

Views from Inside the Net: How Websites Affect Young Adults' Political Interest

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Abstract

We use multiple methods to study how websites affect political interest. A model clarifies necessary conditions for a site to increase an individual's interest. A survey then reveals age-related interest changes that are consistent with the model's logic. Specifically, we find that respondents *of all ages* report greater political interest after viewing sites that they rate as effective and efficient than they do after viewing sites that lack such attributes. Age-related interest changes appear because some sites that young adults rate effective and efficient, older adults do not.

This work makes two contributions. Methodologically, our unique model and survey design provide templates for better understanding the impact of online political appeals. Substantively, our finding can help political entrepreneurs engage young adults more effectively.

Running Head: How Websites Affect Political Interest

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Using data from “The American Freshman,” Soule (2001: 4) reports that

“Over the past forty years, no generation has begun with such low levels of interest in politics. Cross-sectional surveys of incoming freshmen reveal that only 26% consider it very important or essential to keep up to date with political affairs. This is a near record low, in contrast to over 50% of students prior to 1970 and 42% in 1990.”

Many people want to understand why this trend is happening. Delli Carpini

(2000:344) describes one cause as follows:

“[M]ost of the formal institutions of public life either ignore young adults and the issues that matter to them or are ill equipped to attract young adults and provide them with meaningful opportunities to participate.” Parties and candidates see little reason to devote their resources to reaching out to young Americans given that this age cohort is less likely to vote than older Americans. Government officials are unlikely to listen to young Americans, knowing there is little risk that they will be punished for their neglect at the polls. The news media is aimed at an older and increasingly shrinking audience. Traditional civic organizations and interest groups are dominated by issues, governing structures, policy solutions, and/or civic styles that are anathema to younger Americans raised in a faster-paced, entrepreneurial, mass-mediated, and global environment (Delli Carpini 2000: 344).

Following Delli Carpini’s lead, we examine how a focal aspect of public life, the Internet, can be redesigned to increase young adults’ political interest. Given the increasing number of people who have Internet access, the Internet is a plausible venue for increasing political interest. But it is no panacea. Among the many factors working against online strategies is the fact that entrepreneurs who want to draw young adults away from political pursuits can use the same medium to create many new non-political diversions.

Can the Internet to increase young adults’ political interest? Observers draw the gamut of conclusions. Some, such as Weber et. al. (2003: 39), “find that participation on the Internet exerts a positive influence on political participation.” Others are more skeptical. Richard Davis (1999:168) argues that “the Internet will not lead to the social

and political revolution so widely predicted” and Bruce Bimber (2003:24) concludes that “[t]he new information environment has not changed levels of engagement in any substantial way.” A few claim more dire consequences. Cass Sunstein (2001) contends that the Internet, instead of increasing political participation, will lead people to withdraw further from the public sphere.¹

We respectfully disagree with all of these accounts. The crux of our disagreement is that “the Internet” is not the best level of observation on which to base claims about how this medium can affect young adults’ political interest. The Internet is not a monolith with which people interact as a whole. It is a collection of millions of individual web sites. People interact with one site at a time. Therefore, if “the Internet” is going to change young adults’ political interest, it will do so because particular websites capture the attention of otherwise disinterested young adults.

Our study’s guiding premise is that questions about how “the Internet” affects political interest are better answered by focusing on how *certain kinds of web sites* affect *certain kinds of people*. This approach not only clarifies “the Internet’s” effect on individual-level political phenomena, but is also more relevant to people who want to use the medium to increase young adults’ political interest (e.g., most entrepreneurs can adjust a website’s design and content far more easily than they can adjust “the Internet.”)

From the guiding premise, we offer a study with two parts. The first part is a simple website impact model. The second part is an unusual web-based survey.

¹ Scholarly research on other communications mediums, particularly television, includes parallel debates. As Pippa Norris (1996: 479) argues, “the relationship between civic engagement and television viewership is more complex than sometimes suggested.” This literature is divided between scholars who believe media increases engagement (e.g., Norris 1996) and those who believe that media usage depresses political engagement (e.g., Patterson 1993; Ansolabehere and Iyengar 1995; Putnam 2000). Taken together, the evidence suggests that it is not the media *per se*, but the content of the information being transmitted. Hamilton (2004) adds to the debate by clarifying how market forces affect news content and impact (also see Druckman 2003).

Our model is based on the fact that an Internet viewer has millions of web sites from which to choose, but can concentrate on only one at a time. So if a particular site is to increase a viewer's political interest, the viewer must pay sufficient attention to it and must remember certain things about what he or she viewed. By integrating basic ideas from the empirical study of memory and attention with insights from more formal theories of information search, we can characterize the kinds of sites that are likely to increase political interest. We conclude that a viewer's *perception* of a site's *effectiveness and efficiency* is critical. Given the massive competition for a viewer's attention -- from other web sites and life in general -- viewers are more likely to attend to sites that they perceive as providing interesting information effectively and efficiently. Our model implies that empirical work on viewer perceptions of a website's effectiveness can inform debates about how "the Internet" affects young adults' political interest.

