

# First Impressions - Lasting Impressions?

## The short-and long-term effects of candidate contact on voting intentions

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### Abstract

We usually assume that first impressions matter, both in politics and in relation to social interactions. However, we know relatively little about the effects of mediated and unmediated interactions between candidates and voters on voting intentions in high stakes, national elections. Survey- and field experiments have demonstrated that political persuasion, in general, is possible, and that persuasion effects can be long-lasting. At the same time, the small, but growing literature that uses field experiments to study political persuasion in high-stakes elections, raises doubts about the idea that campaigns are able to persuade voters. Drawing on a unique dataset of individual voting intentions collected in a UK parliamentary constituency from 2002 up to the General Election of May 2015, I study voting intentions after a first time Labour Parliamentary candidate introduces herself to a randomly assigned subset of rival and swing-voters. Based on the consistent results of two randomized field experiments, I show that despite the presence of partisan cues and party loyalties, voters initially update their voting intentions after interacting with the candidate, and that these persuasion effects are non-negligible and last for multiple weeks. However, over time, persuasion effects decline, and voters appear to revert back to their default choices. This study shows that apparent contradictions between the results of persuasion experiments in low and high-stakes elections can be reconciled, and offers a new means of producing more evidence by leveraging the ongoing data collection routines embedded in partisan election campaigns.

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## Motivation

While we usually assume that first impressions matter in politics, and that they are difficult to change (Lodge et al., 1989, Holbrook et al., 2001, Druckman et al., 2004), there is little systematic and well-identified evidence on whether what candidates do early on in election campaigns, matters. Based on recent advances in persuasion experiments (Broockman and Kalla, 2016, Coppock, 2016) we should expect political persuasion to be possible, and effects to be long-lasting. And indeed, there is evidence from local, and other low salience, elections in the United States, that candidates are able to influence voters' evaluations and voting intentions (Barton et al., 2014, Potter and Gray, 2008).

Why should we care about interactions between local parliamentary candidates and voters, which happen early in a General Election campaign? First of all, there is a debate in the discipline about whether the actions of local candidates matter, or whether, eventually, elections come down to national factors such as the economy and longstanding trends in partisanship (Vavreck and Sides, 2014). Second, campaigns are usually 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. It is hence unsurprising that persuasion attempts in the weeks directly preceding an election are ineffective (Kalla and Broockman, 2017, Bailey et al., 2016). What is more intriguing, and less well understood, is whether early interactions between candidates and voters result in new supporters that can then be mobilized on election day. The majority of well-identified research on the effects of campaign contact on persuasion and mobilization has focused narrowly on this second stage of the election campaign, the weeks directly preceding polling day (Green, 2004, Cardy, 2005, McNulty, 2005, Michelson, 2005, Nickerson et al., 2006, Bailey et al., 2016, Kendall et al., 2014, Doherty and Adler, 2014, Barton et al., 2014). This study takes a radically different approach by starting at the beginning, rather than at the end of the campaign.

The evidence is based on two randomized voter persuasion experiments conducted in collaboration with a first-time Parliamentary candidate in the United Kingdom. Labour Parliamentary candidate Rowenna Davis contacted voters with hand-written letters 12 months, and on the door-step 10 months before the 2015 UK General Elections. The

study took place in the Southampton Itchen Parliamentary constituency, a highly marginal Labour-Conservative seat in the South of England. Until the 2015 General Election the seat was held by retiring former Labour cabinet minister John Denham. Southampton Itchen was an important target seat for the Conservative Party, which invested heavily in the seat. Davis, a former journalist, was seen as a strong candidate to succeed Denham and was tied or leading in constituency polls (Ashcroft, 2014, 2015) throughout most of the campaign. Nevertheless, on an unexpected national swing against Labour, she lost the seat by a margin of 5.2 percentage points.

Drawing on a unique panel dataset of individual voting intentions collected by the Labour Party both pre-treatment, since 2002, and post-treatment between April 2014 and May 2015, I study political persuasion in a changing political environment during a high salience General Election campaign. The unusually long time frame of this study allows me to follow voting intentions throughout the entire campaign.

By showing that voters initially update their opinions about the candidate after interacting with her, but eventually revert back to their default positions, this paper contributes to our understanding of how voters decide in high-stakes elections. The finding the voters update their preferences is of importance because it shows that decades of research based on the political communication literature can be reconciled with more recent results that question the effectiveness of persuasion strategies in General Election campaigns. Moreover, this paper adds to our understanding of how persuasion effects decay in General Elections, and allows us to formulate new testable hypotheses about why they decay. I conclude that candidates can leave lasting impressions on voters of all partisan persuasions, but that high-salience, national campaigns may overshadow voters' local candidate evaluations.

## **Persuasion in General Election Campaigns**

Candidates do not operate in a political vacuum when they campaign for office. They operate within the constraints of a national political campaign and within a party system that has been shaped over decades, and sometimes, over centuries. However, for too long behavioral political scientists have not taken these constraints seriously enough when thinking about the generalizability of their results, often obtained in local, non-partisan

elections, to high-stakes campaigns. The two major constraints that I will discuss in this paper are partisan loyalties and the national election campaign.

