Moving Slowly up the Ladder of Political Engagement: A 'Spill-over' Model of Internet Participation

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Research Highlights and Abstract

This article:

- Confirms that e-participation is multi-dimensional with prior modes of participation emerging online.
- Shows that these online activities have mobilising effects and that this relationship appears to work largely in a step-wise or 'spill-over' manner.
- Demonstrates that accessing online news and information acts as a 'gateway' or first step into participation.
- Argues that the more active modes of online participation do not appear to exert any mobilising effects on other types of post-election engagement.
- Shows that the dynamics of Internet participation are more complex than the 'one size fits all' approach that dominates the current literature.

In this study we test whether a range of online political activities undertaken during the campaign affect the propensity to engage in non-electoral types of online and offline political engagement subsequently. We develop three hypotheses accounting for this linkage based on a 'spill-over' logic about (1) the effort required for the action; (2) the type of activity undertaken (formal versus informal); and (3) the medium on which the action occurs (online or offline). We test our hypotheses with a pre/post-election panel dataset from the UK 2010 General Election. The results show that after controlling for prior political engagement, online information seeking during the campaign has a significant and positive effect on further engagement in 'softer' discussion modes of partici-pation. The findings are seen to confirm that Internet-based political mobilisation works in a 'step-wise' manner whereby lower intensity activities spill-over to move individuals a little further up the participation ladder.

Keywords: political participation; new media; elections; political communication

Introduction

The literature on the Internet and participation has expanded rapidly over the last decade and a half. To date, studies have focused primarily on questions of mobili-sation and whether digital technologies are widening the pool of the politically active or worsening existing democratic biases. As yet no clear answer has been delivered on this central question although the literature has increasingly pointed to the conclusion of a positive but small impact of Internet use on engage-ment (Boulianne 2009). Part of the reason for the absence of consensus and

non-cumulative nature of the findings in the field has been the lack of consistency in methodological approaches adopted. Indeed in her summation of the findings from the literature Boulianne (2009, 203) drew particular attention to this problem noting that 'the research design of studies may account for the nonlinearities'. Since her influential review several scholars have made more systematic attempts to measure and model the dimensions of online participation as a form of engagement in its own right and specify a clearer structural pathway to participation. The results have been instructive in that they have shown firstly that online or 'e-participation' is a multi-dimensional concept with several underlying modes of activity, like its offline counterpart. In addition, it appears they have varying potential to mobilise with information seeking and consuming news online appearing to act as a key trigger to moving people along the participatory ladder toward voting (Boulianne 2011; Cantijoch et al. 2011; Rojas and Puig-i-Abril 2009). Other newer types of social media based engagement also appear to be emerging, but their impact on engagement in formal politics remains unclear.

In this study we seek to extend this promising new area of online or 'e-participation' research using a new data source—an online pre- and post-election panel study of UK voters in the 2010 General Election. This allows us to test again for the various modes of e-participation identified in previous work and examine their impact on a wider range of political activities than voting. In addition, the panel structure of the data means that we can control for prior levels of relevant political attitudes and behaviours and thus better isolate the effects of these online campaign activities. To undertake this work the article is divided into three parts. The first section profiles the development of the literature examining the relationship between Internet use and political participation in general and findings from studies of the UK more specifically. We then specify the likely dimensions of e-participation in the UK election campaign using results from prior analyses and the relationships we expect to observe between these dimensions and a range of subsequent post-election on and offline political activities. To do this we present three distinct logics linking the sets of activities that centre on the increasing intensity of the acts, their formal versus informal nature and finally the 'medium' or context for the act. We develop these logics into hypotheses that we empirically test with our panel data in the final section of the article.

The study contributes to the literature in that it confirms e-participation is multi-dimensional in nature and a common set of clusters or modes of online political activity are emerging across different data sources. In addition we show that these activities do have mobilising effects and that this relationship appears to work largely in step-wise or 'spill-over' manner with more passive activities triggering similar if slightly higher intensity actions. Overall our results show that the dynamics of Internet participation are more complex than the 'one size fits all' approach that has predominated in the literature to date, and the search for mobilising effects requires a more subtle and theoretically grounded approach.

The Internet and Participation

Studies of the relationship between Internet use and political engagement at the individual level have grown considerably over the past decade. Early work

maintained at best an ambivalent stance on the question with a number of studies pointing to negligible or even negative effects whereby digital participation patterns were replicating and exaggerating biases seen in offline engagement (Hill and Hughes 1998; Bimber 1999, 2001; Davis 1999; Wilhelm 2000; Norris 2001; Scheufele and Nisbet 2002). Subsequent analysis have yielded a more optimistic picture about the effects of Internet use on a range of different types of political behaviour (typically voting) and attitudes such as interest and efficacy (Kaye and Johnson 2002; Krueger 2002; Shah et al. 2002; Tolbert and McNeal 2003; Gibson et al. 2005; Kenski and Stroud 2006; Mossberger et al. 2008). A review of 38 empirical studies of the relationship between Internet use and participation by Boulianne (2009) confirmed that a more positive impact was being detected although she issued several caveats to this conclusion. The trend was non-monotonic, effects were small, and concentrated primarily in information-related uses of the new media.

Certainly these findings which consistently suggest a positive effect of Internet use on political engagement is plausible in that it reflects the growing integration and utility of the technology in voters' everyday lives. However, as Boulianne notes, these findings are despite rather than because of the approach taken within the literature. For the first decade at least there was little consistency in specification of the subject of study and a lack of standardisation of the indicators used to assess cause and effect. The search for effects often relied on simple binary measures of Internet use (i.e. access/no access) to predict varying measures of offline participation, or used a range of socio-demographic and political characteristics to predict engagement in a set of *ad hoc* items measuring online participation such as emailing a politician, signing an online petition, or discussing politics with others online.

The non-cumulative nature of the research designs and findings have been due in large part to limitations in the data available. As those measures have expanded so have models and measurement of the phenomenon of e-participation. Scholars have applied uses and gratification theory to argue that Internet is not a one size fits all medium and care needs to be taken to 'match' how individuals use the technology with likely outcomes (Kaye and Johnson 2002; Shah et al. 2005). Work by Best and Krueger (2005) has pointed to the development of a new scale of 'Internet skills' that work independently of civic skills to boost online forms of participation. More recently a body of work has developed a richer conceptual understanding of e-participation as an activity in its own right by disaggregating it into underlying dimensions or latent constructs (Rojas and Puig-i-Abril 2009; Hirzalla and Van Zoonen 2011; Gil de Zuniga et al. 2010; Gibson and Cantijoch 2013). These analyses have identified different types of online political engagement that include familiar activities such as looking for news and information and performing campaign activities for a party online to newer social media-based 'e-expressive' acts that involve posting and sharing informal campaign content. The effect of these types of participation in setting up a new 'pathway to participation' has been further explored by examining their inter-linkage and whether they increase offline participation, particularly voting. Recent findings suggest that browsing for information and news is an important trigger to more active types of engagement. The findings for e-expressive participation are more ambiguous with some studies clearly showing a direct effect on the likelihood of voting (Gil de Zuniga et al. 2010)

while others see it as a mediating variable (Rojas and Puig-i-Abril 2009). By contrast, other studies have found no effect of e-expressive activities on voting at all (Cantijoch et al. 2011).