To this end, we designed an unusual survey. Knowledge Networks conducted it for us on a random sample of Americans during the closing weeks of the 2000 general election. The survey interview -- which was conducted online -- began in a standard manner, asking respondents about their attention to news and interest in politics. Then, without prior notice to the respondent, we interrupted the interview. We then sent every respondent to one of nine randomly selected websites for five minutes. Some of the sites were run by leading news and information organizations, such as CNN. Others were run by non-profit organizations, such as Project Vote Smart. After a few minutes, we asked respondents to evaluate the sites they visited and to report on how the sites affected their interest in politics.

Our analysis focuses on a respondent's age, their site evaluations -- an empirical measure of the *viewer perceptions* highlighted in our model -- and their subsequent self-reported political interest. We find that:

- “The Internet” affects the political interest of young adults’ in our study. Our evidence for this point is far more direct than previous studies that claim no effect.
- When respondents *of any age* perceive a site to provide information quickly, easily, and accurately, then viewing the site is significantly more likely to correspond to increases in their political interest than does viewing a site that lacks such attributes.
- There are age differences in how individual sites affect political interest. They can be explained, in part, by the fact that young and old citizens evaluate sites differently. Some sites that young adults perceive as effective and efficient, others do not.

So when it comes to increasing political interest via the Internet, our results suggest that “one site” does not fit all.

This research has at least two implications. First, findings such as ours cannot be culled from studies of, or conjectures about, “the Internet.” Scholars can better understand this medium by augmenting existing “Internet” studies with research on how site and page level phenomena affect individual viewers. Second, Internet-based attempts to increase young adults’ political interest can benefit from focusing on “views from inside the ‘Net.’” No matter how important or engaging activists or educators might find a particular online political presentation, it will have a disappointing impact if young adults perceive the site in a different and negative way. Viewer perceptions – and not those of site designers -- determine how, and for whom, the Internet can change political interest. We offer our methods as a template for more effective work in both areas.

Theory

We begin by asking you to think about three null hypotheses. They are:

- The Internet’s effect on political interest does not depend on the website(s) viewed.
- A website’s effect on political interest does not depend on the viewer’s age.

- A website's effect on political interest does not depend on how viewers perceive the site.

These hypotheses are worth thinking about because even though they are not often stated explicitly, they are widely accepted. When an analyst makes a claim about how “the Internet” or “the Web” affects some aspect of politics (e.g., political engagement) without accounting for site- or viewer-specific variables, they are implicitly basing their conclusions on the assumption that these hypotheses are true.

Consider, for example, Bruce Bimber's recent conclusion (2003: 224) that, “The new information environment has not changed levels of political engagement in any substantial way.” Bimber may be correct. However, his claim's validity depends on how individuals react to particular sites. Finding that some sites increase some people's political interest in particular ways is sufficient to falsify the claim.

Bimber's study has many appealing attributes, chief among which is the care with which he examines longer-term trends in the role of communication mediums in political discourse. We have not seen a better treatment of the topic. However, like most studies of politics and the Internet, his data do not document interactions between individuals and sites. Instead, he bases his conclusion on large-scale surveys and related studies where respondents are asked not about experiences with particular websites, but about general impressions of “the Internet” as a whole. Augmenting such studies with direct observations of how people interact with online content may indeed reveal that “the Internet” (with site- and individual-specific aspects aggregated in reasonable ways) cannot change levels of political engagement, as Bimber claims. However, we are not aware of anyone who has proven this point or supported it empirically using site-viewer interaction data.

Moreover, even if such data were to produce Bimber’s “no impact” finding, the lack of aggregate change could still mask a sea change in important political dynamics. For example, it may be that some online presentations leave memorable impressions on important target audiences. These impressions may, in turn, give people greater confidence in their ability to find the information they need and increase their sense of efficacy. The same sites may, of course, have different effects on other people. Perhaps they increase viewers’ cynicism or frustration with politics. And it is entirely possible that the positive and negative effects just described would cancel in the aggregate. Even so, failing to examine the consequences of viewer-website interactions leaves us unaware of, and less able to replicate, the success of the most effective websites. Such successes are surely worth looking into.

Our study builds from the premise that whether and how “the Internet” affects political interest depends on how web sites affect individuals. Figure 1 depicts our website impact model. The model begins (at the top of the figure) with a viewer and an Internet connection in a context that we call a “viewing session.” The model focuses on whether and how a site visited during the session affects the viewer. The figure’s end nodes (towards the bottom of the figure) describe possible results of the viewing session. Following various paths in the figure, as we shall now take a moment to do, clarifies when viewing a particular web site, X, affects a viewer’s political interest. The bold parts of the figure denote the focus of our empirical work, a topic to which we shall return.

[Figure 1 about here.]

At the beginning, the viewer has millions of web sites from which to choose, but can concentrate on only one site at a time. At this moment, she is either aware of Site X

or she is not. If she is not aware, then she does not view Site X at that moment. If one of the sites she views during this session subsequently alerts her to the existence of Site X (perhaps through a link, a reference, or an advertisement), she becomes aware of it. Otherwise, she concludes the viewing session unaware of Site X and it cannot affect her political interest during that session.²

If the viewer is aware of Site X, she must choose whether or not to view it. If she does not choose to view Site X, it cannot affect her political interest during the session.