### **Partisan loyalties**

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 (Sniderman et al. 1991; Rahn 1993; Snyder and Ting 2002; Arceneaux and Kolodny 2009). Serious candidates for political office affiliate with political parties. Political parties not only provide candidates with campaign volunteers and funds, they also offer a party label that relates to longstanding partisan attachments in the electorate. According to Aldrich (2011), party affiliation provides candidates with their basis of political support, their starting point in an election campaign. As Green et al. (2002, 222) emphasize: "A large fraction of the electorate start each campaign with a strong proclivity to support one candidate or another". 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). At the same time, individuals are subject to biases (Tversky and Kahneman, 1974). For instance, partisan cues appear to condition the receptiveness of voters to campaign communication (Zaller, 1992, Iyengar and Simon, 2002).

If this was the case and voters were filtering out messages from candidates who belong to parties that they do not support, voters who interact with a first time candidate should be no more likely to intend to vote for her than voters who are not contacted by the candidate.

However, empirically, there is mixed evidence on whether partisans refuse to receive, and update their candidate evaluations, or whether these evaluations are simply traded-off against other important considerations and identities, such as long-standing partisan attachments or national level evaluations. There is conflicting evidence on whether we should expect partisans to update their beliefs based on messages from rival parties. Coppock (2016) for instance shows that, in survey persuasion survey experiments, there is little heterogeneity in how subjects respond to persuasive messages. Moreover, Foos and John (2016) show that during the 2014 European Elections, Labour voters in the North-East Somerset parliamentary constituency were less likely to turn out after being

randomly assigned to contact with a Conservative canvassers. Clearly then, they must have considered the information provided to them. Moreover Foos and de Rooij (forthcoming) show that Conservative voters are likely to pass on messages from a Labour campaign to spouses who support Labour. Again, this would speak in favour of voters' receptiveness to competing messages. I therefore hypothesize that voters who are contacted by a candidate via letter or on the door-step will be more likely to intend to vote for her than voters who are not contacted by the candidate.

### **National campaign factors**

It should be no surprise that a candidate's vote share in a constituency will be highly correlated with the party's national vote share, and that campaign events that unfold nationally are usually outside a local Parliamentary candidate's influence. Such factors that might influence the outcome of local campaigns are for instance the national economy, the dominance of political issues that may either be favorable or unfavorable to a political party, the popularity of the party leaders (Vavreck and Sides, 2014), and coalition options in multi-party systems. All of these factors appear to have played an important role in the 2015 UK General Election.

### **Stable preferences and changing context**

Any interaction between a randomly assigned treatment and time is a treatment-by-covariate interaction, and therefore, multiple potential explanations for observed patterns may be highly correlated, and indeed, confounded. We should therefore show extreme caution when interpreting these correlations. It is, for instance, if we are unwilling to impose heroic assumptions, 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, helps to disentangle explanations that predict a general resistance of partisans to receiving and accepting information from rival party candidates, from more dynamic explanations. As Simon (1956) wrote, individual behavior is the interaction between individual preferences and the environment in which the individual operates. Partisan loyalties should be relatively stable, and indeed, our data shows that they are. However, what is unstable, is the national political environment and the cues

that it sends to individual voters. Before December in an election year in the UK, there are no election broadcasts or posters. Parties only present their election manifestos during the "short campaign", six weeks before the General Elections. Campaigns in the constituencies start long ahead of the national campaign. Both major party candidates in Southampton Itchen had already launched their official campaigns in early summer 2014, which left them six month of campaigning while Parliament was sitting and the government kept going on about its usual business. The local campaign context has hence seen relative stability during the period of the study.

## Identifying persuasion effects

Field experiments that address omitted variable bias thanks to random assignment of personal contact with party workers in the United States and various European countries (Bailey et al., 2016, Kendall et al., 2014, Pons, 2014) face several challenges, some, but not all of which, are specific to the high-stakes, partisan political environment in which they operate. Persuasion is more difficult to study than mobilization. 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. If 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 in the United States and Britain. 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., 2016), 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 allows researchers to measure vote share without bias. This approach has been used for instance by Pons (2014) to estimate the effects of door-to-door canvassing on vote for the French Socialist Party, or by Rink (2017) to estimate the effects of facebook advertisement on CDU vote share in a German state election. However, aggregate data

also has its drawbacks: As Foos (2016) argue, aggregate vote shares cannot distinguish between differential mobilization and persuasion effects. Moreover, if it is our aim to study if persuasion effects decay, then this approach is not ideal because it limits the researcher to measuring vote share at one point in time. This not only prevents us from investigating potential explanations for why effects decay, but it is particularly frustrating for campaigns that, in an ideal world, would like to use experiments to adjust their campaign tactics during the election cycle (Loewen et al., 2010).

