

Has Technology Made Attention to Political Campaigns More Selective? An  
Experimental Study of the 2000 Presidential Campaign

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Introduction

Self-preservation requires selective attention, and the highly evolved human organism is adept at screening out stimuli that do not appear important (see Dodd and White, 1980). Selectivity would seem especially important in the domain of political campaigns, where the range of incoming stimuli is vast and prospective voters, characterized generally by low levels of information and interest, are more than willing to adopt reasonable short-cuts to decision-making (Sniderman et al., 1991).

Fifty years ago, when campaigns occurred primarily through partisan channels, voters were thought to simplify their choices by relying on the candidates and positions of their preferred political party. “Selective exposure” on a partisan basis was considered the principal means by which candidates reached voters. As political parties withered and the candidates turned more to the media, partisan selectivity appeared to have been replaced by a more utilitarian, message-based specificity: voters attended to news reports that were perceived as personally relevant, while tuning out similarly available information on topics of lesser personal consequence. Selectivity persisted, but on a basis that was less partisan and more personal.

As we enter the post-media age, candidates and political organizations have regained their ability to communicate directly with voters, thus renewing opportunities

for voters to exercise selectivity on a partisan basis. At the same time, because technology has exponentially increased the sheer volume of available information, voters are under still more pressure to focus on issues of personal relevance. As we demonstrate in this paper, technologically-enhanced forms of campaigning have made it possible for voters to enjoy the best of both worlds -- to allocate attention on the basis of their partisan preferences as well as the personal relevance of the political issues being debated by the candidates. On balance, however, we find that they are far more likely to engage in need or relevance-based selectivity than partisan or candidate selectivity. These results suggest that technology is unlikely to restrict the range of perspectives voters encounter during political campaigns.

#### A Review of Selective Exposure and Attention Research

Initial attempts to examine the selective attention phenomenon focused on political campaigns and the tendency of partisan voters to report greater exposure to appeals from the candidate or party they preferred (Lazarsfeld et al., 1948, Sears and Freedman, 1967; Schramm and Carter, 1959). Early communication researchers considered such motivated exposure to sources an explanation for the reinforcing (as opposed to persuading) effects of political campaigns (Klapper, 1964). More generally, the operation of a partisan selection bias in the audience for campaign communication was deemed antithetical to the democratic ideal of reasoned choice based on the marketplace of ideas. As eloquently stated by the authors of The People's Choice:

In recent years there has been a good deal of talk by men of good will about the desirability and necessity of guaranteeing the free exchange of ideas in the market place of public opinion. Such talk has centered upon the problem of keeping free the channels of expression and communication. Now we find that the consumers of ideas, if they have

made a decision on the issue, themselves erect high tariff walls against alien notions. (Lazarsfeld et al., p. 89)

Evidence showing that voters deliberately avoided exposure to discordant appeals or campaigns proved equivocal. Although a handful of controlled studies did uncover traces of selective exposure (Bartlett et al., 1974; Stempel, 1961; Sweeney and Gruber, 1984), large-scale surveys generally did not (e.g. Chaffee and Miyo, 1983). In the case of the Elmira study, which is widely cited as supporting the hypothesis, the researchers found that the effect applied to Republicans, but not Democrats. Based on their exhaustive assessment of the literature, Sears and Friedman concluded that de facto selectivity -- the process by which people self select into more or less politically engaged and informed strata -- rather than motivated or partisan selectivity was the norm in political campaigns (Sears and Freedman, 1967; Frey, 1986). In light of the bottom-heavy distribution of political information, de facto selectivity implied that candidates should worry less about their ability to recruit from the ranks of the opposition and more about their ability to reach anyone at all (Sears and Whitney, 1973).

With the gradual weakening of political parties and the development of alternative, media-based methods of communicating with voters, the idea of partisan selectivity in exposure to campaigns lost currency. Generally, voters' partisan preferences were insufficiently intense to motivate avoidance of the out-party candidate. Moreover, voters were afforded few opportunities to encounter the campaign or the candidates in an explicitly partisan context. Instead they observed the campaign unfold through the news media. Given the professional norms that govern news coverage, partisans would be hard pressed to exercise selectivity in their exposure to the campaign (Mutz and Martin, 2001).

As campaigns turned to the news media, scholars began to redefine the likely compositional biases in the audience. Instead of partisanship, interest was directed at an egocentric or utility-based selectivity that might prompt people to tune in more or less carefully to news reports about the campaign. According to this perspective, the demand for news would depend on the subjective utility or relevance of the coverage to potential members of the audience. As the candidates and the media discussed particular issues, the composition of their audience would change so that voters who were personally affected by the “target” issue (for instance, unemployment) joined the audience, while others who found the issue of less consequence, departed. This “issue public” argument (see Iyengar, 1990) predicts differences in attention to news reports, depending on their issue content.

The opposing perspective, analogous to the notion of de facto selective exposure, posits a one-dimensional or uniform audience for news -- the people who tune in to news about any particular issue are the same people who tune in to news generally (Price and Zaller, 1993). Rather than being segmented into narrow pockets of interest, the audience for news is homogeneous. To date, the evidence concerning the question of monolithic versus fragmented news audiences is mixed. In favor of relevance-based selective attention, Iyengar found that viewers of television news had higher recall for news reports when coverage concerned issues of personal relevance. This same study also found that people acquired more information about “their” issues; African-Americans, for instance, though less informed than whites on typical “civics knowledge” questions, were actually more informed on matters pertaining to race and civil rights (Iyengar, 1990). For the opposing side, Price and Zaller (1993), after examining recall of sixteen different news

stories, found that more educated people had greater recall of all stories and that audience differences in recall associated with the imputed personal relevance of the story were modest.<sup>1</sup> They concluded that “there is a general audience for news, such that people are more or less likely to become aware of particular news events according to their general level of attention to public affairs . . . someone who is generally well-informed about politics will tend to be well-informed about whatever the news media also cover, whether the trials of Hollywood celebrities or the latest arms control proposals” (p. 157).