Now consider the case where she is viewing Site X during the session. She can stop viewing it at any moment. She may switch to any of the other millions of other available sites or choose to do something other than surf the web. However, to affect her political interest -- the site must engage her attention for a sufficient period of time. Otherwise, the site's content can never make the leap from short-term memory (which is little more than a cognitive holding center with low capacity and high rates of decay, Kandel, et. al. 1995: 664) to long-term memory (which is a necessary condition for the stimulus to affect future attitudes and actions). We discuss attention and memory requirements briefly, and in turn.

Following the logic of information search models in several social sciences, the viewer will devote her scarce cognitive resources to the site only if it provides her with greater perceived benefits than other objects to which she can attend (see, e.g., the review in Lupia and McCubbins 1998, Chapter 2). The exact attributes of a stimulus that can retain a person's attention vary with the person's expectations and context (see, e.g.,

² It is possible that a Site Y could post on its own site content from Site X. For the purpose of this study, we count Site Y as having the impact on the viewer if it is where the viewer engages the relevant content. In this case, the designer of Site Y made a decision about content that was sufficient, given that the viewer was already at Site Y, to impact the viewer.

Schacter 2001). For present purposes, we simply state that the site will retain the viewer's attention and is eligible to affect her only if she perceives the site to provide interesting information effectively and efficiently. In such a case, she is less likely to trade viewing the current site for other opportunities, such as "changing the channel" or "logging off." That is, if the site provides information that is uninteresting, or if it provides interesting information in a manner that the viewer perceives as slow or difficult to retrieve, then the viewer is more likely to direct her attention elsewhere.³

If she stays on the site long enough and engages it with sufficient energy, then she will begin to elaborate on its content (see, e.g., Petty and Cacioppo 1986, Kandel, et. al. 1995: Chapter 35). In so doing, she will compare the content to her current beliefs. If she perceives the new information as sufficiently relevant and credible, she will devote mental energy to updating her beliefs. If she devotes sufficient energy and if the new information is sufficiently novel, then Site X will produce a distinct memory.

Changing an aspect of memory is a *necessary condition* for the site to increase the viewer's political interest. For if Site X changes her belief about absolutely nothing, then she has no basis for paying a different amount of attention to politics than she had before. The belief change can be about the personal importance of a particular political issue (e.g., encountering a new fact about environmental policies or partial birth abortions), a realization that becoming informed about politics is easier or more difficult than previously anticipated, or even a conclusion that Site X is worth revisiting --- a

³ This dynamic also depends on perceived attributes of other sites. If, for example, a viewer believes that 100 sites offer interchangeable information on a particular topic, then we expect her to be less patient with any particular site and if she has a bad experience with a site, she will believe it easy to find a substitute. If, however, the viewer perceives that a particular site is the only one with the information she needs – such as is the case when a viewer attempts online commerce with a vendor who sells a particular product only on its own website, then the viewer may put up with slower performance. Given the large number of news and political sites that closely resemble those in our empirical study, we suspect if viewers perceive them to be ineffective or inefficient, they are less likely to draw or retain a viewer's attention.

conclusion which brings her back to the “Views” stage of our model and provides Site X with new chances to affect her.

In sum, Site X can increase a viewer’s political interest during a viewing session only if she:

- is aware of the site or visits a site that makes her aware of it,
- chooses to view the site,
- perceives the site as providing interesting information effectively and efficiently,
- stays on it long enough to elaborate on the site’s content,
- and the elaboration changes her beliefs about some phenomena, which, in turn, changes her interest in politics.

Failure to satisfy *any* of these conditions is sufficient for Site X to have no impact during the viewing session.

Many scholars have made broad claims about “the Internet’s” impact on political interest and efficacy. Few base their conclusions on direct reasoning about, or evidence of, site-user interactions. The general practice is to speculate about these interactions in ways that are tantamount to assuming that no viewer- or site-specific effects exist (i.e., accepting the null hypotheses with which this section began). Such effects deserve more than speculation. Our model implies that new empirical studies of site-viewer interactions can clarify how “the Internet” affects political interest.

Study Design

We now describe a study whose design is unusual and, to the best of our knowledge, unique.⁴ It combines orthodox and unorthodox survey design elements and

⁴ Given this motivation and the model described above, our ideal research design is as follows: “Observe a large sample of randomly selected American adults interacting with online political content under “normal usage conditions” (e.g., individuals, who do not know they are being observed, surfing the net when and how they choose; using web sites as they would in their home or office). Then , record relevant behaviors and beliefs before and after the viewing session.” With such a study, we could test hypotheses about how a person’s interactions with particular websites affect their political interest and efficacy. Ethical and

allows us to test key hypotheses about how a person's interaction with a particular website affects their political interest. The study's orthodox aspects include the fact that, like most political surveys, we do not follow respondents and record their actual behaviors. Instead, our measures of political interest come from standard survey questions. The sample is also orthodox. It is a randomly selected subset of the Knowledge Networks panel. The panel is compiled in the same manner as leading telephone-based public opinion surveys, with the firm obtaining respondent names from a nationally focused RDD sampling procedure. Knowledge Networks conducted this study, interviewing 1199 members of their panel between October 13 and November 6, 2000.

