Journal of Elections, Public Opinion & Parties
Publication details, including instructions for authors and subscription information:
http://www.informaworld.com/smpp/title~content=t713727959

The Effect of Grassroots Campaigning on Issue Preferences and Issue Salience

Kevin Arceneaux [a]; Robin Kolodny [a]
[a] Temple University, Philadelphia, USA

Online Publication Date: 01 August 2009

To cite this Article Arceneaux, Kevin and Kolodny, Robin(2009)'The Effect of Grassroots Campaigning on Issue Preferences and Issue Salience',Journal of Elections, Public Opinion & Parties,19:3,235 — 249
To link to this Article: DOI: 10.1080/17457280903072916
URL: http://dx.doi.org/10.1080/17457280903072916

Journal of Elections, Public Opinion and Parties
Vol. 19, No. 3, 235–249, August 2009

Routledge
Taylor & Francis Group

The Effect of Grassroots Campaigning on Issue Preferences and Issue Salience

KEVIN ARCENEAUX & ROBIN KOLODNY
Temple University, Philadelphia, USA

ABSTRACT *What effect, if any, do personally delivered campaign messages have on political attitudes? Recent evidence suggests that these messages can affect voting behavior, but not issue opinions (Arceneaux, 2007). We extend this work by considering the effect of electioneering on opinions about contested position issues, and whether the delivery method of the message matters. Drawing on a large scale randomized field experiment, we show that personally delivered campaign messages can influence people's issue attitudes and issue importance on emerging issues. Furthermore, we find that people are able to resist persuasive messages that are inconsistent with their value preferences.*

This paper asks two important questions. First, can people be persuaded to change their positions on highly controversial issues? Second, does the particular method of campaigning – door-to-door canvassing or phone calls – make a difference? The first question has clear implications for those wanting to conduct issue-based campaigns. Contrary to early claims that political advertising has "minimal effects" (e.g., Atkin and Heald, 1976; Patterson & McClure, 1976), mounting evidence strongly suggests that mass political advertising can both alter people's political attitudes and focus their attention on particular issues (Gerber, et al., 2006; Huber & Arceneaux 2007; Johnston, et al., 2004). These more recent studies have uncovered the persuasive effects of advertising through rigorous research designs that capture variation in the partisan balance of advertising and more accurately measure causal effects with natural and randomized field experiments (Gerber, et al., 2006; Huber & Arceneaux, 2007; Johnston, et al., 2004).

The second question about campaign methods addresses the dilemma that campaigners (candidates, political parties, and interest groups) face in deciding how best to accomplish their electoral goals given a scarcity of resources. Although it would be difficult to detect from the voluminous literature on political advertising in the US, political parties spend millions of dollars and devote enormous manpower to grassroots campaigning, such as door-to-door canvassing and phone calls. In the 2000 US presidential election, for example, the national party organizations spent

Correspondence Address: Kevin Arceneaux and Robin Kolodny, Department of Political Science, Temple University, Gladfelter Hall, 4th Floor, 1115 W. Berks Street, Philadelphia, PA 19122, USA. Email: kevin.arceneaux@temple.edu; rkolodny@temple.edu

ISSN 1745-7289 Print/1745-7297 Online/09/030235-15 © 2009 Elections, Public Opinion & Parties
DOI: 10.1080/17457280903072916

only 25% less on grassroots campaigning than mass media advertising and the local party organizations spent 7.5 times more on direct campaigning than mass advertising (La Raja & Jarvis-Shean, 2001). In 2008, grassroots campaigning in early caucus states was seen as the key to Barack Obama's securing of the Democratic presidential nomination, despite Hillary Clinton's success in primary states (Montero, 2008). Yet despite advances in understanding the persuasive effects of mass political advertising, little is still known about the effect that more direct forms of campaigning have on political attitudes. To date, only a handful of rigorous studies have been published on the subject (Arceneaux, 2007; Gerber, 2004; Nickerson, 2005).[1]

Gerber and Green (2000) establish that personal contact, especially door-to-door canvassing, increases the likelihood that individuals will turn out to vote. Arceneaux (2007) finds evidence that grassroots campaigning can influence voting choices but, intriguingly, finds scant evidence that personal contact from a campaign worker affects citizens' attitudes about political issues. If this is a general finding, it could be explained by the way in which voters process information. To the extent that citizens construct evaluations of candidates through an online process, voters may discard information about a candidate – such as issue positions – once they have used it to update their evaluation of the candidate (cf. Hastie & Park 1986; Lodge, et al., 1995). Accordingly, personally delivered campaign appeals may influence voters' beliefs about candidates, but by Election Day, these effects are fully absorbed into the voting decision and without an experiment designed to test precisely for this effect, any evidence of persuasion would be impossible to discern.

