

6

Comparing the American National Election Studies and the National Annenberg Election Survey for Political Communication Research¹

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In the ongoing pursuit to better understand how politics works, scholars regularly explore how the process citizens use to seek, learn, and retain information improves our understanding of why people think, reason, feel, and behave in the ways that they do with respect to political choices and outcomes. At its heart, this quest is about political communication: the study of the transmission of information between political actors, the news media, and the public. While social scientists regularly examine why people vote the way they do, their communicative process of decision-making, and how they make sense of politics in an increasingly mediated world, it is equally important to understand the advantages and disadvantages of the sources of information scholars use to answer these important questions.

In the spirit of comparative evaluation, this chapter closely scrutinizes two of the most prominent measures of the democratic blood flow, the American National Election Studies (ANES) and the National Annenberg Election Survey (NAES). On the one hand, both the ANES and NAES are overlapping treasure troves of invaluable data for political communication research. On the other hand, each project's central mission, depth, breadth, and overall design have particular strengths and limitations that scholars should be mindful of when undertaking scholarly analysis.²

It is tempting to think of the ANES as “political science data” and the NAES as “communication studies data” given the traditional differences in scholarly focus between the two disciplines. Yet when considering political science's historical focus on the constrained use of power (Goodin & Klingemann 1996) and “who gets what, when and how” (Lasswell 1950) and the focus of communication research on how people use different messages to engender meanings both within and across a variety of media, cultures, and contexts,³ both the ANES and NAES concomitantly serve political science, communication research, and related social science disciplines in useful and important ways. While the two surveys have different missions, instruments, and research designs, a comparison of the ANES and NAES suggests that the complementary and

even synthetic, use of each of these unique resources is a productive way to advance political communication scholarship.

This chapter proceeds as follows: first, I sketch the history of both the ANES and NAES; second, I explore the most crucial elements of each survey's research design; third, I examine each survey in the context of its utility in uncovering both traditional and new questions in political communication research; and lastly, I make some brief comparisons of the ANES and NAES to other prominent secondary data sources and offer some recommendations for future iterations of each survey. Together and individually, the ANES and NAES cast a great deal of light on the influence of political communication on public preferences, political behavior, and political outcomes.

ORIGINS OF THE ANES AND NAES

Before the National Science Foundation officially launched the National Election Studies in 1977, two centers housed within the Institute for Social Research at the University of Michigan—the Survey Research Center and Center for Political Studies—had conducted an unbroken series of national election surveys from 1952 to 1976 focusing on presidential and midterm elections. Presidential election years always include a pre and post-election survey while the midterm election surveys occur only after the votes have been cast. Regularly, the ANES conducts panel surveys over three-election periods interviewing the same respondents at different points in time in order to more precisely explore change and continuity in public opinion and political behavior.

Originally and most famously reported by Campbell, Converse, Miller, and Stokes (1960) in *The American Voter*, the ANES' genesis comes from a study led by Campbell and Kahn during the 1948 election (Carmines & Huckfeldt, 1996). The ICPSR's website lists the scope of study for the ANES as:

a time-series collection of national surveys fielded continuously since 1952. The election studies are designed to present data on Americans' social backgrounds, enduring political predispositions, social and political values, perceptions and evaluations of groups and candidates, opinions on questions of public policy, and participation in political life.

The mission of the ANES is to provide a wide swath of data from individual interviews, which allows researchers to explore a variety of hypotheses seeking to explain election outcomes across individuals, varying contexts, and time.⁴ The formal establishment of the ANES by the NSF allowed the survey's designers to move beyond merely extending the time-series into the realm of pursuing better measures and methodological innovations. In 2006, the ANES did not conduct a midterm election survey; though a pilot study was conducted to test new questions and examine innovative survey methods. Thus, the ANES' presidential time-series remains unbroken, while the midterm election time-series unfortunately has stopped.⁵ Current principal investigators are Jon Krosnick of Stanford University and Arthur Lupia of the University of Michigan.