More extensive tests of these effects are now needed. The idea that exposure to online news acts as a stimulus to more active types of both online and offline engagement is clearly consistent with conclusions from earlier studies (Boulianne 2009). Furthermore, Boulianne's (2011) recent work applying simultaneous equation modelling of 3-wave panel data from the American National Election Study (2008–2009) provides further compelling support and insight into the effects of online news. She shows that attention to online news increased individuals' levels of political interest and discussion during the campaign, even after taking into account existing proclivities. As such it seems that the online environment may be providing a new pathway to participation, whereby accessing news and information in the campaign increases individuals' awareness and interest in the election and thus commitment to help decide the outcome.

Internet Use and Participation in the UK

Studies of e-participation have focused predominantly on the US population to date and work on the UK is much more limited. What has been done reveals a similar picture of growing use of the Internet for political news and information across time, albeit at a lower level than in the US. Some of the earliest survey evidence available from 2002 showed that just under one fifth of UK Internet users (17%) reported some kind of political use of the medium (Gibson et al. 2005). By the 2005 General election this had increased to just over one quarter of Internet users (28%) which equated to around 15 per cent of the overall population (Ward and Lusoli 2005). By 2010 the numbers had risen again, with approximately one third of the UK population and just under half of Internet users reportedly engaging in some form of online political activity during the campaign (Gibson et al. 2010).

In terms of the mobilising effects associated with the medium, again while analyses are thin on the ground, the evidence suggests grounds for cautious optimism. One of the first studies by Gibson et al. (2005) showed that after controlling for existing political involvement and likelihood to be online, the profile of online participants was more socio-economically diverse and younger than was true of those engaging in conventional types of offline political activity. Research by Schifferes et al. (2009) using MORI opinion data from the 2005 election supported a mobilising effect of online news among young people in that 18–24 year olds using the Internet were found to be twice as likely to vote as those who did not. Even taking into account the obvious selection effects operating here, this was a considerable margin of difference, especially since turnout for young people reached a new low. Ward and Lusoli's 2005 analysis of the 2005 General election further underscores this youth effect by finding that a significantly larger proportion of 18–35-year-olds considered that the internet helped them make a more informed vote choice and increase their likelihood of voting compared with older age groups (Ward and Lusoli, 2005, 19).

More recent studies of the 2010 UK General election have followed the direction of the wider literature and given closer attention to the measuring and modelling of

online political behaviours and their effects on turnout. Using a particularly rich set of indicators of online and offline participation, Gibson and Cantijoch (2013) applied simultaneous confirmatory factor analysis to post-election survey data to show that online political engagement in the UK is a multi-dimensional phenomenon which divides into more passive forms of activity relating to news and discussion, and more active party oriented actions and targeted communication to government officials. A related study by Cantijoch et al. (2011) used three of the factors identified—e-news, e-party and e-expressive—to explore questions of mobilisation during the election campaign and whether engaging in these modes increased an individuals' likelihood to vote. The results were in line with the existing literature in that online information seeking was the best predictor of turnout. The other two modes had no discernible impact on voting.

Drawing together the extant literature on online political participation, a number of conclusions and lines for further enquiry emerge. First, it is clear that online participation is maturing and differentiating in ways consistent with offline political engagement. Second, while familiar modes are reappearing, a newer more informal mode appears to be emerging that reflects the sharing and posting of opinion and information across social media. Third, these different modes of activity appear to have differing mobilisation potential. More common and less demanding types of engagement such as browsing online news do seem to trigger other more instrumental acts such as voting. While the exact mechanism through which this occurs has not been fully specified, one possible explanation is that online news consumption during a campaign increases awareness, interest and discussion of political affairs which in turn may lead people to feel a stronger stake in the outcome. Expressive engagement via blogs or Twitter does not appear to provide a similar stimulus, at least in the UK, however, it may be linked to other non-electoral or 'softer' forms of participation.

Finally, the UK constitutes an ideal case study for expanding the geographic focus of this area of research beyond the US where most of the analyses have been conducted to date. Firstly, Internet use during elections in the UK has generally been more modest than in the US, and more in line with levels of engagement observed in other established democracies (Vaccari 2013). Furthermore, the stronger party system in the UK arguably creates a more comparable and generalizable institutional setting in which to evaluate the mobilising effects of the technology in a campaign, particularly with regard to involvement in its more formal aspects. The candidate-centred model of elections that operates in the US means that volunteering to help in a campaign is a more discrete and personalised choice that is likely to vary over time at the individual level. Certainly this is consistent with the findings of Bimber and Copeland's (2013) conclusions about the lack of linearity in aggregate levels of online activism among the US electorate across 5 recent elections. In the UK as in many other party-centred democracies, however, engagement in a candidate's official campaign online or offline is more likely to be a statement of support consistent with a long-lasting identification with the party beyond the context of any given election. As such any findings about the profile and impact of online party and campaigning related activities are seen as more likely to hold cross-national relevance.

Analytical Framework and Hypotheses

In this article we seek to retrace and extend the work of existing studies to develop our understanding of the mobilisation effects of Internet use. Specifically we seek to re-test some of the modes of online political activity that have been identified in prior work—attention to e-news, online party and campaign activities and finally social media based e-expressive activities—and examine whether they provide a 'gateway' into other types of online and offline political behaviour beyond the act of voting. Voting, while important, is a unique type of participation that can be characterised as the easiest yet most formal form of engagement in politics (Verba et al. 1995, 360–361). Here we focus on four other types of non-electoral activities as outcome or dependent variables that are well established in the wider participation literature (Verba and Nie 1972; Barnes et al. 1979; Parry et al. 1992; Verba et al. 1995; Teorell et al. 2007). The first two are both seen as more targeted and conventional types of action and typically occur in a formal representative context: donation to a political organisation and contacting a government official. Both require resources, although the former are largely monetary in nature while the latter is more dependent on civic skills. The third, signing a petition, is more commonly associated with protest or extra-representational modes of participation. Finally, political discussion is often viewed as a 'softer' form of informal engagement that falls outside of some stricter and more instrumental definitions of participation, but which has been included in studies adopting a broader understanding of the term (Delli Carpini et al. 2004; Pan et al. 2006). In specifying this range of participatory acts in both their online and offline forms we hope to gain insight into whether engagement in an election through online means is triggering further and possibly deeper levels of political involvement, and if so how?

The first mobilisation mechanism we investigate between online campaign activities and post-election political behaviour stresses the level of intensity of the acts being undertaken and the investment and effort required from the participant. While some activities can be considered time consuming and require higher levels of skills, others can be conducted more easily and therefore attract a wider pool of participants. Different modes of participation according to this logic follow a hierarchical and cumulative structure whereby citizens would choose to perform only those activities the cost of which they are able to assume given their availability of resources (Milbrath 1965; Verba and Nie 1972; Verba et al. 1995). As a consequence any mobilisation effects of the e-campaign modes of engagement would be limited to those activities that the participant is 'able' to perform.

