Can electoral websites increase youth political participation? An experimental analysis of three types of mobilization sites in the 2012 US Presidential and London Mayoral elections

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Abstract

The decline in young people's political participation in the UK, US and other advanced democracies is a widely documented and debated trend. Since its inception the World Wide Web has been regarded as a potential means for reversing some of these trend, to revive political engagement in general and particularly in the case of young people (Gerodimos, 2008; Loader, 2007; Wells, 2010).Specifically in response to the concerns about youth electoral turnout, a growing number of websites have been developed by non-partisan organisations, aimed at informing and mobilizing these 'digital natives'. Collectively these sites are seen as forming a 'youth civic web-sphere' (Bennett et al. 2011). The body of empirical research on the effects of these youth mobilization sites is small but early indications are that individuals' exposure to these sites may have positive effects on levels of political involvement (Bennett and Xenos, 2004; Tedesco, 2007). In the same time period, web-based voting advice applications (VAAs) and candidate campaigning websites have increased in number and sophistication, and whilst not directly aimed at young people may have a role to play in increasing political engagement.

In this paper we aim to compare the impact of youth mobilization sites, VAAs and the main election candidate websites on young people's likelihood of voting in the 2012 London Mayoral and US Presidential election and a crucial political attitude which is linked to participation: political efficacy. We do so by examining data from a unique experimental pre-test post-test survey design whereby participants were randomly exposed to one of the three types of sites or a control, allowing us to compare differences between sites and between the two locations. Examining the London Mayoral election offers us a rare chance to compare a relatively high profile candidate-based election in the UK with that of the US. Finally we speculate on the wider implications of our findings for policy makers with regard to the utility of websites as a means of engaging younger citizens.

Introduction

The decline in electoral participation in the U.S. and other advanced democracies is a widely documented and debated trend (e.g. Blais, 2006; Esser and Vreese, 2007; Milner, 2010; Wattenberg, 2007). The fall in the numbers of young people voting has been particularly pronounced and become a source of growing concern. Studies suggest that young people's voting rates declined at a more rapid rate than older members of the public and also previous cohorts of young people, suggesting that there may be a specific generational effect at play (Franklin, 2004; Zukin et al, 2006). Recent research by Martin (2012), using the American National Election Study (ANES) has identified a more complex and volatile pattern of youth participation may be occurring rather than straightforward decline. As he notes, in 2008 youth turnout was in fact slightly higher than it was at the start of the time series in 1952. However, there are still two areas of concern: firstly, there is a larger gap between younger and older citizens' participation rates at the end of the time series, and secondly, some type of period effect seems to be in play with the young present for some elections and noticeably absent for others.

The emergence and growing use of the World Wide Web in the late 1990s particularly among young people has coincided with the apparent reversal in the decline of conventional participation rates in the US. While these patterns present no evidence of a causal link, the internet as a medium has been widely regarded as holding the potential for enhancing democracy by increasing citizen participation (e.g. Delli Carpini, 2000) The internet offers wider access to information, more informal channels for citizen input and in turn for persuasion by parties and candidates, thereby potentially reviving political engagement. Over time there has been an increasing number of civic and political websites developed by non-partisan organisations aimed at informing and mobilizing 'digital natives'. Collectively these sites are seen as forming a 'youth civic web-sphere' (Bennett et al. 2011). Analyses of the impact of particular youth mobilization websites constitute a very small number of studies (Tedesco, 2007; Xenos and Kyoung, 2008). Both of these studies used experimental methods, specifically t randomized pre-test post-test designs exposing college students to a selection of youth sites and examining the effect on a number of different outcome variables. Whilst Xenos and Kyoung (2008) found modest effects for developing cognitive engagement amongst users, they found no evidence for changes towards political engagement, including political efficacy. Tedesco's (2007) study however found that those exposed to highly interactive sites including a youth mobilization site and a Vote Advice Application (VAA), saw a significant increase in their levels of political information efficacy whilst those in the control condition did not.

This study seeks to advance these studies both substantively and methodologically. Substantively we expand the focus on efficacy given its prominence to date in the 'story' of web effects. Methodologically we offer a randomized controlled experimental design on a much larger sample than has previously been conducted. Rather than the convenience

sample used in the studies outlined above, we utilize a representative sample drawn from an existing consumer research web panel, allowing us to compare young people with older citizens. In addition, we expand the scope of the websites studied by exploring exposure to a VAA site and the 2012 Presidential candidate sites, as well as a youth mobilization site. Although these sites are not specifically aimed at young people, there is some evidence that VAA sites may have an impact on young people and as candidate sites have become increasingly sophisticated, it is a good opportunity to assess what, if any, impact they have. Finally, our aim is to look not just at the effects on likelihood of voting but also on political trust and efficacy; both considered important pre-cursors of participation.