Beginning in 2000, the National Annenberg Election Survey (NAES) challenged Holbrook's (1996) assertion that presidential campaigns have minimal (at most) effects on election outcomes by following the guiding assumption that "understanding campaign dynamics is important because campaigns do matter" (Jamieson & Kenski, 2006, p. 1). Housed at the Annenberg Public Policy Center of the University of Pennsylvania, the survey's co-directors for 2008 were Kathleen Hall Jamieson, Richard Johnston, and Diana Mutz. The ambitious design of the NAES is meant

to allow for systematic analysis of particular events that occur at unpredictable times during an election cycle by providing public opinion data (from national telephone surveys in 2000 and 2004; from phone and Web surveys in 2008) for each day of the race for the White House. For example, the 2004 NAES began telephone interviews on October 7, 2003 and ended them on November 16, 2004. Rather than merely drawing a single sample in the fall of an election year, the NAES begins several months earlier, combining a rolling cross-section (RCS) and several smaller panel studies (usually around presidential debates and key primaries) from the beginning of the election season through a few days after the election. As is currently the case for the ANES, the NAES is only concerned with presidential election years, an unfortunate limitation preventing scholars from examining non-presidential-year political communication, and non-election-centric political communication more generally.⁶

ELEMENTS OF RESEARCH DESIGN: CONVERGENCE AND DIVERGENCE

ANES Research Design

After the survey instrument is designed, the American National Election Studies' examination of public attitudes begins with a pretest of about 30 respondents who are administered the penultimate draft of the survey.⁷ The pretests are recorded so that ANES interviewers can hear examples of problems that can come up during the interview process such as an interviewer departing from the question text or a respondent giving a non-responsive answer to a question. An extensive debriefing of these respondents informs the principal investigators of problems with question order effects, confusing questions, and respondent fatigue.

With a completed survey instrument in hand, the ANES implementation process proceeds in three phases: drawing the sample, conducting the interviews, and readying the data for dissemination.

While simple random sampling is the classic, most representative way to assess public opinion, the ANES engages in a multi-stage area probability design. Step one of such a process is to divide the country into four geographic regions, each of which contains a number of randomly selected counties and standard metropolitan statistical areas for analysis (Erikson & Tedin 2007). The second step is to select the area that will be sampled (i.e., sub-sampled places of Census Enumeration Districts).⁸ This leads to the third step, randomly sampling a specific housing unit, and the fourth step, randomly selecting an eligible member of the household for the interview.

ANES interviews are conducted face-to-face. From the 1940s to the 1990s respondents completed interview booklets. Beginning in 1996 the ANES began using Computer Assisted Personal Interviewing (CAPI), which allows face-to-face interviewers to take advantage of similar Computer Assisted Telephone Interviewing (CATI) on a laptop computer. In-person interviewing has the advantage of a high response rate, which for the ANES has never fallen below 59.8%.

Each ANES survey includes special themes or new topics, many of which are particularly useful for political communication scholars. In 1974, media use patterns were carefully explored for the first time; in 1976, questions sought to examine how the media and presidential debates affected political learning. Social network questions were added in 1980, as were survey items gauging public policy preferences and perceptions of leadership. Questions allowing for the integration of political communication and political psychology perspectives have been regularly added to the ANES as well. Measures of individualism and egalitarianism were added in 1984; additional questions concerning political knowledge and values came along in 1986; a racial stereotypes battery was added in 1992; while the 2000 survey brought with it more questions about

social trust, networks, and cognitive style. Typically, new measures of this kind are added to the ANES after being established elsewhere.

ANES survey instruments are developed by its PIs and diverse Board of Overseers and the ANES community, broadly construed.⁹ The research agendas of the board and other cutting-edge work in the discipline often leads to the addition (or subtraction, as scholars leave the board) of particular questions. Typically, the Board of Overseers is made up of political scientists, though the 2005–2009 board includes those with a joint appointment in departments of political science and communication, a psychologist, sociologists and economists.

Recently, the ANES has added an “Online Commons” where social scientists and interested citizens can propose questions that they would like included on the ANES instrument. Indeed, in order for a question to be added to the ANES, it must be posted on the Online Commons. For example, the use of the Online Commons resulted in a new battery of media use questions, which are described below. It should be noted that this process requires significant commitment from the scholars seeking to improve the ANES instrument as proposed questions must win the competition to be pilot tested, actually get pilot tested and analyzed, and only then added to the survey instrument. Over 600 scholars have participated in the process and, thus, the construction of the 2008 ANES, including (as an example) a special competition that was held to develop questions to gauge public attitudes about terrorism and homeland security.¹⁰ The introduction of the Online Commons should help the ANES to quickly and transparently respond to suggestions for modifications to the main survey, which has historically been constrained by its mission and efforts to preserve measures over time.