A second causal logic linking our e-election activities to our outcome variables relates to the targets of those actions and channels through which they occur (Barnes et al. 1979; Teorell et al. 2007). Activities that are directed towards and take place via the formal channels of representation, such as donating and contacting would arguably have a stronger affinity to the more institutional and party-oriented campaign activities. By contrast, citizen-initiated forms of engagement such as signing petitions constitute an extra-representational mode of involvement that is more akin to the e-expressive form of campaign participation. If mobilisation effects

are detected for some of the e-campaign activities, therefore, according to this logic these would be consistent with the target and channel of expression.

A third mobilisation logic that our data allow us to test is that it is the medium through which the act takes place that matters most. Put more simply if online activities during the campaign foster any further mobilisation this will be confined to the online environment (Vissers et al. 2012). The essential argument here is that if any mobilisation effect occurs, this will be as a consequence of the characteristics of the technology, such as its ability to reduce some of the costs associated with participation, e.g. contacting a politician via email is less demanding for the participant than sending a letter (Anduiza et al. 2010). Another argument in favour of an online-only expected impact would be that this mode of participation allows one to more easily move across levels and intensity of action than is the case in the offline mode. Supporting a political party or candidate online or contacting a public official via email all take place largely within the same broad arena and may lead to a convergence of these practices.

Although we consider our three mobilisation mechanisms to be distinctive they share a common baseline assumption that the process is a sequential and progressive one. In each account, online campaign involvement triggers other types of engagement that expand an individual's range of action but remains consistent with their prior participatory behaviour. Put simply, we don't expect participants in specific forms of online engagement during the campaign to expand their post-election repertoire towards activities that would radically alter their behavioural patterns, i.e. they move from online to offline modes, or from formal to informal modes and from low-cost to high-intensity modes. On the contrary, we would expect a more graduated and step-wise advance whereby any new type of non-electoral participation that individuals engage in as a result of their online election activities is consistent in terms of its level of intensity, target or channel, and medium of choice.

Based on these three logics of sequential or spill-over effects we can specify a series of hypotheses that we test in the next section of the article. First, with regard to the intensity of the act undertaken, this approach suggests that any increase in individuals' levels of political engagement is dependent on their prior levels of effort invested. Thus, a person engaging with politics simply by looking at election websites is not expected to then move on to writing to a public official. Instead we would anticipate a more incremental progression along the 'participatory ladder' from the more passive and low-cost forms of e-campaigning, such as accessing and viewing information to similarly low-key softer modes of non-electoral political engagement, i.e. discussing politics.[1] This leads us to formulate our first hypothesis:

> H1: e-news modes of engagement during the campaign will have an effect on (e-)discussion.

Our second mobilising logic centres on the formal or informal nature and target of the activities being pursued. Here the expectation is that more institutionally oriented e-campaign activities undertaken during an election such as helping a party are likely to foster other types of more official engagement with representative bodies such as contacting a politician or donating to a party. By

contrast, less institutionalised modes of campaign involvement would be more likely to prompt other similarly informal modes of engagement such as petition or discussion. These expectations are summarised by our second and third hypotheses:

> H2: e-news and e-expressive forms of e-campaigning will lead to engagement in (e-)petition and (e-)discussion.

> H3: the e-party mode of e-campaigning will lead to engagement in (e-)donation and (e-)contact.

Our third and final 'spill-over' logic is based on the medium or context on which the actions occur. This leads to the relatively straightforward expectation that the mobilising effects of e-campaign activities will be confined or exclusive to activities that also occur online.

> H4: the mobilisation effect of any e-campaign activity will occur only in relation to online modes of non-electoral participation (e-discussion, e-donation, e-contact, e-petition).

Data and Methods

To conduct our analysis we use a two wave (pre and post) election panel study conducted by the UK based Internet polling company YouGov in 2010.[2] The panel structure of the data means that we can explicitly examine the impact of the e-campaign participation activities on subsequent levels of political activity.[3] The study replicates the online campaign-specific items that Gibson and Cantijoch (2013) used in their post-election survey to create the three latent constructs of e-news, e-party, and e-expressive outlined earlier. The pre-election component included questions about likelihood of engagement in more general forms of political behaviour in the next few years. These questions were administered again in the post-election wave. Additional questions measuring political attitudes and standard demographic data were also included. A full listing of the items used in both surveys can be found in the Appendix B.

The first section of the data analysis profiles overall levels of online engagement in the election using the pre-election survey component of the YouGov panel. We then identify whether underlying dimensions of e-campaign participation exist and if so, whether they form similar constructs to those identified in the earlier work. Specifically we conducted an exploratory factor analysis (PCA) with Promax rotation. The second part of the analysis tests our hypotheses by examining whether these online campaign specific factors had a mobilisation effect on different types of political engagement in the post-election period.

We examined four particular types of participatory activities in their offline and online forms—donate and e-donate, contact and e-contact, petition and e-petition and discuss and e-discuss. Likelihood of engagement in each of these activities as measured in the post-election wave was the dependent variable in each of the models. The models included not only a range of control items, but also lagged variables from the pre-election wave used to measure the same outcome variables. This allowed us to control for the prior propensity to engage in each participatory activity[4].

Results

Engagement with the Online Campaign

Our survey included three items measuring engagement with the official e-campaign of the parties and six items that measure involvement in more informal and non-party based aspects of the e-campaign, and use of non-official sources of information. The basic frequencies for each type of activity separately and for an overall measure of e-campaign engagement are reported in Table 1 below.

The consultation of mainstream news and media content was the most popular type of online activity with 45% of Internet users turning to such sources during the election. One fifth of Internet users reported accessing party produced sites at some point in the campaign, while more than one in ten of Internet users watched non-official YouTube videos. Individuals displayed lower levels of engagement in the more active types of e-campaign participation, with posting political content to social networks walls and blogs and forwarding campaign content attracting nine and six per cent respectively. Other more active types of involvement with the official campaigns such as signing up as a Twitter follower or Facebook fan of a party or candidate were less common, with only five per cent of Internet users engaging in such practices. Helping to promote the parties' message or online profile via various tools such as email or texts or posting supportive links and messages on Facebook or Twitter only attracted just over 3 per cent of individuals online. Notably, the more active forms of unofficial involvement (as with official campaign led initiatives) such as starting or joining a political social networking group or reposting political material were less popular than more passive acquisition of online election material. Taking all these activities together we can see that just over half of Internet users engaged in some form of online political activity during the election.