The paper is divided into the following four key sections. First we outline the debates on the decline in conventional participation and particularly youth political engagement. We then detail how the Web might present a means of increasing citizen involvement and actual studies that have investigated these claims. Third we present our research questions, data and survey design for testing the impact of various types of political websites on political attitudes and behaviour during the recent U.S. presidential election. Finally we test our questions via a set of simple bivariate and then multivariate analyses, before reflecting on the differential effects of the sites on our different age groups.

Young people's political engagement
Studies exploring the reasons for these changes in young people's engagement have tended to fall into one of two broad narratives: that of a disaffected citizenship perspective or that of a cultural displacement perspective (Loader, 2007). The former perspective argues that young people are withdrawing from political life, as measured by the decline in engagement across a number of indicators including party membership and political interest (Putnam, 2000). This approach has often informed media accounts of young people, suggesting that young people are apathetic and locating the 'blame' for non-participation solely at the door of young people themselves (Kimberlee, 2002). The latter perspective argues that the nature of political participation is changing (Dalton, 2008; Inglehart and Welzel, 2005; Norris, 2002) whereby young people are interested in political issues but are looking for more expressive forms of politics than formal participation can offer them and therefore are more likely to engage with single issue groups such as New Social Movements (Dalton, 1998; Hallsworthy, 1994) or alternative forms of participation such as protest or consumer politics (Norris,2011; O'Toole et al., 2003; Tarrow, 1990).

While this latter approach and broadening conception of political participation is helpful in understanding the changing nature and of youth engagement, it is still the case that the comparative decline and more sporadic nature of young people's electoral participation needs to be understood and some solutions found. When certain segments of the demos do not participate in one of the least demanding forms of representative politics, it raises some important questions about the health of the citizen body and ultimately the democratic legitimacy of the elected governments. The capacity for equal representation of citizens is compromised (Schlozman, Verba and Brady, 1999). Young people are likely to have different interests and values from other parts of society and if they are not engaged with the electoral process, they run the risk of having little real representation or opportunities to protect these rights and values (Henn et al, 2002; Mill, 1958). Indeed Dalton (2011) and Wattenberg (2002) found in separate studies that if young people had turned out to vote in

greater numbers in the 2000 and 2004 Presidential elections, the final results would have been reversed. Thus, while alternative modes of participation can be effective in creating change, it belies the fact that young people may be failing to make the connection between the causes and problems they are interested in and the larger world of public policy, and the fact that these issues may sometimes be addressed more systematically and effectively through more traditional political routes. As such they are losing out on an important means of influence and also the understanding that politics matters.

Political socialization and political efficacy

Given the growing gap in the participation rates of younger citizens the question arises of how this is occurring. While it may be that they are increasingly likely to be missed out by the parties in their contacting efforts, a more complex answer can be found in the wider social context they inhabit. Effectively young people are seen as failing to acquire the habit of voting and taking this process one step further back, this means they are missing out in developing the political attitudes and behaviours that have been shown to be key predictors of electoral participation. Several empirical studies have emphasized the importance of political attitudes and cognitive behaviours for electoral participation, such as political interest, efficacy and attentiveness to news (Verba et al., 1995; Zukin et al., 2006). Political socialization is defined as the transmission of key attitudes and behaviour from one generation to the next (Jennings and Niemi, 1968). Given the extensive social change of the last few decades it is perhaps unsurprising that the traditional agents of political socialization such as family and social class are failing to operate in the usual way and disseminate these norms and modes of behaviour in the same way (Putnam, 2000; Niemi and Klinger, 2012). Montgomery et al. (2004) suggest that without these 'pre-participatory' attitudes, young people are unlikely to take part in electoral politics.

Of particular interest for this study is the role of one particular attitude that has been found to be particularly influential in stimulating political behaviour - political efficacy. It is of particular importance for young people's participation and, as the literature outlined below makes clear, has an affinity and association with web use. Political efficacy is usually described as a person's feeling that they have the ability to influence the political process (Campbell et al., 1954), and its relationship with political participation has been of interest for many years, particularly as studies have shown that political inefficacy is a key predictor of non-voting for young people (Kaid et al., 2000). Most studies consider both internal and external dimensions of efficacy, which Niemi et al, (1991) defining internal efficacy as "the competence to understand and to participate effectively in, politics" and external efficacy as "beliefs about the responsiveness of governmental authorities and institutions to citizens' demands" (p.1407). How can higher levels of political efficacy be developed in young people?

The web and political efficacy

The inherent structure and make-up of the web has led to some of the hope that the web may be instrumental in engaging young people with politics (Coleman and Hall, 2001; Krueger, 2002). Today's Millennial generation have grown up in a digital world, many have hoped that the web may have a role to play in socializing young people into electoral

engagement. The web offers huge potential for interactivity and interconnectivity (Lievrouw and Livingstone, 2002), which has further increased with the evolution of social media or Web 2.0 (O'Reilly, 2005). In terms of communication, the web is unique in that it allows for the types of communication offered by other forms of communication technologies and media e.g. 'one-to-one', 'one-to-many' and 'many-to-one' whilst also facilitating the unprecedented form of 'many-to-many' (Chadwick, 2006 ; Weare, 2002).