Prior to this innovation, the ANES began including several questions about Congress into the “core” instrument in 1978. Many questions, mostly dealing with the amount of contact respondents had with their representatives and congressional candidates were discontinued in 1994, but other questions relating to congressional approval, recall of one’s representative in the House, and candidate likes and dislikes have remained in subsequent years.

A notable innovation in the 2008 ANES is the decision to record respondents’ response times. Response latency measures have long been used in psychology (Fazio, 1990) and political science (Huckfeldt, Sprague, & Levine 2000). With the measurement of response times, the ANES will open a new door for political communication scholars to measure the accessibility of knowledge, communicative processes, issue preferences, and political choices. The addition of the Online Commons makes it more likely that theoretical and methodological innovations will take less time to find their way into the ANES.

ANES Panel Data

While the central purpose of the ANES is to allow scholars to explore the reasons why a particular election season turned out the way that it did, many important trends in American politics can only be uncovered with the use of panel data involving the reinterviewing of the same respondents at different points in time (see Eveland and Morey, Chapter 2 this volume). While panels naturally suffer from attrition (the 2000–2002–2004 ANES panel interviewed 1,807 respondents in 2000, 1,187 in 2002, and 840 in 2004), they have the ability to explore changes over time on topics including abortion, affirmative action, party identification, candidate evaluations, political knowledge, and evaluations of Congress. Panel data that include media measures, such as the 2000–2002–2004 ANES panel, are especially useful for political communication scholars, as they afford the opportunity to explore the stability of news viewing, whether respondents have seen campaign ads in presidential and congressional elections, and how media use and attention affect other attitudes, behaviors, and group identities over time (see Carsey and Layman 2006). In 2008,

the ANES conducted a six-wave, random-digit-dialing-recruited, panel study administered on the Internet. The panel remained in the field after the election to provide scholars with the ability to investigate public perceptions of the beginning of a new American presidency.

NAES Research Design

While the ANES typically relies on in-person interviewing during short periods from Labor Day to Election Day and from after the election to late December or early January, the NAES design consists of the largest academic telephone surveys ever administered in the United States. Whereas the ANES Cumulative File includes data from approximately 45,000 participants from 1948–2004, the NAES contains data from upwards of 200,000 respondents (in some form or another) for just 2000 and 2004 alone.

The major differences between the NAES and ANES begin with the mode of interviewing. The NAES is conducted via the telephone using numbers generated by random digit dialing.¹¹ As such, the NAES questionnaire, while lengthy, is much shorter than the ANES survey instrument, since it is quite difficult to keep respondents on the phone for more than half an hour. To maximize the number of questions asked of respondents, the NAES often engages in “split sample” interviews, where selected questions are asked of some respondents but not others. Typically, this is done randomly. Split samples are most often used to ask additional questions, conduct survey experiments, and test question wording effects. The split sample gives scholars access to more information to analyze; of course, sample size suffers from carving respondents out of particular question batteries.

Keeping up with the range and timing of the NAES sample splits requires careful attention. For example, a standard election season question such as “how would you rate economic conditions in this country today—would you say they are excellent, good, fair, or poor?” was asked of every respondent from October 7, 2003 to October 29, 2004. The question was then asked of a random half of the samples drawn from October 30 to November 1, 2004 and was asked of all respondents again until November 16, 2004. Other questions, such as whether respondents would favor repealing tax cuts for the wealthy to pay for health insurance, are asked for a shorter period of time (e.g., February 19 to May 25, 2004) and of a smaller, random set of each day’s respondents (one-third of all respondents in this case). Investigators must pay attention to issues of statistical power when running multivariate analyses with a high number of variables containing randomly assigned split samples (Zaller, 2002), although in most cases this problem should be offset by the size of the NAES sample.

When it comes to standard variables of interest to the political communication scholar, far fewer questions are asked of split samples. The core media use battery, for example (which is discussed below), is asked of all participants on all dates of the survey. When the sample is split, it is typically to test the wording of the question at hand, as is the case when the NAES splits the sample in half for a question about the frequency with which presidential campaign information was accessed or read online. Standard political discussion questions are also present on all dates for all respondents, while others, such as whether respondents tried to influence the votes of others, are asked at intermittent points during the election season to one-third of a given day’s sample.