Table 1: E-Campaign Activities of UK Citizens in the 2010 General Election

	%	N
Mainstream news websites	44.84	500
Official candidate sites	19.20	214
Videos with unofficial campaign content	12.52	140
Posted comments (Blogs/Wall SN etc.)	9.12	102
Forwarded campaign content	5.97	67
Official register	4.95	55
Official tools	3.46	39
Unofficial SNS	2.28	25
Embedded/reposted campaign content	2.18	24
Overall activity	51.3	569

Note: Data is weighted

While these levels of participation do not quite match the levels of engagement seen in the US during the Presidential election of 2008, which were estimated to be over half of population (Smith 2009), levels have clearly increased significantly in the UK since 2005. And while mainstream news sites remain among the most commonly accessed sources, one of the most striking increases from Ward and Lusoli's (2005) findings is the rise of those utilising official campaign sites, with up to seven times as many individuals reportedly having sought out party or candidate produced material this time around.

Measuring and Modelling the Effects of Participation in the Online Campaign

Based on the extant literature our expectation was that items would cluster into at least three underlying latent constructs. One factor would include more passive activities such as viewing political material online, while the other two would measure more active types of engagement in party-related activities and a potentially new type of engagement based on the use of social media to post, exchange and comment on non-official election material. To determine how well our expectations fitted the data, we conducted a principal components analysis (PCA) on our nine e-campaign participation variables as measured in the YouGov dataset using Promax rotation. As the survey was conducted online, all respondents were Internet users from the analysis.

The results shown in Table 2 appear to confirm our expectations. Three factors emerge with eigenvalues of at least 1.0 that fit the anticipated profile. Factor 1 we label as the 'E-expressive' mode of participation in the campaign given that it contains items relating to forwarding links and new stories to others, reposting or embedding such content into one's own site and joining or starting a political group

Table 2: Exploratory Factor Analysis of E-Campaign Indicators

	E-expressive	E-news	E-party
Mainstream news websites	−0.05	0.88	−0.14
Official candidate sites	−0.07	0.71	0.17
Videos with unofficial campaign content	0.19	0.54	0.10
Official register	0.01	0.06	0.77
Official tools	−0.04	−0.01	0.83
Unofficial SNS	0.67	−0.20	0.23
Posted comments (Blogs/Wall SN etc.)	0.66	0.19	−0.03
Forwarded campaign content	0.73	0.10	−0.02
Embedded/reposted campaign content	0.86	−0.07	−0.14
Eigenvalue	3.09	1.22	1.01
Variance (%)	34.31	13.57	11.25

Note: Data is weighted. Extraction method: Principal Components Analysis. Rotation method: Promax

within a social network site. Factor 2 emerges as the 'E-news' factor and combines activities relating to accessing news and campaign information and watching online video. Finally Factor 3 is our 'E-party' mode and captures involvement in formal politics including signing up for party news feeds and actively using online tools to help campaign for the party.

In order to test our four hypotheses regarding the relationship of the three e-campaign factors (E-News, E-Expressive and E-Party) to the eight non-formal political engagement activities (online and offline donation, contact, petition and discussion), we conducted a series of multivariate analyses. These were run over three stages. Model 1 includes the three e-campaign factors only.[5] Model 2 includes socio-demographic variables (gender, age, education, social class and civic skills) that have been identified in the wider participation literature as strongly linked to individuals' propensity to participate (Verba et al. 1995), an indicator of media exposure (newspaper readership) and a measure of overall competence of Internet use, as developed by new media scholars to test for any independent effects on rates of participation, offline and online (Best and Krueger 2005). We also include a number of established political variables that are known to influence political engagement: general interest in politics, feelings of internal efficacy and trust in British politicians (Norris 1999; Dalton 2002; Norris et al. 2006). In Model 3, to avoid the problems of two-way causation, we use a pre-election measure of engagement to predict post-election engagement. In other words, we added a measure of each participatory activity at time t as a control for pre-existing likelihood of engagement in each of them. Both the lagged versions of each dependent variable and the dependent variables themselves were measured with a scale of 0–10 of the likelihood of undertaking the activity within the next few years. In order to avoid problems of skewness and kurtosis, we recoded these variables into binary measures[6]. In all cases, we use binary logistic regressions and regress our eight dependent variables at time t+1 (post-election) on these scores along with a series of control variables and other attitudinal factors associated with participation measured at time t (pre-election).

Table 3 contains details of the four models outlined above on offline and online donations, contact, petitions and discussion. All models show improvements in fit as anticipated. For simplicity, we only show the coefficients for the three e-campaign factors and, in Model 3, also the lagged effect. Full details of the socio-demographic and other political influences on these offline and online non-formal engagement activities are show in the appendices (Tables A1 to A4). We first summarise the results for each of the four outcome variables with and without the lagged measure of each one, and then move on to discuss the extent to which they support or reject our hypotheses.

Offline and Online Donations. The first two columns of Table 3 show the results of our three models for predicting offline and online donation. While the e-news and e-expressive factors predict e-donation after controls are applied, once prior intention to donate is added in Model 3 they become insignificant. The loss of significance between the non-lagged and the lagged model suggests that individuals who engage in campaign activities online are already more likely to be active in these forms of engagement. Their engagement in e-expressive and e-news activities

Table 3: Logistic Regression of E-Campaigning Variables on Offline and Online Donation, Contact and Petition

Variables	Donation (β)	(Odds)	E-donation (β)	(Odds)	Contact (β)	(Odds)	E-contact (β)	(Odds)	Petition (β)	(Odds)	E-petition (β)	(Odds)	Discuss (β)	(Odds)	E-discuss (β)	(Odds)
Model 1 (Null Model)																
Constant	−0.74*		−0.68*		0.41*		0.65*		1.70*		1.77*		2.60*		0.79*	
E-Expressive	0.14	1.15	0.17*	1.19	0.09	1.09	0.11	1.12	0.21	1.24	0.20	1.22	−0.04	0.96	0.21	1.23
E-Information	0.29*	1.34	0.40*	1.49	0.38*	1.46	0.47*	1.60	0.46*	1.58	0.75*	2.12	0.95*	2.58	0.76*	2.14
E-Party	0.15	1.16	0.08	1.09	0.24*	1.27	0.20	1.22	0.10	1.11	−0.04	0.96	−0.08	0.93	0.10	1.10
Pseudo R^2	.03		.05		.04		.05		.04		.06		.06		.09	
Log Likelihood	−661.78		−664.05		−694.43		−664.75		−468.03		−456.72		−305.51		−631.34	
N	1095		1094		1083		1083		1080		1083		1107		1096	
Model 2 (With Controls)																
Constant	−2.94*		−2.45*		−4.85*		−4.65*		−4.62*		−5.57*		−2.55		−1.97	
E-Expressive	0.17	1.19	0.19*	1.21	0.10	1.11	0.11	1.12	0.28	1.32	0.28	1.33	−0.16	0.86	0.20	1.22
E-Information	0.19	1.21	0.26*	1.29	0.34*	1.40	0.38*	1.47	0.38	1.46	0.54*	1.71	0.49	1.63	0.61*	1.84
E-Party	0.11	1.12	0.07	1.08	0.17	1.19	0.13	1.14	−0.03	0.96	−0.13	0.88	−0.12	0.88	0.06	1.06
Pseudo R^2	.11		.13		.15		.16		.17		.20		.25		.12	
Log Likelihood	−596.23		−593.51		−600.46		−572.30		−394.73		−376.15		−237.97		−593.41	
N	1058		1058		1047		1046		1045		1048		1070		1059	
Model 3 (Lagged)																
Constant	−3.40*		−2.75*		−4.52*		−4.52*		−4.97*		−5.36*		−3.40		−2.13	
E-Expressive	0.16	1.17	0.13	1.14	0.03	1.03	−0.02	0.98	0.23	1.26	0.06	1.07	−0.19	0.83	−0.05	0.95
E-Information	0.18	1.20	0.18	1.19	0.25	1.28	0.23	1.26	0.16	1.17	0.66	1.94	0.22	1.24	0.38*	1.46
E-Party	−0.04	0.96	−0.18	0.84	0.13	1.14	0.01	1.01	−0.19	0.83	−0.43*	0.65	−0.23	0.79	−0.07	0.94
Lagged Effect	0.35*	1.42	0.49*	1.64	0.30*	1.35	0.41*	1.51	0.39*	1.48	0.49*	1.63	0.22*	1.24	0.33*	1.39
Pseudo R^2	.18		.21		.22		.29		.29		.36		.29		.21	
Log Likelihood	−538.65		−527.39		−527.66		−466.16		−328.71		−293.35		−223.81		−562.65	
N	1042		1045		1005		1000		1007		1014		1058		1040	