#### New Forms of Campaigning: Implications for Selective Attention

In addition to the shift from party to media control, recent technological developments have further transformed the nature of political campaigns, with important implications for the possibility of selective exposure and attention. With the advent of digital technology and the exponential expansion of the Internet, mainstream news outlets have lost their monopoly over the supply of campaign information. As candidates, parties, political action committees and news outlets develop their presence online, voters gain access to more extensive and diverse information. It is not our purpose here to document the potential of the Internet as a political arena (see DiMaggio et al., 2000; Davis, 1998); it suffices to note that at present the online audience includes more than half the adult population who have access to thousands of web-based organizations intent on providing their distinct perspective on public affairs and candidates for elective office. Clearly, voters’ dependence on standardized news reports has been reduced.

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<sup>1</sup> One reason for these authors’ failure to detect evidence of issue-specific audiences was their use of weak indicators of relevance. For example, the news story reporting the outcome of the New York City mayoral election was deemed more relevant to residents of New York State, regardless of their proximity to the New York City media market.

There are several distinct implications of the new “unmediated” campaign for the selective attention debate. Selectivity assumes that the perceptual system is overloaded; most media-based campaigns thus provide weak tests of selectivity because news coverage is limited to a report or two each day (for evidence on the declining level of news coverage accorded presidential campaigns, see Media Monitor, 1996); in the case of local news outlets, as recently documented by Kaplan and Hale (2001), campaign coverage is nonexistent. Partisan selectivity is virtually impossible because voters rarely encounter the candidates in news reports. In the most recent presidential election, viewers of network news would have heard Al Gore or George W. Bush speak for approximately six seconds each evening (Patterson, 2000). This level of coverage is unlikely to burden the typical voter’s attention span. By making available much larger chunks of information, technology provides a renewed and strengthened basis for expecting selective exposure and attention during campaigns.

Technology not only increases information overload, it simultaneously facilitates the user’s ability to be selective. First, voters enjoy easy access to explicitly partisan sources of information (e.g. the DNC and RNC web sites) and to interest groups that focus on particular policy questions (e.g., the N.R.A. or Sierra Club). These sources are not constrained by journalistic norms of “objectivity” or by the market pressures that prompt news organizations to focus on the more entertaining side of campaigns. Compared with conventional news outlets, therefore, web-based sources provide greater opportunities for partisan selectivity. In addition, most online sources enable user filtering and searching. Rather than examining the complete collection of speeches found on the Al Gore for President website, users can seek out specific references that are

personally meaningful. Thus, as online sources of information grow in number and reach, they provide renewed opportunities for voters to access information consistent with their partisan preferences and political interests (Neuman, 1996; Mutz and Martin, 2001, Sunstein, 2001).

### Research Design

We designed a study to assess the effects of technology on the level of selective attention to campaigns. Our study focused on the 2000 presidential campaign. Using a multimedia CD as the medium, we provided a representative sample of “online” American voters<sup>2</sup> with large quantities of campaign information two weeks before the election. Depending upon the condition to which they were assigned, participants’ CD either contained mediated or unmediated campaign information. In the unmediated condition, participants received “In Their Own Words,” a CD we had produced and made available free of cost to any voter who requested it. This CD contained the speeches, party platforms, televised debates and television commercials of the two major presidential candidates.<sup>3</sup> A second group received a similarly designed CD, containing a representative selection of news reports about the candidates, their positions on the issues, their path to the nomination, the state of the horserace, and other such newsworthy

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<sup>2</sup> The sample was drawn from households with Internet access. Knowledge Networks, a leading market research firm, drew the sample from their nationwide panel. Knowledge Networks is the only firm to have developed a probabilistic sampling framework for online research (for details concerning the sampling framework and the survey methodology used by Knowledge Networks, see Krosnick, 2001; Dennis, 2001).

<sup>3</sup> This civic initiative was made possible through the generous support of the Pew Charitable Trusts and the Carnegie Corporation of New York. Compiled as a multimedia CD, the database included text of the two major candidates’ campaign speeches (delivered between July 1 and October 7), video of the televised ads aired by the candidates and their respective parties, and the texts of the party platforms. The CD also included the soundtracks and transcripts of the nomination acceptance speeches and the first presidential debate. In total, the CD amounted to over 600 pages of text and three hours of multimedia. In order to distribute the CD to voters in advance of the election, speeches, ads and debates occurring after our “publication” date (October 8) were provided on a companion website in the same format as presented in the CD.

items. The media CD represents the status quo -- the information most voters encounter in newspapers and television newscasts today. The candidate CD, on the other hand, represents the future trajectory of campaigns in which candidates and their surrogates bypass the media and reach voters directly. In fact, most of the Gore and Bush speeches and political ads included in the candidate CD were available on their websites. Given the previously noted differences in the level of exposure to the candidates and their positions on the issues between mediated and unmediated campaigns, we expect that both forms of selectivity -- partisan and issue-based -- will be significantly enhanced by use of the candidate rather than media CD.

Both CDs, which were similar in appearance, format, and length, were programmed to enable “usage tracking;” that is, the specific pages that participants accessed, the number of times they used the CD, as well as the length of their CD sessions was recorded on the user’s PC. This information was returned to the researchers immediately following the election, along with study participants’ responses to a survey of their political opinions and attitudes.<sup>4</sup>

The CD tracking data provides detailed information about the specific pages used by each participant. In order to assess partisan selectivity in CD use, each page was classified according to the level of coverage accorded Bush or Gore. Any page in which one of the two candidates occupied more space/text than the other was coded as one-sided in favor of that candidate. The partisan selectivity hypothesis predicts that supporters of each party will access more pages featuring their preferred candidate.