The centerpiece of the NAES is an RCS design, which was in the field from December 1999 through January 2001 for the 2000 election and from October 2003 through mid-November 2004 for the contest between President George W. Bush and Senator John Kerry.¹² During the primary season and the summer before the election, the NAES conducts about 100 random-digit-dialed interviews per day, tripling that number during the final months of the campaign. The number of interviews can pick up day-to-day changes, allowing for the actual testing of the oft-stated

proposition that “overnight is a lifetime in politics.” The response rate for the NAES in 2004 ranged between 25 and 31%, falling well short of the ANES rate, which averages well over 60%,¹³ while the cooperation rate—the rate at which people agreed to be surveyed upon being reached—was a much more respectable 53%.

Because each iteration of the NAES spans a period of well over a year, some survey questions are dropped from the instrument over time while others are added, reflecting the ebbs and flows of issues, salient candidate traits, and information present in the campaign environment. There are advantages and disadvantages to this approach. On the one hand, the NAES’ strategy provides maximum flexibility with respect to the kinds of information gathered during the campaign. On the other hand, dropping and adding questions prevents scholars from uncovering long-term within-campaign effects for questions that are not asked on all dates. Perhaps the most prominent example of information lost occurred with the NAES’ 2004 campaign advertising battery, which asked respondents if they had seen and learned anything from political ads that season. The NAES asked the most useful portions of the television advertising battery from April to May 2004,¹⁴ stopping long before most voters started tuning in and paying attention to the race for the White House—and long before candidates (and special interest groups) saturated swing states with commercials!¹⁵

To its credit, the 2004 NAES did return to questions about advertising in August with items about the “Swift Boat” ads against John Kerry. The unique flexibility of the NAES’ design allows for the inclusion of questions as issues like the “swift-boating” of John Kerry come up; at the same time, the last NAES questions about the “Swift Boat” issue or other campaign advertising-related issues were asked in August, long before Election Day.

The Wisconsin Advertising Project codes political television advertisements for the U.S. House, Senate and gubernatorial races for 1996, 2000, 2002, and 2004 (<http://wiscadproject.wisc.edu/project.php>). Given the data gathered by the Wisconsin Advertising Project, which tracks finely grained information about campaign advertisements such as advertisement tone, content, and placement (i.e., when it aired), cutting off the advertising battery in May is a missed opportunity, especially when coupled with the NAES’ lack of any questions about congressional campaign ads. Since the NAES’ sample size is so large, many congressional districts receive enough coverage to investigate how campaign ads influence congressional vote choice, roll-off, political knowledge, split-ticket voting, and other questions relevant to political behavior.

On the upside, the rolling cross-sectional design of the NAES allows investigators to capture the potential effects of campaign-relevant events that pop up briefly well before Election Day that would otherwise be lost. Take the following examples: the NAES asked respondents for a week in April 2004 whether they watched Condoleezza Rice’s 9/11 Commission testimony; early in the primary season, the NAES asked which Democratic candidate was proposing universal health care; and the Annenberg team fielded a variety of questions after each presidential debate in the general election between Bush and Kerry, providing the opportunity for scholars to assess what impact these campaign dynamics had at the time they occurred and whether there were any lingering effects on the campaign’s outcome.

NAES Panel Data

The ANES’ panel data afford scholars the opportunity to investigate change and continuity among respondents over several election years. The NAES includes several panels in its research design that allow for the exploration of short-term effects on respondents during a *single* election cycle. Particularly impressive is the sheer number of respondents in NAES’ panel studies. In 2000, between 1,500 and 6,500 respondents were sampled in panels before and after the Iowa caucuses,

the New Hampshire primary, Super Tuesday, the South Carolina and Michigan primaries, each party's convention, each presidential debate, and throughout the primary and general election season (from January to December).

In 2004, fewer panels were fielded and these focused on the conventions and a presidential debate, and tracked voter support of candidates throughout the election season (from July to December) (Romer et al., 2006). Indeed, the availability of these data presents an auspicious opportunity for political communication scholars to conduct media content analyses of these events to facilitate fine-grained examinations of potential media effects at a variety of important stages in a campaign. For example, Marjorie Hershey (1992) has shown how the news media "constructs" explanations for why candidates won presidential elections. With content analysis of debate coverage coupled with the NAES panels, scholars could compare evaluations of the presidential candidates immediately following a debate to evaluations after media constructions (should they develop) of who won the debate and why. Even though the NAES has only been in existence for three presidential elections, the rolling cross-sectional design allows for the introduction of time-series analysis (see Kenski, Gottfried, & Jamieson, Chapter 3 this volume; Jerit & Simon, Chapter 24 this volume).