The interconnectivity of the web means that communication is no longer restricted in time and space, as people can easily and quickly communicate through symmetrical or asymmetrical means, allowing for a transcendence of geographic and time barriers (Castells, 2003), all of which offer the potential for greater interactivity and self-expression which may appeal to young people. Finally, the vast amount of political information available online has led some to suggest that it may help reduce the costs of participation for young people (Polat, 2005), by creating ease of access. Given this and the fact that the current generation of young people "live much of their lives online" (Palfrey and Glasser, 2008), it is unsurprising that many have hoped the key to socializing and mobilizing may be found online.

The empirical research on the effects of the web on political efficacy is still a young one and the majority of these studies have looked the connections between types of web use such as information seeking or communication and efficacy. Kaye and Johnson found that political use of the web such as information seeking had stronger links to political efficacy compared to uses of the web for entertainment. Kenski and Stroud (2006) found a small but positive relationship between online exposure to campaign information and political efficacy, even when other variables such as partisan strength and other media exposure were taken into account. In terms of communication uses, Wang (2007) found that using the web to express political opinions increased internal efficacy. Specifically looking at young people, Lee (2006) studied college students' online behaviour and found that visiting online news sites and sending or posting political messages were significant predictors of internal efficacy. However, visiting public sector sites such as candidate sites did not increase internal efficacy and in fact, decreased external efficacy. Lee suggests that this decrease may be due to young people having high levels of expectation for design and usability of websites and if government or candidate sites do not impress, this may translate into judgements on the effectiveness of government. In terms of political information efficacy, Tedesco (2007) found that young people who were exposed to highly interactive political web content saw increases in political information efficacy and also were more likely to believe that voting was an important behaviour.

These studies have focused on the effects of types of web use but several scholars have argued that what is needed is an understanding of the ways in which the features, content and design of particular websites in specific elections (Hirzalla et al, 2010; Lupia and Philpot, 2005) affect political efficacy and other attitudes and behaviours. Different sites may also have differential effects depending on who is using them, as Bakker and de Vreese (2011) neatly summarize, "Internet use is not a uni-dimensional concept and thus, does not - if at all- affect all groups in society similarly; rather, its effects depend on a complex combination of personal characteristics, usage patterns, and the specific content and context of the medium" (p.452). This is particularly important when considering the potential of any site to

engage young people as they will not automatically engage with any website – be it entertainment or educational – purely because it is a digital platform (Selwyn, 2007). Rather they need to find it interesting, useful and engaging and crucially, they need to have exposure to it. The challenge then is to find which sites, if any, increase young people's political efficacy as well as to understand if any websites have a straightforward mobilization effect i.e. they increase young people's likelihood of voting.

Electoral mobilization websites
Since the start of the century, there have been a variety of attempts by non-partisan organisations, government and corporations to create political websites that will specifically appeal to young people and help socialise them into electoral politics (Owen, 2006). The phenomenon has been most notable in the US with a number of different types of websites emerging, offering information, tools to simplify registration or finding your polling station or simply encouraging young people to vote (Montgomery et al., 2004; Bennett and Xenos, 2004). In addition, a number of sites known as Vote Advice Application (VAAs) have been designed to help people decide who to vote for as well as the evolution of increasingly sophisticated web campaigns of election candidates themselves.

Youth Mobilization sites
Many of the mobilization sites such as Rock the Vote or the New Voters project, are specifically designed in the hope of getting young people to register and to vote. As they are a relatively recent phenomenon, the body of work relating to them is small and as such, few studies have explored the effects of these sites on young users. In an experimental study, Xenos and Kyoung (2008) tested the effects of use of two different youth engagement sites in the 2004 election: Rock the Vote and the New Voters Project. They found differences both between the effects of the individual sites and also between types of users. Participants in the experiment were randomly assigned to one of the sites or a control condition which was the Google website and asked to assess how helpful the sites were in terms of helping them think about the important issues in the election and the logistics of casting their ballot (e.g. voter registration, polling places etc. as opposed to helping them choose between candidates). From post-test subjective ratings, Rock the Vote and Google were found to be more helpful than the New Voters Project site in terms of helping to think about the issues, whereas the New Voters Project was much more useful than the others in terms of providing information about how to vote.

Vote Advice Applications (VAAs)

Vote Advice Applications are web-based tools which aim to help voters choose between parties or candidates by asking them to complete a quiz on their opinions on a number of political issues and then matching them with the candidate or party that comes closest to their views. The original VAA, the StemWijzer (VoteMatch), was developed in the Netherlands by the Institute for Political Participation in 1998 to help voters navigate the complexities of the multi-party system. It has gone on to be used in civic education settings as well as by the general public and has been extremely popular, with an estimated 3.5 million unique users (approximately 30% of the population). This tool has been adapted by a variety of non-partisan actors across a number of different countries and elections (Farrell and Schmitt-Beck, 2008), for example 'Project Vote Smart' and 'On The Issues' in the US.

