

Issue-Related Learning in a Gubernatorial Campaign:
A Panel Study

Stephen C. Craig
James G. Kane
Jason Gainous

University of Florida
Department of Political Science
P. O. Box 117325
Gainesville, FL 32611-7325
sccraig@polisci.ufl.edu

Abstract: This study is based on data from a three-wave telephone panel survey conducted during the 1998 governor's race in Florida. The evidence suggests that a considerable amount of issue-related learning (having to do with candidate policy stands and group endorsements) took place over the course of the general election campaign, though substantial differences were observed from one issue area to the next. Further analysis indicates that learning was especially likely to occur among voters who (a) were more knowledgeable about political affairs to start with (confirming that the so-called "knowledge gap" may be exacerbated during campaigns); (b) scored high on a measure of advertising negativity (for one candidate, but not the other); and (c) early in the campaign, read their local newspaper *less* frequently. Consistent with prior research, TV news appears to have done little or nothing to boost issue-based learning among the electorate.

Note: An earlier version of this paper was presented at the 1999 Annual Meetings of the American Political Science Association.

Democratic theory has never been specific about how much information and knowledge is needed in order for individuals to be able to fulfill the obligations of effective citizenship. Most would agree, however, that at a minimum one must have a basic understanding of the policy differences that exist between candidates for office, and between the parties they represent. Without such an understanding, the public will be unable to cast its ballots wisely and, hence, unable to hold elected leaders accountable for their actions. Unfortunately, more than half a century of empirical research has left the distinct impression that "[v]oters have a limited amount of information about politics, a limited knowledge of how government works, and a limited understanding of how governmental actions are connected to consequences of immediate concern to them" (Popkin, 1991, p. 8).

Much of the knowledge that citizens possess concerning candidate and party differences is presumably acquired within the context of spirited electoral competition, though some scholars contend that campaigns "provide little, if any, information to the electorate – and that whatever information is disseminated by the campaigns is distorted by the mass media and even ignored by voters" (Alvarez, 1997, p. 7). Indeed, candidates do not always take clear positions or address the issues of greatest concern to voter (but see Ansolabehere, Snyder, & Stewart 2001; Spiliotes & Vavreck 2002) and, when this happens, it is hardly surprising that there is a high degree of confusion and uncertainty about who stands for what. Yet campaigns also provide the single most "compelling incentive [for the average person] to think about government" (Riker, 1989, p. 1). According to Gelman and King (1993), for example, the instability in public opinion polls that frequently occurs during presidential elections is a result of information flow; that is, as voters acquire more information about candidates and issues, and as they incorporate that information into their decision-making processes, they eventually find themselves able to make

decisions that are consistent with their political attitudes, beliefs, and interests. It seems likely that if this type of learning takes place during high-visibility presidential campaigns, then it should happen in at least some races for lower office as well since most candidates will initially be less familiar to voters than their counterparts at the top of the ticket.¹

This is the question we address here. Skeptics notwithstanding, numerous studies have demonstrated that a significant amount of learning about candidate issue positions takes place during election campaigns (Berelson, Lazarsfeld, & McPhee, 1954; Patterson & McClure, 1976; Bartels, 1993; Ansolabehere & Iyengar, 1995; Alvarez, 1997). What is less certain is the extent to which (a) *different media* (especially newspapers vs. television news vs. campaign ads) contribute to such learning; (b) the *tone of a campaign* (positive vs. negative) affects issue awareness; and (c) patterns of learning are similar at all *levels of electoral competition* (presidential vs. subpresidential). It is our hope that the present study, based on data from a three-wave panel survey conducted during the 1998 gubernatorial election in Florida, will shed new light on the ways in which campaigns do or do not provide citizens with the information they need in order to effectively exercise their most fundamental democratic right.

Sources of Issue Learning in Campaigns

The Medium of Communication

Communication scholars agree that, for most people most of the time, the primary source of campaign information is the mass media. Despite their usual preoccupation with the horse race (campaign strategy and poll results; see Sigelman & Bullock, 1991; Just et al., 1996; Cappella & Jamieson, 1997), and with scandals and candidate gaffes (Sabato, Stencel, & Lichter, 2000), both newspapers and television provide a considerable amount of issue-related

information to voters. Not everyone would agree, of course. In their landmark study of the 1972 election, Patterson and McClure (1976, p. 54; also see Robinson & Levy, 1986) concluded that television news "may be fascinating. It may be highly entertaining. But it is simply not informative."² As for newspapers, the absence of local coverage in Pittsburgh due to a strike had no noticeable impact on voter knowledge in the 1992 campaign; the evidence in this case was, according to Mondak (1995, p. 99), "shattering for any theory of print superiority."

Even less respect is afforded a third channel of campaign communication: paid ads, which are regarded by many critics as little more than "self-serving puffery and distortion" (Popkin, 1992, p. 164). Yet campaign ads as a whole contain more issue content than they are typically given credit for (West, 2001; Geer, 1998); one can even argue that "candidate messages are almost inextricably about both issues and character at the same time, as they gravitate toward issues that amplify their self-presentation, *and* as they stress aspects of their pasts and their personalities that reinforce their policy concerns" (Just et al., 1996, p. 88). If candidates sometimes fail to make specific policy commitments in their ads (or other public statements), they may do so for strategic reasons – or, alternatively, they may be remembering the harsh treatment often given to politicians who venture beyond the usual sound-bite approach, e.g., George McGovern's welfare plan in 1972, or Walter Mondale's 1984 promise to fight the budget deficit by raising taxes. As Michael Robinson said, "Fresh ideas come out [in the news] sounding less like new and more like dumb" (cited in Patterson, 1993, p. 159).

The proof, however, is ultimately in the pudding. It may be that a sufficient amount of issue information exists for voters who pay attention, and that others "know little about issues because they are uninterested, not because the information is unavailable" (Zhao & Bleske, 1998,

p. 14). Nevertheless, one of the most critical functions of election campaigns in a democracy is to educate the public about important issues, and about competing candidates' stands on those issues. We are interested in gauging the extent to which this happened during the 1998 campaign for governor in Florida. Regardless of whether the informational glass is judged to have been half-empty or half-full, did voters exhibit greater awareness of candidate positioning at the end of the campaign than at the beginning? And if so, can the increase be linked to voters' differential levels of attentiveness to campaign coverage in the newspapers or on TV, to paid ads, or to some combination of these?³

While we know from prior research that a certain amount of learning takes place during campaigns,⁴ there is no consensus as to the relative contribution of different communication channels to that learning. Some studies suggest that voters learn more from reading newspapers than from watching television news programs and that, in fact, the latter adds little or nothing to one's ability to place candidates on key issues (Patterson & McClure, 1976; Patterson, 1980; Robinson & Levy, 1986; Choi & Becker, 1987; Berkowitz & Pritchard, 1989; Weaver & Drew, 1993). Others indicate that TV news may be a significant source of issue awareness after all (Chaffee & Schleuder, 1986; Neuman, Just, & Crigler, 1992; Bartels, 1993; Chaffee, Zhao, & Leshner, 1994; Weaver & Drew, 1995, 2001; Zhao & Chaffee, 1995; Graber, 2001).⁵

And then there are studies which raise the possibility that campaign ads convey at least as much issue information to voters as do newspapers and television. Patterson and McClure (1976, pp. 116-117), for example, found that "[o]n every single issue emphasized in presidential commercials [in 1972], persons with high exposure to television advertising showed a greater increase in knowledge [about the candidates' positions] than persons with low exposure." Survey

data from a Michigan congressional district in 1974 revealed that voters' awareness of candidates and their issue positions was enhanced by both television and radio advertising (Atkin & Heald, 1976). Brians and Wattenberg (1996) reported that, at least in the latter stages of the 1992 presidential race, ad watchers were better informed about candidates' issue positions than either newspaper readers or TV news watchers; the obvious conclusion seemed to be that "political advertising contributes to a well-informed electorate" (p. 185). Ansolabehere and Iyengar (1995), using an experimental design, also obtained results that run counter to conventional wisdom: "Though political advertisements are generally ridiculed as a serious form of campaign communication," they observed, "our results demonstrate that they enlighten voters and enable them to take account of issues and policies when choosing between the candidates" (p. 59).