The 2008 NAES is especially innovative. Included in the rolling cross-sectional design is a five-wave panel with over 19,000 respondents and data points covering the entire duration of the 2008 campaign season, complete with surprising wins, the rise and fall of Rudy Giuliani, a misty-eyed Hillary Clinton before New Hampshire, the Obama–Rev. Jeremiah Wright controversy, Sen. McCain's Sunni/Shiite gaffe overseas, and so forth. Given the NAES' willingness to add questions as campaign events unfold (e.g., gaffes, dramatic results, and feeding frenzies), the enormous panel size is an extraordinarily useful feature of the NAES. While the ANES' traditional pre- and post-election survey design gives scholars some leverage to explore media effects like agenda-setting (Kiousis & McCombs 2004; McCombs & Shaw 1972), framing (Brewer 2003; Druckman 2004), and priming (Iyengar & Kinder 1987), the NAES' rolling cross-sectional design—including panels in 2000 and 2004 and a five-wave panel in 2008—allow for uniquely precise analyses that can shed new light on the conditions under which these recognized media effects are present in presidential electoral politics. The 2008 NAES also interviews a considerable number of respondents online, enabling comparisons of web-based and CATI survey responses (see Johnston, 2008 for complete details of the NAES' move to Web-based surveys of campaign dynamics).¹⁶

SURVEY INSTRUMENTATION: UNCOVERING SHORT- AND LONG-TERM MEDIA EFFECTS

Media Use

Of crucial importance to the political communication scholar is the prevalence of media use questions present in any survey data set. At the same time, as Price and Zaller (1993) argue, "students of political communication would do well in many cases to abandon their normal reliance on self-reported levels of news media exposure and look instead to prior political knowledge as the preferred general indicator of news reception" (p. 160). Impressively, Price and Zaller base their conclusions on analyses of the 1989 ANES Pilot Study, which included a wider variety of media exposure questions than are normally present in the "core" survey instrument. Putting this important insight aside for the moment, it is still valuable to inspect the ANES media use offerings, compare them to the NAES media exposure and opinion battery, and scrutinize some proposed innovations to both survey instruments.

The ANES' contemporary battery of media exposure questions has its roots in the 1980 and 1984 studies; thus, they are comparable for about three decades of over-time analysis. Several additional media use questions are present in the 1989 pilot study, tapping differences in respondents' use of national, local, and "infotainment"-type news programs (such as *Good Morning America*) in national and local settings. Unfortunately, no set of media use questions have been consistently asked throughout the entire lifespan of the ANES cumulative file (1948–2004), making ANES-based analyses of media use over time exceptionally limited and challenging. A battery of questions became consistent starting in 1984, with the addition of a media trust question in 1996. Additionally, some media use questions are only asked in presidential years, making comparisons to midterm elections impossible. Perhaps more frustrating for the longitudinally-minded investigator, some political communication measures are included in seemingly random ways. For example, the ANES asks respondents whether they watched presidential debates in 1976, 1980, 1984, 1996, and 2000 but does not ask the same debate question in 1988, 1992, and 2004.

These are not the only problems with the ANES media exposure questions. As items were added at different points in time, little effort was made to make questions comparable across different media. For instance, as Althaus and Tewksbury (2007) have pointed out, the ANES asks respondents to report the number of days in the past week they watched national television news and, separately, the number of days in the past week they read a newspaper; these are both interval-level measures. By contrast, the talk radio item simply asks whether the respondent listened to political talk radio, which is a nominal-level measurement. Thus, precise comparisons between the number of days voters might have watched television news or listened to political talk radio are not possible. Moreover, those who listened to radio news in a non-talk format (e.g., listeners of National Public Radio or local all-news AM stations) have no way of conveying that information to the ANES interviewer. Furthermore, the ANES is behind in measuring how, in the contemporary media landscape, citizens now acquire their political news, lacking a question, for instance, that gauges regular consumption of political news on the Internet (see Althaus & Tewksbury 2007; ANES 2004).¹⁷

Having comparable measures of the changing information environment is important for another reason. Prior (2007) demonstrates that as political information becomes increasingly available via the Internet, cable news channels and other information sources, including soft news and entertainment programs, are much more likely to be offered at the same time as traditional hard news program, easily allowing politically disinterested citizens to "opt-out" of watching or listening to the news (choosing, for example, a rerun of *Seinfeld* over the *NBC Nightly News with Brian Williams*). In his analyses, Prior demonstrates that the array of media choices that encapsulates contemporary political communication, a condition he refers to as "post-broadcast" democracy, increases political inequality and fosters partisan polarization due to the fact that those who opt out of political viewing subsequently know less about politics and participate less in political activities than those who voraciously consume political information.