However, it is possible that this finding is not a general pattern, because the campaign messages in Arceneaux's study address *valence* issues (cf. Stokes 1963). Because most voters agree on valence issues, there are few left to persuade. After all, who does not prefer economic growth, crime reduction, and water conservation? In contrast, we expect that there will be more evidence of persuasion with respect to *position* issues. These issues are defined by their lack of consensus. As contested policy solutions, position issues lend themselves to argumentation. It is possible that an appeal may convince people to support or oppose budget cuts, support or oppose gun control, or support or oppose zoning restrictions.

Nevertheless, it is likely that the degree to which people can be swayed on position issues varies. On some issues, people possess strong, well-formed, crystallized attitudes, making it unlikely that a persuasive argument can do much to change their minds (Converse, 1964). We expect to see the greatest potential for attitude change on opinions regarding less well-defined issues. Because citizens simply have not given much thought to novel or complex issues, they lack the stable store of considerations on these issues that they have on more crystallized issues. All things being equal, a persuasive message is more likely to alter the balance of available considerations and lead to attitude change when it addresses a less crystallized issue (cf. Zaller 1992). Yet it is also important to remember that citizens are more likely to

reject persuasive arguments that conflict with underlying predispositions (Petty & Cacioppo, 1986; Zaller, 1992). Taken together, both of these propositions generate the hypothesis that even if a persuasive message targets a less crystallized issue, citizens are more likely to accept arguments that are in line with their attitudes on the general issue area (pro-attitudinal arguments), and are more likely to reject arguments that contravene their predispositions (counter-attitudinal arguments) (Kam, 2005; Petty & Cacioppo, 1986).

We also suspect that the mode of communication may condition the persuasiveness of the campaign message. Previous research convincingly demonstrates that impersonal forms of communication, such as written arguments or television commercials, can be persuasive. Yet do more personal forms of communication amplify the persuasive effects of messages? After all, face-to-face contact has proved more effective than impersonal tactics (such as phone calls) at motivating a broad array of behaviors, from voting (Gerber & Green, 2000) to blood donation (Jason, et al., 1984) to recycling (Reams & Ray, 1993). The same may be true with respect to persuasive messages. For instance, face-to-face contact may make a bigger impression on individuals, leading them to remember the interaction better and, thereby, give greater weight to the considerations they acquired through the interaction.

Our field experiment allows us to gauge the effects of personally delivered campaign messages on attitudes about the emerging issue of birth control as well as assess whether a message delivered through canvassing is more effective than one delivered over the phone. Our first hypothesis is that voters will be receptive to issue influence on emerging issues. Leading up to the 2006 elections, some pro-life (anti-abortion) activist groups shifted their attention to birth control, lobbying many states in the US to adopt a "conscience clause" that allows pharmacists to refuse to dispense birth control pills or other forms of contraception if doing so violates their personal beliefs. There were even a number of documented cases in which pharmacists refused to fill women's prescriptions for oral contraception (cf. Haff, 2006). Consequently, women's access to birth control is an emerging position issue connected to the narrower debate over abortion. The group hoped to persuade voters to favor their pro-birth control position, and the candidates who also agreed with it, in the upcoming election.

Our second hypothesis is that personal contact will prove more persuasive to voters than impersonal contact. If personal contact is recalled more than impersonal contact, then campaigners can make better decisions about how to invest their resources. We investigate how door-to-door canvassing and phone calls affect people's political attitudes and sense of issue importance by drawing on a randomized field experiment conducted in two state legislative districts located in Southeast Pennsylvania during the 2006 midterm election. The group with which we worked canvassed or called (based on random assignment) households of registered voters. In their conversations with subjects, canvassers and phone callers discussed access to birth control as a way to garner support for the group's endorsed candidates.

Experimental Design

Background

US politics in 2006. The 2006 elections were competitive on a national scale. While there was no presidential election, national elections were scheduled to select the fixed-term US Congress (one-third of US Senate seats were up for election and all 435 seats of the US House of Representatives). In the 2006 midterm year, 36 of the 50 states held elections for their chief executives, governors, and since all states have fixed-term legislatures, most of them had state-level legislative elections as well. Our experiment took place in two of these state legislative districts in Pennsylvania. Pennsylvania is an exceptionally good case for the study of persuasion on issue positions as it has always been tightly contested between Democrats and Republicans. While both parties have had close electoral competition, in 2006, expectations ran high that the Democrats might gain control of one chamber of the Pennsylvania General Assembly, the Pennsylvania House of Representatives. The state legislative elections had the added dimension of a highly public "scandal" – a pay rise lawmakers of both parties first approved in the summer of 2005 and later rescinded. Indeed 15 state legislative incumbents were defeated in the May 2006 primaries, 11 Republicans and four Democrats (Jacobson, 2006). Going into this election, Democrats sought to win eight additional seats statewide to control the lower chamber of the state legislature.