As Broockman et al. (2016) show, studies that attempt to identify persuasion effects at the individual level are relatively expensive, and have to deal with heavy survey attrition, often challenging both the internal, in the case of differential attrition as a function of treatment assignment, and the external validity of the study. Well-powered persuasion experiments in the context of election campaigns are rare, important examples being Kalla and Broockman (2017), Bailey et al. (2016), Kendall et al. (2014), Pons (2014). By introducing and validating a measure of party support based on canvassing data, this paper demonstrates that ‘embedded’ persuasion experiments can be conducted at a) low cost and b) during the election cycle. In addition to its low costs the unobtrusive nature of data generation, relying on canvassing data has unique advantages: In marginal constituencies, canvassing data has high response rates, and is updated every time a campaign succeeds at contacting a household. Thanks to standardized reporting procedures, canvassing data is comparable across constituencies, and to a lesser extent across parties that follow similar reporting procedures, such as the UK Labour Party and the UK Conservative Party. In what follows I describe the rationale for employing canvassing-based voting intention data as an outcome measure, and validate it based on a telephone survey conducted in May and June 2014.

### **Using canvassing data for in-cycle experimentation**

This study is based on an alternative individual level outcome measure for in-cycle persuasion experiments in partisan campaign settings: canvassing data. 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 as a pre-treatment covariate for blocking and covariate-adjustment (Foos

and John, 2016, Foos and de Rooij, forthcoming), this paper is the first to employ it as an outcome variable.

Voting intention data based on canvassing reports is continuously collected, and updated by party volunteers. British voters are used to volunteering their voting intentions to canvassers affiliated with political parties, and all political parties in the UK make use of canvassing data to target their GOTV efforts. Canvassing data is usually stored in the party's targeting database that is updated whenever a volunteer makes contacts a specific household. In competitive, marginal seats such as Southanpron Itchen, where contact rates with eligible voters are high, voting intentions data based on canvassing returns are available for a large proportion of the local electorate, and date back multiple election cycles.

For the purposes of this paper, I rely on a dataset of time-stamped voting intentions collected in the Southampton Itchen Parliamentary constituency between May 2002 and 7 May 2015, the day of the last 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 during the entire period, while other individuals drop in and out of the panel, for instance because they move away, or because they no longer wish to talk to party canvassers. The data on voting intentions is supplemented with official turnout records from the public register, for the period between 2010 and 2015. Finally, I match these data to treatment assignment via a unique person and household number. Given the data structure, there are more entries available in later years than in earlier years.<sup>1</sup>

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

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<sup>1</sup>I obtained the complete time series up until May 2015, and the time stamps for the voting intention data in December 2016. Hence, earlier versions of this paper rely on an incomplete time series that ends in February 2016. I am grateful to the UK Labour Party's Contact Creator, Targeting, and Analysis Team for sharing the updated data with me.

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

$t$	$t+n$				
	2010	2011	2012	2013	2014
2009	.75	.74	.71	.69	.64
2010		.76	.77	.71	.69
2011			.81	.81	.73
2012				.86	.80
2013					.82

Note: polychoric correlation coefficients. All results are significant with  $p < 0.001$ .

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 3 elections pre-dating the experiment. Unsurprisingly, I find that among those with available covariate data, respondents interviewed by Labour canvassers after the treatment were significantly more likely to have volunteered that they intended to vote Labour in the past than subjects with missing outcome data. The difference, on average, is around 15 percentage-points. In contrast, respondents to the non-affiliated telephone survey were no more likely to have volunteered that they intended to vote for Labour in the past than non-respondents.

Table 2: Representativeness of Respondents

	Telephone		Canvassing	
	Respondents	Non-Respondents	Respondents	Non-Respondents
% Lab 2013	6.7	13.3	29.1	12.5
% Lab 2012	30.4	27.2	18.3	6.9
% Lab 2011	18.4	23.9	36.1	17.9
% Lab 2010	25.0	20.1	26.7	15.8
% Turnout 2013	92.6	84.8	85.7	76.8
% Turnout 2012	51.4	55.1	55.7	44.7
% Turnout 2010	92.6	84.8	90.4	84.7

Unsurprisingly, as Table 2 shows, campaigns hence behave strategically, and interviews conducted by Labour-affiliated canvassers lead to an oversample of respondents who are more sympathetic to the Labour Party. While canvassing-based measures are therefore more likely to include respondents sympathetic to the party, they fare similarly to the telephone survey when it comes to sampling respondents who are representative of the

target population in terms of their prior electoral participation, measured from public records. Compared to online panels, canvassers underperform on sampling voters who are representative of the population in relation to their voting intentions, but they do equally well, or slightly better in relation to prior turnout (Broockman et al., 2016, 46). In Broockman et al. (2016)'s experiment, turnout was 20 percentage points higher among respondents than among non-respondents in the 2014 midterm election, and 11 percentage points higher in the 2012 Presidential election.

## Research Design

The aim of both experiments was to test whether Davis was able to reach out to voters who had supported parties other than Labour (experiment 1) as well as former Labour voters who had stopped voting Labour in past election cycles (experiment 2) through impersonal and personal means of contact. The target samples for both experiments were determined in collaboration with the candidate and her campaign team.<sup>2</sup>

### Experiment 1: Hand-written letters

The first experiment was aimed at persuading voters of the major rival party, the UK Conservative Party, and voters of smaller parties, particularly UKIP, LibDems, and the Green Party to switch their support to the candidate. 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 second stage consisted of a meeting between the candidate and the constituent. Since only three subjects replied positively to Davis' invitation to meet her for tea, effects are unlikely to result mainly from the limited personal interaction that occurred between the candidate and voters.