Not everyone is ready to jump on the campaign ad bandwagon. The results of a 1992 two-wave panel survey in North Carolina led Zhao and Bleske (1998; also see Zhao & Bleske, 1995) to conclude that respondents who paid *more* attention to ads tended to learn *less* about candidates' issue positions. This finding may have been anomalous, or it may provide "one case in which some members of the advertising audience [were] misled and their issue learning hindered. It supports critics' distrust of political commercials and also supports the [emergence of] professional 'ad watchers' who monitor and expose misinformation" (Zhao & Bleske, 1998, p. 27). Such a result reminds us that ads, like newspapers and TV news, are likely to have a greater effect under some conditions than under others (Drew & Weaver, 1998). Researchers have yet to determine with any degree of precision which conditions enhance the ability of which media to facilitate voter learning during campaigns.

The Tone of Political Advertising

While the literature on negative advertising has expanded exponentially in recent years (e.g., Ansolabehere & Iyengar, 1995; Johnson-Cartee & Copeland, 1991; Lau & Pomper, 2004; Sigelman & Kugler, 2003), relatively little attention has been given to the question of how advertising tone affects campaign learning. An exception is Brians and Wattenberg (1996), in which people who recalled seeing negative ads during the 1992 presidential race were significantly more likely than those who did not to be aware of the candidates' issue positions. Many voters claim not to like negative campaigning and consider it to be misleading and/or unethical (Garramone, 1984; Just et al., 1996; Pinkleton, 1997; but see Hill, 1989),⁶ and yet candidates continue to employ attack strategies because of their presumed effectiveness in helping to win elections.

We will not be addressing this question directly in the present study (for a review, see Lau, Sigelman, Heldman, & Babbitt, 1999; also Lau & Pomper, 2004). Instead, our concern here has to do with whether negative advertising is more or less likely than positive advertising to facilitate issue learning during election campaigns. When either type of ad contains information about the policy positions of candidates, to what degree is that information received and assimilated by the target audience? Voters themselves do not consider negative ads to be especially helpful (Pinkleton & Garramone, 1992), but the jury remains out. As previously noted, Brians and Wattenberg (1996) discovered a significant relationship between recall of negative ads and issue awareness in their analysis of the 1992 American National Election Study. Similarly, an analysis of Senate elections between 1988-92 led Kahn and Kenney (2000) to conclude that negative advertising is especially important in helping voters to accumulate information about challengers. In controlled experiments, however, Ansolabehere and Iyengar

(1995; also see Geer & Geer, 2003) found positive and negative ads to be equally informative.

Thus, what is probably the strongest justification for negative advertising (i.e., that it provides information without which it would be "much more difficult for the voters to make intelligent choices about the people they elect to public office"; Mayer, 1996, p. 450) is based upon an assumption that may or may not be true. There are indications that the issue content of political advertising as a whole, and presumably of negative ads in particular, has increased in recent years (West, 2001). We therefore hypothesize, first, that campaign ads will make a contribution to voter issue awareness independently of any learning that results from exposure (or attention⁷) to campaign coverage in the newspapers or on television. Second, regardless of the processes involved – e.g., that negative ads are more frequently recalled (Shapiro & Rieger, 1992; Brians & Wattenberg, 1996); that they contain more issue information than positive ads (Kaid & Johnston, 1991; Geer, 2000; West, 2001); that negative information is given greater weight than positive information (Lau, 1985) and is thus more helpful in assisting voters to discriminate between the candidates (Garramone, Atkin, Pinkleton, & Cole, 1990); or that negative ads heighten feelings of anxiety which, in turn, cause voters to seek out more information about candidates' policy stands or other attributes (Marcus & MacKuen, 1993) – we expect to find that increases in issue awareness over the course of a campaign are more closely associated with exposure to negative rather than positive advertisements.

Data and Measures

The present study uses data from a three-wave telephone panel survey conducted by the *Florida Voter* polling organization during the 1998 campaign for governor of Florida.⁸ Our initial interviews (late July-early August) were with 628 individuals, randomly chosen from a list

of all registered voters living in Broward (including Fort Lauderdale) and south Palm Beach Counties in the southeastern part of the state. Wave two interviews (N = 402) were completed in late September-early October, wave three (N = 301, 47.9 percent of the original group) in November beginning on election night. The results reported below are limited to the 301 respondents who participated in all three waves.⁹

Most of the research reviewed earlier is based on the analysis of either cross-sectional surveys (which do not take into account the amount of information that people *bring to* the campaign and, hence, do not allow for measurement of individual-level change) or experimental data (which cannot fully capture the dynamics of a real-life campaign). Most of it also centers on presidential elections, where trends and relationships may vary from what one would find in races for congressional, state, and local office. Our study is hardly unique in its use of panel data (Berelson, Lazarsfeld, & McPhee, 1954; Patterson & McClure 1976; Patterson, 1980; Bartels, 1993), in the fact that issue learning is examined within the context of an actual campaign below the level of president (Atkin & Heald, 1974; Choi & Becker, 1987; Weaver & Drew, 1993; West, 1994; Ansolabehere & Iyengar, 1995; Zhao & Bleske, 1995; Kahn & Kenney, 1999), or even in the inclusion of three potential sources of learning during campaigns: newspapers, TV news, and paid ads (Patterson & McClure, 1976; Berkowitz & Pritchard, 1989; Weaver & Drew, 1993; Brians & Wattenberg, 1996; Just et al., 1996; Alvarez, 1997). On the plus side, though, we also are able to compare the impact of positive and negative ads and, because our panel encompasses three waves, to determine whether issue learning is more likely to take place early or later in the campaign (Brians & Wattenberg, 1996; Holbrook, 1999). Moreover, this study is one of the few to look at gubernatorial politics (see Choi & Becker, 1987; Ansolabehere & Iyengar, 1995), a

level of electoral competition that is in some ways similar to, but in other ways quite different from, the race for the White House.