Note. Data is weighted. * Significant at the <0.05 level

does not make a difference to their likelihood of donating once this is taken into account. Trust appears to be the most important predictor (see Appendix Table A1).

Offline and Online Contacting. Similar findings emerge for offline and online contact as for donation. Both political interest and trust are significantly and positively associated with contacting (see Appendix Table A2). The e-news form of e-campaign activity is the only e-campaign measure to have a significant effect once controls are applied. However, the influence of e-news disappears for both online and offline contact once we control for the prior likelihood of contacting.

Offline and Online Petitions. The results for petitions prove somewhat more interesting than those for the two previous types of online and offline political engagement. In the non-lagged model (Model 2) the coefficients for our e-campaign indicators reveal that only engaging in e-news activities has a positive effect on e-petition. As for donation and contact this effect disappears when we include the lagged variable—a measure of prior likelihood of signing an e-petition. However, one e-campaign activity does remain a significant predictor—e-party— albeit in a negative direction. This finding, while somewhat unexpected is nevertheless interesting and we return to it below when we discuss the findings in light of our hypotheses.

Offline and Online Discussion. The findings for our discussion models are the most encouraging in regard to identifying mobilising effects of online activity. At all stages of the modelling process, e-news is the key driver of e-discussion, i.e. with and without lagged variables for propensity to discuss politics. Indeed, none of the socio-demographic or political controls actually matter (see Appendix Table A4). Thus it would seem that accessing news and information online during the campaign provides a significant independent boost to an individuals' subsequent political activity in that it increases their desire to talk about politics.

Discussion and Conclusions

Relating these findings to our four hypotheses it appears that only H1 is clearly confirmed by our analysis. The others receive mixed support although none can be entirely rejected. The only significant and positive effect detected for any of the three modes of e-campaign engagement on our outcome variables (after controlling for the prior propensity toward the outcome variable) is for e-news on e-discussion. This suggests that the online environment can produce a more mobilised citizenry but that this process does not occur directly. The process seems to be more of an incremental one whereby individuals take a gradual 'step-up' the ladder of participation, migrating from low intensity activities to marginally more active versions. Whether this 'softer' form of engagement then leads them onto to harder, more resource intensive and purposive acts such as contacting, donating or being involved in protest we cannot test here given the structure of our dataset but this is clearly a question for further analysis.

While the exclusive nature of the impact of online information consumption on e-discussion and not offline discussion might be seen to lend some partial support to H4, given that the effect applies to only one of our four online outcome variable, then

it would seem that any spill-over effect associated with the medium are likely to be supplementary to the 'main' effect of intensity. The contention of H2 and H3 that spill-over effects of online election activity will remain consistent in terms of the target and channel of the participation is not supported. However, as noted above one intriguing finding to emerge from the preceding analysis is the negative relationship of e-party activity to online petition signing. This suggests that active involvement in formal politics during the campaign (signing up for party news feeds and actively using online tools to help promote the party) actually reduces the propensity to engage in informal modes of online participation after the election. This finding thus goes beyond our theoretical expectations to indicate that those undertaking more online party activities during the campaign appear to become less inclined to seek out more direct channels of influence afterwards in the shape of e-petitions. Given that this is confined to online petition signing and has no effect on offline behaviour this lends further support to H4 and the notion of 'medium specific' effects. More generally, however, it underscores our expectation about the importance of institutional context for interpreting our results and particularly the likelihood that the strong party attachments characteristic of UK voters would be relevant in shaping this type of campaign activism. Essentially it suggests that those people who are most highly engaged online in helping a candidate or party to actually get elected develop an even stronger loyalty and identification to the representative process as a result of these actions, leading them to reject subsequent informal issue or cause oriented movements. Whether this holds particularly for those whose party actually won the election and went on to govern is of course an interesting question. Unfortunately, the N in our data is too small to test for this.

Our findings for online discussion and the support it provides for H1 are, however, perhaps the most important of those generated here. This finding supports the conclusions reached in the wider existing literature about the importance of online news and information in mobilising further participation. Our analysis goes further, however, in providing insight into how this process might be occurring. Essentially our results link with and support Boulianne's (2011) findings that online news acts as a 'gateway' or first step into participation. After consuming campaign information online it would appear that individuals' interest is increased as is their tendency to be involved in political discussion about politics with family and friends. This discussion occurs online however. There is no perceptible increase in offline discussion from having read election news online. This partial effect may be due to the fact that offline networks are more likely to exist prior to the election and have more fixed properties. Any further stimulation of discussion and debate will be driven either by their expansion, changing composition or a 'shock' external event which are unlikely to occur in the short period of time covered by our panel survey. Online discussion networks are arguably more fluid and responsive to the ebb and flow of individuals' interest and time available, as such they may be able to better absorb and even encourage an increase propensity to discuss compared with offline networks.

As well as our more specific findings about whether and how mobilisation is occurring in the online environment and the importance of online news and information for this process, this article has also provided further support for the idea that 'one size does not fit all' and that e-participation is a multi-dimensional

phenomenon. In particular we have shown how prior modes of participation are repeating themselves online and a new expressive mode revolving around social media does appear to have emerged. In line with previous work by Cantijoch et al. (2011) which examined voting, however, the more active formal and informal modes of engagement (e-party and e-expressive) do not appear to exert any mobilising effects in other types of post-election engagement. Indeed a higher engagement with e-party activities seems to have a demobilising effect on subsequent involvement in non-institutionalised modes such as signing a petition. For e-party this lack of a stimulus to the other actions measured here suggests that those engaging in it during the campaign are highly partisan and no more likely subsequently to be inspired to write to their MP, discuss politics or give money to a party. For e-expressive the lack of an impact is somewhat more perplexing in that one might expect a more intensive use of social media to exchange and comment on unofficial campaign content to trigger some increased propensity toward informal and softer modes of political activity on or offline. The lack of any connection might be explained by the fact that social media constitute a truly social and 'apolitical' space in which although electorally relevant content is discussed and opined about, such activities do not trigger any 'follow through' in terms of an increased commitment to pursue political objectives through representative or extra-representational channels. This puzzle and potential explanation is one clearly for future research to untangle.