Fivaz and Schwarz (2007) suggest that VAAs may encourage electoral participation amongst users, particularly those who are less engaged with politics, as the VAAs may help to reduce the time and energy costs associated with processing political information. As Walgrave et al (2008a) suggest, VAAs take voters by the hand through a complicated political landscape. Whilst they are not usually specifically designed for young people, some research suggests that young people who used them were less likely to have high levels of political interest and knowledge, whereas older users tended to be politically engaged already (Hirzalla et al., 2011). Nadig and Fivaz (2009) found that VAAs seemed to be more effective amongst younger users than older groups of the population in terms of increasing knowledge, encouraging discussion about the candidates or parties and many users went on to search for further information about the election.

The majority of the small body of research of VAAs has been conducted in the European context, likely reflecting the large number of multi-party systems but these tools are also likely to be useful in candidate-based elections, helping to understand each candidate's policy positions. Use of these may lead to increases in political efficacy, an area which has yet to be explored, particularly in the context of young people.

Candidate websites

The use of the web in election campaigns in the United States has been evolving since the late 1990s. The earliest studies from the 1996 election concluded that the candidate websites were generally static reproductions of offline campaign materials, often termed as 'brochureware' (Kamarck, 2002). The sites were fairly rudimentary with few interactive features or attempts to interact with voters and for these candidates, merely having a presence on the web was considered to constitute web campaigning (Foot and Schneider, 2006). The turn of the century saw the emergence of a phase of maturation (Davis et al., 2009) as campaign websites in the 2000 US election began to have a wider mix of functions and more sophisticated designs appeared. Both John McCain and Al Gore made innovations in online fundraising in the Primary season and there were some attempts at interactive features across the main candidate sites but in general, it was considered that web campaigning was largely failing to make use of its potential to connect with and mobilize supporters (Bimber, 2003; Chadwick,2006; Gibson et al, 2003).

The 2004 election cycle made advances in web campaigning with Howard Dean's primary campaign embracing emerging web 2.0 technologies such as blogging to try to create a more participatory campaign (Trippi, 2005). The ultimate candidates John Kerry and George W. Bush did adopt some of these online tools but the other supposedly interactive features they included on their websites were heavily managed. The blog on the Bush campaign website for example, did not allow supporters to comment on posts, whilst although the Kerry blog did allow comments, albeit subject to hefty moderation, its discussion groups were occasionally removed from the site entirely (Chadwick, 2006; Williams et al, 2005). In short, the major candidates were happy to make nominal displays of their use of interactive web technologies but were not fully embracing them.

The web story of the 2008 US campaign was predominantly the way in which Barack Obama utilised and integrated web 2.0 technologies. The main campaign site utilised many interactive features including a blog and fundraising tools that particularly encouraged small donors to donate (Harfoush, 2009). The lynchpin of the campaign was the My Barack Obama site or MyBO which combined the traditional uses of a campaigning site e.g. providing information and online donation tools with a bespoke social networking and activist organization site. The site encouraged visitors to create their own online profiles and allowed them to access others through tools such as an internal messaging system and through a number of interest groups and supporters were encouraged to be heavily interactive The design, content and moderation of the site also meant that whilst people had a great amount of freedom to be inventive and contribute in a variety of ways, the focus was kept clearly on the campaign and the goal of getting Obama elected by getting out the vote (Exeley, 2008; Stromer-Galley, 2009). Many have attributed Obama's success, particularly in terms of mobilizing younger voters to his campaigns use of the web but there is little empirical work exploring the effects of candidate sites on young people.

These three types of sites are all of interest in relation to young people: youth mobilization sites are designed with the aim of engaging young people, previous research suggests that VAAs may be more effective with young people than with older citizens and candidate sites are perhaps the most visible face of election websites. There is a need for empirical research to test the effects of exposure to these sites on young people's efficacy. This study aims to do just that, using an experimental approach to examine the effects of these sites on 18-30 year olds' internal and external efficacy and likelihood of voting. This translates into the following research questions:

Research Question 1: *Does exposure to a Youth Mobilization, VAA or candidate website significantly increase young people's likelihood of voting?*

Research Question 2: *Does exposure to the selected websites significantly increase young people's political efficacy?*

Research Design

Following a process of content analysis which focussed on the design, interactivity and content of 2012 electoral websites, the highest scoring Youth Mobilization and VAA site were selected as well as the two main Presidential or Mayoral candidate sites. A randomised pre-test/post-test quasi-experimental research design administered via the web was used to test the effects of exposure to the selected sites on the three dimensions of political efficacy amongst young people.