None of the above is intended to suggest that our approach is without shortcomings. First, there is the fact that we employ survey data alone, i.e., relying solely on respondent self-reports of exposure and attention to various media, and to negative vs. positive information as conveyed by campaign ads (Ansolabehere & Iyengar, 1996; Iyengar & Simon, 2000). Second, the focus on a single community raises some obvious concerns about the extent to which our findings can be generalized to other settings – though, traditionally, panel studies of media effects have relied on local samples (Berelson, Lazarsfeld, & McPhee, 1954; Patterson & McClure, 1976) in order to control respondents' media environments. Third, a potentially serious problem in any panel survey is that which stems from the inevitable process of respondent mortality. As previously noted, less than half of our original sample participated in all three waves. If the sociodemographic and political characteristics of this group differed markedly from those of the individuals we interviewed at wave one, then our results and conclusions would be called into question. Fortunately, this did not happen. Not only did the final panel have substantially the same characteristics as the original sample in all important categories (including age, education, gender, race, and party identification) but, perhaps equally important, its choice for governor was within two percentage points of the actual outcome.¹⁰

Election Backdrop: Bush vs. MacKay

The early front-runner for governor in 1998 was Miami businessman Jeb Bush, son of former President George Bush (and younger brother of the president-to-be), who had run for and lost the same office four years earlier by the closest margin in Florida's history. Although making

only his second bid for elective office, that earlier campaign and, no doubt, his family ties gave Bush an extremely high profile among voters: Statewide polls showed his name recognition level to be consistently above 90 percent during the year leading up to the election. Bush's opponent was Democratic Lieutenant Governor Buddy MacKay, a former congressman and loser (also in an incredibly close contest) in his 1988 U. S. Senate race against Connie Mack. In Florida, the lieutenant governor is elected on a ticket with the governor and has no formal constitutional role apart from replacing the latter in case of death or incapacity – which is exactly what MacKay did (briefly) following the sudden death of Governor Lawton Chiles in December 1998. Although less of a sure thing than Bush, MacKay entered the election year as his party's undisputed leader for the gubernatorial nomination; the obscurity of his office notwithstanding, he had name recognition in the 80-percent range (91 percent in wave one of our Broward-south Palm Beach survey).

Both candidates escaped a primary challenge, and neither had begun any individual campaign advertising prior to the first survey in July-August.¹¹ As a result, the situation in late summer was one in which the candidates were personally well-known, but their positions on the issues were not. As prior research (especially at the presidential level; see Bartels, 1988 and 1993; Patterson, 1980; Popkin, 1991) has shown, many voters obtain a considerable amount of information during the prenomination phase, and surveys that do not begin until the general election are unable to capture the issue-based (or other) learning that may already have taken place. In principle, our study is problematic in this regard. Yet with no serious primary competition on either side, and with most campaigning prior to Labor Day being of the "inside politics" variety, one could anticipate that voter awareness of the policy positions of these two

extremely well-known public figures would be limited. As we shall see momentarily, it was.

Our sampling area (coinciding with the circulation market of our sponsor, the *South Florida Sun-Sentinel*) included all of Broward County and portions of south Palm Beach County. In 1998, over 900,000 of the estimated 1.7 million residents were registered to vote, most as Democrats (53 percent vs. 34 percent Republican). Considering its size, the media market is somewhat limited. Broward County, which makes up the largest portion of our study area, has no television stations of its own; instead, residents must rely on TV news from Miami and, in some parts of the county, Palm Beach. Although these non-local stations regularly cover developments in Broward, such stories frequently take a back seat to reporting on events closer to home. As for print, the region is served principally by two major newspapers: the *Sun-Sentinel* and, to a lesser extent, the *Miami Herald*. Both papers are fairly traditional in their approach to news coverage, and both contained numerous stories relating to the 1998 race for governor.

Dependent Variables: Issue and Group Support Awareness

Our analysis centers upon two separate aspects of issue-related learning among voters. The most familiar of these is a battery of questions that was introduced as follows:

Next, I'm going to read a brief series of statements. After each, I'd like you to tell me which of the two major candidates for governor, Buddy MacKay or Jeb Bush, is more likely to favor the statement, if you happen to know. Let's start with "thinks we don't need any more gun control laws." Do you think MacKay or Bush is more likely to favor this position, or don't you know?

The gun control query (correct answer: Bush) was followed by six others: "supports vouchers for students in underperforming public schools" (Bush), "wants to guarantee that 40 percent of the

state budget goes to public education" (MacKay), "believes that a woman should have the right to have an abortion in most instances" (MacKay), "wants patients to have the right to sue their HMO when they're denied proper care" (MacKay), "has pledged not to raise taxes" (MacKay), and "wants to appoint a statewide drug czar to fight drug abuse" (Bush).

Our challenge in preparing this list was to identify, in advance of the public campaign, (1) issues that one side or the other, or perhaps both, could be expected to emphasize in their communications with voters (directly via ads, and indirectly through print and broadcast media); as well as (2) issues on which the two candidates offered a relatively clear-cut choice.¹² Five of the seven issues we selected ended up meeting these standards to a greater or lesser degree. Bush's proposal for a drug czar was something of a trial balloon; it came and went with scarcely any notice being paid by the press or by the MacKay camp. Also, both candidates (for strategic reasons) handled the no-new-taxes pledge fairly quietly, and in a manner not entirely consistent with their respective parties' images. It is therefore not surprising that neither of these items scaled with the others in an index of *issue awareness*.¹³

A second set of questions was included in the survey, relating to group bases of support for the two candidates:

Now I'm going to ask you if you happen to know which groups and organizations are currently supporting either Buddy MacKay or Jeb Bush for governor. The first is police organizations – do you think they are supporting Buddy MacKay or Jeb Bush, or is this something you're not sure about?

In addition to law enforcement (correct answer: Bush), respondents were asked to name the candidate supported by teacher organizations (MacKay), environmentalists (MacKay), the

Christian Coalition and other conservative religious groups (Bush), and tobacco companies (Bush).¹⁴ Our intent was partly to have surrogates in place for issues (or clusters of issues) that had not yet emerged at wave one but might arise later in the campaign, e.g., school prayer, credentials for teachers in public schools, environmental problems related to the Everglades or other ecologically sensitive areas, and so on; in each instance, we expected that the candidates' positions would be relatively clear and predictably different from one another.¹⁵

Apart from specific (and often short-term) issues, however, prior research has shown that voters tend to associate the Republican and Democratic parties and their leaders with particular sociopolitical groups and organizations – associations which stem from the tendency for each party, over time, consistently to represent the interests and policy views of certain segments of society better than others (Craig, Martinez, & Kane, 1999). Many voters will be aware of these party-group linkages regardless of whether or not there is a campaign under way, just as they will know that one prospective candidate for president or governor favors Policy A while another prefers Policy B. But for the electorate as a whole, the level of awareness should increase as more cues become available from the media or from candidates themselves. We therefore combined the five items described above in an index of *group support awareness* that was expected to behave, for the most part, in the same fashion as our measure of issue awareness.¹⁶

The frequency of accurate candidate-issue and candidate-group associations is shown in Table 1 (which includes both actual and corrected percentages¹⁷). In Table 2, we display the magnitude of change occurring between each of the waves. Several observations are in order. First, except for abortion (which was a major issue in the 1994 governor's race when Jeb Bush ran against Lawton Chiles, and which voters clearly perceive as being a point of division

between the parties; see Adams, 1997), fewer than half – and usually fewer than one-third based upon corrected estimates – of all respondents at the beginning of the campaign were able to connect any policy stand with the candidate taking it. Similarly, the Christian Coalition "and other conservative religious groups" (which had been strongly in Bush's corner four years earlier) was the only instance where a majority could successfully link a group with the candidate that group was supporting. Thus, as we already have pointed out, the candidates for governor in 1998 were well-known by the electorate, but in a relatively superficial way.

Tables 1 and 2 about here

This changed somewhat as the campaign unfolded. Among our five issues, the greatest amount of learning was evident for school vouchers: By November, 79.4 percent (corrected) knew that Jeb Bush advocated the use of vouchers – a huge increase of 44.6 points over the preceding three months. And even though many voters knew at the start where Bush and MacKay stood on abortion, a considerable amount of learning (20.2 points corrected) took place there as well. The other three issues (especially education and patient rights) saw more modest improvements in voter awareness, which is hardly surprising given that they did not receive nearly as much attention from the media and candidates as did vouchers and abortion.