Swing districts in southeastern Pennsylvania. Our experiment took place in two of the districts where Democrats hoped they might defeat current or retiring Republican incumbents. The 161st district was represented by a 28-year Republican incumbent. The Democratic challenger was a former prosecuting attorney and Iraq war veteran who lined up support from a variety of interest groups. The dynamic shifted clearly toward the Democrat in late September in response to an ad run by the Republican Party alleging that the Democrat "helped" put a child predator back on the street (Schaeffer, 2006a). The ad was roundly criticized and the race became extremely high profile. The Democratic challenger beat the Republican incumbent by 820 votes out of 27,870 cast. The 156th district's incumbent Republican chose to retire from a district with voter registration of 20,941 Republicans, 12,185 Democrats and 6,236 who cited no affiliation (Price, 2006). Both candidates in this open seat race were experienced politicians who had been elected to the same local governing body, the West Chester Borough Council. On election night, the results of this race were too close to call. It took over a month of recounts before the Democrat was declared the winner by 28 votes out of 23,204 cast on 21 December 2006 (Schaefer, 2006b).[2] The outcome of these two races, together with six others previously decided, determined that the Democrats would have a slim majority in the Pennsylvania House of Representatives.

Subjects and Protocol

In autumn 2006, we conducted a field experiment with the help of a well-known liberal issue advocacy group that focuses on women's issues. The group sent

workers to campaign on behalf of the Democratic candidates in both the 156th and 161st districts. The group selected a target universe of 67,076 individuals from 39,595 households from the registered voter file (24,000 Democrats, 32,000 Republicans, and 11,000 unaffiliated voters). The group targeted people, including nearly 22,000 female registered Republicans, it believed to be sympathetic to support for reproductive rights[3] and, thus, open to supporting the Democratic candidate.

We randomly assigned households to receive door-to-door canvassing, a phone call, or no contact (i.e., the control group).[4] We show the breakdown by households and individuals in Table 1a.[5] After the election, a reputable survey research firm surveyed subjects from 12,000 randomly sampled households, producing 2,000 completed interviews. The breakdown of treatment assignment by districts for the survey sample is shown in Table 1b.[6]

Even though abortion has become an increasingly partisan issue in the United States (Adams, 1997), there remain individuals who hold views on abortion that are at variance with their preferred party's platform. For instance, many Catholic Democrats oppose abortion on religious grounds, and many professional women align with the Republican Party on economic issues while maintaining pro-choice views. The group's strategy was to contact cross-pressured Republicans and Independents whose support for abortion rights might make them open to voting for Democratic candidates. Canvassers and phone callers were trained to work from the same script, which following standard practice, first asking subjects assigned to the treatment group a brief set of questions about their issue and candidate

Table 1. Random assignment by district

a. Target population

	District 156		District 161	
Experimental condition	Number of households	Number of individuals	Number of households	Number of individuals
Door-to-door canvass	12,515	20,441	12,833	22,768
Phone call	2,846	5,055	4,434	5,149
Control	4,150	6,195	2,817	7,468
Total	19,511	31,691	20,084	35,385

b. Post-election survey sample

Experimental condition	District 156	District 161
Door-to-door canvass	314	297
Phone call	572	573
Control	114	130
Total	1,000	1,000

preferences. Subjects who said that they viewed "protecting access to family planning services" as important and did not express opposition to the Democratic statehouse candidate, were read the following endorsement:

> Okay, thanks for answering those questions. Just to let you know, [GROUP] has endorsed (Democratic candidate name) because of (his/her) stance on access to birth control, cervical cancer screenings, mammogram services, and his/her support for reproductive healthcare rights. *(If they say: Does that mean (he/she) supports abortion? Answer: It's my understanding that (he/she) has expressed the right to choose abortion, though that is not (his/her) top priority.*)[7]

If respondents did not express support for open access to family planning or explicitly said they opposed the Democratic candidate, they were thanked for their time and the endorsement was not given. This message is well suited to test the hypotheses we developed above. It directly addresses an emerging position issue (birth control) that is connected with a position issue that has been a stable aspect of party politics for the past 20 years (abortion). Furthermore, abortion attitudes tend be both a central and crystallized idea element in belief systems (Abramowitz, 1995), and a polarizing issue split along partisan lines (Adams, 1997). Consequently, this stimulus affords us the opportunity to gauge the extent to which campaign messages can affect attitudes on established and emerging issues. The random assignment of registered voters into personal treatment, phone call, or control groups means that the distribution of attitudes towards female reproductive rights will be the same (within sampling variability). This allows us to assess the effect of the method of campaigning because in the absence of the campaign's intervention, there should be no differences in political attitudes between the treatment and control groups.