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<sup>4</sup> Each CD was mailed to a representative sample of approximately 570 adults on October 23, two weeks in advance of the election. Participants were informed that the CD was an educational product of Stanford University, which sought feedback on user experience and reactions. The number of “completions”

The differing content of the two CDs created greater opportunities for users to exercise partisan selectivity in the candidate CD condition. This CD presented the candidates in their own words and included substantially more “one-sided” pages than the media CD. Indeed, all but 58 pages in the campaign CD were classified as providing either Bush or Gore-oriented content.<sup>5</sup> In contrast, most of the pages in the media CD either provided general, “analytic” coverage of the campaign, or granted equal treatment to the two candidates. Only 221 of the 534 pages in the media CD could be classified as providing a preponderance of coverage to one or other of the candidates.

In the case of issue-based selectivity, we coded pages according to their coverage of specific issues, the hypothesis predicting that voters would be more likely to seek information about issues that directly affect them.<sup>6</sup> Given the difficulties of measuring the personal relevance of issues, we limited this portion of the analysis to health care and education, both of which were debated extensively during the campaign.

Once again, the design of the two CDs created significant differences in the availability of information relating to health care and education. Specifically, the candidate CD provided significantly more issue-based information than the media CD, making it easier for users to locate information about health care or education.<sup>7</sup> The greater availability of issue information in the candidate CD, of course, mirrors real

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(defined in terms of participants who returned the CD usage data and who completed the survey) was 230 and 205 for the campaign and media conditions respectively.

<sup>5</sup> The 58 exceptions consisted of pages providing a transcript of the first debate and the opening pages of each chapter (which provided links to both candidates’ speeches and ads).

<sup>6</sup> Any page in which there was at least one paragraph of text about a specific issue was coded as relevant to that issue.

<sup>7</sup> The number of pages coded as health-related pages was 113 in the candidate CD and 23 in the media CD. The corresponding numbers for education were 123 and 27.

differences between unmediated and mediated campaigns.<sup>8</sup> In the case of the former, the candidates address voters on the issues and their prior performance, paying little attention to questions of strategy or poll standing. By contrast, media accounts emphasize the horse race and other non-substantive aspects of the contest at the expense of the candidates' positions on the issues (see Bartels, 2000).

Unlike most previous studies, we rely on behavioral measures of selective attention. The advantages of behavioral indicators over standard survey self-reports are well known. Errors of memory and self-presentation biases tend to inflate recall of exposure to campaign communication (see Ansolabehere et al., 2000 for illustrative evidence). Despite the presumptive accuracy of the CD usage indicators, their inclusion imposed no methodological tradeoffs. The recording process was non-reactive as respondents used the CD at their own discretion, when they chose to, and in the privacy of their home or office. Of course, the design also featured a high level of mundane realism; the stimulus materials were realistic and exposure occurred at a time when participants would find the information useful -- during the closing stages of the campaign. Finally, we note that as web-based and other digital media spread, similar "direct" campaigning with CD or other platforms will increasingly replace conventional news outlets.

As indicated above, we are interested in two forms of selective attention -- partisan selectivity and issue or relevance-based selectivity. We measured the former using the standard party identification and political ideology questions. If partisan

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<sup>8</sup> Because the Gore campaign produced more text than the Bush campaign, there were approximately 30 more Gore-oriented pages in the candidate CD. Conversely, the news media reports in our compilation favored Bush by approximately the same margin -- there were 33 more Bush-oriented pages in the media CD.

selectivity affects exposure to campaigns, Democrats and liberals should have higher rates of contact with Gore material, with the opposite pattern describing Republicans and conservatives. Our indicators of issue-based specificity consisted of a series of questions designed to measure the personal relevance of health care and education. (We anticipated that both issues would be prominent in the campaign.) These indicators were used to define health care and education “issue publics.”

In the case of health care, membership in the issue public was determined on the basis of four criteria, each scored as a dichotomy: (1) employment in the health field, (2) membership in an HMO, (3) continuity of health insurance coverage over the past six months, and (4) age of participants’ parents. Similarly, we defined members of the education public according to: (1) parenthood and gender (i.e. whether participant was a mother), (2) number of children, (3) income and residence in a large city,<sup>9</sup> and (4) frequency of church attendance.<sup>10</sup> For both issues, we summed the indicators of personal relevance to form an index of “issue public membership.”<sup>11</sup>

The alternative to the issue-based selective attention hypothesis is that the audience for issue-oriented messages is constrained by the same factors that govern exposure to other forms of information. People who are more voracious gatherers of information per se will also be more active consumers of information about crime,

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<sup>9</sup> Given the association between the performance of public schools and urban residence, we anticipated that people who lived in large cities whose annual income was under \$30,000 (who were thus unlikely to consider private schools as an option) would be drawn to the issue of education. “Urban residents” were those who resided in the cities with populations exceeding 300,000.

<sup>10</sup> As expressed by the candidates, educational issues intersected issues of religion and family values. Speeches/platform planks on education frequently referred to strengthening marriage, family life, and mainstream American culture. Given this content, we added church attendance as a criterion for membership in the education issue public.

<sup>11</sup> In both instances, respondents who “passed” two or more of the tests were classified as members of the issue public (+1); those who passed only one of the screens were classified as potential members of the

unemployment, foreign policy, etc. Selective attention to issues is simply a by-product of general information. Price and Zaller (1993) have provided persuasive evidence that education is a more reliable surrogate for general information than self-reported media exposure. Following their advice, we rely on participants' level of education to measure general political involvement. We supplemented education with an index of interest in the campaign.<sup>12</sup> In addition to these measures of general involvement, we also considered level of CD usage (which may be considered a proxy for fluency with the medium); when examining the effects of either form of selectivity, we controlled for the number of CD sessions, the total number of pages accessed, and the total amount of usage time.<sup>13</sup>

## Results

### Partisan Selectivity

We begin by examining the proportion of visits to one-sided pages (pages in which there was more coverage of one of the two candidates) in relation to users' party identification and ideology. The partisan selectivity hypothesis, of course, predicts a polarized pattern of CD exposure: more concentrated exposure to Gore pages among Democrats and liberals, the opposite pattern for Republicans and conservatives. We report the comparisons for each CD group separately in Figure 1.<sup>14</sup>

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issue public (0), and those who had no basis at all to consider the issue relevant were classified as non-members (-1).