<u>Participants and procedure</u>

Participants were drawn from an existing consumer web research panel and were sent an invitation to take part in the survey via email. On accepting the invitation, participants were sent a link to the pre-test survey and randomly assigned to either the control group or one

of the experimental conditions, which determined the website to which they would be exposed.

The pre-test took place approximately two weeks before each election with the post-test following shortly after the election. The pre-test survey measured existing levels of political attitudes, attentiveness to news, previous political behaviour and other relevant factors such as partisanship, feelings towards the two main candidates and socio-economic demographics. Those in the experimental conditions were then exposed to one of three websites: a youth mobilization site (Power of 12 in the US and Bite the Ballot in the UK), a vote advice application (ISideWith in the US and Vote Match in the UK) or the two main candidates' websites (Barack Obama and Mitt Romney in the US and Boris Johnson and Ken Livingstone in the UK).

These participants were asked to browse the sites as they would normally and were able to return to the survey after 4 minutes of exposure to the site. Those assigned to the candidate site condition were given the opportunity to visit both candidates' sites and answered questions on either the site the site they had spent most time on or if they felt they had spent equal time on both, on the site they liked the most. Following exposure to the site, they answered a short series of questions evaluating the sites in terms of usability and usefulness. Those in the control condition answered the same questionnaire but ended the pre-test at the point prior to any website exposure. The post-test questionnaire was a short survey, repeating the measures of attitudes and attentiveness to news and measuring levels of participation in the election, including vote. In the US, 4667 respondents took part in the pre-test wave, which dropped to 2975 in the post-test wave: an attrition rate of 36.3%. In the UK, the sample was much smaller, with a total of 851 completing both waves of the survey. This small n needs to be taken into account in the UK analysis, as the sample size in some of the conditions, particularly when split by age becomes quite small.

Dependent Variables

For voting, participants were first asked in the pre-test if they had already sent a postal vote for the election. Those who had not were then asked the likelihood of their voting using an 11 point Likert scale, "Using this scale that runs from 0 to 10, where 0 means very unlikely and 10 means very likely, how likely is it that you will vote in the US Presidential election?". In the post-test following the election, vote was measured by the question "We have found that many people did not vote in the recent US Presidential/London Mayoral election. Did you manage to vote?" and had the option of the following four responses:

•   I wanted to vote but was prevented from doing so
•   I decided not to vote
•   I voted
•   Don't know

This was then re-coded as a binary variable: voted or did not vote

Internal and external efficacy were measured on both the pre-test and the post-test. Each efficacy variable was measured on a 5-part Likert scale: strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree and strongly disagree. Respondents were

asked to select the extent to which they agreed with a single statement per attitude as follows:

• 　　　Voting is a good way of expressing your views (Internal Efficacy)
• 　　　I don't think government officials care much about what people like me think (External efficacy)

Findings

RQ1: Turning first to vote, we conducted a series of binary logistic regressions to understand if exposure to any of the websites had an effect on the likelihood of respondents voting. In the US, the only significant finding from the model was that young people are less likely to vote than older people (see table 1). None of the website condition variables or interaction terms had a significant effect on voting in the 2012 election.

Looking at the UK findings, (see table 2),we see that the Vote Match VAA has a statistically significant effect on the likelihood of voting. Those in the VAA website condition were more likely to vote (p<0.01) but the interaction term reveals that this effect is significantly less for young people (p<0.05). In other words, viewing the Vote Match website in the UK did increase the likelihood of voting in the London Mayoral election but this effect was not as strong amongst 18-30 year olds.

RQ2:
Internal efficacy
First, we will examine the findings for internal efficacy. Turning to the US findings first, we see that 86.2% of over-30s strongly or somewhat agree with this and therefore have high or fairly high levels of internal efficacy, compared to 77.2% of young people.

Examining the paired sample t-tests, those in any of the experimental conditions saw no change at all in their levels of internal efficacy (see table 3). For those in the control condition, we see that 18-30 year-olds had a significant increase in their levels of internal efficacy (p<0.05) whilst the over-30s saw a small decline in internal efficacy but not significantly so. Taking each condition in turn, we find that young people in the Youth Mobilization website condition had a very small positive change in internal efficacy whereas older people saw a small negative change. The reverse is true for the VAA website, with younger people seeing a small decline and older people seeing a small increase. Both younger and older people in the candidate website condition had a very small decline in internal efficacy. The effects across all of the conditions were very small and not significant. Turning to the multiple regression models, (see table 4) political interest was significant (p<0.001). The variable relating to young people was negatively and significantly related (p<0.001), confirming that younger people have lower levels of internal efficacy overall.