Among group support awareness variables, the biggest gains by far occurred for police organizations: In wave one of the survey, respondents were equally likely to name Bush and MacKay (16.9 percent each, for a corrected total of exactly zero) as the preferred candidate of official law enforcement; by November, a respectable 54.5 percent (corrected) knew that the GOP standard bearer had received the endorsement of the Police Benevolent Association and similar organizations. With the Bush campaign having saturated the state's airwaves with a series

of ads attacking MacKay for being soft on crime, we anticipate that this may be one area where issue-related learning is directly and substantially related to one's attentiveness to those ads.

The remaining four group associations exhibited less change. A majority of voters (51.8 percent corrected) knew in July-August that the religious right was supporting Bush, and only 7.7 percent were added to that number over the ensuing three months; total gains were not much higher for teachers (14.3 points corrected) and environmentalists (11.0 points). Apart from law enforcement, the greatest amount of learning occurred for tobacco companies: 60.9 percent (corrected) naming Bush as the favored candidate in wave three, up 22.0 points from our initial survey. This is somewhat puzzling since tobacco did not play a prominent role in the 1998 governor's race. It was in the news, however, because of an enormous out-of-court settlement between tobacco companies and the state government (the former having been sued by the latter), and because of the ensuing controversy over how much of that settlement should be part of the fee paid to attorneys (traditionally a Democratic group) who had represented the state on a contingency basis. Perhaps these events led some voters to conclude that tobacco companies were behind Bush; or, more simply, it may have been a case of people applying longstanding party stereotypes (Rahn, 1993), i.e., big business is usually pro-Republican, so big tobacco must be pro-Republican in Florida. Still, even if the latter is true, the campaign appears to have played at least some role in activating those stereotypes for many individuals.

Independent Variables

Results so far demonstrate that learning did occur during the 1998 gubernatorial campaign in Florida. Our next task is to estimate the relative contributions made by news coverage and paid ads (both positive and negative) to that learning. Along with Price and Zaller

(1993) and others, we agree that being exposed to the news is not the same as "getting" it – and that by relying solely on self-reports of exposure (or surrogates such as education), survey-based studies may underestimate the effects of mass media on citizens' attitudes and perceptions. Thus, as an indirect measure of "habitual news reception" (Zaller, 1996), the analysis below also employs a six-item index of general political knowledge as one of our independent variables.¹⁸

Further, we have attempted to distinguish between mere exposure and "attention" to media news coverage and campaign ads (assuming that attention would have a greater impact on issue learning). Respondents were asked in wave one to indicate how many days in the past week they had read a daily newspaper, and how many days they had watched the local news on TV. Against this backdrop of exposure, they were asked in waves two and three (1) how much attention (from a great deal to none) they had been paying to news on TV and radio about the campaign for governor;¹⁹ (2) whether they had read about the campaign in a newspaper and, if so, how much attention they had been paying to newspaper articles about it; (3) whether in the past few weeks they recalled seeing or hearing any Bush ads on TV or radio and, if so, how much attention they had been paying to them; and (4) whether they recalled seeing any MacKay ads and, if so, how much attention they had been paying. The last two items ($r = .71$ at t_2 and $.70$ at t_3) were used to create a simple additive index tapping overall attentiveness to campaign ads.

Our analysis also includes measures of interest in the campaign and in "government and public affairs" generally, as well as party identification (the standard 7-point scale), partisan strength (combining strong Democrats with strong Republicans, weak Democrats with weak Republicans, and so on), and demographics (gender, education, age, race). Finally, perceptions of campaign negativity were captured in waves two and three with the following questions:

As you know, some campaigns are mostly positive, that is, candidates talking about their own record and qualifications – but others are mostly negative, that is, candidates criticizing something about their opponent. Overall, would you say that the Bush campaign for governor this year has been very positive, somewhat positive, somewhat negative, or very negative? What about the MacKay campaign for governor – overall, would you say that it has been very positive, somewhat positive, somewhat negative, or very negative?

Scores on each of these items ranged from 1 (very positive) to 5 (very negative).²⁰

Results

Our first pass through the data is presented in Table 3, where the variables to be explained are issue and group support awareness in wave one (July-August). As noted earlier, these results provide a snapshot of the electorate before Bush and MacKay started airing their TV and radio spots, and before news coverage of the campaign was as prominent as it would later become. Using binomial generalized linear models with a logit link function (Gill, 2001), we see essentially the same pattern in both instances: statistically significant coefficients indicating higher levels of substantive knowledge among individuals who were well-informed about and interested in politics generally, who exhibited a high degree of interest in the nascent campaign, who possessed a strong attachment to one of the parties, and who watched television relatively *infrequently*.²¹ In essence, politicized voters, especially if they also were partisan and watched less local news on TV (but regardless of how often they read the newspaper), were more knowledgeable voters in the campaign's initial stages.

Table 3 about here

Results in Table 4 are for waves two (September-October) and three (November). We follow common practice here in employing three sets of independent variables: (1) one's prior scores on issue or group support awareness (t_1 in the first two columns, t_2 in the next two); (2) several other first-wave measures including exposure to newspapers and TV news, political knowledge, general interest in politics, direction and strength of partisanship, gender, age, education, and race; and most importantly, (3) contemporaneous measures of attention to the campaign in newspapers and on television, overall level of attention to paid ads on radio and TV, perceived negativity of the Bush and MacKay campaigns, and in wave three an item indicating exposure to the single debate that was held (and broadcast on both TV and radio) between the two contenders. With wave-one factors (or wave-two as appropriate) in the equation, regression coefficients can be interpreted as representing the impact of an independent variable on *changes* in the dependent variable over the course of the general election campaign (Markus, 1979).

Table 4 about here

Not surprisingly, prior levels of issue and group support awareness are the best predictors of an individual's scores on these same variables as measured in waves two and three. Among the other variables displayed in Table 4, political knowledge has the most consistent effect on issue-related learning, i.e., those who knew more about current events initially tended to acquire more information during the campaign.²² In addition, negative advertising by Bush is significant in three of our four models (greater perceived negativity being associated with higher levels of learning), as is newspaper exposure in both wave-two equations (less learning occurring among voters who frequently read the newspaper, though this relationship is no longer evident in the campaign's closing days).

Attentiveness to the campaign as reported either in the newspaper or on local TV news programs, perceived MacKay negativity, and debate exposure²³ have no discernable impact on learning, while the coefficient for attention to the candidates' TV ads approaches conventional levels of significance ($p \leq .10$) only for issue awareness and only in wave three; to the extent that simple exposure to TV news, interest in the campaign and in politics generally, and partisan strength exert an influence, it is indirect, i.e., operating through the effects these variables have on initial levels of issue and group support awareness (see Table 3). Demographic factors play a limited role, though two of them (education and age) are associated with the learning of group support in one of the waves. While calculating the difference between null deviance and residual deviance at the bottom of Table 4 indicates a decent overall fit for our model (Gill, 2001), it is clear that the data presented here do not tell us everything that we would like to know about the origins of individual differences in issue-related learning during the 1998 gubernatorial campaign in Florida.

Conclusion

Very few citizens know where each candidate stands on every important issue that might arise over the course of an election year. As Popkin (1992, p. 168) explained, "[c]ampaigns are blunt instruments, not scalpels. They are for ratifying broad changes in direction that have been worked out between campaigns or for rejecting incumbents and their policies. The reformist hope that campaigns can raise new and complicated issues or bring Americans to a deeper understanding of the most complex issues facing the country is misguided." Nevertheless, campaigns do inform. The findings presented here are consistent with a great deal of prior research which suggests that learning takes place – not on every issue perhaps, nor in every

electoral contest, but certainly in those instances where candidates talk about policy, and about the similarities and differences between themselves and their parties on those issues. Such was the case in Florida's race for governor in 1998. Were voters as well-informed as democratic theory suggests they might have been? Of course not. Were they better informed in November than they had been in late summer? Absolutely, and by a considerable margin on some issues.