The unorthodox aspects of our study lie in how and when we collected the data. The data comes from a national web-based survey commissioned by the Markle Foundation. The survey focuses primarily on sites in the Web White & Blue Network. This non-partisan consortium of 17 of the largest Internet news and news organizations worked together to highlight the Internet's potential to expand citizen participation. Network members included CNN, Fox News, The New York Times, USA Today and Yahoo. In addition, a Markle-funded site called webwhiteandblue.org offered innovative

financial constraints prevent us from implementing this ideal. The ethical constraint is privacy protection. It is possible technologically to install software that can track keystrokes and record screen images without viewer knowledge. We know this because we have installed such software in specially designed experimental laboratories for other studies (Lupia 2001). Placing such software in homes and offices without prior consent, however, is unethical and illegal. At a minimum, research subjects must sign consent forms that inform them that they are being watched, as was true in our laboratory studies. So while interesting insights may be gleaned from wholly clandestine activities, human subjects committees do not allow them. The financial constraint, in turn, precluded tracking an expansive set of a large population's actual political behaviors. Following the behaviors of any substantial number of randomly selected respondents over any significant amount of time is prohibitively expensive for most researchers – as it was for us in this study. The actual study, therefore, has attributes of the ideal study but works within the stated constraints.

content.⁵ Our study focuses on the sites named above plus others, such as vote-smart.org, for which comparisons to the Web White and Blue project proved useful.⁶

The study's defining feature is an interruption during the interview. The interview begins with standard questions about political interest and Internet usage. Then, a random number generator determines which version of the question "Have you ever heard of [SITE]?" a respondent receives. There are nine versions of the question, each of which corresponds to one of the sites in our study. Those who answer "yes" are also asked, "Do you ever go onto [SITE] to get news and information on the presidential campaign?"

After answering these questions, and without warning, respondents receive a message:

Now we are going to send you to [SITE]. For the next five minutes, we would like you to use this site to learn about the candidates in the presidential campaign. At the end of the five-minute session, this interview will resume and we will ask you questions about it.

453 respondents were interrupted once, 746 were interrupted twice. The first interruption sent all respondents to webwhiteandblue.org.⁷ The second interruption randomly assigned respondents to one of eight sites: cnn.com, foxnews.com, isyndicate.com, politics.Yahoo.com, politicalinformation.com, nyt.com (The New York Times on the Web), usatoday.com and vote-smart.org.

The number of sites used in the second interruption is a function of the sample size and a desire to have at least 75 respondents view each site. Markle's criterion for choosing sites was that most – but not all -- be part of the Web White and Blue Network.

⁵ The site, which received over 7.5 million page views from June 28, 2002 to Election Day, contained a "Rolling Cyber Debate" between the presidential candidates, a daily selection of links to online political information from the 17 charter sites, a Featured Non-Profit Site of the Week, and a unique and widely-used directory of state-by-state election information.

⁶ More information about this study is available in Lupia (2001) and Lupia and Baird (2002). While these studies use the same data as ours, the analyses do not overlap.

⁷ The rationale for this choice is one of efficacy. While Markle organized the Web White and Blue Network, the only site whose content it controlled was WWB.org. Therefore, we were asked to gather large amounts of data on WWB.org because lessons learned about its impact could be implemented directly.

Our criteria were that they vary in whether they were commercial or non-profit in origin, and that that they vary in whether respondents are likely to have heard of or used them.

After each viewing session, we asked respondents to agree or disagree with a set of statements. Some statements sought *site evaluations*, such as “I can use [SITE] to get the information I want quickly and easily.” Others probed *personal impact* – measures of whether the site affected respondents’ political interest. Our impact questions asked whether the site made respondents “feel more confident about the quality of political information available on the Internet”, “want to learn more about politics”, “more likely to talk about politics”, “more likely to vote in the November election” and “more certain about who I will vote for in the presidential election.” Each of these questions refers to either a manifestation of increased political interest (e.g., increased learning, talking, or voting) or a factor that can make future political interest more rewarding (e.g., greater confidence or certainty). Table 1 contains the list of questions.

[Table 1 About Here]

In other words, our study focuses on the parts of the website impact model whose boxes and fonts are in bold. It begins at the point where a respondent views a particular site and ends with consequences of viewing the site.

Design Discussion

While not yet standard practice in political science, web-based surveys offer several important advantages over other more conventional means of collective data. The first advantage is that any question that can be read on the phone can be printed on the screen, which helps respondents control the interview’s pace. The second advantage is that a web-based survey allows visual attributes to become part of the experimental

design (see, e.g., Prior 2002). For this study, the main advantage was a seamless transition between a survey interview and a website viewing session. Respondents were taken directly from the interview to the randomly selected website and, after five minutes, returned straight to the interview.

A possible disadvantage is that Knowledge Networks respondents have free Internet access as a consequence of agreeing to serve in their panel. We therefore expect them to be more frequent users of the Internet than the American population at large. We are mindful of this fact when drawing inferences, but contend that its effect on our results is minor. We do not make any claims about the percentage of Americans taking any particular actions. Instead, we document and attempt to explain *variations in reactions* to the web sites in our study. For that reason, it is more important that our respondents be randomly assigned to particular web sites than it is for respondents to be representative of the general population in terms of Internet usage.⁸ Moreover, Knowledge Networks draws an otherwise representative sample, and leading researchers not affiliated with the company have judged the quality of their sample to be comparable to leading phone surveys (Krosnick and Chang 2001).

Results

The initial interview begins with the question: “Do you ever get any kind of news online?” Those who answer “yes” are asked about the frequency of such activities. The next two questions repeat this sequence, with the phrase “news or information about politics or the presidential campaign” replacing the phrase “any kind of news.” Table 2 displays the responses sorted by age category.