Turning to the UK findings, we see that overall levels of internal efficacy are slightly lower than in the US, with 80.2% of over-30s and 67.8% of younger people strongly or somewhat agreeing that voting is a good way of expressing your views. From the t-tests, (see table 5)

we can also see some differences in the effects of the websites. Those who were in any of the treatment conditions saw a decline in their levels of internal efficacy, which was significant for the over-30s (p<0.1). The control group also saw a decline but not significantly so. Examining the individual conditions we see a broadly negative effect from all of them, with some exceptions. Exposure to the Youth Mobilization website had a negative effect on young people but a small positive effect on older people. Those in the VAA condition, saw an increase in their internal efficacy if they were under 30 but a significantly negative effect (p<0.1)for those over 30. The candidate websites condition saw a decline in both the younger and older groups but not significantly so.

Examining the results of the multiple regression models,(see table 6) we find that again political interest is significantly related (p<0.001)and being young was significantly negatively related (p<0.1). However, none of the other variables were significantly related to internal efficacy.

External efficacy:

Lastly we examine the external dimension of efficacy. Respondents in both the US and UK survey were asked to indicate how much they agreed with the statement "I don't think government officials care much about what people like me think". Looking at the overall US results, we find that just 19.2% of the over-30s and 19.9% of the under-30s have high or fairly high levels of external efficacy. If we compare this to the levels of the attitudes we have previously looked at we can see that there is a distinct difference, with both civic duty and internal efficacy in the high 80%s for older people and high 70%s for younger people. This suggests that government and politicians are doing a poor job of making most people feel like they care what they think.

Looking at the results of the t-tests, amongst those who were in any of the treatment conditions we see that there was a positive and significant effect (p<0.1) for 18-30 year-olds whereas older people saw a negative and significant effect (p<0.05) on their levels of external efficacy. Comparing this to the control group, we see very small positive changes or no change between the pre-and post-tests; none of which are significant (see table 7). Young people in the Youth Mobilization website condition saw an increase in their external efficacy, with older people seeing a decrease although none of these findings were significant. We see this pattern again in the VAA condition, with younger people seeing an increase and older people seeing a decrease but in this treatment group, the findings are statistically significant (p<0.05. Those exposed to the candidate sites saw a very small negative effect but this was not significant.

Turning to the multiple regression models (see table 8), we find that as in the previous models political interest and being young are significantly related to post-test levels of external efficacy(p<0.001). However we also see that exposure to the VAA is also significantly related; overall it the effect is negative (p<0.001) but for young people this effect is positive (p<0.01). In other words, exposure to the Isidewith VAA website increased levels of external efficacy for young people but decreased this attitude in the over-30s.

Moving on to the UK findings, we see fairly similar overall results in terms of overall levels of external efficacy as in the US. Just 18.5% of over-30s and 24.7% of under-30s had high or fairly high levels of external efficacy, suggesting that the UK government and politicians are also doing a fairly poor job of making citizens feel like their views are important. Turning to the t-test results (see table 9), young people exposed to any of the treatments saw a fairly large (+0.21 points) and significant ($p < 0.1$) increase in external efficacy , whilst over-30s saw a moderate but also significant decrease ($p < 0.05$). The control group saw a small decrease which was not significant. Looking at the individual conditions, the Youth Mobilization website had a negative effect on both the younger and older groups, but for the older group the effect is quite large (a decrease of -0.34 points) and statistically significant ($p < 0.01$). The VAA website had a positive effect, with a moderate but not significant increase for young people and a significant increase for the older group ($p < 0.1$). For young people in the candidate websites condition, a large (+0.56 points) increase which was also significant ($p < 0.001$) could be seen. Older people in this treatment group saw a moderately negative effect but this was not significant.

Looking at the results of the regression models (see table 10), we see that political interest and being young were significant at $p < 0.001$ and $p < 0.1$ respectively. None of the other variables were shown to be statistically significant.

Conclusion and discussion

To summarise the findings, exposure to the websites had no effect on the likelihood of US respondents voting. In the UK however, those viewing the Vote Match website were significantly more likely to vote, though this effect was weaker amongst 18-30 year-olds. This therefore was the only experimental condition to show a significant direct mobilization effect.

Turning to the second research question, the US findings show no significant change in levels of internal efficacy in any of the experimental conditions. In the UK, the Vote Match website again had a significant impact; however this time, the effect was negative, decreasing the over-30s levels of internal efficacy. The most interesting findings come when we turn to external efficacy. In the US, exposure to the ISideWith VAA significantly increased young people's levels of external efficacy but significantly decreased older people's levels. In the UK, all three websites had a significant effect but on different age groups and in different directions: Bite the Ballot had a significant negative effect on older people's levels of external efficacy, Vote Match significantly increased this attitude for the over-30s and viewing the candidate websites significantly increased 18-30 year-olds levels.