Notes

1. We accept that accessing e-news may in turn lead to more directed and purposive political acts. However, due to the structural properties of our panel dataset, as we explain below, we focus here and in subsequent hypotheses on the first step of the mobilisation pathway.

2. YouGov uses targeted quota sampling. The overall N for the panel study was 1141. These were UK adults recruited from YouGov's online panel via email. For all our subsequent analyses, subjects with missing data on any employed item were deleted. Weights were based on a combination of demographic and political variables. Since the study sought to obtain a national representative sample of the electorate, data were weighted to the profile of all adults aged 18+ taking into account age, gender, social class, region, political party identification and newspaper readership. Target percentages were derived from census data, the National Readership Survey and YouGov internal analysis. Weights were applied in all the analyses presented in this article.

3. The pre-election wave was conducted in the final week of the campaign (end of April) and the post wave at the beginning of August.

4. This is one of the advantages of using panel data. It is likely that people who engage in online activities during the campaign are already politically active. Their prior levels of participation would help explain their likelihood to become engaged again after the election. By adding a measure of prior engagement in the models, we take these effects into account and isolate the net effect of involvement in online campaign activities.

5. The three factors are weakly correlated. The correlation between Factor 1 and Factor 2 = .37; Factor 1 and Factor 3 = .31; Factor 2 and Factor 3 = .31. This is consistent with the differentiation hypothesis which supports that these are indeed distinct types of online activity (Gibson and Cantijoch 2013). The Cronbach's alpha coefficient for Factor 1 is $\alpha = 0.70$ (4 items); Factor 2, $\alpha = 0.60$ (3 items); Factor 3, $\alpha = 0.52$ (2 items). The alpha coefficient for all the items combined is $\alpha = 0.71$ (9 items).

6. Coded as 0 = very unlikely (former value 0), and 1 = all other values (former values 1 to 10).

Bibliography

Anduiza, E., Gallego, A. and Cantijoch, M. (2010) 'Online political participation in Spain: The impact of traditional and Internet resources', *Journal of Information, Technology & Politics*, 7:4, 356–368.

Barnes, S., Kaase, M. and Allerbeck, K. R. (1979) *Political Action. Mass Participation in Five Western Democracies* (Beverly Hills, CA: Sage).

Best, S. J. and Krueger, B. S. (2005) 'Analyzing the representativeness of Internet political participation', *Political Behavior*, 27:2, 183–216.

Bimber, B. (1999) 'The Internet and citizen communication with government: Does the medium matter?', *Political Communication*, 16:4, 409–428.

Bimber, B. (2001) 'Information and political engagement in America: The search for effects of information technology at the individual level', *Political Research Quarterly*, 54:53–67.

Bimber, B. and Copeland, L. (2013) 'Digital media and traditional participation over time in the U.S', *Journal of Information Technology and Politics*, 10:2, 125–137.

Boulianne, S. (2009) 'Does Internet use affect engagement?: A meta-analysis of research', *Political Communication*, 26:2, 193–211.

Boulianne, S. (2011) 'Stimulating or reinforcing political interest: Using panel data to examine reciprocal effects between news media use and political interest', *Political Communication*, 28: 147–162.

Cantijoch, M., Cutts, D. and Gibson, R. (2011) 'Participating in the 2010 UK E-campaign: Who engaged, how, and with what effect?' Paper presented at the annual meeting of the European Consortium for Political Research, Reykjavik, Iceland, 25-27 August.

Dalton, R. (2002) *Citizen Politics. Public Opinion and Political Parties in Advanced Industrial Democracies* (Chatham, NJ: Chatham House Publishers).

Davis, R. (1999) *The Web of Politics. The Internet's Impact on the American Political System* (New York: Oxford University Press).

Delli Carpini, M. X., Cook, F. L. and Jacobs, L. R. (2004) 'Public deliberation, discursive participation, and citizen engagement. A review of the empirical literature', *Annual Review of Political Science*, 7:315–344.

Gibson, R. and Cantijoch, M. (2013) 'Conceptualizing and measuring participation in the age of the Internet: Is online political engagement really different to offline?', *Journal of Politics*, 75:3, 701–716.

Gibson, R., Cantijoch, M. and Ward, S. (2010) 'Citizen participation in the e-campaign', in R. Gibson, A. Williamson and S. Ward (eds), *The Internet and the 2010 Election: Putting the Small 'P' Back in Politics?* (London: Hansard Society), 5–18.

Gibson, R. K., Lusoli, W. and Ward, S. J. (2005) 'Online participation in the UK: Testing a contextualised model of Internet effects', *British Journal of Politics and International Relations*, 7:4, 561–583.

Gil de Zuniga, H., Veenstra, A., Vraga, E. and Shah, D. (2010) 'Digital democracy: Reimagining pathways to political participation', *Journal of Information, Technology & Politics*, 7:1, 36–51.

Hill, K. A. and Hughes, J. E. (1998) *Cyberpolitics: Citizen Activism in the Age of the Internet* (Lanham, MD: Rowman & Littlefield).

Hirzalla, F. and van Zoonen, L. (2011) 'Beyond the online/offline divide: Convergences of online and offline civic activities among youth', *Social Science Computer Review*, 29:4, 481–498.

Kaye, B. K. and Johnson, T. J. (2002) 'Online and in the know: Uses and gratifications of the web for political information', *Journal of Broadcasting and Electronic Media*, 46:1, 54–71.

Kenski, K. and Stroud, N. J. (2006) 'Connections between Internet use and political efficacy, knowledge, and participation', *Journal of Broadcasting & Electronic Media*, 50:2, 173–192.

Krueger, B. S. (2002) 'Assessing the potential of Internet political participation in the United States: A resource approach', *American Politics Research*, 30:5, 476–498.

Milbrath, L. (1965) *Political Participation* (Chicago, IL: Rand McNally).

Mossberger, K., Tolbert, C. J., NcNeal, R. S. and McDonald, J. (2008) 'The benefits of society online: Civic engagement', in K. Mossberger, C. J. Tolbert and R. S. NcNeal (eds), *Digital Citizenship. The Internet, Society, and Participation* (Cambridge, MA: MIT Press), 47–66.

Norris, P. (ed.) (1999) *Critical Citizens: Global Support for Democratic Government* (Oxford: Oxford University Press).

Norris, P. (2001) *Digital Divide: Civic Engagement, Information Poverty, and the Internet* (Cambridge: Cambridge University Press).