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 those households that had an available landline number.

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<sup>2</sup>The research was approved by the Research Ethics Committee of the Department of Sociology (DREC) at the University of Oxford.

This restriction was important because subjects were interviewed by telephone in the month following the treatment in order to record their voting intentions and candidate evaluations. Second, to be included, information about household members' pre-treatment party support needed to be available. This information was based on the local party's voter canvassing of constituents over the past years. I then excluded all households that included a Labour partisan, or about whom there was no data on past voting intentions. Subjects were then grouped by party support into 7 distinct experimental blocks: Conservative Party supporters, Liberal Democrats, Green Party supporters, supporters of the UK Independence Party, 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. In a second step, I randomly chose one person per household to be assigned to treatment or to control. I then stratified the sample based on the experimental subject's partisanship.

### **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 not to receive a letter with business card from the candidate. 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 Appendix. <sup>3</sup>

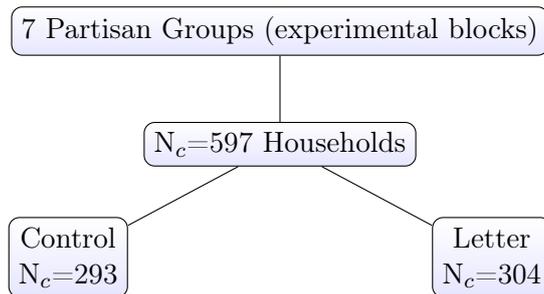
### **Collection of Outcomes**

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 not aware of treatment assignment in the months following the experiment. The telephone survey was fielded

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<sup>3</sup>The subjects who were assigned to treatment were then reassigned using a 2x2 factorial design. Factor 1 varied the frame of the invitation used in the letter and factor 2 varied whether a business card, which was enclosed to all letters, included a colored photograph of the candidate, or not. The random assignment therefore resulted in 5 experimental conditions: one 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.

Figure 1: Experiment 1 – Block and Cluster Random Assignment



three weeks after the introduction letters were sent on 15 April 2004, and was completed on 20 May 2014. Callers managed to speak to 55% (327 subjects) of the experimental sample, and 21% (120 subjects) agreed to take part in the survey. 110 subjects answered the voting intention question. This response rate is comparable to other telephone surveys. Barton et al. (2014) report a response rate of 13% to their vote choice question.

## 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 leaflet. Before the candidate and her team started canvassing for 200 hours in April and May 2014, I block- and cluster-randomly assigned subjects within 3'376 households located in 6 electoral wards to one of four experimental conditions: a personal campaign visit by the candidate (+leaflet), a personal visit by a member of her campaign team (+leaflet), the same campaign leaflet without a personal visit, or no campaign visit and no leaflet (control). In both canvassing treatments, campaign contact consisted of the candidate introducing herself or being introduced by the canvasser, and of an ensuing unscripted conversation centering around local and national issues raised by the subject. The leaflet provided information about the candidate and about her rationale for running for parliament. Impressions from the door-to-door canvassing are displayed in Figure A.3 in the Appendix, and the leaflet that was distributed by canvassers and sent to households assigned to the leaflet only treatment group is displayed in Figure A.4 in the Appendix. Treatment assignment is displayed in Figure 3. The candidate’s canvassing script is displayed below, and she describes her canvassing experience in the Appendix. It is important to emphasize that

post-treatment outcome data was again collected by Labour canvassers who were unaware of treatment assignment. Voting intentions are collected as part of the campaign's routine operation, and canvassers were unaware that any experiment had taken place previously.

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, we it does seem like a lovely area!

Do you know your MP John Denham at all?

(they almost always do)

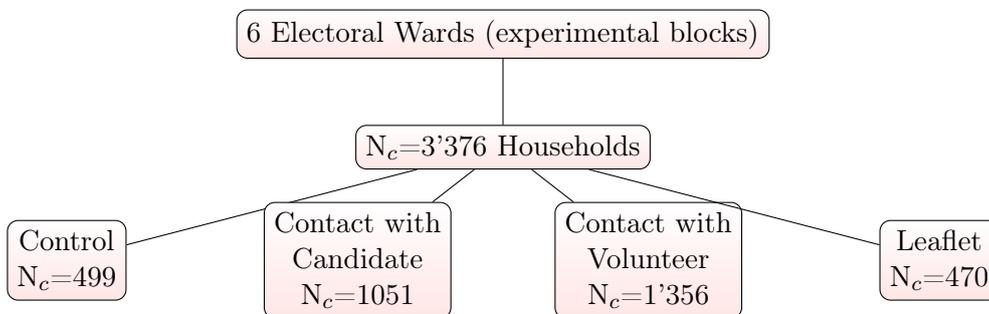
Well he's retiring next year after 23 years service, so I'm "the new John Denham"! It's just nice to say hello.

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!