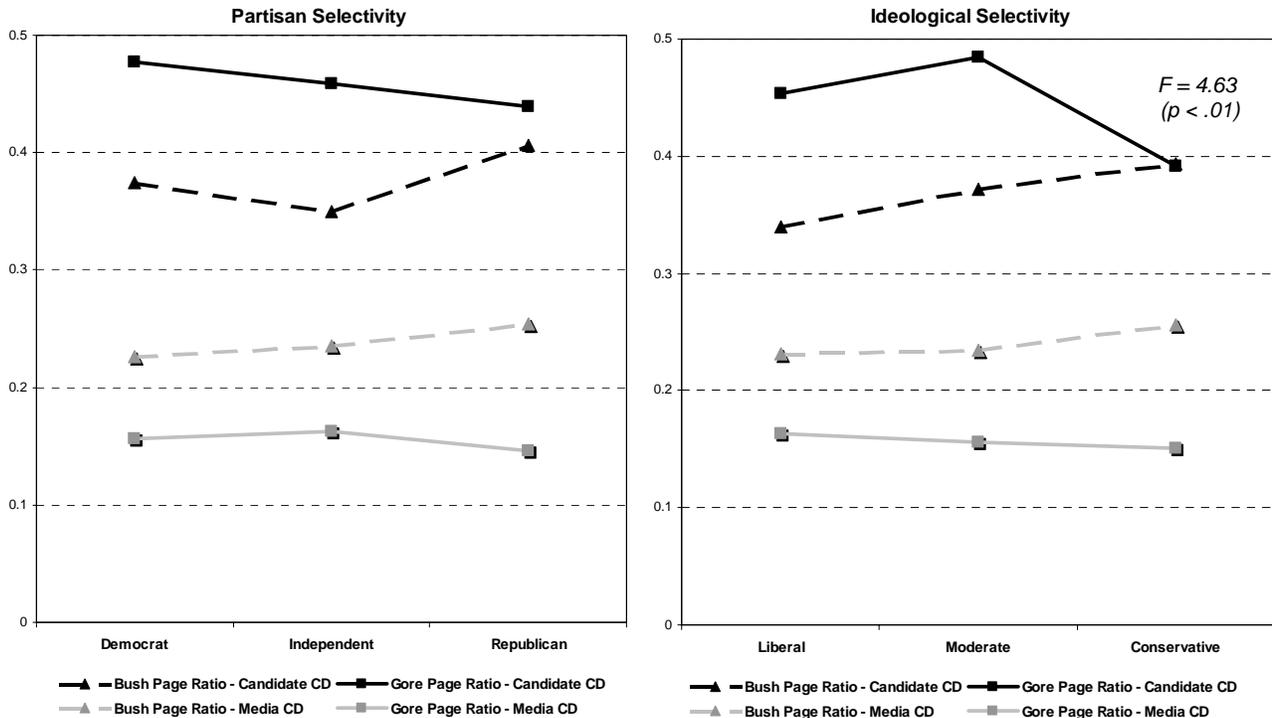
<sup>12</sup> The education question was dichotomized to differentiate college graduates from all others. The index of interest was based on responses to the following four questions: (1) Which of the following best describes how often you follow what's going in the government? (2) How many days in the past week did you talk about politics? (3) Generally speaking, how much do you care about who won the presidential elections this fall? and (4) How much do you personally care about the way the 2000 election to the U.S. House of Representatives came out? We scored responses to each of these four questions either 0 or 1 and the resulting index score ranged from 0 to 4.

<sup>13</sup> In the case of total pages and total usage time, both of which were characterized by large standard deviations, we used a logarithmic transformation.

<sup>14</sup> We also carried out a pooled analysis (across CD conditions) of partisan and ideological selectivity in CD use. These results were generally consistent with the CD-specific estimates reported here.

The differing content of the two CDs was reflected in participants' usage data. Pages that provided more information about either Bush or Gore accounted for some 80 percent of CD use in the candidate condition, but only 40 percent in the media condition. By definition, unmediated campaigns feature the candidates as the primary sources.

**FIGURE 1. Partisan & Ideological Selectivity in Attention to the Candidates**



Within each CD, attention to Gore or Bush-oriented pages tended to vary only slightly by party or ideological affiliation, generally in the direction of greater exposure to the preferred candidate. However, only one of the eight tests permitted rejection of the null hypothesis. In this case, liberals and moderates in the candidate CD condition granted Gore considerably more attention than conservatives. There was one further instance in which the level of selectivity approached statistical significance; Democrats and independents assigned the candidate CD tended to consume less information about

Bush than Republicans. In all other cases, CD usage was unaffected by party affiliation and ideology; Bush and Gore typically elicited attention from all political quarters.

These results indicate only faint traces of partisan selectivity, even under conditions of unmediated campaigning. While direct access to the candidates certainly made it easier for voters to exercise partisan selectivity, few voters were inclined to ignore the less attractive candidate. Among conservatives given the candidate CD, for example, Gore-oriented pages accounted for 39 percent of their total CD usage.<sup>15</sup>

Next, we considered the level of partisan and ideological selectivity while controlling for indicators of CD usage and a variety of background factors known to influence candidate preference.<sup>16</sup> Unlike the earlier analysis, we focus here on the two partisan and ideological groups separately. That is, rather than using the full trichotomy of responses to the party identification and ideology questions, we included separate predictors for Republican (conservative) and Democratic (liberal) affiliation. This specification is appropriate given the unknown candidate preferences of moderates and non-partisans and the non-linear pattern of means observed in Figure 1. The effects of party and ideological affiliation are summarized in Table 1. The full set of regression results is provided in the Appendix.