Measures

Respondents answered a number of attitudinal questions on the post-election survey, which provide measures for our dependent variables. We used standard question wording to measures subjects' abortion and birth control attitudes. For abortion, respondents were asked, "Would you like to see the government and the courts make it harder to get an abortion than it is now, make it easier to get an abortion than it is now, or leave the ability to get an abortion the same as it is now?" And, for birth control, we used the same question wording but substituted "birth control" for "abortion". On both questions, interviewers randomized whether they said "harder" or "easier" first. In the analysis that follows, we code a "harder" response as –1, a "same" response as 0, and an "easier" response as +1. In addition, we measured how much importance subjects placed on birth control as an issue by asking respondents after the birth control question, "How important is this issue to you? Very important, important, somewhat important, or not at all important". We

code "not at all important" as 0, "somewhat important" as 1, "important" as 2, and "very important" as 3.[8] We also measured respondents' partisanship by asking the standard question, "Generally speaking, do you consider yourself a Democrat, Republican, Independent, or what?" Subjects' demographic information (age and geographic location) was taken from the official voter file.[9]

Findings

We estimate the effect of the campaign activity on abortion and birth control attitudes by regressing post-study measures of these attitudes on indicators for assignment to the canvassing and phone groups.[10] Because these indicators measure random assignment to the group and not exposure to the message, the regression coefficient associated with each indicator is an unbiased estimate of the intent-to-treat (ITT) effect. The ITT effect tells us the overall effect of the campaign message on the target population, including those who received the message and those who did not. It is the difference between those who were randomly assigned to the treatment group and those who were randomly assigned to the control group; the ITT effect is the impact of the treatment among those whom we *intended* to treat. This quantity is of great interest to campaigns that do not know beforehand whom they will be able to contact and tells them – given a target population – the effectiveness of their campaign among those they try to contact. It is a simple matter to estimate the average treatment on treated effect (ATT) among those exposed to the message by using random assignment as an instrument for exposure in a two-stage model (Angrist, et al., 1996). Unfortunately, the campaign did not systematically collect data on which households were exposed to the message, making it impossible to estimate the ATT. This is not an uncommon aspect of field experiments where one cannot observe exposure (e.g., television advertisements or direct mail messages), and does not pose a problem to obtaining unbiased estimates of the ITT effect.

Because our dependent variables are measured on ordinal scales, we use an ordered probit regression model to estimate the ITT effects.[11] In order to improve the fit of the regression models and, thus, the efficiency of the standard errors, we include covariates that may be related to abortion and birth control attitudes: age, gender, indicators for partisanship, and a dummy variable for whether the respondent lived in the 156th district. Since canvassing and phone calls were randomly assigned, the inclusion (or exclusion) of these covariates does not affect the point estimates of the ITT effects.

The results for the abortion attitudes model are shown in the first column of Table 2. As we anticipated, the campaign message had little effect on subjects' abortion attitudes. Both canvassing and phone calls had miniscule and statistically insignificant effects on the likelihood that subjects in the treatment group expressed a pro-choice attitude ($z = 0.70$ for canvassing and $z = 0.79$ for phone calls). Unsurprisingly, abortion attitudes are strongly associated with partisanship. As a polarizing issue, Democrats are far more likely than Republicans to support abortion rights, while Independents fall in between.

Table 2. The effects of personally delivered campaign messages on issue attitudes and issue importance

	Abortion attitude	Birth control attitude	Birth control importance ranking
Canvass treatment	0.063	0.205*	0.143†
	(0.091)	(0.109)	(0.089)
Phone treatment	0.066	0.030	0.142*
	(0.084)	(0.098)	(0.083)
Abortion attitude		1.151***	–0.063
		(0.146)	(0.115)
Canvass × abortion		0.395**	0.344***
		(0.174)	(0.133)
Phone × abortion		–0.125	0.194†
		(0.156)	(0.125)
Age	0.000	–0.006***	–0.001
	(0.002)	(0.002)	(0.001)
Female	0.010	0.082	0.405***
	(0.056)	(0.064)	(0.054)
Republican	–0.576***	–0.324***	–0.184***
	(0.068)	(0.078)	(0.066)
Democrat	0.316***	0.000	0.119*
	(0.069)	(0.081)	(0.068)
District 156	–0.057	–0.025	–0.037
	(0.054)	(0.062)	(0.052)
Cut points			
τ_1	–0.718***	–2.166***	–0.561***
	(0.125)	(0.154)	(0.122)
τ_2	0.863***	–0.148	0.243**
	(0.125)	(0.143)	(0.122)
τ_3			0.794***
			(0.123)
N	1781	1627	1760
Pseudo-R^2	0.056	0.223	0.026
χ^2	201.834***	680.957***	123.34***

Note: Ordered probit estimates; standard errors in parentheses.
***p < 0.01, **p < 0.05, *p < 0.10, †p < 0.12, two-tailed p-values.