Figure 2: Experiment 2 – Block and Cluster Random Assignment



## 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.5 and A.6 in the Appendix show that treatment assignment in both field experiments is not significantly related to pre-treatment covariates. The pre-treatment covariates used in the balance check are the same as in the subsequent analysis: the electoral ward in which the subject lives, voting intentions based on canvassing interviews in all available years preceding the 2015 General Election (2002-2013), as well as turnout in the 2010 General Election, and the 2011, 2012, and 2013 local elections.<sup>4</sup>

## Results

Tables 3, 4, and 5 display the results from both persuasion experiments. Tables 2 and 3 reports the effects of the letters, hand-written by the Labour candidate on voting intentions, once based on the telephone survey (Table 2) and once based on canvassing interviews (Table 3). Table 4 displays the effects of the door-to-door visits and the leaflets from the second experiment, on subsequent Labour voting intentions as recorded during canvassing interviews.

Column 1 in Table 3 presents the manipulation check administered in the post-treatment telephone survey. Subjects were asked whether they had been contacted in the previous month by the Labour parliamentary candidate for Southampton Itchen. No reference was made to letters or the field experiment. This manipulation check is hence a conservative test of whether subjects remembered the letter. Responses to this question show that subjects in the treatment group were 15 percentage points more likely to recall having

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<sup>4</sup>For the balance checks of the canvassing data in the second experiment, I use multinomial logistic regression to regress treatment assignment on all available pre-treatment covariates, and estimate the log-likelihood statistics from this regression. Next, I compare the log-likelihood statistics to the mean of the log-likelihood statistics that I obtain after re-assigning subjects to treatment or control group 5000 times. The p-value of the balance check is the share of random assignments that results in a log-likelihood that is as large or larger than the log-likelihood that I obtain from my experimental sample, given that the sharp null hypothesis is true.

been contacted than subjects in the control group. This result shows that the intervention was highly memorable.

Column 2 in Table 3 shows the effects of the letter on voting intentions as recorded in the telephone survey. The results show that the hand-written introduction letters increased Labour Party voting intentions from a very low base line among the targeted supporters of rival parties by more than 8 percentage points. Due to the relatively low response rate to the telephone survey, the effect is only significant at the .10 level.

Table 3: Experiment 1: Effects of letter on recall and Labour voting intentions (telephone survey)

	Recall contact	Labour voting intention
Control	29.3%	5.5%
Letter	44.0%	13.6%
ITT	15.2*	8.2 <sup>+</sup>
95% CI	[-2.3, 32.9]	[-2.9, 19.3]
N	110	110

\*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.1$  (based on one-tailed hypothesis tests using randomization inference), accounts for block and cluster random assignment

Table 4 shows the effects of the letter on Labour voting intentions as recorded during post-treatment canvassing interviews. I use the mean of the days between the treatment and the 2015 General Election to split the sample into two periods. Results are robust to various different specifications of the time-gap between the treatment and the election, such as using the median number of days <sup>5</sup>. The voting intentions in Table 4 column 1 were collected between April 2014 and December 2014, and the outcomes in column 2 were measured between December 2014 and May 2015. All voting intentions were recorded by Labour canvassers who were entirely unaware of subjects' treatment status. Strikingly, in period 1, the canvassing-based measure replicates the telephone based measure, with a point estimate of 13.8 percentage points. This effect is statistically significant at the .05 level, which is a function of the larger sample size compared to the telephone survey. In period 2, however, the point estimates are smaller than in period 1. In the second time period leading up to the 2015 General Election, the treatment effects decline by 10 percentage points, and are no longer distinguishable from zero in statistical terms.

<sup>5</sup>The robustness checks will be reported in the Appendix after EPSA

While the samples are not large enough to detect significant differences between the two time-periods, the effect sizes suggest that effects may have decayed over time.

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

	April - Dec '14	Dec '14 - May '15
Labour Support Control	12.0%	20.3%
Labour Support Letter	25.9%	23.9%
ITT	13.8*	3.7
95% CI	[1.8, 26.0]	[-7.4, 14.6]
Covariate-adjusted ITT	14.1*	4.9
95% CI	[0.0, 28.2]	[-4.6, 14.7]
N	207	611