As noted previously, the level of attention to Bush or Gore depended on which CD was used; the media CD contained more Bush-oriented pages, while Vice-President Gore's greater volubility produced more Gore-oriented pages in the candidate CD. The constants in Table 1 reflect these built-in differences for non-partisans and moderates respectively. In the case of the candidate CD, for example, after adjusting for the effects

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<sup>15</sup> We replicated this analysis, using the difference in the number of candidate-oriented pages visited in place of the page visit proportions. The differences were generally equivalent, but somewhat weaker.

of the control variables, the Gore advantage among non-partisans was .16 (.21 - .05). Against this baseline, partisan selectivity induced small, but significant fluctuations in CD use. Using the logic of one-tailed tests, we confirmed the selectivity hypothesis in three of the eight tests. The “hits” were confined to the candidate CD and all three involved selective attention among conservatives and Republicans. Moderates and liberals tended to pursue an “equal opportunity” strategy, examining both candidates more or less equally. In this respect at least, the results for the candidate CD corroborate prior research; partisan selectivity becomes more pronounced as one moves right on the political spectrum.

**TABLE 1. Partisan & Ideological Selectivity in CD Use**

	Candidate CD		Media CD	
	Bush Proportion	Gore Proportion	Bush Proportion	Gore Proportion
Constant	.052 (.039)	.206*** (.043)	.157*** (.041)	.043 (.031)
Republican	.048** (.024)	-.029 (.027)	.021 (.018)	-.018 (.014)
Democrat	.028 (.028)	.005 (.031)	-.014 (.022)	-.016 (.017)
Adj. R <sup>2</sup>	.273 (N=196)	.204 (N=196)	.008 (N=171)	.100 (N = 171)
Constant	.016 (.029)	.233*** (.043)	.155*** (.041)	.036 (.031)
Conservative	.047** (.025)	-.068** (.028)	.026 (.019)	-.001 (.014)
Liberal	.002 (.032)	-.030 (.034)	-.005 (.024)	.004 (.018)
Adj. R <sup>2</sup>	.272 (N=196)	.223 (N=196)	.007 (N=171)	.090 (N=171)

*Note.* OLS estimates with standard errors in parentheses. For Republican/Conservative and Democrat/Liberal coefficients, significance tests are one-tailed (\* $p < .10$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ ).

<sup>16</sup> These included participants’ ethnicity, region of residence, and age.

We could detect virtually no evidence of partisan selectivity in the case of the media CD where the norms of objective and balanced reporting made it difficult for partisans to encounter one-sided coverage. Only one of the coefficients showed faint traces of selectivity (greater attention to news coverage of Bush among conservatives); in all other cases, partisan and ideological differences in CD use were nonexistent. The audience for news coverage of campaigns is politically homogeneous.

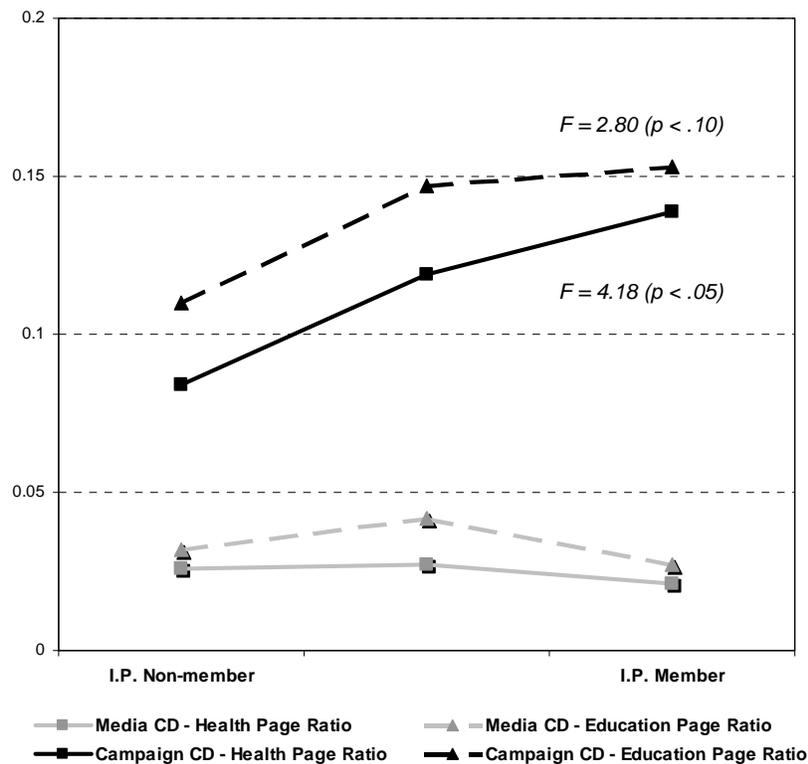
Our evidence suggests that new forms of unmediated campaigning strengthen voters' ability to exercise selective attention on a partisan basis. Exposure to this form of campaigning, however, fails to polarize the audience by party or ideology. Even Republicans and conservatives, the groups most prone to use the CD selectively, granted non-trivial attention to the "out-party" candidate. For those who fear that technology encourages the formation of "gated communities," these results are reassuring. There is little evidence here to suggest that unmediated campaigns will inevitably lead to a renaissance of partisan and ideological selectivity.

### Issue-Based Selectivity

We turn next to the question of selective attention to specific issues. We begin by identifying the appropriate "issue public" for health care and education.<sup>17</sup> As in the analysis of partisan selectivity, we then examine the proportion of page visits to CD pages that focus on the "target" issue in relation to membership in the appropriate issue public. As presented in Figure 2, exposure to unmediated campaigns distinctly encouraged issue-based selective attention. The level of attention to both issues was much greater in the candidate CD condition, simply because the CD provided ample coverage of the candidates' stances on health care and education. Granted access to issue

information, members of the appropriate issue public allocated much more attention to their issue. This differential was especially pronounced for the issue of health care; among health public members in the candidate CD condition, the proportion of visits to health-related pages nearly doubled the corresponding proportion of page visits made by non-members (.14 vs. .08). Needless to say, this difference was robust ( $F = 4.18, p < .05$ ). In the case of the media CD, members of the health public were equally inattentive to news coverage of health as non-members.