⁸ Following large-scale experimental design principles articulated by Sniderman and Grob (1996), Knowledge Networks selected each respondent randomly and without prejudice to whether or not they had used, or even heard of, the sites in which we were interested.

[Table 2 About Here]

Table 2 shows that young respondents are less likely than others to go online for general news, to seek general news frequently if ever they go online to do so, to seek political news if ever they seek online news, and to seek political news more than once every few weeks if they seek such news at all. These findings reinforce the common stereotype of younger citizens as relative “slackers” when it comes to politics. It also shows that the mere existence of online opportunities to obtain political information is not sufficient to engage many young adults. Such findings, however, do not address questions about whether, and for whom, a particular site can make a difference. So while many Internet and politics studies conclude with the kinds of results displayed in Table 2, we now turn to an analysis of what happens when people interact with individual sites. In so doing, we focus on the three null hypotheses that motivated our theoretical discussion. We shall reject each one.

Our dependent variable is a five-item political interest index built from answers to the following statements:

- [Site] makes me feel more confident about the quality of political information available on the Internet.
- [Site] makes me want to learn more about politics.
- [Site] makes me more likely to talk about politics with others.
- [Site] makes me more likely to vote in the November election.
- [Site] makes me more certain about who I will vote for in the presidential election.

We code answers to these questions from zero to one, where responses receive a one if the respondent strongly agreed with the statement, zero if the respondent strongly disagrees, and .25 and .75 for the values in between. We then added the score for each

item into a political impact index that ranges from 0 to 5. The inter-item correlation of these items ranges from .65 to .81 and the reliability coefficient for these items is .93.

Our first independent variables measure what site a respondent saw and his or her age. To measure site-specific effects, we include dummy variables for all but one of the websites to which our respondents were randomly assigned. The excluded website is foxnews.com, so the coefficients of site-specific dummy variables reflect the effect of the named website in comparison to foxnews.com. The variable *Age* is categorical and equals 1 for age 18-24, 2 for age 25-54, and 3 for 55 years of age or older. We present age in this way to highlight differences between the youngest respondents and others. We have also used more continuous measures of age and achieved similar results. To document age-specific effects on particular sites, we interact age with each of the dummy variables.

Each of our OLS regressions also includes a set of control variables. These variables measure basic demographic information (race, gender, income and education level), political information (the respondent's party identification and level of partisan attachment), and prior Internet use (whether the respondents have previously used the Internet or the site to which they were randomly assigned).

Table 3 presents our results. The table contains four data columns. We will first direct your attention to the two-left most data columns, which lie under the heading "Political Impact by Age and Website." Later, we will direct your attention to the two-right-most data columns and draw an important comparison. The reason for two regressions under each heading is that we ran one for webwhiteandblue.com, the first site that all respondents viewed, and one for the other eight sites, to which respondents were randomly assigned.

The two-left most columns of Table 3 provide initial evidence against the first two null hypotheses. The site-specific variables' coefficients imply significant differences in how sites affected respondents' political interest. Respondents who were randomly assigned to I-syndicate, CNN, and USA Today reported significantly lower levels of political interest than subjects who were randomly assigned to the excluded category, foxnews.com. By contrast, respondents who were randomly assigned to Project Vote-Smarts site, or that of the New York Times did not show significantly different increases in interest. Such findings work against the hypothesis, "The Internet's effect on political interest does not depend on the website(s) viewed."

The two-left most columns of also offer evidence against the hypothesis "A website's effect on political interest does not depend on the viewer's age." The coefficients on the variables that interact CNN and USA Today with age suggest significant age-related effects in how being randomly assigned to these sites affects political interest. The positive impact on political interest of being randomly assigned to each of these sites increased significantly with age. In the Web White and Blue regression, the *Age* coefficient is also significant. As age increases, the impact of viewing Web White and Blue on respondents' political interest decreases.

In sum, we observe site- and age- based effects in the left-most columns of Table 3. We now offer an explanation of these effects. The explanation comes from the website impact model described above. In it, a website is more likely to have an impact if a viewer perceives the site as providing important information effectively and efficiently. Our measure of these perceptions is our viewers' responses to the following statements:

- I can use [site] to find information that I have not seen elsewhere.
- I can use [site] to find information that is accurate and non-partisan.

- I can use [site] to get the information I want quickly and easily.

We code each response as 0 if the respondent disagrees with the statement and 1 if the respondent agrees with the statement. To simplify the presentation, we combine these responses into a *site evaluation* index that ranges in value from 0 (disagrees with all three statements) to 3 (agrees with all statements). The inter-item correlations of the three measures ranged from .76 to .77 and the Chronbach's alpha was .91.

Figure 2 depicts the values of the evaluation indices for the nine websites in our study. It shows a lot of variation by age and site. For instance, on average 18-24 year olds give Yahoo and Fox News the highest possible rating, while older respondents were more likely to give high ratings to Project Vote-Smart's site.

[Figure 2 About Here]

We now examine how the site evaluations correspond to what respondents say about their political interest later in the interview. Our model predicts that as the value of the site evaluation index increases (i.e., as respondents are more likely to perceive a site as providing important information effectively and efficiently) the site's political impact should increase (i.e., respondents are more likely to report increased interest in politics). We, therefore, expect our analysis of the data to provide evidence against our third and final null hypothesis "A website's effect on political interest does not depend on how viewers perceive the site." For this purpose, we return to Table 3.