Fortuitously, the 2006 ANES Pilot Study incorporated new measures that are yielding promising results. Indeed, the new measures included in the pilot address the lack of comparability between the previous media use questions about television and newspapers to items measuring talk radio exposure and Internet use. Simply changing the response set to include the number of days per week a respondent listens to radio news and surfs for information on the Internet should vastly improve our knowledge of the political information consumption habits of Americans. Interestingly, these four forms of media use found in the 2006 Pilot Study are not strongly predicted by demographic variables, partisan identification, or political knowledge (Althaus & Tewksbury 2007).

The 2006 pilot data illustrate that, while citizens are consumers of multiple forms of media, they do pick favorites. Reliance on multiple sources of news is particularly consequential: regular use of three of the four news sources on the battery of questions is positively correlated with political knowledge (Althaus & Tewksbury 2007). Indeed, this finding is interesting when juxtaposed with analysis of both cable and network television coverage of the 2006 congressional elections,¹⁸ which showed that television news users were more likely to vote for congressional Republican candidates while politically knowledgeable television viewers were more likely to vote for Democratic candidates for Congress (Carmines, Gerrity, & Wagner 2008).

Even more promising is the inclusion of psychological measures that, when combined with improved media use measures, will help scholars understand how citizens *process* the information they receive about politics. Taking seriously developments in social psychology, such as the Need for Cognition scale (Cacioppo & Petty 1982) in the 2004 ANES instrument and the Need for Closure scale (Kruglanski, Webster, & Klem 1993) in the 2006 ANES pilot, Althaus and Tewksbury (2007) chart a reasonable, yet exciting course for the future of measuring information consumption, retention, and processing. Crucially, Althaus and Tewksbury's (2007) proposal keeps the traditional "number of days" variable for both television and newspapers,¹⁹ providing much needed continuity for over-time analyses. If these or similar suggestions are not adopted by the ANES, the problems with the current media use battery outlined above will become even more pronounced as media technology continues to alter the ways in which citizens gather political information and participate in democratic processes (see Bucy & Gregson, 2001).

The media exposure battery on the NAES instrument represents a distinct advantage over nearly every iteration of the ANES. In addition to asking the network news and newspaper use questions, the NAES asks *which* network news program and newspaper respondents used the most. Nor does the NAES ignore the growth of cable news, asking identically worded questions about respondents' cable news viewing and most-watched cable news station. The NAES also uses its enormous sample to its advantage, asking if respondents watched Spanish language news) or BET (Black Entertainment Television), listened to NPR (National Public Radio) or other talk radio shows (and *which* talk radio program was listened to the most), or viewed late night comedy programs (along with the *most-watched* program). As noted above, the NAES also asks respondents if they have access to the Internet and whether they use the Web to stay current with political information. While sharing the ANES' inability to directly compare radio use to network and cable television as well as newspaper use, the NAES' battery is a marked improvement over what is typically found in the ANES.

Not surprisingly given its communication lineage, the NAES also asks questions regarding opinions about the news media and whether respondents saw particular salient episodes in the race for the White House. These kinds of questions are good examples of how the NAES measures public perceptions of the communicative process, something not found in the ANES. For example, for about eight weeks at the end of 2003 and beginning of 2004, the NAES asked if respondents believed that the news media were responsible for deciding the Democratic frontrunner. Cleverly, the NAES also asked who respondents thought that "media created" frontrunner was. Additionally, in the days directly after each presidential and vice presidential debate, the NAES asked whether the respondents watched the debate and, if so, on which channel?

A short trip from these media use items is each survey's questions measuring the influence of one's social communication networks on political beliefs and behavior. In the 2000 ANES survey, respondents were asked for the names of people with whom they discussed "important matters," a desirable way to measure political discussion within social networks as it increases the likelihood that respondents will name people with whom they both agree and disagree with politically (Huckfeldt, Johnson, & Sprague 2004). From an interpersonal communication perspec-

tive, the ANES always asks whether the respondent tried to persuade someone else how that person “should vote” in the upcoming election. A useful wrinkle in the NAES instrument is a measure of the prevalence with which respondents chat about politics online.