**FIGURE 2. Issue-Based Selective Attention: Health Care and Education**



Issue-based selectivity proved weaker in the case of education. In the candidate CD condition the difference between members and non-members was marginally

<sup>17</sup> The scoring procedure is described in note 11.

significant ( $p < .10$ ), whereas the corresponding effects of issue public membership were nil in the case of the media CD condition.

In estimating the magnitude of issue-based selective attention, a key theoretical question is whether such selectivity holds up when “de facto selectivity” is taken into account. That is, do voters selectively consider information about “their” issues above and beyond their general proclivity to monitor public affairs? We addressed this question by estimating the effects of issue-based selectivity while controlling for two measures of general political involvement -- education and interest in the campaign.<sup>18</sup> In estimating the effects of issue-based selectivity, it is also necessary to control for party identification. Petrocik (1996) and others have demonstrated that partisans tend to consider particular subsets of issues as “owned” by their party. Democrats, for instance, may prefer to examine discussions of health care only because they anticipate Gore will dominate Bush on this issue (See Petrocik, 1996; also see Iyengar and Valentino, 2000). By this logic, party identification can imply an interest in particular issues. Since our interests lie in isolating relevance-based selective attention, we included the 3-point party identification question as a control variable.<sup>19</sup> Finally, as in the previous analysis of partisan selectivity, we also controlled for level of CD use (number of CD sessions, usage time, and total number of pages visited).

Table 2 presents the results of four regressions, one for each indicator of relative attention to health care and education for each CD condition. Among the control variables, total CD use increased the rate of exposure to both issues in the candidate CD

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<sup>18</sup> We dichotomized participants’ responses to the education question so that college graduates were scored 1 and all others 0. Interest in the campaign was measured with an additive index. The component items were:

<sup>19</sup> The responses were scored –1 for Democrats, 0 for independents, and 1 for Republicans.

condition, and to health in the media CD condition. Participant's party identification exerted significant effects on attention to health care in the media CD condition. Democrats allocated more of their CD use to health-related pages than their Republican counterparts. This association of issue attention with party affiliation is precisely as suggested by Petrocik's theory of issue ownership.

**TABLE 2. Issue-based Selectivity in CD Use**

	Proportion of Health Pages		Proportion of Education Pages	
	Candidate CD	Media CD	Candidate CD	Media CD
Constant	.016 (.029)	-.013 (.013)	.028 (.033)	.001 (.021)
College Graduate	.015 (.014)	.002 (.005)	.032** (.016)	.001 (.008)
Interest Index	-.011* (.006)	-.001 (.002)	-.017*** (.006)	-.001 (.003)
Total # Sessions	-.010* (.006)	-.001 (.002)	.003 (.006)	-.001 (.003)
Log (# Pages)	.026*** (.007)	.008*** (.003)	.030*** (.008)	.005 (.004)
Log (Use Time)	.001 (.007)	.002 (.002)	-.011 (.008)	.003 (.003)
PID	-.015 (.010)	-.008** (.003)	.016 (.011)	-.001 (.005)
Issue Public	.021** (.010)	-.002 (.003)	.023** (.011)	.002 (.006)
Adj. R <sup>2</sup>	.110 (N = 196)	.097 (N = 171)	.121 (N = 196)	-.015 (N = 171)

*Note.* OLS estimates with standard errors in parentheses (\* $p < .10$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ ).

From our perspective, the most important control variables are the indicators of general political involvement. There were three instances of significant or near-significant effects of education and interest in the campaign, but two of these pointed to lower levels of issue attention among those more interested in the campaign. In only one instance was the prediction of de facto selectivity sustained: visits to education-related pages in the candidate CD were higher among the more educated. Based on this

evidence, we conclude that political involvement is not a proxy for interest in specific issues.<sup>20</sup> The demand for issue information is not uniform across issues.