Next, we test the hypothesis that campaign messages are capable of influencing attitudes on less polarized aspects of the abortion debate as long as the message is consistent with the recipients' underlying abortion preferences. We accomplish this by regressing birth control preferences on the treatment indicators and interactions between treatment indicators and subjects' abortion attitudes. These results are

reported in the second column of Table 2. The statistically significant interaction between canvassing and abortion attitudes support the hypothesis that the effect of the campaign message, as delivered via door-to-door canvassing, is conditioned by people's abortion predispositions. We do not find a statistically significant interaction between the phone treatment and abortion attitudes. To illustrate the interaction between abortion attitudes and canvassing, we calculate the ITT effects as follows,

$$ITT = \Pr(BC = 1 \mid C = 1, A = a) - \Pr(BC = 1 \mid C = 0, A = a),$$

where BC = birth control attitude (−1 = prefer stricter policies, 0 = prefer status quo, +1 = prefer more permissive policies), C = canvassing assignment indicator (0 = control group, 1 = canvassing group), A = abortion attitude, and a = value of abortion attitude variable (harder, same, easer).

As depicted in Figure 1, treatment group subjects who are supportive of abortion rights are more likely to support making access to birth control easier than subjects with the *same* abortion attitude in the control group.[12] Treatment group subjects who support the status quo policy on abortion are 8.1 percentage points more likely to support making it easier for people to gain access to birth control than are like-minded individuals in the control group (95% confidence interval runs from −0.5 to 16.4 percentage points). Subjects who want to see the government make it easier for women to obtain an abortion were 10.7 percentage points more likely than control group subjects who support expanding abortion rights to say that birth control access should also be expanded (95% confidence interval runs from 2.5 to 21.1 percentage points). Conversely, among subjects who want the government to restrict access to abortion, the campaign message had no statistically significant effect on their birth control attitudes, and, if anything, may have actually led these subjects to adopt a less liberal opinion on birth control (ITT effect = −2.8 percentage points; 95% confidence interval runs from −13.5 to 5.1 percentage points). In short, the campaign message led some pro-choice individuals to see the connection between birth control access and abortion rights, helping them bring their preference on the government regulation of birth control in line with their attitude on abortion.

We also estimated the effect of the campaign message on the salience of the birth control issue to subjects (see column 3 of Table 2). Again, the data support the hypothesis that people's abortion predispositions condition the effect of the campaign messages on how important subjects consider the birth control issue, as delivered by both the door-to-door canvassers and phone bank callers. Subjects in the canvassing treatment group who are supportive of abortion rights, for instance, are more likely to view birth control as an important issue relative to abortion supporters in the control group (see Figure 2). Those who support the status quo on abortion access are 4.5 percentage points more likely than similar individuals in the control group to say the birth control issue is very important to them (95% confidence interval: −0.5 to 9.7 percentage points), and those who would like to expand abortion access are 15.8 percentage points more likely than like-minded individuals in the control group to view birth control as a very important issue (95% confidence

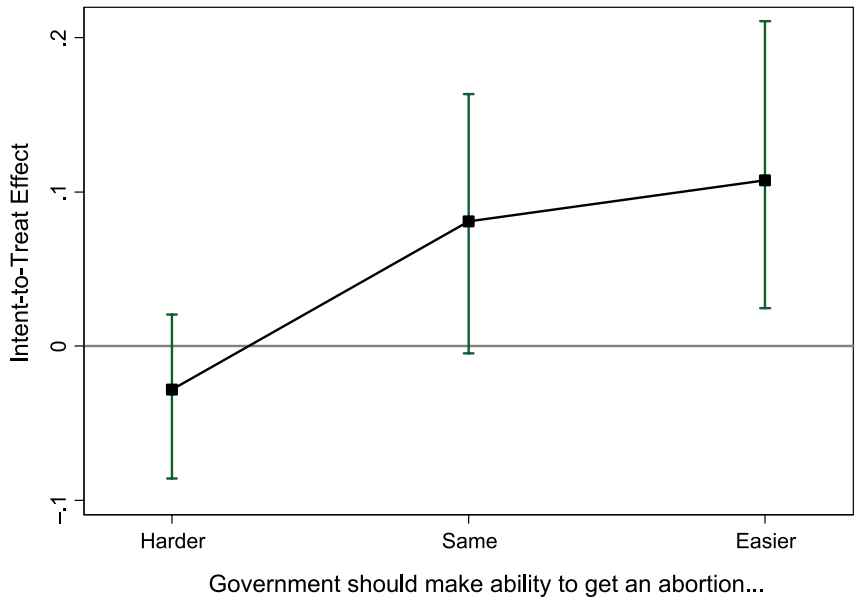

Figure 1. The effects of door-to-door canvassing on birth control attitudes, as conditioned by subjects' predisposition on abortion.
Note: Squares represent the estimated ITT effect (see text for an explanation). The horizontal bars represent the 95% confidence interval, and were estimated with *Clarify* (Tomz, et al., 2003).

interval: 5.4 to 25.7 percentage points) Abortion foes in the treatment group, on the other hand, were, if anything, less likely than abortion foes in the control group to view birth control as an important issue, although this negative effect is not statistically significant (ITT effect = –5.5; 95% confidence interval: –14.2 to 1.9 percentage points).