Table 3's right-most columns offer a modified version of the first two OLS regressions. The new estimations differ in that they add the relevant site evaluation index. Our model leads us to expect positive and significant coefficients in every case. The results are consistent with this expectation. Site evaluation is highly correlated with the

effect on political interest of being randomly assigned to a particular website. In other words, a website's effect on political interest *does* depend on how viewers perceive the site.

Table 3 also explains the age and site-specific findings described earlier. Once we control for respondents site evaluations, the age- and site-specific effects we saw earlier dissipate, though they do not disappear. Respondents randomly assigned to USA Today or CNN were significantly less likely to report increased political interest than those assigned to foxnews.com – however the magnitude of the coefficients is reduced by about one-third. Adding site evaluations as an explanatory variable has a similar effect on the coefficients for all other sites. The coefficients are still not statistically significant, but their magnitudes are reduced by at least one-third on average. Viewer perceptions of the site to which they were randomly assigned are an important component in understanding their reactions to the political interest questions.

Including the site evaluation indices has a similar effect on the previously observed age-based effects. For instance, where there was a 1.3 unit difference between 18-24 year olds and 25-54 year olds in the reported political impact of viewing USA Today, this difference decreases to .71 once we control for site evaluation. Similarly, the difference between these age groups who viewed the CNN website is .72 before controlling for site evaluation and .51 after site evaluation is included in the model. In short, when you control for site evaluation, site effects and age effects shrink.

When we combine the shrinking coefficients of Table 3 with the age-specific variations in site evaluations documented in Figure 2 we conclude that that when it comes to using “the Internet” to increase political interest, *one site does not fit all*. Young adults

evaluate the sites in our study differently than do older respondents. Some sites that younger adults perceive as providing important information effectively and efficiently, older adults do not – and vice versa. However, once young adults find a site with such attributes, the positive effect that it has on their political interest is not that different than the effect that similarly perceived web sites have on other age groups.

The key, therefore, to an effective online strategy for increasing young adults' political interest is website design strategies that this group perceives as providing interesting information effectively and efficiently. Such strategies may be unconventional. They may lead to a presentation of political news that is more like MTV than *The Economist*. If, however, the goal is to increase young adults' interest in politics, capturing their attention implies engaging them on their own terms. As Delli Carpini's quote at the beginning of this paper suggests, those who want to increase young adults' participation can succeed if they make politics more relevant to them.

Conclusion

Web sites are a relatively new communicative medium. While this fact has provided social science with a limited window to explore their impact, it has one attribute about which all can agree – its potential to affect political interest is substantial. Larsen and Rainie (2002), for example, extrapolate from a survey of 2000 Americans to conclude that “42 million Americans have used government Web sites to research public policy issues. 23 million Americans have used the Internet to send comments to public officials about policy choices. 14 million have used government Web sites to gather information to help them decide how to cast their votes,” and “13 million have participated in online lobbying campaigns” (Larsen and Rainie 2002: 2). Such results

suggest that the Internet is an important means by which citizens interact with, and learn about, politics. They also suggest that the Internet has great potential to affect political interest and participation.

Unlike many current observers, we conclude that “the Internet” can increase young adults’ interest in politics. However, we argue that finding such effects requires looking “inside the ‘Net.” For if “the Internet” is going to affect a person’s political interest it is going to be because a particular site catches their attention and induces them to think about some aspect of politics in ways that they had not before. Our work provides a template for examining such effects. The model clarifies why some sites are more likely than others to affect political interest. The survey design offers a way to document and test such relationships.

We also observe age differences in how individual sites affect political interest. However, the differences are explained, in large part, by the fact that young and old evaluate sites differently. This result implies that people who are interested in using the Internet to reverse recent declines in political interest can increase their likelihood of success by understanding their target audiences’ perceptions of key website attributes. A logical next step for future researchers is to delve into what it is about a website’s content, presentation, and design that drive the kinds of site and age differences we observe.

In sum, we are not under the impression that a website or two is sufficient to reverse broad aggregate declines in political interest. Many factors are feeding it. The Internet, however, does provide an opportunity. Young adults spend time on it. There are moments at which they encounter political content. These moments have the potential to

change their beliefs about the value of being politically active or engaged. Political science can be more relevant to achieving the potential in such moments than it is today, but only if it expands its repertoire of studies about “the Internet’s” impact to include analyses of how websites and individuals interact.