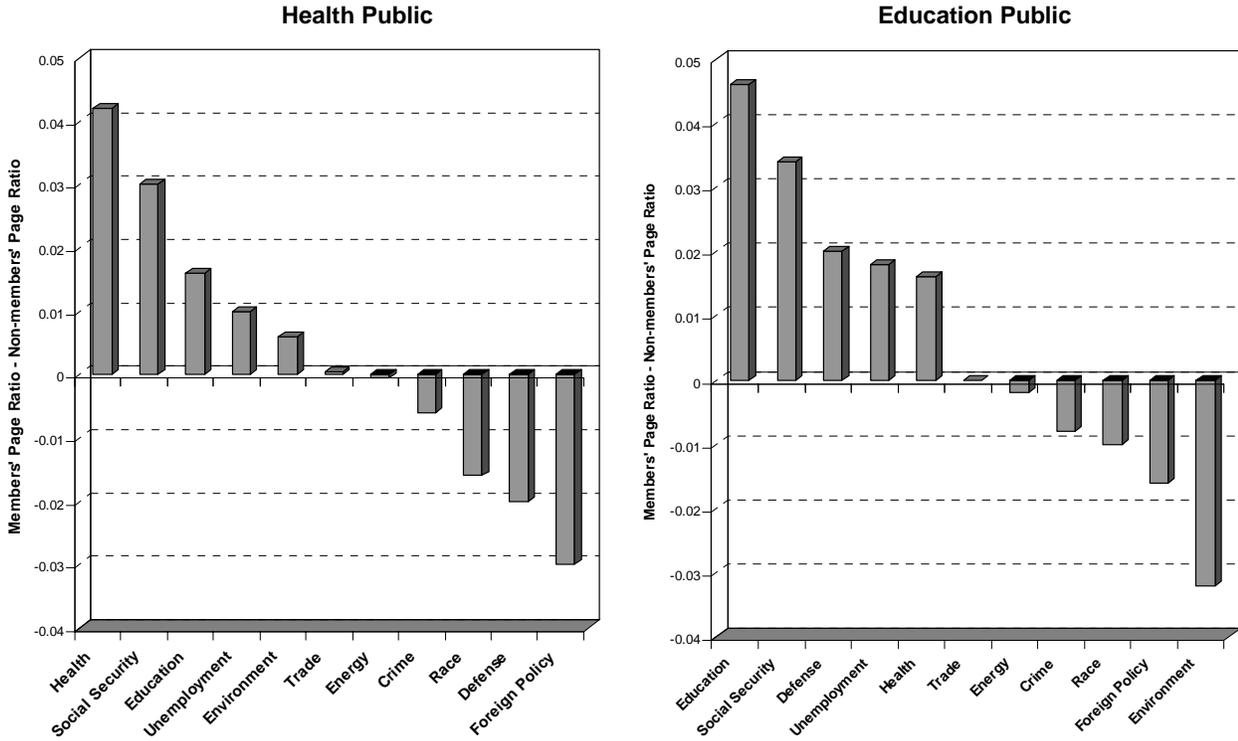
In contrast to the sporadic and inconsistent effects of general political involvement, we found strong effects of issue public membership in the candidate CD condition: membership in the issue public significantly boosted attention to the “target” issue. After controlling for other relevant predictors, the health public’s proportion of health-related visits exceeded non-members’ by .042 ( $p < .05$ ). In the case of education, the difference was .046 ( $p < .05$ ). On the other hand, use of the media CD yielded no evidence of issue-specific attention to news reports. This difference can be attributed to the much lower level of coverage accorded issues in the media CD. Whatever the explanation, exposure to unmediated campaigning enhanced voters’ ability to exercise issue-based selective attention.

Given access to a wealth of issue information, issue publics are drawn to their issues. However, we have yet to examine the extent to which issue publics discriminate between relevant and irrelevant issues. Do the health and education publics, as predicted, turn away from issues that are of less relevance? We next examined the effects of issue public membership on attention to a series of issues. Essentially, we re-estimated the effects of issue public membership on their page visits to non-relevant issues (e.g. crime, foreign policy, the environment, etc.) in addition to education and health care. The results of this comparative analysis, which was limited to the candidate CD, are presented in Figure 3.

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<sup>20</sup> It is important to note that the absence of effects attributable to de facto selectivity holds up across alternative measures of selectivity. For instance, we replicated the analysis reported in Table 2 with the total number of health and education-related page visits. The effects of issue public membership remained substantial, while the effects of education and political interest were both non-significant.

**FIGURE 3. Issue Attention By Health Care and Education Publics: All Issues**



Clearly, the issue publics discriminated between issues.<sup>21</sup> While following their own issue most closely, they also granted higher levels to attention to issues that were closer (in a topical sense) to health and education and vice-versa. Social security, for example, ranked second for both issue publics. Education ranked third for the health public, defense for the education public. Conversely, the issues that ranked lowest in interest to health public members (issues on which their attention score was negative, indicating higher page visit proportions for nonmembers) were foreign policy and race. For their part, the education public ignored the environment and foreign policy. These results suggest a proximity or relevance gradient to attention: people interested in health care also examined the candidates' positions on social security and employment, those immediately affected by education also considered other related issues. This overlapping

pattern suggests that new forms of campaigning are unlikely to fragment public opinion; the immediate relevance of any particular issue implies attention to related issues.

There is a second pattern in Figure 3, one that suggests a degree of partisan agenda-setting in the two issue publics. In particular, the pairing of attentiveness to defense and education with inattentiveness to race and the environment among members of the education public tends to mirror the Bush campaign agenda. A similar Democratic tilt characterizes the attention scores of the health public -- social security and health were central elements of the Gore campaign; foreign policy and defense, at best, were tangential. Our indicators of issue public membership may thus mask the effects of partisanship; the personal relevance of health or education may be confounded with attention to participants' preferred candidate's stand on the issues. Accordingly, our final analysis attempted to tease out the effects of partisan and issue-based selectivity.

We separated participants' visits to health or education-related pages according to the candidate addressing the issue. Our argument that relevance mediates the differential attention to the issue among issue publics can be taken as valid if the issue public indices successfully predict selectivity for both candidates' messages about the relevant issue. The results of this analysis are presented in Table 3. The estimates for the issue public indices generally strengthen our inference that attention to issues is based on relevance. In two of the four cases, membership in the issue public significantly increased attention to either candidate's discussion of the target issue, even after controlling for party identification. On the other hand, the effects of party identification were detected only once; Democrats were more likely than Republicans to consider Bush's statements on

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<sup>21</sup> When all non-relevant issues were grouped together, both issue publics granted "their" issue more attention by a 5:1 ratio.

health care. Perhaps this cross-party result reflects Democrats' greater familiarity with their own candidate's stand on matters of health care. In general, the finding that the issue publics attended to both candidates' positions implies that the effects of issue public membership do not mask partisan selectivity.

**TABLE 3. Candidate and Issue Selectivity among Issue Publics**

	Health Care		Education	
	Bush Page Ratio	Gore Page Ratio	Bush Page Ratio	Gore Page Ratio
Constant	-.001 (.016)	.018 (.024)	.011 (.019)	.018 (.021)
College Graduate	-.003 (.008)	.018 (.012)	.014 (.009)	.017* (.010)
Interest Index	-.002 (.003)	-.009* (.005)	-.004 (.004)	-.013*** (.004)
Total # Sessions	-.005* (.003)	-.005 (.005)	-.001 (.004)	.004 (.004)
Log (# Pages)	.009** (.004)	.017*** (.006)	.013*** (.005)	.016*** (.005)
Log (Use Time)	.003 (.004)	-.002 (.006)	-.005 (.005)	-.005 (.005)
PID	-.010* (.005)	-.005 (.008)	.010 (.006)	.006 (.007)
Issue Public	.006 (.005)	.015* (.008)	.016** (.006)	.008 (.007)
Adj. R <sup>2</sup>	.051 (N = 196)	.062 (N = 196)	.066 (N = 196)	.098 (N = 196)

Note. OLS estimates with standard errors in parentheses (\* $p < .10$ ; \*\* $p < .05$ ; \*\*\* $p < .01$ ).