The data also support our expectation that messages delivered via canvassing would be more effective than messages delivered through phone calls. With respect to birth control attitudes, the door-to-door canvassers influenced the attitudes of pro-choice subjects, while the phone bank had no statistically significant effect on subjects' birth control attitudes. Unsurprisingly, a post-hoc test confirms that the ITT effect for the canvassing group is statistically different from the ITT effect for the phone group ($z = 4.42$, $p < 0.001$). With respect to issue importance, both canvassing and phone calls had a positive effect among pro-choice subjects, but canvassing had a stronger effect ($z = 1.72$, $p = 0.043$, one-tailed test).

Conclusion

These findings offer some clues about the conditions under which personally delivered campaign messages can influence people's issue attitudes, helping bring

Figure 2. The effects of door-to-door canvassing on the importance ranking of the birth control issue, as conditioned by subjects' predisposition on abortion.
Note: Squares represent the estimated ITT effect (see text for an explanation). The horizontal bars represent the 95% confidence interval, and were estimated with *Clarify* (Tomz, et al., 2003).

some clarity to a bourgeoning field of study. We add to previous work that suggests campaign messages are unable to affect people's opinions about valence issues (Arceneaux, 2007) by demonstrating that campaign messages also do little to affect attitudes on polarized issues. People's attitudes on these types of issues are likely to be crystallized and firm, limiting the effect of persuasive communication. Yet this does not mean that campaigns cannot seek to influence people's attitudes on issues related to a polarized debate. The data support the interpretation that personally delivered campaign messages can move attitudes on less visible issues, and thus those on which people are likely to have less crystallized attitudes.

Nevertheless, campaigns do not have a free hand in influencing people's opinions on emerging issues. Our findings suggest that people are able to resist counter-attitudinal messages on a peripheral issue (e.g., birth control) that are inconsistent with their more crystallized attitude on the central issue (e.g., abortion), while accepting pro-attitudinal messages. This finding is consistent with evidence from laboratory settings that people are able to systematically weigh persuasive arguments and resist those that conflict with their values (e.g., Druckman, 2004; Petty & Cacioppo, 1986). Consequently, we suspect that when campaigns attempt to reframe a polarized position issue by targeting issues that are less central to the debate, they

will succeed – at least in the long run – in simply making the peripheral issues more central and, therefore, just as polarizing as the original issue.

This study also demonstrates that door-to-door canvassing may be more effective than phone calls at influencing people's issue attitudes. Because we do not have complete information about how many people the campaign contacted within each group, we cannot rule out the possibility that canvassing appears to be more effective because canvassers reached a larger proportion of their target group than the phone callers reached in theirs. However, we strongly doubt this possibility, since phone banks typically have higher contact rates than door-to-door canvassers (i.e., in an hour, it is easier to call ten people than it is to knock on ten doors). Moreover, in this study, the canvassing group was nearly 3.5 times the size of the phone group, making it far easier for the phone bank to have a higher contact rate than the canvassing group. If this were true, it would mean that the ATT effect would be greater for the canvassing group than it would be for the phone group by a wider margin than we found with the ITT analysis.[13] Accordingly, we believe that these data support the thesis that given the same message, face-to-face contact makes a bigger impression on people than phone calls. This is not to say that more impersonal forms of communication are not persuasive – a mountain of evidence (including this study) suggests otherwise. Instead, it suggests that more personal forms of communication may augment the persuasiveness of messages. We leave it for future research to sort out why and under what conditions this is the case.

Acknowledgements

A previous version of this paper was presented at the 2008 State Politics and Policy Conference, Philadelphia, PA, 30–31 May. We owe a debt of gratitude to Michael Hagen and the Temple University Institute for Public Affairs whose support and generous funding made this project possible. Of course, any errors are ours.