Norris, P., Walgrave, S. and Van Aelst, P. (2006) 'Does protest signify disaffection? Demonstrators in a postindustrial democracy', in M. Torcal and J. R. Montero (eds), *Political Disaffection in Contemporary Democracies. Social Capital, Institutions and Politics* (London: Routledge), 279–307.

Pan, Z., Shen, L., Paek, H.-J. and Sun, Y. (2006) 'Mobilizing political talk in a presidential campaign. An examination of campaign effects in a deliberative framework', *Communication Research*, 33:5, 315–345.

Parry, G., Moyser, G. and Day, N. (1992) *Political Participation and Democracy in Britain* (Cambridge: Cambridge University Press).

Rojas, H. and Puig-i-Abril, E. (2009) 'Mobilizers mobilized: Information, expression, mobilization and participation in the digital age', *Journal of Computer-Mediated Communication*, 14:4, 902–927.

Scheufele, D. A. and Nisbet, M. C. (2002) 'Being a citizen online: New opportunities and dead ends', *Press/Politics*, 7:3, 55–75.

Schifferes, S., Lusoli, W. and Ward, S. J. (2009) 'What's the story? Online news consumption at the 2005 UK General Election', *Northern Lights*, 7:1, 51–71.

Shah, D. V., Cho, J., Eveland, W. P. and Kwak, N. (2005) 'Information and expression in a digital age. Modeling Internet effects on civic participation', *Communication Research*, 32:5, 531–565.

Shah, D. V., Schmierbach, M., Hawkins, J., Espino, R. and Donavan, J. (2002) 'Nonrecursive models of Internet use and community engagement questioning whether time spent online erodes social capital', *Journalism & Mass Communication Quarterly*, 79:4, 964–987.

Smith, A. (2009) 'The Internet's role in campaign 2008', Pew Internet and American Life Project, 15 April, Available online at: http://www.pewinternet.org/files/old-media/Reports/2009/The_internets_Role _in_Campaign_2008.pdf, accessed June 2012.

Teorell, J., Torcal, M. and Montero, J. R. (2007) 'Political participation: Mapping the terrain', in J. van Deth, J. R. Montero and A. Westholm (eds), *Citizenship and Involvement in European Democracies: A Comparative Analysis* (London: Routledge), 334–357.

Tolbert, C. J. and McNeal, R. S. (2003) 'Unravelling the effects of the Internet on political participation', *Political Research Quarterly*, 56:2, 175–185.

Vaccari, C. (2013) *Digital Politics in Western Democracies. A Comparative Study* (Baltimore, MD: Johns Hopkins University Press).

Verba, S. and Nie, N. (1972) *Participation in America: Political Democracy and Social Equality* (New York: Harper & Row).

Verba, S., Schlozman, K. L. and Brady, H. E. (1995) *Voice and Equality: Civic Voluntarism in American Politics* (Cambridge, MA: Harvard University Press).

Vissers, S., Hooghe, M., Stolle, D. and Maheo, V. A. (2012) 'The impact of mobilization media on off-line and online participation: Are mobilization effects medium-specific?', *Social Science Computer Review*, 30:2, 152–169.

Ward, S. and Lusoli, W. (2005) 'Logging on or switching off? The public and the Internet at the 2005 general election', in S. Coleman and S. Ward (eds), *Spinning the Web. Online Campaigning in the 2005 General Election* (London: The Hansard Society), 13–21.

Wilhelm, A. G. (2000) *Democracy in the Digital Age: Challenges to Political Life in Cyberspace* (New York: Routledge).

Appendix A

Table A1: Regression of Donation and E-Donation on E-Campaign (E-Party, E-Expressive and E-News) and Control Variables

Variables	Donation non-lagged (β)	(Odds)	Donation lagged (β)	(Odds)	E-donation non-lagged (β)	(Odds)	E-donation lagged (β)	(Odds)
Age	−0.06	0.94	0.01	1.01	−0.02	0.98	−0.02	0.98
Age squared	0.00	1.00	−0.00	1.00	0.00	1.00	0.00	1.00
Female	−0.02	0.98	0.09	1.09	−0.02	0.98	0.11	1.12
Education	−0.01	0.99	−0.01	0.99	0.02	1.02	0.03	1.03
Class	0.33	1.39	0.29	1.34	0.49**	1.63	0.44**	1.55
Newspapers	0.22	1.25	0.17	1.19	0.31	1.37	0.35	1.42
E-skills	0.00	1.00	0.06	1.06	−0.00	1.00	0.08	1.09
Political interest	0.31**	1.36	0.22	1.25	0.23	1.26	0.12	1.12
Political efficacy	0.00	1.00	0.00	1.00	0.04	1.04	0.06	1.06
Political trust	0.24**	1.27	0.23**	1.26	0.24**	1.27	0.22**	1.25
E-expressive	0.17	1.19	0.16	1.17	0.19**	1.21	0.13	1.14
E-news	0.19	1.21	0.18	1.20	0.26**	1.29	0.18	1.19
E-party	0.11	1.12	−0.04	0.96	0.07	1.08	−0.18	0.84
Prior (E-)donation			0.35**	1.42			0.49**	1.64
Constant	−2.94**		−3.40**		−2.45*		−2.75**	
Pseudo R^2	.11		.18		.13		.21	
Log likelihood	−596.23		−538.65		−593.51		−527.39	
N	1058		1042		1058		1045	

** Significant at the <0.05 level

Table A2: Regression of Contact and E-Contact on E-Campaign (E-Party, E-Expressive and E-News) and Control Variables

Variables	Contact non-lagged (β)	(Odds)	Contact lagged (β)	(Odds)	E-contact non-lagged (β)	(Odds)	E-contact lagged (β)	(Odds)
Age	0.08**	1.08	0.08	1.08	0.09**	1.09	0.08	1.08
Age squared	−0.00	1.00	−0.00	1.00	−0.00	1.00	−0.00	1.00
Female	0.25	1.28	0.19	1.20	0.20	1.22	0.17	1.18
Education	0.10	1.11	0.09	1.09	0.13	1.14	0.11	1.12
Class	0.44**	1.55	0.30	1.35	0.54**	1.72	0.43	1.54
Newspapers	−0.19	0.83	−0.17	0.84	−0.19	0.82	−0.03	0.96
E-skills	0.10	1.11	0.10	1.11	0.07	1.07	−0.02	1.00
Political interest	0.50**	1.65	0.36**	1.43	0.50**	1.65	0.36**	1.43
Political efficacy	0.04	1.04	0.06	1.06	0.05	1.05	0.09	1.10
Political trust	0.10**	1.11	0.08	1.08	0.10**	1.10	0.04	1.04
E-expressive	0.10	1.11	0.03	1.03	0.11	1.12	−0.02	0.98
E-news	0.34**	1.40	0.25	1.28	0.38**	1.47	0.23	1.26
E-party	0.17	1.19	0.13	1.14	0.13	1.14	0.01	1.01
Prior (E-)contact			0.30**	1.35			0.41**	1.51
Constant	−4.85**		−4.52**		−4.65**		−4.52**	
Pseudo R^2	.15		.22		.16		.29	
Log likelihood	−600.46		−527.66		−572.30		−466.16	
N	1047		1005		1046		1000	