This study has shown that specific electoral sites can have an effect on efficacy and vote, though those effects are small and often stronger amongst older people rather than young people. A particularly interesting finding is that exposure to the same site can have the opposite effect on young people compared to older people. There is scope for a great deal of further research in this area both in terms of comparable effects of other types of electoral websites, why it is that particular sites have these effects or lack of these effects. One limitation of this study is that we have only been able to look at one site as an example

for each type of website and different results may be found when looking at other examples of these sites. In addition, participants were exposed to these sites for a very short amount of time and so different effects may be found when used for a longer period of time and in a more natural environment. Finally, we cannot know exactly how people viewed the sites actually used them, in terms of what they looked at and interacted with. This aspect of web research may well have a big part to play in understanding the differences in effects between younger and older people. This study will hopefully provide a springboard for further research into the relationship between electoral sites, young people and their political engagement.

Appendix

Table 1: Binary logistic regression, Vote (US)

	Model 1	Model 2	Model 3
Youth Mobilization website	.237 (.139)*	.274 (.141)*	.354 (.193)
VAA website	-.074 (.132)	-.051 (.134)	.046 (.182)
Candidate websites	.026 (.134)	.071 (.136)	.297 (.193)
18-30		-.920 (.097)***	-.703 (.194)***
Youth Mobilization website * 18-30			-.183 (.281)
VAA website *18-30			-.219 (.269)
Candidate websites * 18-30			-.460 (.275)
Nagelkerke R²	.003	.052	.053

Table 2: Binary logistic regression, Vote (UK)

	Model 1	Model 2	Model 3
Youth Mobilization website	.337 (.230) *	.400 (.238)*	.407 (.297)
VAA website	.530 (.264)*	.534 (.272)*	.984 (.382)**
Candidate websites	.025 (.219)	.145 (.228)	.059 (.284)
18-30		-1.256 (.172)***	-1.160 (.229)***
Youth Mobilization website * 18-30			-.038(.494)
VAA website *18-30			-1.193 (.597)*
Candidate websites * 18-30			.189 (.465)
Nagelkerke R²	.010	.097	.105

Table 3: Paired sample t-tests, Internal Efficacy (US)

	Pre-test	Post-test	t	df	p	Change
Any treatment						
All	4.23	4.23	.154	2253	.877	+/- 0.00
All 18-30	4.02	4.02	.030	825	.976	+/- 0.00
All Over 30	4.35	4.35	.175	1427	.861	+/- 0.00
Youth Mobilization website						
All	4.23	4.23	-.007	756	.182	+/- 0.00
18-30	3.96	3.98	-.310	274	.757	+0.02
Over 30	4.38	4.37	.256	481	.798	-0.01
VAA website						
All	4.23	4.24	-.273	746	.778	-0.01
18-30	4.02	4.03	-.118	267	.906	-0.01
Over 30	4.35	4.36	-.254	478	.800	+0.01
Candidate websites						
All	4.23	4.21	.562	749	.574	-0.02
18-30	4.08	4.05	.525	282	.600	-0.03
Over 30	4.33	4.31	.297	466	.766	-0.02
Control						
All	4.19	4.21	-.391	720	.845	+0.02
18-30	3.94	4.09	-2.326	240	.021*	+0.15
Over 30	4.32	4.27	1.198	480	.232	-0.05

Table 4: OLS Linear regression, Internal Efficacy (US)

	Model 1	Model 2	Model 3	Model 4
Youth Mobilization website	.019 (.050)	.019 (.048)	.025 (.059)	.095 (.059)
VAA website	.029 (.051)	.018 (.048)	.023 (.059)	.072 (.059)
Candidate websites	.005 (.051)	-.021 (.048)	-.011 (.059)	.004 (.059)
Political Interest		.369 (.020)***	.353 (.020)***	.353 (.020)***
18-30			-.205 (.064)***	-.104 (.072)***
Youth Mobilization website * 18-30				-.200 (.100)*
VAA website *18-30				-.144 (.100)
Candidate websites * 18-30				-.051 (.100)
Adjusted R²	-.001	.101	.111	.111

Table 5: Paired sample t-tests, Internal efficacy (UK)

	Pre-test	Post-test	t	df	p	Change
Any treatment						
All	4.21	4.14	1.578	379	.115	-0.07
All 18-30	4.05	4.02	.387	99	.699	-0.03
All Over 30	4.26	4.18	1.614	279	.108*	-0.08
Youth Mobilization website						
All	4.19	4.15	.539	136	.591	-0.04
18-30	4.03	3.98	.360	34	.721	-0.05
Over 30	4.24	4.21	.406	101	.686	+0.03
VAA website						
All	4.27	4.15	1.437	109	.154	-0.12
18-30	3.72	3.77	-.317	22	.754	+0.05
Over 30	4.42	4.25	1.733	86	.087*	-0.17
Candidate websites						
All	4.17	4.12	.788	132	.432	-0.05
18-30	4.25	4.18	.471	41	.640	-0.07
Over 30	4.14	4.09	.628	90	.532	-0.05
Control						
All	4.06	4.03	.757	470	.449	-0.03
18-30	4.02	3.94	.790	108	.431	-0.08
Over 30	4.07	4.05	.420	361	.675	-0.02