Notes

1. There are a number of observational studies (some of which the researchers inaccurately categorize as experiments) that study the relationship between voting decisions and campaign contact (e.g., Bartell & Bouxsein, 1973; Blydenburgh, 1971; Hillygus, 2005; Kramer, 1970; Rosenstone & Hansen, 1993), but unlike randomized field experiments, one must make heroic assumptions about the absence of selection bias and unobserved heterogeneity when inferring causal effects from these data.
2. The Democrat had 11,616 votes to the Republican's 11,588.
3. Specifically, independents, female Republicans, and Republicans of both genders who voted infrequently.
4. Some subjects in the door-to-door canvassing condition were assigned to receive a follow-up phone call, but the additional phone call did not have perceptible effects on attitudes.
5. Using multinomial logit, we regressed treatment assignment on age, party registration, household size, sex, precinct, and voter history, and found that these covariates do not jointly predict treatment assignment (District 156: no phone number listed, $\chi^2[47] = 43.49$, $p = 0.619$, phone number listed, $\chi^2[235] = 230.98$, $p = 0.562$; District 161: no phone number listed, $\chi^2[61] = 55.24$, $p = 0.684$, phone number listed, $\chi^2[310] = 302.06$, $p = 0.616$).

6. Using the most conservative American Association for Public Opinion Research (AAPOR) definition (i.e., definition #1) to calculate the response rate, the survey firm interviewed 30.6% of the eligible sample. Like observational surveys, our results only generalize to the population of individuals who are willing to participate in surveys. Of course, the advantage of our study over an observational one is that survey nonresponse does not undermine the internal validity of our experiment. As evidence, the response rates do not differ across treatment groups (District 156: $\chi^2[5] = 3.11$, $p = 0.684$; District 161: $\chi^2[5] = 3.53$, $p = 0.619$). Finally, a randomization check similar to the one reported in note 4 failed to reject the hypothesis that the treatment groups differed along observed dimensions (District 156: $\chi^2[230] = 211.28$, $p = 0.807$; District 161: $\chi^2[295] = 297.82$, $p = 0.443$).
7. All door-to-door canvassers worked from this script. Phone bank callers were randomly assigned to read either this script or one very similar. There are no consistent significant differences in effects between the two scripts. Consequently, we do not make a distinction between the scripts in the analyses reported here. The alternate script read:

   > Okay, thanks for answering those questions. Just to let you know, [GROUP] has endorsed (Democratic candidate name) because (he/she) believes the current attacks on birth control and reproductive healthcare must stop. (Democratic candidate name) will work on behalf of Pennsylvania families to keep government intrusion out of personal healthcare decisions. *(If they say: Does that mean (he/she) supports abortion? Answer: It's my understanding that (he/she) has expressed the right to choose abortion, though that is not (his/her) top priority.*)

8. Respondents were also asked to rate the importance of the abortion issue. As we find with respect to abortion attitudes, the campaign message did little to affect respondents' subjective assessment of the issue's importance.
9. Gender was determined by the survey interviewers.
10. The treatment effect estimates combine the impact of the campaign message along with the screening survey.
11. We do not find substantive differences if we relax the assumption that the answers to the survey questions fall on a categorical scale by employing a multinomial logit model instead.
12. ITT effects and confidence intervals were estimated with Monte Carlo simulations using *Clarify* in STATA 9.2 (Tomz, et al., 2003).
13. The ATT effect equals the ITT effect divided by the contact rate. Because the contact rate is a fraction that ranges between 0 and 1, the ATT effect is necessarily larger than the ITT effect. Therefore, if the contact rate in the phone group > contact rate in the canvassing group, then the ATT effect for the canvassing group > ATT effect for the phone group.

References

Abramowitz, Alan I. (1995) It's abortion, stupid: policy voting in the 1992 presidential election. *Journal of Politics*, 57(1), pp. 176–186.

Adams, Greg D. (1997) Abortion: evidence of an issue evolution. *American Journal of Political Science*, 41(3), pp. 718–737.

Angrist, Joshua D., Imbens, Guido W. & Rubin, Donald B. (1996) Identification of causal effects using instrumental variables. *Journal of the American Statistical Association*, 91(434), pp. 444–455.

Arceneaux, Kevin (2007) I'm asking for your support: the effects of personally delivered campaign messages on voting decisions and opinion formation. *Quarterly Journal of Political Science*, 2(1), pp. 43–65.

Atkin, Charles & Heald, Gary (1976) Effects of political advertising. *Public Opinion Quarterly*, 93(4), pp. 901–910.

Bartell, Ted & Bouxsein, Sandra (1973) The Chelsea Project: candidate preference, issue preference, and turnout effects of student canvassing. *Public Opinion Quarterly*, 37(2), pp. 268–275.

Blydenburgh, John C. (1971) A controlled experiment to measure the effects of personal contact campaigning. *Midwest Journal of Political Science*, 15(2), pp. 365–381.

Converse, Philip E. (1964) The nature of belief systems in mass publics, in: David E. Apter (ed.) *Ideology and Discontent* (New York: Free Press).

Druckman, James N. (2004) Political preference formation: competition, deliberation, and the (ir)relevance of framing effects. *American Political Science Review*, 98(4), pp. 671–681.

Gerber, Alan (2004) Does campaign spending work? Field experiments provide evidence and suggest new theory. *American Behavioral Scientist*, 47(5), pp. 541–574.