As to the factors that help to shape issue-related learning, our results raise serious doubts about the centrality of the mass media; if anything, exposure to newspapers and local TV news had a negative impact (the latter indirectly) in the Bush-MacKay contest, while attentiveness to campaign coverage in either medium appears not to have affected learning at all. What mattered most was general political knowledge and prior awareness of candidate issue stands and sources of group support, with the informationally rich becoming even richer as the flow of information increased over time. In addition, the oft-maligned negative campaign provided a boost to the levels of substantive knowledge exhibited by some voters; specifically, although overall attention to paid ads had no effect on learning, perceptions of Bush (but not MacKay) negativity were associated with issue awareness in late September/early October, and with both issue and group support awareness in our post-election survey. For whatever reason – e.g., that they were more memorable, more informative, more frequently aired, or more effective at engaging people's emotions and stimulating their desire to learn – Bush's attacks appear to have had a greater impact than did the candidate's positive message (or, for that matter, MacKay's messages both pro *and* con). Negative campaigning isn't always a good thing but, when it helps voters to learn what they must know in order to cast an informed ballot, neither should we judge it to be without any redeeming value.

In conclusion, this study suggests that some (though by no means all) of the same dynamics that are evident in presidential elections may apply in high-level subpresidential contests as well. Future research should examine campaigns for a broader range of offices, while also looking more closely at alternative communications channels – including direct mail, which is a crucial element in many state and local races. Finally, we encourage researchers to continue trying to develop improved measures of media attentiveness and campaign negativity. Until we have a better idea about the kinds of messages voters encounter over the course of a campaign, our estimates of the impact of those messages (on learning, candidate choice, or anything else) will necessarily be problematic.

Notes

1. Along these lines, people appear to learn more from presidential debates about candidates with whom they are relatively unfamiliar (Holbrook, 1999, p. 79).

2. For their part, the American public rates the performance of the news media generally, and TV news in particular, as "adequate," i.e., "neither an abysmal failure [n]or a tremendous success" in terms of its political coverage (Dautrich & Hartley, 1999, p. 90).

3. Among the potentially important sources of campaign learning not considered here are magazines (Robinson & Levy, 1986; Neuman, Just, & Crigler, 1992), so-called "nontraditional media" (Hollander, 1995; Weaver & Drew, 1995), opinion leaders (Lazarsfeld, Berelson, & Gaudet, 1948), direct mail advertising (Weaver-Lariscy & Tinkham, 1996; Vavreck, Spiliotes, & Fowler, 2002), and campaign events of one sort or another (Holbrook, 1996; Shaw, 1999); radio news (Berelson, Lazarsfeld, & McPhee, 1954; Weaver & Drew, 1993) will not be examined separately but rather in combination with its TV counterpart (see note 24). In addition to the factors discussed above, our analysis will assess the impact of candidate debates on learning.

4. Despite a higher proportion of ads stressing personal traits rather than issues (Geer, 1998), such learning is especially likely to take place during primaries (Bartels, 1988; Popkin, 1991) when candidates, and their policy views, are less known to begin with (also see note 1). As a result, our focus on the general election poses a somewhat sterner test of the learning hypothesis than might otherwise be the case.

5. Some scholars contend that neither newspapers nor TV news facilitates learning to any appreciable degree (Price & Zaller, 1993) or, alternatively (and perhaps most plausibly), that it depends less on the medium *per se* than on the content of the message being delivered (Norris &

Sanders, 2003).

6. Even if attack ads are not generally popular among voters, some types of attacks are regarded as more legitimate than others (e.g., Johnson-Cartee & Copeland, 1989, 1997; Green & Rourke, 2000).

7. Exposure and attention obviously are not the same thing (Chaffee & Schleuder, 1986; Zhao & Bleske, 1995; Brians & Wattenberg, 1996; also see Price & Zaller, 1993; Zaller, 1996). While many studies use measures of the former, it is the latter that should have the stronger impact on issue learning or almost any other attitude and/or behavior that might be of interest to communication scholars.

8. The panel was commissioned by the *South Florida Sun-Sentinel*, whom the authors wish to thank for their generous support of this project. Additional information can be obtained from *Florida Voter* directly (954-584-0204), or from the Graduate Program in Political Campaigning in the Political Science Department at the University of Florida (352-392-0262).

9. While respondent mortality contributes to an increased margin of error (plus or minus 5.6 points, compared with 3.9 for the original sample), an N of 301 cases is sufficient to meet the required assumptions of the estimating procedures employed in our analysis. One might wonder whether participation not only in one but in three surveys may have sensitized some respondents to the campaign and caused them to be more attentive than they otherwise would have been to issue information about the candidates. Fortunately, the patterns of learning reported below in Tables 1 and 2 suggest that this was not a serious problem (cf. Bartels, 2000). First, there were some issue areas where the levels of information were only slightly higher at the end of the campaign than at the beginning; thus, any sensitizing that took place was selective in its impact.

Second, most learning took place between waves two and three of our survey, but on at least two issues (education and patient rights) it happened earlier; we consider it unlikely that the experience of being interviewed would have encouraged respondents to seek out information about different issues at different times.

10. One difference that emerged had to do with the tendency for less-informed people to drop out of panel surveys at disproportionately high rates (Price & Zaller, 1993). Consistent with this pattern, members of our panel scored significantly higher than other respondents on measures of general political knowledge, interest in government and public affairs, and interest in the campaign for governor; they also were very likely to have made it to the polls on election day (92 percent self-reported turnout). The two groups had roughly equal levels of formal education, however.

11. The Republican Party did broadcast a number of so-called "party-building" ads, most of which centered around Jeb Bush and his family (and lacked any real issue content).

12. "Relatively clear" does not necessarily mean "polar opposite." For example, Bush endorsed higher spending for public education but refused to commit to the 40 percent share of the state budget urged by MacKay.

13. Alpha for this index (scored as the number of correct candidate placements out of five possible) was .67 in wave one, .66 in wave two, and .62 in wave three. Apart from their failure to scale, the omitted items showed little or no evidence of voter learning during the campaign.

14. Some of these connections (MacKay and teachers) were stronger and more explicit than others (Bush and tobacco).

15. As it happened, none of the issue types listed here became major points of contention during the campaign.

16. Alpha was .72 in wave one, .72 in wave two, and .64 in wave three. As with issue awareness, scores were determined by the number of correct identifications made by respondents out of five possible.

17. The second, fourth, and sixth columns in Tables 1 and 2 are based on percentages that include a correction for guessing. This correction was calculated as the percent wrong subtracted from the percent right, setting aside those who say they don't know; cf. Patterson (1980).

18. Respondents were asked to name the job held by Janet Reno (U. S. attorney general), the branch of government whose responsibility it is to determine whether a law is constitutional, which party has the most members in the U. S. House and in the Florida state legislature (Republicans), how much of a majority is required in each chamber for Congress to override a presidential veto, and which party is more conservative than the other at the national level. Alpha was .61 for this scale, which was asked in its entirety only in wave one of our survey.

19. One might wonder whether we have confused matters by asking about TV and radio together (both here in terms of news coverage, and also with regard to campaign ads). The truth is that not many respondents relied on radio for political information: Asked where they got most of their "news and information about state and local politics," 42.5 percent said television, 39.9 percent local newspapers, 6.6 percent radio, and 3.3 percent friends and family. Nevertheless, it is clear that what we are testing with these measures is the impact of attention to TV *and* radio (or *electronic media* generally) rather than to television alone.

