporter scared she was losing agency with her disability, who was thrilled to find that we could give her a lift to the polls so she can still exercise her right to vote. Then there was the guy who was recovering from being a drug addict. He had been clean for two months and said if he could make it another year, he wanted to work with Labour and local young people to make sure they didn't make the same mistakes. You never know what you're going to get when you reach a door. But even when there's hate or sadness, you feel it's worth it to reconnect. You can't fix everything, but you can listen and learn."

Question Wording Telephone Survey

In case you decide to vote in the council election, which party would you vote for?

INTERVIEWER: DO NOT PROMPT

- 0 None/Will (probably) not vote
- 1 Labour
- 2 Conservative
- 3 LibDem
- 4 UKIP
- 5 Green Party
- 6 BNP
- 7 SNP
- 8 Plaid Cymru
- 9 Other (WRITE IN)
- 10 Undecided
- 11 Don't know
- 12 Refused

If you decide to vote in the General Election next May, which candidate will you vote for? I am now going to read out a list of the candidates in your seat:

- 1 Rowenna Davis for the Labour Party
- 2 Royston Smith for the Conservative Party
- 3 David Goodall for the Liberal Democrats[a]
- 4 Alan Kebell for the UK Independence Party[b]

- 96 Other (INTERVIEWER: DO NOT NAME OPTION, WRITE IN):
- 97 Undecided (INTERVIEWER: DO NOT NAME OPTION)
- 98 Don't know (INTERVIEWER: DO NOT NAME OPTION)
- 99 Refused (INTERVIEWER: DO NOT NAME OPTION)

[a]There was no declared LibDem candidate in the seat at that point. The 2010 LibDem candidate was named instead.

[b]There was no declared UKIP candidate in the seat at that point. The 2010 UKIP candidate was named instead.

Now, I would like to ask you how you view the two major General Election candidates. On 4 points-scale ranging from strongly positive to strongly negative, how do you evaluate the Labour Candidate Rowenna Davis?

- 1 Strongly positive
- 2 Somewhat positive
- 3 Somewhat negative
- 4 Strongly negative
- 98 Don't know
- 99 Refused

On the same 4 points-scale ranging from strongly positive to strongly negative, how do you evaluate the Conservative Candidate Royston Smith?

- 1 Strongly positive
- 2 Somewhat positive
- 3 Somewhat negative
- 4 Strongly negative
- 98 Don't know
- 99 Refused

Have you already been contacted by any of the candidates running in the General Election?

a) Rowenna Davis

- 1. yes
- 2. no

b) Royston Smith

- 1. yes
- 2. no