In the main, the NAES asked more and better media use questions than the ANES in 2000 and 2004, but the 2006 ANES Pilot Study fixed some old problems while adding additional questions, opening the door to new conceptual and empirical development with respect to information exposure and processing. A distinct advantage of using NAES data is the ability (via the rolling cross-section design) to determine *when* people started paying attention to the race and whether time of attention influences vote choice, partisan attitudes, political knowledge, and other outcomes of interest. That said, the ANES’ 2008 panel study will enable researchers to explore the times at which voters started attending to (or not) the election in much the same way as the NAES. Finally, users of both studies must remain mindful of issues including causal direction (e.g., does watching Fox News cause one to vote Republican or do Republicans just like watching Fox News?), measurement scales of different sizes, and selection bias since exposure to particular media outlets is not random, causal direction, and scales of different sizes (see Barabas 2008).

Issues and Evaluations

For all their utility, media exposure items may not be the most effective way for political communication scholars to test the influence of the mass media on public opinion and political behavior. Zaller (1996) uses a measure of political awareness to revive the idea that the news media have a substantial effect on public opinion. Both the ANES and NAES ask a half dozen or more political knowledge questions. The ANES asks general questions that are comparable over decades while the NAES presents an inventory of knowledge questions as well as more detailed explorations of what specific candidates for president support. With respect to traditional political knowledge measures, both surveys provide adequate data for most political communication research questions,²⁰ with the ANES holding an advantage for analysis over time and the NAES providing sharper measures of presidential campaign-related knowledge, including questions about which candidate is proposing to cut taxes.

Among other reasons, measures of media use and political awareness are important because scholars seeking to test hypotheses regarding agenda-setting, framing, priming, political learning, turnout, partisan attitudes, and voter choice require them as control variables. But what kinds of specific issues and respondent evaluations and attitudes do the ANES and NAES provide scholars the opportunity to scrutinize?

The NAES offers dozens of ways for respondents to evaluate presidential candidates (and their running mates) during both the general election and primary season. The NAES selects potentially relevant trait attributions and evaluative question topics that are consistent with media coverage of the campaign. In 2004, for example, respondents were asked whether George W. Bush or John Kerry was reckless, steady, knowledgeable, easy to like, trustworthy, prone to changing his mind, out of touch, and so forth.²¹ Unfortunately, many of these questions were not asked at all points of the election season, making analyses of whether and how media coverage affected general public preferences and judgments about the candidates challenging to disentangle.

While generally exploring fewer specific traits of candidates for office than the NAES, the ANES asks several “feeling thermometer”²² questions about candidates, political parties, organized interests, ethnic groups, religious groups, and the like. Feeling thermometer questions about major political parties and religious groups are consistently included in the ANES while measurements of feelings toward other kinds of groups such as young people and Independents are taken inconsistently. The ANES also routinely asks respondents to list their “likes and

dislikes” for candidates and political parties and whether there are important differences between the two major parties.

One distinct advantage of using the ANES is the ability to explore with identically worded questions attitudes on issues as diverse as government aid to blacks, abortion, women’s rights, health care, and whether the government should guarantee that its citizens have jobs over time.²³ Consistently available for two decades or more of inspection are questions concerning civil rights, school busing, government spending on social services, gay rights, affirmative action, and school prayer. Availability of attitude data about a wide variety of issues has facilitated systematic examination of the media’s role in the stability of public opinion (Page & Shapiro 1992), conflict extension (Carsey & Layman 2006), and issue ownership (Petrocik 1996), to name a few. Political communications scholars willing to content analyze media coverage or campaign advertising relating to these issues have decades of data to work with.

The NAES asks dozens of issue-related questions, but only a few (e.g., about the most important problems facing the nation, the state of the economy, war in Iraq) are used for all dates of the survey. Indeed, many issue questions are not present during the major portion of the general election, August through November. Some particularly unique questions that were asked for at least a few months during the 2004 election cycle included whether respondents had “personally benefited” from President Bush’s tax cuts, or favored the Medicare prescription drug law passed during President Bush’s first term, even in the face of counterarguments.

Institutions

By design, the NAES does not devote much attention to the legislative and judicial branches of government. General attitudes of favorability toward Congress and the judicial branch (including, but not limited to the Supreme Court) are measured for brief periods of time (October, 2003–April 2004) as is congressional vote choice. The ANES asks a wider variety of questions relating to respondents’ evaluations of congressional candidates, leaders, and partisans. Of course, given the NAES’ large *N*, political communication scholars can don a spelunker’s hat and dig deep into the data across different kinds of districts (competitive, uncontested, rural, urban) to explore a variety of questions with respect to what people know about Congress and how the information environment influences congressional approval and vote choice. Even though the NAES has a much shorter history than the ANES, the 2000 and 2004 studies already allow for pre- and post-redistricting comparisons of the ways in which voters receive information about Congress when redistricting affects how media markets overlap congressional districts (Engstrom, 2005; Winburn & Wagner, forthcoming).