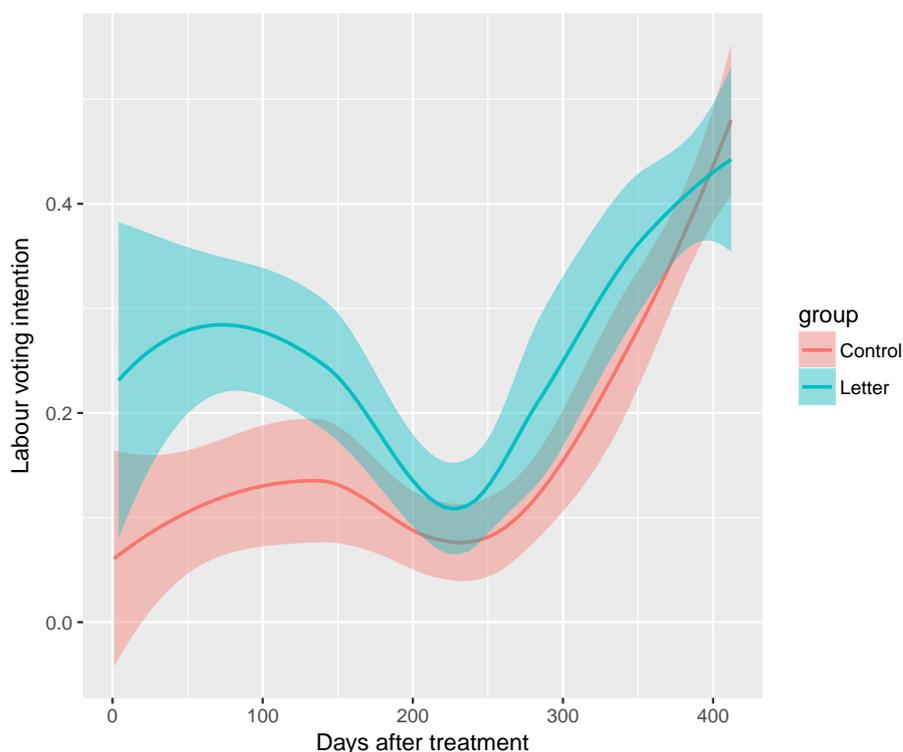
\*\*\*  $p < 0.001$ , \*\*  $p < 0.01$ , \*  $p < 0.05$ , +  $p < 0.1$  (based on one-tailed hypothesis tests using randomization inference), accounts for block and cluster random assignment

In Figure 3 I display the decay of effects over time in greater detail. Figure 3 plots Labour voting intentions in the treatment and the control group over the entire period from April 2014 to May 2015 using local polynomial regression. All results are robust to using linear regression instead of local polynomial regression. Figure 3 suggests that the difference in voting intentions between the treatment and the control group become statistically undistinguishable from zero 150 days after the treatment, and entirely disappear towards the end of the election campaign, when the two plots entirely overlap.<sup>6</sup>

The results of the second experiment are displayed in Table 5 and Figure 4. They show the effects of the door-to-door visits and leaflets on voting intentions as recorded during post-treatment canvassing interviews in the same time periods as in the first experiment. The results of the canvassing experiment are substantively similar to the results reported in Table 4. In spring and summer 2014, Labour voting intentions were significantly higher among subjects contacted by the candidate personally, and among subjects who received the leaflet introducing the candidate than among subjects in the control group. Campaign volunteers only managed to contact a very limited number of voters, and were therefore ineffective at persuading a significant number of voters. Point estimates range from 6 percentage-points for the door-to-door visit to 10 percentage-points for the leaflet. Both

<sup>6</sup>I use 83% confidence intervals in this analysis because they correspond to the 5% confidence level when we look at the difference between the two groups (and not whether the estimates in both groups are statistically distinguishable from zero.)

Figure 3: Decay of persuasion effects



83% Confidence Intervals

effects are statistically indistinguishable from each other.

Table 5: Experiment 2 – Effect of canvassing and leaflets on labour voting intentions

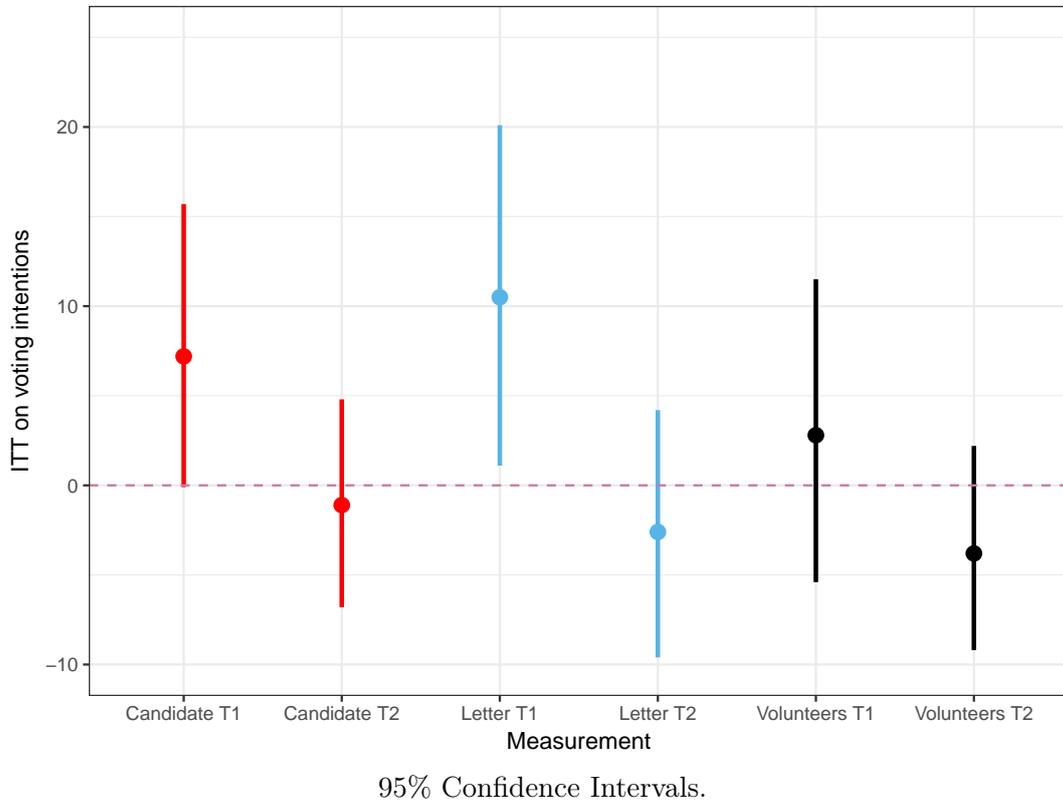
	Candidate t+1	Candidate t+2	Volunteers t+1	Volunteers t+2	Leaflet t+1	Leaflet t+2
Control mean	61%	69.9%	60.9%	69.7%	61.5%	69.9%
Contact rate	37.7%	43.7%	14.7%	18.5%		
ITT unadjusted	6.3 <sup>+</sup> [-2.6, 15.4]	-1.1 [-7.2, 5.1]	-0.2 [-8.8, 8.6]	-5.0 [-10.7, 1.1]	9.8* [-0.1, 19.6]	-3.2 [-10.5, 4.1]
CACE unadjusted	16.7 <sup>+</sup> [-7.8, 41.2]	-2.6 [-17.0, 11.8]	-1.4 [-67.0, 64.2]	-28.0 [-62.1, 6.1]		
ITT covariate-adjusted	7.2* [-0.1, 15.7]	-1.1 [-6.8, 4.8]	2.8 [-5.4, 11.5]	-3.8 [-9.2, 2.2]	10.5* [1.1, 20.1]	-2.6 [-9.6, 4.2]
CACE covariate-adjusted	18.7* [-2.9, 40.3]	-2.6 [-15.6, 10.4]	19.7 [-37.0, 76.4]	-20.5 [-50.8, 9.8]		
N	818	2133	979	2484	549	1324