20. The frequent divergence of subjective and objective measures of campaign tone is noted by Sigelman and Kugler (2003). In wave two, Bush's ads were judged (in the aggregate) to have been slightly more negative than positive, and MacKay's ads slightly more positive than negative. In

the third wave, each candidate's ads were characterized as negative by roughly sixty percent of those offering an opinion.

21. The figures in Table 3 also show more information possessed by Democratic identifiers (issue awareness) and older voters (group support awareness). The impact of age is relative: Our sampling area and, consequently, our panel contain a large number of older voters, and so it is not *young* people in an absolute sense, but rather those under age fifty who were most knowledgeable about the organizations supporting each candidate.

22. This would seem to support the idea that campaigns serve to widen the "awareness gap," with the informationally rich becoming even richer due to increased communication flow (see Holbrook, 2002 for a review; also Moore, 1987; Zaller, 1992; Price & Zaller, 1993; Ansolabehere & Iyengar, 1995). Some studies, however, report that exposure to campaigns, or to the news media generally, have the potential to promote larger knowledge gains among the least informed (and/or the least engaged, least educated, and least socioeconomically well-off; see Alvarez, 1997; Eveland & Scheufele, 2000; Rhine, Bennett, & Flickinger, 2001; Holbrook, 2002; Norris & Sanders, 2003).

23. Slightly more than half of our respondents reported having seen or (less often) heard the debate. By a margin of about 2-to-1, they judged Jeb Bush to have been the winner. While the null finding here is at odds with much prior research on the topic (e.g., Holbrook, 1999; Just, Crigler, & Wallach, 1990; Weaver & Drew, 1995; Drew & Weaver, 1998; Druckman, 2003), one limitation of most of these studies (an exception is Holbrook, 2002) is that the models tested fail to control for other sources of learning such as exposure to news media or TV ads.

References

- Adams, G. D. (1997). Abortion: Evidence of an issue evolution. *American Journal of Political Science*, 41, 718-737.
- Alvarez, R. M. (1997). *Information and elections*. Ann Arbor: University of Michigan Press.
- Ansolabehere, S., & Iyengar, S. (1995). *Going negative: How political advertisements shrink and polarize the electorate*. New York: Free Press.
- Ansolabehere, S., & Iyengar, S. (1996). The craft of political advertising: A progress report. In D. C. Mutz, P. M. Sniderman, & R. A. Brody (Eds.), *Political persuasion and attitude change* (pp. 101-122). Ann Arbor: University of Michigan Press.
- Ansolabehere, S., Snyder, J. M., Jr., & Stewart, Charles, III. (2001). Candidate positioning in U. S. House elections. *American Journal of Political Science*, 45, 136-159.
- Atkin, C., & Heald, G. (1976). Effects of political advertising. *Public Opinion Quarterly*, 40, 216-228.
- Bartels, L. M. (1988). *Presidential primaries and the dynamics of public choice*. Princeton, NJ: Princeton University Press.
- Bartels, L. M. (1993). Messages received: The political impact of media exposure. *American Political Science Review*, 87, 267-285.
- Bartels, L. M. (2000). Panel effects in the American national election studies. *Political Analysis*, 8, 1-20.
- Berelson, B. R., Lazarsfeld, P. F., & McPhee, W. N. (1954). *Voting: A study of opinion formation in a presidential campaign*. Chicago: University of Chicago Press.
- Berkowitz, D., & Pritchard, D. (1989). Political knowledge and communication resources.

Journalism Quarterly, 66, 697-701.

Brians, C. L., & Wattenberg, M. P. (1996). Campaign issue knowledge and salience: Comparing reception from TV commercials, TV news, and newspapers. *American Journal of Political Science*, 40, 172-193.

Cappella, J. N., & Jamieson, K. H. (1997). *Spiral of cynicism: The press and the public good*. New York: Oxford University Press.

Chaffee, S. H., & Schleuder, J. (1986). Measurement and effects of attention to media news. *Human Communication Research*, 13, 76-107.

Chaffee, S. H., Zhao, X., & Leshner, G. (1994). Political knowledge and the campaign media of 1992. *Communication Research*, 21, 305-324.

Choi, H. C., & Becker, S. L. (1987). Media use, issue/image discriminations, and voting. *Communication Research*, 14, 267-291.

Craig, S. C., Martinez, M. D., & Kane, J. G. (1999). The structure of political competition: Dimensions of candidate and group evaluation revisited. *Political Behavior*, 21, 283-304.

Dautrich, K., & Hartley, T.H. (1999). *How the news media fail American voters: Causes, consequences, and remedies*. New York: Columbia University Press.

Drew, D., & Weaver, D. (1998). Voter learning in the 1996 presidential election: Did the media matter? *Journalism and Mass Communication Quarterly*, 75, 292-301.

Druckman, J. N. (2003). The power of television images: The first Kennedy-Nixon debate revisited. *Journal of Politics*, 65, 559-571.

Eveland, W. P., & Scheufele, D. A. (2000). Connecting news media use with gaps in knowledge and participation. *Political Communication*, 17, 215-237.

- Garramone, G. M. (1984). Voter responses to negative political ads. *Journalism Quarterly*, 61, 250-259.
- Garramone, G. M., Atkin, C. K., Pinkleton, B. E., & Cole, R. T. (1990). Effects of negative political advertising on the political process. *Journal of Broadcasting & Electronic Media*, 34, 299-311.
- Geer, J. G. (1998). Campaigns, party competition, and political advertising. In J. G. Geer (Ed.), *Politicians and party politics* (pp. 186-217). Baltimore: Johns Hopkins University Press.
- Geer, J. G. (2000). Assessing attack advertising: A silver lining. In L. M. Bartels & L. Vavreck (Eds.), *Campaign reform: insights and evidence* (pp. 62-78). Ann Arbor: University of Michigan Press.
- Geer, J.G., & Geer, J.H. (2003). Remembering attack ads: An experimental investigation of radio. *Political Behavior*, 25, 69-95.
- Gelman, A., & King, G. (1993). Why are American presidential election polls so variable when voters are so predictable? *British Journal of Political Science*, 23, 409-451.
- Gill, J. (2001). *Generalized linear models: A unified approach*. Thousand Oaks, CA: Sage.
- Graber, D. (2001). *Processing politics: Learning from television in the Internet age*. Chicago: University of Chicago Press.
- Green, J., & Rourke, B. (2000). Rules of the game: Codes of campaign conduct. *Public Perspective*, 11, 34-36.
- Hill, R. P. (1989). An exploration of voter responses to political advertisements. *Journal of Advertising*, 18, 14-22.
- Holbrook, T. M. (1999). Political learning from presidential debates. *Political Behavior*, 21, 67-89.
- Holbrook, T. M. (2002). Presidential campaigns and the knowledge gap. *Political Communication*,

19, 437-454.

Hollander, B. (1995). The new news and the 1992 presidential campaign: Perceived versus actual political knowledge. *Journalism and Mass Communication Quarterly*, 72, 786-798.

Iyengar, S., & Simon, A. F. (2000). New perspectives and evidence on political communication and campaign effects. In S. T. Fiske, D. L. Schacter, & C. Zahn-Waxler (Eds.), *Annual review of psychology* (pp. 149-169). Palo Alto, CA: Annual Reviews.

Johnson-Cartee, K. S., & Copeland, G. (1989). Southern voters' reaction to negative political ads in the 1986 election. *Journalism Quarterly*, 66, 888-893, 986.