References

- Ansolabehere, Stephen, and Shanto Iyengar. 1995. *Going Negative: How Political Advertisements Shrink and Polarize the Electorate*. New York: Free Press.
- Bimber, Bruce. 2003. *Information and American Democracy: Technology in the Evolution of Political Power*. New York: Cambridge University Press.
- Davis, Richard. 1999. *The Web of Politics: The Internet's Impact on the American Political System*. Oxford, UK: Oxford University Press.
- Delli Carpini, Michael X. 2000. "Gen.com: Youth, Civic Engagement, and the New Information Environment." *Political Communication* 17: 341-349.
- Druckman, James N. 2003. "The Power of Television Images: The First Kennedy-Nixon Debate Revisited," *The Journal of Politics* 65: 559-571, 2003.
- Hamilton, James T. 2004. *All the News That's Fit to Sell: How the Market Transforms Information into News*. Princeton: Princeton University Press.
- Kandel, Eric R., James H. Schwartz, and Thomas M. Jessell. 1995. *Essentials of Neural Science and Behavior*. Norwalk, CT: Appleton and Lange.
- Krosnick, Jon A., and LinChiat Chang. 2001. "A Comparison of the Random Digit Dialing Telephone Survey Methodology with Internet Survey Methodology as Implemented by Knowledge Networks and Harris Interactive." Paper presented at the Annual Meeting of the American Association for Public Opinion Research. Montreal, May 17-20.
- Larsen, Elena, and Lee Rainie. 2002. *The Rise of the E-Citizen: How People Use Government Agencies' Web Sites*. Washington: Pew Internet and American Life Project. April 3.

- Lupia, Arthur. 2001. *Evaluation: The Web White and Blue Network*, 2000. New York: The Markle Foundation.
- Lupia, Arthur, and Mathew D. McCubbins. 1998. *The Democratic Dilemma: Can Citizens Learn What They Need to Know*. New York: Cambridge University Press.
- Lupia, Arthur, with Zoe Baird. 2003. "Can Web Sites Change Citizens? Implications of Web White and Blue 2000." *PS: Political Science and Politics* 36: 77-82.
- Mansbridge, Jane. 1999. "On the Idea that Participation Makes Better Citizens." In Stephen L. Elkin and Karol E. Soltan (eds.) *Citizen Competence and Democratic Institutions*. University Park, PA: Penn State Press.
- Norris, Pippa. 1996. "Does Television Erode Social Capital? A Reply to Putnam." *PS: Political Science and Politics* 29:474-80.
- Patterson, Thomas E. 1993. *Out of Order*. New York: A Knopf.
- Petty, Richard E., and John T. Cacioppo. 1986. *Communication and Persuasion: Central and Peripheral Routes to Attitude Change*. New York: Springer-Verlag.
- Prior, Marcus. 2002. "More Than a Thousand Words: Visual Cues and Visual Knowledge." Paper prepared for the Annual Meeting of the Midwest Political Science Association, Chicago.
- Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon and Schuster.
- Schacter, Daniel L. 2001. *The Seven Sins of Memory: How the Mind Forgets and Remembers*. New York: Houghton Mifflin.

- Soule, Suzanne. 2001. "Will They Engage? Political Knowledge, Participation and Attitudes of Generations X and Y." Prepared for the 2001 German and American Conference, "Active Participation or a Retreat to Privacy."
- Sniderman, Paul M., and Douglas B. Grob. 1996. "Innovations in Experimental Design in Attitude Surveys." *Annual Review of Sociology* 22: 377 – 399.
- Sunstein, Cass. 2001. *Republic.com*. Princeton: Princeton University Press.
- Weber, Lori, Alysha Loumakis, and James Bergman. 2003. "Who Participates and Why? An Analysis of Citizens on the Internet and the Mass Public." *Social Science Computer Review* 21: 26-42.