### Conclusion

Providing voters with an extensive database of campaign-related information in a format that facilitated user control did produce the expected increase in selective attention. Contrary to popular accounts, however, selective attention was guided primarily by voters' interest in particular issues rather than their partisan or ideological

affinity for the candidates. In fact, our participants engaged in a trivial degree of partisan screening, which was limited to Republicans and conservatives. Voters occupying the center and left of the political space failed to discriminate between the candidates when they used the CD; rather, they granted Bush and Gore equal attention. On normative grounds, such “comparative analysis” is to be commended, especially since the comparisons seem based on substantive, issue-oriented material. Moreover, the fact that voters gravitated to issues of personal concern does not imply that other, less relevant issues received short shrift. Voter attention, although issue-specific, is not allocated in zero-sum fashion; instead it fits a gradient pattern, with attention declining as one moves from the most to least relevant of issues.

More generally, our findings address the ongoing debate over the normative implications of the information revolution. As access to technology spreads, it is certain that individual selectivity will replace media or editorial selectivity as the major gateway between candidates and voters. Candidates, political parties, interest groups and civic organizations are all likely to compete with the news media as sources of campaign information. How will this increase in direct or unmediated access to the candidates affect the electorate?

One scenario, suggested by the partisan selectivity hypothesis, is increased polarization and conflict. Voters will seek out sources that reinforce their preferences and opinions. Increased competition for audiences creates incentives for content providers to aim their messages at more segmented and narrow audiences, thus decreasing the frequency of chance or unintended encounters with less familiar or comforting voices (Sunstein, 2001).

An alternative scenario is that increased user selectivity will facilitate voter engagement and learning. It is well-documented that media-based campaigns fail to deliver substantive information. In place of the candidates' positions and past performance on the issues, news coverage gravitates inevitably toward the more "entertaining" facets of the campaign -- the horse race, the strategy and, whenever possible, instances of scandalous or unethical behavior. The professional culture of journalism further impedes the public's ability to learn. Rather than depicting the candidates as principled agents of the political parties who are committed to implementing their campaign pledges, reporters emphasize the scripted and typically manipulative aspects of candidate behavior (Patterson, 2000). Carefully controlled studies demonstrate that this "strategic" frame effectively activates generalized cynicism about the electoral process itself (Cappella and Jamieson, 1995). Media coverage thus discourages voters from approaching campaigns; instead, it breeds apathy and negativism.

Against this backdrop, direct access to the candidates makes it possible for voters to bypass or supplement media treatment of the campaign. Our evidence indicates that increased voter autonomy is unlikely to propagate ideologically homogeneous "gated communities." Rather than screening information on the basis of their partisan values or ideology, voters are more inclined to employ a relevance or utility-based criterion that prompts them to tune in more carefully to news reports about issues that affect them. This form of selectivity is hardly an impediment to deliberation: paying attention to what the candidates have to say facilitates issue-oriented voting; paying attention to media

coverage of the candidates does not. There is good reason to hope that unmediated campaigns will provide a better way to inform and engage voters.

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## Appendix. Partisan & Ideological Selectivity in CD Use

	Candidate CD		Media CD	
	Bush Proportion	Gore Proportion	Bush Proportion	Gore Proportion
Constant	.052 (.039)	.206*** (.043)	.157*** (.041)	.043 (.031)
Black / Hispanic	-.044 (.042)	.091** (.046)	.047 (.034)	-.023 (.025)
South	.001 (.024)	-.059** (.026)	-.003 (.018)	-.008 (.014)
Total # Session	-.024*** (.009)	-.011 (.009)	-.009 (.006)	-.012** (.005)
log (# Pages)	.063*** (.011)	.073*** (.012)	.017* (.009)	.032*** (.007)
log (Use Time)	.022** (.011)	-.009 (.012)	.005 (.007)	.002 (.006)
Republican	.048** (.024)	-.029 (.027)	.021 (.018)	-.018 (.014)
Democrat	.028 (.028)	.005 (.031)	-.014 (.022)	-.016 (.017)
<b>Adj. R<sup>2</sup></b>	.273 (N=196)	.204 (N=196)	.008 (N=171)	.100 (N = 171)
Constant	.050 (.040)	.233*** (.043)	.155*** (.041)	.036 (.031)
Black / Hispanic	-.039 (.042)	.097** (.046)	.043 (.033)	-.019 (.025)
South	.005 (.024)	-.063** (.026)	-.004 (.018)	-.009 (.014)
Total # Session	-.024*** (.009)	-.009 (.009)	-.010 (.006)	-.012** (.005)
log (# Pages)	.068*** (.011)	.066*** (.012)	.016 (.009)	.031*** (.007)
log (Use Time)	.018* (.011)	-.007 (.012)	.007 (.007)	.002 (.006)
Conservative	.047** (.025)	-.068*** (.028)	.026 (.019)	-.001 (.014)
Liberal	.002 (.032)	-.030 (.034)	-.005 (.024)	.004 (.018)
<b>Adj. R<sup>2</sup></b>	.272 (N=196)	.223 (N=196)	.007 (N=171)	.090 (N=171)

Note. OLS estimates with standard errors in parentheses. For Republican/Conservative and Democrat/Liberal, one tailed t-tests are conducted. (\*p < .10; \*\*p < .05; \*\*\*p < .01)