\*\*\* p<0.001, \*\* p<0.01, \* p<0.05, + p<0.1 (based on one-tailed hypothesis tests), accounts for block and cluster random assignment. 95%-Confidence Intervals in brackets.

Figure 4 shows that, in line with the results of the letter-writing experiment, all treatment effects decline to zero in the second time period leading up to the General Election in May 2015. The results of both experiments, conducted on independent samples, therefore suggest that, initially, personal and impersonal introductions were effective at

persuading voters to change their minds. However, as the campaign unfolded, the effects decayed.

Figure 4: Effects of canvassing and letters on voting intentions



## Discussion and conclusion

The results of this paper provide new evidence on the first, understudied, stage of modern election campaigns: New candidates introduce themselves to voters, and through personal or impersonal interactions, they can leave a positive first impression. This paper shows that voters change their voting intention as a result of interacting with a parliamentary candidate, but after months pass, revert back to their default choice. It is the first stage of an election campaign, the attempt to persuade opponents and undecided voters, that has often been neglected based on the belief that modern campaigns are better equipped to mobilize than to persuade voters. However, until recently, this belief may have been as much a function of self-selection into research opportunities, available time frames, and outcome measures, than robust evidence.

This paper brings systematic evidence, based on two randomized field experiments embedded in a parliamentary candidate’s election campaign, to bear on this question. It makes several contributions. First, I find that both personal and impersonal interactions between a parliamentary candidate and voters during a high-salience election were effective at persuading voters. Persuasion is therefore not impossible in high stakes, partisan environments. These consistent results strongly suggest that partisans do not screen out messages from candidates who belong to rival parties, and, that at least for a period of time, they behave as we would expect from Bayesian updaters. This result supports survey and online experiments that show that individuals are unlikely to reject new information based on prior beliefs (Coppock, 2016). They might not move all the way from opposing an issue to supporting it, but they do update their priors based on new information.

Moreover, the recorded persuasion effects are long-lasting, and hence not dissimilar to the effects reported in earlier non-partisan studies (Broockman and Kalla, 2016), and low-salience elections (Barton et al., 2014, Potter and Gray, 2008). I exploit the specific setting of this study, combined with a unique panel dataset on individual voting intentions, to show that persuasion effects decay before voters go to the polling station. This decay correlates with the on-set of the national election campaign, which is characterised by the dominance of national political issues and the news media.

Second, although the use of canvassing data raises challenges such as self-selection of party supporters into the sample, potential problems may not outweigh potential gains. Since campaigns routinely collect canvassing-based party support data as part of their usual routine, using canvassing data for persuasion experiments is the most cost-effective way of studying persuasion in the context of real-world campaigns. Relying on an existing data generation process is also the least disruptive means of conducting persuasion experiments within high stakes environments. The costs of persuasion field experiments, even if they can be reduced significantly, are still non-negligible. Moreover, the grants necessary to run such experiments restrict access to field experimentation and make the method unfeasible for graduate students and early career researchers.

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. Using canvassing data to study political persuasion therefore constitutes

an attractive option for campaigns focused on in-cycle experimentation and researchers studying persuasion in partisan electoral contexts. Outcome data based on canvassing interviews are meant to complement existing methods of studying the causal effects of personal and impersonal campaign interactions on political persuasion, not replace them.