Gerber, Alan S. & Green, Donald P. (2000) The effects of canvassing, direct mail, and telephone contact on voter turnout: a field experiment. *American Political Science Review*, 94(3), pp. 653–663.

Gerber, Alan S., Gimpel, James G., Green, Donald P. & Shaw, Daron R. (2006) The influence of television and radio advertising on candidate evaluations: results from a large scale randomized experiment. Paper presented at the Standard University Methods of Analysis Program in the Social Sciences, Palo Alto, CA.

Haff, Nicole (2006) Health care coverage: contraception and Viagra. *Georgetown Journal of Gender and the Law*, 7, pp. 1185–1199.

Hastie, Reid & Park, Bernadette (1986) The relationship between memory and judgments depends on whether the task is memory-based or on-line. *Psychological Review*, 93, pp. 258–268.

Hillygus, D. Sunshine (2005) Campaign effects and the dynamics of turnout intention in Election 2000. *Journal of Politics*, 67 (February), pp. 50–68.

Huber, Gregory A. & Arceneaux, Kevin (2007) Identifying the persuasive effects of presidential advertising. *American Journal of Political Science*, 51(4), pp. 961–981.

Kramer, Gerald H. (1970) The effects of precinct-level canvassing on voting behavior. *Public Opinion Quarterly*, 34, pp. 560–572.

Jacobson, Louis (2006) Incumbent wipeout in Pennsylvania has big implications for fall. *Roll Call*, 24 May (accessed via Lexis-Nexis, available at <http://www.lexis–nexus.com>, 2 February 2007).

Jason, Leonard A., Rose, Tomas, Ferrari, Joseph R. & Barone, Russ (1984) Personal versus impersonal methods for recruiting blood donations. *Journal of Social Psychology*, 123 (June), pp. 139–140.

Johnston, Richard, Hagen, Michael G. & Hall Jamieson, Kathleen (2004) *The 2000 Presidential Election and the Foundations of Party Politics* (Cambridge: Cambridge University Press).

Kam, Cindy D. (2005) Who toes the party line? Cues, values, and individual differences. *Political Behavior*, 27(2), pp. 163–182.

La Raja, Ray & Jarvis-Shean, Elizabeth (2001) Assessing the impact of a ban on soft money: party soft money spending in the 2000 elections. Policy Brief for Institute of Government Studies and Citizen's Research Foundation.

Lodge, Milton, Steenbergen, Marco R. & Brau, Shawn (1995) The responsive voter: campaign information and the dynamics of candidate evaluation. *American Political Science Review*, 89(2), pp. 309–326.

Montero, David (2008) Obama primed for grass-roots bid. *Rocky Mountain News*, 4 June (accessed via Google News, available at <http://www.news.google.com>, 8 January 2009).

Nickerson, David (2005) Partisan mobilization using volunteer phone banks and door hangers. *The Annals of the American Academy of Political and Social Science*, 601 (September), pp. 10–27.

Patterson, Thomas E. & McClure, Robert D. (1976) *The Unseeing Eye* (New York: G.P. Putnam).

Petty, Richard E. & Cacioppo, John T. (1986) The elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology*, 19, pp. 124–205.

Price, Jeff (2006) 156th candidates agree on differences: GOP rep. Sharon Royer say Democrat Barbara M. Smith is too radical. She says he's "part of the problem". *The Philidelphia Inquirer*, 31 October (accessed via Lexis-Nexis at <http://www.lexis–nexus.com>, 2 February 2007).

Reams, Margaret A. & Ray, Brooks H. (1993) The effects of three prompting methods on recycling participation rates: a field study. *Journal of Environmental Systems*, 22, pp. 371–379.

Rosenstone, Steven J. & Hansen, John Mark (1993) *Mobilization, Participation, and Democracy in America* (New York: Macmillian Publishing).

Schaeffer, Mari A. (2006a) Political ad 'despicable,' Lentz says: the TV commercial, supporting Thomas Gannon, says Lentz helped a child predator. *The Philadelphia Inquirer,* 22 September, available at <http://www.philly.com> (accessed 4 February 2007).

Schaeffer, Mari A. (2006b) GOP concedes in Chesco; Dems take state House. *The Philadelphia Inquirer,* 21 December (accessed via Lexis-Nexis at <http://www.lexis–nexus.com>, 24 September 2008).

Stokes, Donald E. (1963) Spatial models of party competition. *American Political Science Review,* 57(2), pp. 368–377.

Tomz, Michael, Wittenberg, Jason & King, Gary (2003) CLARIFY: software for interpreting and presenting statistical results. Version 2.1. Stanford University, University of Wisconsin, and Harvard University, 5 January, available at <http://gking.harvard.edu/> (accessed 5 January 2003).

Zaller, John (1992) *The Nature and Origins of Mass Opinion* (New York: Cambridge University Press).