Johnson-Cartee, K. S., & Copeland, G. A. (1991). *Negative political advertising: Coming of age*. Hillsdale, NJ: Lawrence Erlbaum.

Johnson-Cartee, K. S., & Copeland, G. A. (1997). *Inside political campaigns: Theory and practice*. Westport, CT: Praeger.

Just, M. R., Crigler, A. N., Alger, D. E., Cook, T. E., Kern, M., & West, D. M. (1996). *Crosstalk: citizens, candidates, and the media in a presidential campaign*. Chicago: University of Chicago Press.

Just, M., Crigler, A., & Wallach, L. (1990). Thirty seconds or thirty minutes: What viewers learn from spot advertisements and candidate debates. *Journal of Communication*, 40, 120-133.

Kahn, K. F. & Kenney, P. J. (1999) *The spectacle of U. S. Senate campaigns*. Princeton, NJ: Princeton University Press.

Kahn, K. F., & Kenney, P. J. (2000). How negative campaigning enhances knowledge of Senate elections. In J. A. Thurber, C. J. Nelson, & D. A. Dulio (Eds.), *Crowded airwaves: Campaign advertising in elections* (pp. 65-95). Washington: Brookings.

- Kaid, L. L., & Johnston, A. (1991). Negative versus positive television advertising in U. S. presidential campaigns, 1960-1988. *Journal of Communication*, 41, 54-64.
- Lau, R. (1985). Two explanations for negativity effects in political behavior. *American Journal of Political Science*, 29, 119-138.
- Lau, R. R., & Pomper, G. M. (2004). *Negative campaigning: An analysis of U. S. Senate elections*. Lanham, MD: Rowman and Littlefield.
- Lau, R. R., Sigelman, L., Heldman, C., & Babbitt, P. (1999). The effects of negative political advertisements: A meta-analytic assessment. *American Political Science Review*, 93, 851-875.
- Lazarsfeld, P. F., Berelson, B., & Gaudet, H. (1948). *The people's choice: How the voter makes up his mind in a presidential campaign* (2nd ed.). New York: Columbia University Press.
- Marcus, G. E., & MacKuen, M. B. (1993). Anxiety, enthusiasm, and the vote: The emotional underpinnings of learning and involvement during presidential campaigns. *American Political Science Review*, 87, 672-685.
- Markus, G. B. (1979). *Analyzing panel data*. Beverly Hills, CA: Sage.
- Mayer, W. G. (1996). In defense of negative campaigning. *Political Science Quarterly*, 111, 437-455.
- Mondak, J. J. (1995). *Nothing to read: Newspapers and elections in a social experiment*. Ann Arbor: University of Michigan Press.
- Moore, D. W. (1987). Political campaigns and the knowledge-gap hypothesis. *Public Opinion Quarterly*, 51, 186-200.
- Neuman, W. R., Just, M. R., & Crigler, A. N. (1992). *Common knowledge: News and the construction of political meaning*. Chicago: University of Chicago Press.

- Norris, P., & Sanders, D. (2003). Message or medium? Campaign learning during the 2001 British general election. *Political Communication*, 20, 233-262.
- Patterson, T. E. (1980). *The mass media election: How Americans choose their president*. New York: Praeger.
- Patterson, T. E. (1993). *Out of Order*. New York: Knopf.
- Patterson, T. E., & McClure, R. D. (1976). *The unseeing eye: The myth of television power in national politics*. New York: G. P. Putnam's Sons.
- Pinkleton, B. (1997). The effects of negative comparative political advertising on candidate evaluations and advertising evaluations: An exploration. *Journal of Advertising*, 26, 19-29.
- Pinkleton, B. E., & Garramone, G. M. (1992). A survey of responses to negative political advertising: Voter cognition, affect and behavior. In Leonard N. Reid (Ed.), *Proceedings of the 1992 conference of the American Academy of Advertising* (pp. 127-133).
- Popkin, S. L. (1991). *The reasoning voter: Communication and persuasion in presidential campaigns*. Chicago: University of Chicago Press.
- Popkin, S. L. (1992). Campaigns that matter. In M. D. McCubbins (Ed.), *Under the watchful eye: Managing presidential campaigns in the television era* (pp. 153-170). Washington: CQ Press.
- Price, V., & Zaller, J. (1993). Who gets the news? Alternative measures of news reception and their implications for research. *Public Opinion Quarterly*, 57, 133-164.
- Rahn, W. M. (1993). The role of partisan stereotypes in information processing about political candidates. *American Journal of Political Science*, 37, 472-496.
- Rhine, S. L., Bennett, S. E., & Flickinger, R. S. (2001). Gaps in Americans' knowledge about the Bosnian civil war. *American Politics Research*, 29, 592-607.

- Riker, W. H. (1989). Why negative campaigning is rational. Paper presented at the annual meeting of the American Political Science Association, Atlanta, GA.
- Robinson, J. P., & Levy, M. K. (1986). *The main source: Learning from television news*. Beverly Hills, CA: Sage.
- Sabato, L. J., Stencel, M., & Lichter, S. R. (2000). *Peep show: Media and politics in an age of scandal*. Lanham, MD: Rowman and Littlefield.
- Shapiro, M. A., & Rieger, R. H. (1992). Comparing positive and negative political advertising on radio. *Journalism Quarterly*, 69, 135-145.
- Sigelman, L., and Bullock, D. (1991). Candidates, issues, horse races, and hoopla: Presidential campaign coverage, 1888-1988. *American Politics Quarterly*, 19, 5-32.
- Sigelman, L., & Kugler, M. (2003). Why is research on the effects of negative campaigning so inconclusive? Understanding citizens' perceptions of negativity. *Journal of Politics*, 65, 142-160.
- Spiliotes, C. J., & Vavreck, L. (2002). Campaign advertising: Partisan convergence or divergence? *Journal of Politics*, 64, 249-261.
- Vavreck, L., Spiliotes, C. J., & Fowler, L. L. (2002). The effects of retail politics in the New Hampshire primary. *American Journal of Political Science*, 46, 595-610.
- Weaver, D., and Drew, D. (1993). Voter learning in the 1990 off-year election: Did the media matter? *Journalism Quarterly*, 70, 356-368.
- Weaver, D., & Drew, D. (1995). Voter learning in the 1992 presidential election: Did the 'nontraditional' media and debates matter? *Journalism and Mass Communication Quarterly*, 72, 7-17.

- Weaver, D., & Drew, D. (2001). Voter learning and interest in the 2000 presidential election: Did the media matter? *Journalism and Mass Communication Quarterly*, 78, 787-798.
- Weaver-Lariscy, R. A., & Tinkham, S. F. (1996). Use and impact of direct mail in the context of integrated marketing communications: U. S. congressional campaigns in 1982 and 1990. *Journal of Business Research*, 37, 233-244.
- West, D. M. (1994). Political advertising and news coverage in the 1992 California U. S. Senate campaigns. *Journal of Politics*, 56, 1053-1075.
- West, D. M. (2001). *Air wars: Television advertising in election campaigns, 1952-2000* (3rd ed.). Washington, DC: CQ Press.
- Zaller, J. R. (1992). *The nature and origins of mass opinion*. Cambridge: Cambridge University Press.
- Zaller, J. R. (1996). The myth of massive media impact revived: New support for a discredited idea. In D. C. Mutz, P. M. Sniderman, & R. A. Brody (Eds.), *Political persuasion and attitude change* (pp. 17-78). Ann Arbor: University of Michigan Press.
- Zhao, X., & Bleske, G. L. (1995). Measurement effects in comparing voter learning from television news and campaign advertisements. *Journalism and Mass Communication Quarterly*, 72, 72-83.
- Zhao, X., & Bleske, G. L. (1998). Horse-race polls and audience issue learning. *Harvard International Journal of Press/Politics*, 3, 13-34.
- Zhao, X., & Chaffee, S. H. (1995). Campaign advertisements versus television news as sources of political issue information. *Public Opinion Quarterly*, 59, 41-65.