As every study, this paper has important limitations. Based on this research design, I am unable to causally disentangle why the persuasion effects recorded in the weeks after the letters are sent and the contacts are made, decay. The question is whether persuasion effects always decay over a long period of time, or if they decay because national level campaign factors overshadow voters' evaluations of local candidates. The latter explanation would be in line with recent work conducted in high-salience elections by Kalla and Broockman (2017) and Pons (2014). Based on this small sample of campaign experiments conducted in national elections, one may hypothesize that persuasion effects materialize when the party does well nationally (the French Socialist Party in the 2012 Presidential Elections), and decay if the party loses nationally (the Democrats in the 2016 US Presidential Election, and Labour in the 2015 UK General Elections). While this paper provides suggestive evidence that national factors may condition the long-term effectiveness of persuasion efforts by local candidates, it must remain an open question whether voters' evaluations of local candidates will be crowded out by national level considerations, or if they tend to align with national trends. Given the small number of persuasion field experiments in high salience elections, the question, under which conditions personal and impersonal interactions between candidates and voters lead voters to update their voting intentions for good, is therefore far from settled. I hope that by introducing and validating a new means of measuring voting intentions in election campaigns, this paper can contribute to a significant increase in the number of persuasion field experiments embedded in partisan campaigns. If experiments can be conducted in-cycle, the incentives for political campaigns to collaborate with researchers increase: Campaigns have a limited budget, both in money and time, and have an inherent interest in using these resources efficiently. By following the "test, learn, adapt" method (Haynes et al., 2012), campaigns can adjust their strategies and tactics "on the fly". The use of canvassing data hence directly addresses one of the key limitations of embedded experiments as defined by Loewen et al. (2010): Researchers need to think about ways of conducting experiments that can deliver timely results for political

elites.

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## Appendix

Figure A.1: Experiment 1: Letters

Dear [REDACTED]

My name's Rowena and I'm writing to ask for a cup of tea and a chat.

You've probably heard our long-standing MP John Denham retire next year, and I'm Labour's new candidate.

I'd love to meet and listen to what you want for your next MP.

I live locally and am happy to meet wherever's convenient.

Thanks and best wishes,  
Rowena

Dear [REDACTED]

My name's Rowenna and I'm writing to ask for a cup of tea and a chat.

You've probably heard our long-standing MP John Denham retire next year, and I'm Labour's new candidate.

I'd love to meet and discuss how we can build on our city's strengths together.

I live locally and am happy to meet wherever's convenient.

Thanks and best wishes,  
Rowenna

Figure A.2: Experiment 1: Business cards



Figure A.3: Experiment 2: Canvassing



Canvassing

Figure A.4: 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,

*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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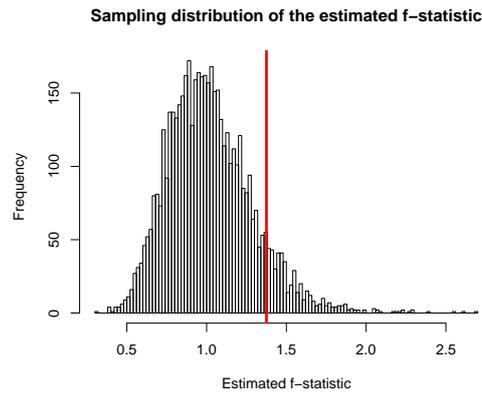
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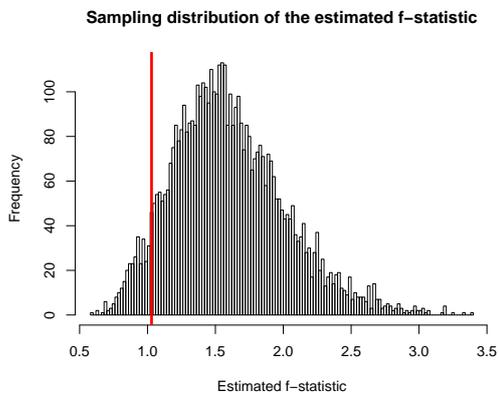
## Rowenna Davis' canvassing experience

"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."

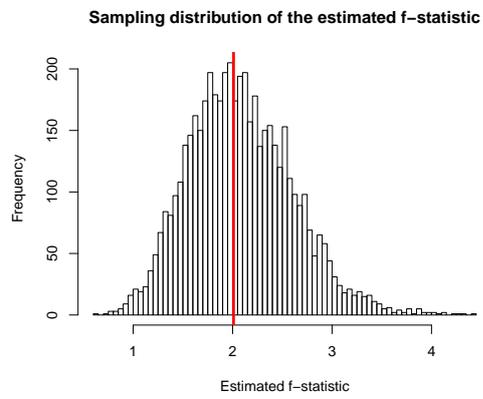
Figure A.5: Balance check experiment 1: Treatment assignment on pre-treatment covariates



a) Telephone survey:  $p=0.09$



b) Canvass period 1:  $p=0.93$



c) Canvass period 2:  $p=0.52$

Figure A.6: Balance check experiment 2: Treatment assignment on pre-treatment covariates