Figure 1

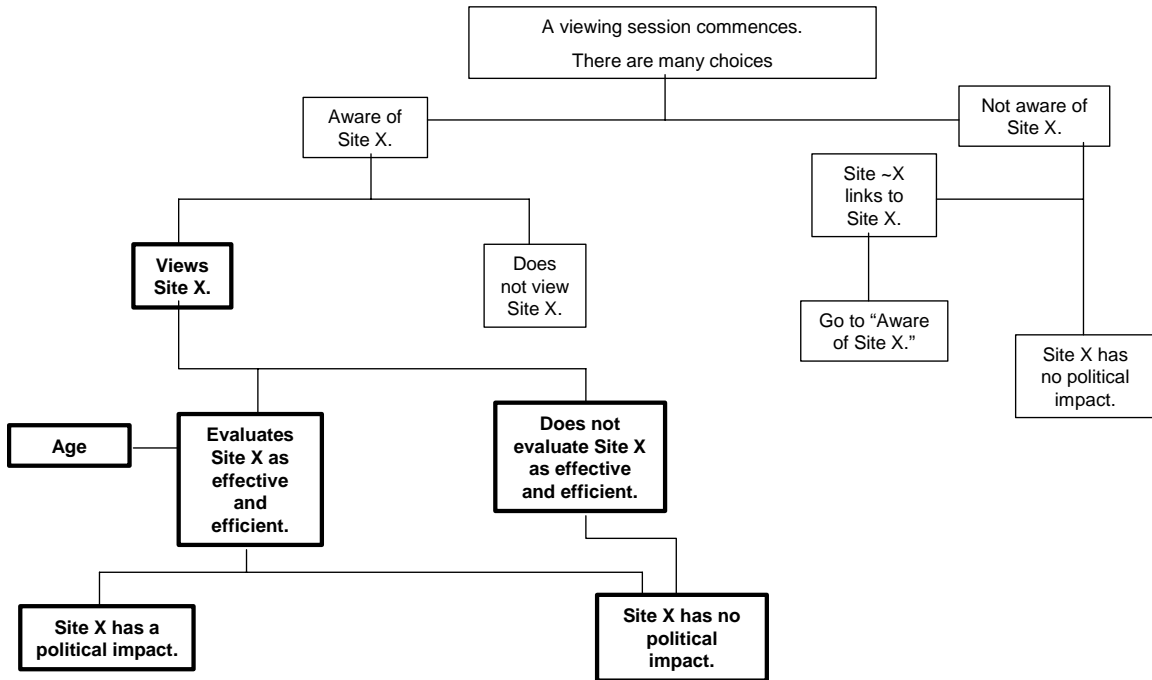


Table 1. Question List	
<i>Question</i>	<i>If yes, ask...</i>
Do you ever get any kind of news online?	Did you happen to do this within the past week, or not?
How often do you go online for this type of information...everyday, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?	
Do you intend to vote in the upcoming presidential election?	
Do you ever look for news or information about politics or the presidential campaign?	Did you happen to do this within the past week, or not?
How often do you go online for this type of information...everyday, 3 to 5 days per week, 1 or 2 days per week, once every few weeks, less often, or never?	
When you are looking for news and information about politics, which web site do you visit most often?	
Are there any other web sites that you would recommend to others as good sources for news and information about politics?	
Have you ever heard of [Site]?	Do/did you ever go onto [site] to get news and information on the presidential campaign?
Now we are going to send you to [site]. For the next five minutes, we would like you to use this site to learn about the candidates in the presidential campaign. At the end of the five-minute session, this interview will resume and we will ask you questions about [site]. Interruption	
Now, I am going to read you a list of statements about [site]. For each statement, please tell me whether you agree strongly, agree somewhat, disagree somewhat, or disagree strongly. I can use [site] to find information that I have not seen elsewhere.	
I can use [site] to find information that is accurate and non-partisan.	
I can use [site] to get the information I want quickly and easily.	
[Site] makes me feel more confident about the quality of political information available on the Internet.	

[Site] makes me want to learn more about politics.	
[Site] makes me more likely to talk about politics with others.	
[Site] makes me more likely to vote in the November election.	
[Site] makes me more certain about who I will vote for in the presidential election.	

Table 2
News and Political Information Internet Viewing Habits, by Age
(in percent)

	18-24	25-54	55+
Do you ever get any kind of news online?	69	79	73
Did you happen to do this with the past week, or not?	43	56	54
How often do you go online for this type of information?			
Everyday	13	28	29
3-5 days/week	17	24	26
Less	67	47	44
Do you ever look for news or information about politics or the presidential campaign?	23	48	51
Did you happen to do this within the past week, or not?	9	23	25
How often do you go online for this type of information?			
Everyday	0	16	18.5
3-5 days/week	36	20	27
Less	64	64	54
Number of Observations	70	849	279

Table 3				
	Political Impact by Age and Website		Political Impact by Age, Website, and Site Evaluation	
	WWB	Eight Other Sites	WWB	Eight Other Sites
Age (1,3)	-0.175** (.09)	-0.579* (.33)	-.044 (.07)	-.333 (.25)
Site Evaluation (0,3)			1.166** (.04)	.813** (.04)
Vote-Smart (0,1)		-.607 (1.01)		-.473 (.77)
Yahoo (0,1)		-1.674 (1.06)		-.842 (.81)
I-Syndicate (0,1)		-2.234* (1.17)		-.932 (.90)
CNN (0,1)		-2.043** (1.00)		-1.395* (.76)
Political Information (0,1)		-1.155 (1.12)		-.696 (.86)
NY Times (0,1)		-.654 (1.07)		-.032 (.82)
USA Today (0,1)		-3.130** (1.01)		-1.818** (.78)
Vote-Smart * Age (0,3)		.450 (.45)		.334 (.34)
Yahoo * Age (0,3)		.706 (.46)		.298 (.35)
I-Syndicate * Age (0,3)		.830 (.53)		.300 (.41)
CNN * Age (0,3)		.716* (.44)		.510 (.34)
Political Information * Age (0,3)		.415 (.49)		.303 (.37)
NY Times * Age (0,3)		-.042 (.48)		-.080 (.37)
USA Today * Age (0,3)		1.302**		.709**

		(.45)		(.35)
Black (0,1)	.024 (.21)	.309 (.26)	-.032 (.16)	.027 (.20)
Education (1,9)	-.118** (.03)	-.090** (.04)	-.049** (.02)	-.041 (.03)
Income (1,17)	-.016 (.01)	-.022 (.02)	-.001 (.01)	-.024* (.01)
Female (0,1)	.161* (.09)	.071 (.12)	.128** (.06)	.057 (.09)
Party Identification (1,7)	-.010 (.02)	-.024 (.03)	-.015 (.02)	-.015 (.02)
Partisan (0,3)	.082* (.04)	-.029 (.06)	.057* (.03)	-.002 (.04)
News Online (0,1)	.016 (.11)	.181 (.16)	.021 (.08)	.150 (.12)
Politics Online (0,1)	.185* (.10)	.386** (.13)	.187** (.07)	.402** (.10)
Has Previously Visited Site (0,1)		.477** (.23)		.073 (.17)
Constant	3.000** (.34)	3.958** (.83)	.066 (.27)	1.321 (.65)
N	1019	631	1019	631
Adjusted R-squared	.03	.07	.47	.46
Estimates are OLS coefficients. Omitted website is Fox News. * p < .10, ** p < .05				

Figure 2

Site Evaluation by Age