Table 6: OLS Linear regression, Internal Efficacy (UK)

	Model 1	Model 2	Model 3	Model 4
Youth Mobilization website	.124 (.096)	.090 (.095)	.094 (.095)	.100 (.110)
VAA website	.121 (.105)	.061 (.104)	.057 (.104)	.128 (.117)
Candidate websites	.091 (.098)	.067 (.096)	.079 (.096)	-.006 (.114)
Political Interest		.225 (.040)***	.227 (.040) ***	.228 (.040) ***
18-30			-.150 (.078_*	-.156 (.107)*
Youth Mobilization website * 18-30				-.023 (.219)
VAA website *18-30				-337 (.252)
Candidate websites * 18-30				.271 (.211)
Adjusted R²	.000	.035	.038	.040

*=significant at 0.1 level

Table 7: Paired sample t-tests, External efficacy (US)

	Pre-test	Post-test	t	df	p	Change
Any treatment						
All	2.41	2.39	.681	2253	.496	-0.03

All 18-30	2.49	2.56	-1.799	825	.072*	+0.07
All Over 30	2.36	2.30	2.140	1427	.033*	-0.06
Youth Mobilization website						
All	2.41	2.40	.143	756	.886	-0.01
18-30	2.49	2.57	-1.189	274	.235	+0.08
Over 30	2.36	2.31	1.031	481	.3013	-0.05
VAA website						
All	2.39	2.36	.519	746	.604	-0.03
18-30	2.42	2.57	-2.221	267	.027*	+0.15
Over 30	2.37	2.25	2.255	478	.025*	-0.05
Candidate websites						
All	2.44	2.41	.512	749	.609	-0.03
18-30	2.56	2.55	.206	282	.837	-0.01
Over 30	2.36	2.33	.483	466	.629	-0.03
Control						
All	2.42	2.43	-.196	720	.845	+0.01
18-30	2.44	2.47	-.350	240	.727	+0.03
Over 30	2.41	2.41	.008	480	.994	+/- 0.00

Table 8: OLS Linear regression, External Efficacy (US)

	Model 1	Model 2	Model 3	Model 4
Youth Mobilization website	-.028 (.057)	-.028 (.057)	-.035 (.057)	-.110 (.071)
VAA website	-.065 (.058)	-.068 (.058)	-.075 (.057)	-.169 (.071)**
Candidate websites	-.015 (.058)	-.022 (.057)	-.034 (.057)	-.091 (.071)
Political Interest		.088 (.024) ***	.108 (.024)***	.108 (.024)***
18-30			.243 (.042) ***	.074 (.087)***
Youth Mobilization website * 18-30				.219 (.120)
VAA website *18-30				.274 (.120)**
Candidate websites * 18-30				.171 (.120)
Adjusted R²	-.001	.004	.014	.015

Table 9: Paired sample t-tests, External efficacy (UK)

	Pre-test	Post-test	t	df	p	Change
Any treatment						
All	2.48	2.45	.461	379	.645	-0.03
All 18-30	2.40	2.61	-2.287	99	.021*	+0.21
All Over 30	2.51	2.40	1.535	279	.126	-0.11
Youth Mobilization website						
All	2.75	2.46	2.632	136	.009**	-0.29
18-30	2.71	2.59	.857	34	.398	-0.12
Over 30	2.76	2.42	2.490	101	.014**	-0.34
VAA website						
All	2.27	2.41	-1.728	109	.087*	+0.14
18-30	2.23	2.32	-.565	22	.578	+0.09
Over 30	2.28	2.44	-1.633	86	.106*	+0.16
Candidate websites						
All	2.38	2.48	.788	132	.432	+0.10
18-30	2.23	2.79	-3.743	41	.001***	+0.56
Over 30	2.45	2.34	.834	90	.407	-0.11
Control						
All	2.35	2.31	.721	470	.471	-0.04
18-30	2.55	2.53	.108	108	.914	-0.02
Over 30	2.29	2.24	1.209	361	.227	-0.05

Table 10: OLS Linear regression, External Efficacy (UK)

	Model 1	Model 2	Model 3	Model 4
Youth Mobilization website	.156 (.107)*	.133 (.107)	.127 (.106)	.142 (.123)
VAA website	.106 (.117)	.065 (.117)	.071 (.116)	.154 (.131)
Candidate websites	.175 (.108)*	.158 (.108)*	.139 (.108)	.076 (.128)
Political Interest		.152 (.045)***	.149 (.045)***	.149 (.045)***
18-30			.245 (.087)**	.265 (.120)*
Youth Mobilization website * 18-30				-.058 (.245)
VAA website *18-30				-.394 (.282)
Candidate websites * 18-30				.195 (.237)
Adjusted R²	.001	.014	.021	.022

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