** Significant at the <0.05 level

**Table A3: Regression of Petition and E-Petition on E-Campaign
(E-Party, E-Expressive and E-News) and Control Variables**

Variables	Petition non-lagged		Petition lagged		E-petition non-lagged		E-petition lagged	
	(β)	(Odds)	(β)	(Odds)	(β)	(Odds)	(β)	(Odds)
Age	0.12	1.12	0.12**	1.12	0.18**	1.19	0.15**	1.17
Age squared	−0.01	0.99	−0.01	0.99	−0.01**	1.00	−0.01**	1.00
Female	0.56	1.75	0.25	1.28	0.24	1.27	−0.08	0.92
Education	0.17	1.18	0.12	1.13	0.15	1.16	0.07	1.08
Class	0.44	1.55	0.49	1.63	0.62**	1.86	0.70**	2.01
Newspapers	0.14	1.15	0.14	1.15	−0.02	0.98	0.02	1.02
E-skills	0.02	1.02	0.01	1.01	0.15	1.17	0.09	1.09
Political interest	0.51**	1.67	0.22	1.25	0.53**	1.70	0.28	1.32
Political efficacy	0.09	1.09	0.10	1.11	0.12	1.12	0.11	1.13
Political trust	0.08	1.08	0.08	1.08	0.11	1.11	0.06	1.06
E-expressive	0.28	1.32	0.23	1.26	0.28	1.33	0.06	1.07
E-news	0.38	1.46	0.16	1.17	0.54	1.71	−0.06	0.94
E-party	−0.03	0.97	−0.19	0.83	−0.13	0.88	−0.43**	0.65
Prior (E-)petition			0.39**	1.48			0.49**	1.63
Constant	−4.62**		−4.97**		−5.57**		−5.36**	
Pseudo R^2	.17		.29		.20		.36	
Log likelihood	−394.73		−328.71		−376.15		−293.35	
N	1045		1007		1048		1014	

** Significant at the <0.05 level

Table A4: Regression of Discuss and E-Discuss on E-Campaign
(E-Party, E-Expressive and E-News) and Control Variables

Variables	Discuss non-lagged (β)	Discuss non-lagged (Odds)	Discuss lagged (β)	Discuss lagged (Odds)	E-discuss non-lagged (β)	E-discuss non-lagged (Odds)	E-discuss lagged (β)	E-discuss lagged (Odds)
Age	0.00	1.00	0.02	1.02	0.05	1.04	0.05	1.05
Age squared	−0.00	1.00	−0.00	1.00	−0.00	1.00	−0.00	1.00
Female	0.05	1.06	−0.17	0.84	0.06	1.06	−0.02	0.98
Education	0.37**	1.45	0.33**	1.39	0.08	1.08	0.07	1.07
Class	0.52	1.69	0.48	1.62	0.30	1.35	0.21	1.23
Newspapers	0.62	1.86	0.67	1.96	−0.01	0.98	0.05	1.05
E-skills	0.17	1.19	0.22	1.24	0.15	1.16	0.15	1.17
Political interest	0.81**	2.25	0.61**	1.83	0.23	1.25	0.09	1.09
Political efficacy	0.09	1.09	0.05	1.05	0.02	1.03	0.00	1.00
Political trust	0.14	1.15	0.14	1.15	0.08	1.08	0.05	1.06
E-expressive	−0.16	0.86	−0.19	0.83	0.20	1.22	−0.05	0.95
E-news	0.49	1.63	0.22	1.24	0.61**	1.84	0.38**	1.46
E-party	−0.12	0.88	−0.23	0.79	0.06	1.06	−0.07	0.94
Prior (E-)discuss			0.22**	1.24			0.33**	1.39
Constant	−2.55		−3.40		−1.97		−2.13	
Pseudo R²	.25		.29		.12		.21	
Log likelihood	−237.97		−223.81		−593.41		−526.65	
N	1070		1058		1059		1040	

** Significant at the <0.05 level

Appendix B: Variables and Coding from YouGov Panel Survey

E-campaign participation: Did during the campaign. (0) No; (1) Yes.

- Read or accessed any party or candidate produced campaign sites (home pages, official Facebook profile, official YouTube channel, etc.).
- Signed up to receive information from a party or candidate (a Twitter feed, a news alert or e-newsletter) or registered online as a supporter or friend of a party or candidate on their website or social networking site (e.g. Facebook, MySpace etc.).
- Used any of the online tools to help parties or candidates in their campaign (e.g. sent or posted official party material to other people by email or text, set up or got involved in a campaign meeting or event, downloaded a party logo or material to put on your own site or profile etc.).
- Read or accessed any mainstream news websites or news blogs to get information about the campaign (e.g. BBC news online, *The Guardian* online, etc.).
- Viewed or accessed videos with unofficial political or election related content.
- Joined or started a political or election related group on a social networking site (e.g. Facebook, MySpace etc.).

- Posted comments of a political nature, on your blog, or a wall of a social networking site (either yours or someone else's).
- Forwarded unofficial campaign content (links to video, news stories, jokes etc.) to friends, family or colleagues via email, SMS, Twitter or through your Facebook network.
- Embedded or reposted unofficial campaign content (links to video, news stories, jokes etc.) on your own online pages (i.e. a social networking profile, blog or homepage).

Non-electoral Participation: How likely will do in the next few years (0- very unlikely, 10-Very likely). Measured at time t (lagged variables) and replicated at time t+1 (outcome variables).

- Contact a politician or national/local government official by email.
- Contact a politician or national/local government official in person, by phone or by letter.
- Discuss politics with family or friends online (e.g. through email or in a discussion group).
- Discuss politics with family or friends in person (i.e. face to face or over the telephone).
- Sign an online or e-petition.
- Sign a paper petition.
- Donate money online to a political party/organisation/cause.
- Donate money offline (e.g. by post or telephone) to a political party/organisation/cause.

Sex: (0) Male; (1) Female

Age: 18–81 years old.

Education: (0) No formal qualifications; (1) Secondary; (2) A-levels; (3) Below degree; (4) Degree or above.

Social Class: (0) C2-D-E; (1) A-B-C1

E-skills: Scale 0–4. Sum index of activities ever done on the Internet: sent an attachment with an email; posted an audio, video, or image file to the Internet; personally designed a webpage or blog; downloaded a software programme from the Internet.

Read Newspaper: (0) Does not read a newspaper; (1) Reads a newspaper.

Internal Efficacy: (0) Politics extremely complicated—(10) Politics not at all complicated.

Trust in British Politicians: (0) No trust—(10) A great deal of trust. Log transformed.

Interest in politics: (0) Not interested; (1) Not very interested; (2) Somewhat interested; (3) Very interested.

About the Authors

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