Table 1
Learning in the 1998 Florida Governor's Race

A.	Issue Awareness	Wave One		Wave Two		Wave Three	
		<u>Percent Corrected</u>		<u>Percent Corrected</u>		<u>Percent Corrected</u>	
	Gun Laws	43.2	29.9	46.8	31.8	63.3	45.8
	School Vouchers	42.2	23.3	62.1	43.8	79.4	67.9
	Education	39.5	22.2	47.2	32.5	54.1	33.2
	Abortion	59.8	52.5	66.3	55.0	81.1	72.7
	Patient Rights	48.2	33.6	58.0	42.7	63.2	45.0
B.	Group Support Awareness	Wave One		Wave Two		Wave Three	
		<u>Percent Corrected</u>		<u>Percent Corrected</u>		<u>Percent Corrected</u>	
	Police	16.9	0.0	26.7	14.4	66.7	54.5
	Teachers	47.8	38.5	49.3	41.3	65.0	52.8
	Environmentalists	44.9	35.3	42.9	32.6	59.9	46.3
	Christian Coalition	56.5	51.8	56.5	49.5	67.3	59.5
	Tobacco Companies	46.5	38.9	47.8	40.8	66.7	60.9

Source: *South Florida Sun-Sentinel* panel survey of registered voters, July-November 1998 (N = 301).

Note: The first set of entries for each wave indicates the percentage of all panel respondents who matched the appropriate candidate with a policy position or group endorsement. The second set of entries presents these percentages corrected for guessing (see text).

Table 2
Magnitude of Change (Learning) in the 1998 Florida Governor's Race

A.	Issue Awareness	Wave One-Wave Two		Wave Two-Wave Three		Wave One-Wave Three	
		<u>Percent Corrected</u>		<u>Percent Corrected</u>		<u>Percent Corrected</u>	
	Gun Laws	3.6	1.9	16.5	14.0	20.1	15.9
	School Vouchers	19.9	20.5	17.3	24.1	37.2	44.6
	Education	7.7	10.3	6.9	0.7	14.6	11.0
	Abortion	6.5	2.5	14.8	17.7	21.3	20.2
	Patient Rights	9.8	9.1	5.2	2.3	15.0	11.4
B.	Group Support Awareness	Wave One-Wave Two		Wave Two-Wave Three		Wave One-Wave Three	
		<u>Percent Corrected</u>		<u>Percent Corrected</u>		<u>Percent Corrected</u>	
	Police	9.8	14.4	40.0	40.1	49.8	54.5
	Teachers	1.5	2.8	15.7	11.5	17.2	14.3
	Environmentalists	- 2.0	- 2.7	17.0	13.7	15.0	11.0
	Christian Coalition	0.0	- 2.3	10.8	10.0	10.8	7.7
	Tobacco Companies	1.3	1.9	18.9	20.1	20.2	22.0

Source: *South Florida Sun-Sentinel* panel survey of registered voters, July-November 1998 (N = 301).

Note: Table entries indicate change in the proportion of respondents who match the appropriate candidate with a policy position or group endorsement. The first set of entries for each of the three time intervals is based on actual percentages, the second set on percentages corrected for guessing (see text and Table 1).

Table 3
Predicting Issue and Group Support Awareness in Wave One

	<u>Issue Awareness</u>	<u>Group Support Awareness</u>
Newspaper Exposure	.024 (.016)	.027 (.017)
TV News Exposure	-.050* (.019)	-.056* (.020)
Political Knowledge	.272* (.029)	.343* (.031)
Campaign Interest	.240* (.058)	.340* (.061)
General Political Interest	.234* (.057)	.254* (.061)
Partisan Strength	.167* (.052)	.238* (.054)
Party ID/Republican	-.214 (.186)	-.233 (.195)
Party ID/Democrat	.384* (.178)	.197 (.188)
Gender/Female	-.030 (.081)	-.046 (.084)
Age	-.004 (.003)	-.013* (.003)
Education	.001 (.016)	.010 (.016)
Race/Black	-.199 (.161)	-.097 (.166)
Constant	-2.574	- 2.769
Null deviance	1302.64 (df 576)	1394.96 (df 576)
Residual deviance	974.08 (df 564)	967.16 (df 564)
N	286	286

Source: *South Florida Sun-Sentinel* panel survey of registered voters, wave one, July-August 1998.

Note: Table entries are unstandardized binomial regression coefficients (standard error in parentheses). Coefficients with asterisks (*) are significant (2-tailed test) at $p \leq .05$.

Table 4
Predicting Changes in Issue and Group Support Awareness

	<u>Wave Two</u>		<u>Wave Three</u>	
	<u>Issue Awareness</u>	<u>Group Support Awareness</u>	<u>Issue Awareness</u>	<u>Group Support Awareness</u>
Issue /Group Support Awareness (t ₁)	.246*	.428*	---	---
Issue/Group Support Awareness (t ₂)	---	---	.204*	.228*
Newspaper Exposure (t ₁)	-.049*	-.066*	.005	.003
TV News Exposure (t ₁)	.009	.020	-.021	-.008
Attention to Campaign: Newspapers	.070	.086	.078	.070
Attention to Campaign: TV News	.012	.059	-.018	.063
Overall Attention to TV Ads	.011	-.025	.067	.025
Perceived Bush Negativity	.180*	.054	.123*	.157*
Perceived MacKay Negativity	-.005	-.008	.025	.014
Gubernatorial Debate	---	---	.073	.001
Political Knowledge (t ₁)	.188*	.115*	.156*	.202*
Campaign Interest	.184	.139	.055	.129
General Political Interest (t ₁)	.087	.146	.035	.110
Partisan Strength (t ₁)	.020	.052	-.012	-.037
Party ID/Republican (t ₁)	.040	-.265	-.267	.131
Party ID/Democrat (t ₁)	.263	-.155	.249	.226
Gender/Female (t ₁)	.028	-.043	-.016	-.127

continued on next page

Table 4, continued

	Wave Two		Wave Three	
	<u>Issue Awareness</u>	<u>Group Support</u>	<u>Issue Awareness</u>	<u>Group Support</u>
Age (t ₁)	-.004 (.004)	.002 (.004)	-.006 (.004)	-.012* (.004)
Education (t ₁)	.035 (.020)	.042* (.021)	.031 (.022)	-.013 (.022)
Race/Black (t ₁)	-.242 (.200)	-.354 (.213)	-.091 (.223)	-.003 (.224)
Constant	-2.976	-3.238	-2.127	-1.552
Null deviance	666.97 (df 352)	818.97 (df 352)	427.10 (df 286)	510.89 (df 286)
Residual deviance	389.47 (df 334)	461.49 (df 334)	244.21 (df 267)	312.88 (df 267)
N	285	285	273	273

Source: *South Florida Sun-Sentinel* panel survey of registered voters, July-November 1998.

Note: Table entries are unstandardized binomial regression coefficients (standard error in parentheses). Coefficients with asterisks (*) are significant (2-tailed test) at $p \leq .05$. Independent variables (left column) are measured in the same wave as the dependent variable unless otherwise noted.