From 1978 to 1994, the ANES asked respondents a battery of questions regarding citizens’ contact with and evaluations of their congressional representatives and challengers for seats in Congress, resulting in work on the “grateful electorate” (Yiannakis, 1981), the public’s view that congressional casework is increasingly partisan (Wagner, 2007b), and debates regarding the existence of legislator benefits gained by congressional communication with constituents (Johannes & McAdams, 1981). In his analysis of information and voting in congressional elections, Althaus (2001) used ANES to construct a new dependent variable in political communication research: voting estimates of a “fully informed” population, which views political communication as something that can happen from the “bottom up” (from citizens to political actors) as easily as it does from the “top down” (elite actors and the mass media to citizens). The current designs of the NAES and ANES make it difficult to find appropriate data to build on these kinds of political communication investigations about Congress.

Summary

A decided advantage for scholars using the ANES is the ability to examine political communication questions across decades. Indeed, as it gets easier to gather and code news coverage and political advertising data thanks to sources such as Lexis-Nexis,²⁴ the Vanderbilt Television News Archive,²⁵ Video Monitoring Service,²⁶ and the Wisconsin Advertising Project scholars are increasingly engaging in ambitious coding projects that can be merged with NAES and ANES data sets to ask more complex and precise questions about how news coverage and the content of political advertising affect public preferences and political behavior. Here, the ANES has had a 50-year head start. Studies such as Kellstedt's (2003) examination of how the mass media's framing of racial issues affected the dynamics of racial attitudes and more recent work on how the partisan framing of issues affected public awareness of elite differences on abortion and tax policy (Wagner, 2007a) rely on ANES and General Social Survey (GSS) public opinion data (see also Chong & Druckman's Chapter 13 in this volume on identifying frames in political communication research). Disadvantages include problematic measures of media use, changes in question wording, the current lack of a midterm congressional survey, and a comparatively small *N*, which can make uncovering media effects especially challenging (see Jerit & Simon, Chapter 24[sje1] this volume).

For its part, the NAES earns high marks for the length of time the survey instrument (or portions of it) is in the field, its nimbleness in reacting to events as they happen, inclusion of multiple panels, coverage of a wide variety of issue and knowledge questions asked at various points of the campaign season, and the large sample size. The statistical power afforded by the sample size alone could play a transformative role in helping to uncover small, but real media effects that are hidden from data sets containing too few respondents (Zaller, 2002). Additionally, the NAES should be praised for mailing free copies of University of Pennsylvania Press books with its data (and CDs of the data!) to members of political communication sections of prominent scholarly associations such as the American Political Science Association and International Communication Association.

ALTERNATIVE DATA SOURCES

Unfortunately, one of the ANES' major advantages over the NAES—namely, midterm studies, which allow for political communication scholarship relating to Congress, congressional campaigns, and comparing these races to presidential races—is a thing of the past now that the ANES will only occur in presidential election years. Fortunately, the midterm elections were systematically investigated in 2006 by a few key alternative research consortia, including the Cooperative Congressional Elections Study (CCES) and the Congressional Elections Study (CES) sponsored by the Center on Congress at Indiana University. The CES study includes a pre- and post-election telephone survey of over 1,100 respondents at each point in time. One innovation of the CES instrument relative to the ANES designs was to not only ask about issue preferences but also how *important* each issue was to respondents. The approximately 800-member panel allows for explorations of agenda-setting that do not rely on the “most important problem” measure. The CES, which over-samples competitive congressional districts, also includes several questions about public attitudes toward Congress, knowledge of the legislative branch, congressional behavior, and congressional elections. In terms of media usage, the CES asks respondents how often they consume newspapers, national television news, and local television news; it also includes an extensive battery of social network questions. In addition, the CES measures the “big

five” personality traits²⁷ and contains some embedded experiments gauged at estimating a variety of potential campaign effects.

The Cooperative Congressional Elections Study from Polimetrix is a Web-based survey of about 30,000 respondents from which scholars can purchase the use of 1,000 respondents (or buy more by sharing costs with co-authors, etc.) for the administering of about 120 questions.²⁸ The CCES features about 60 “common content” questions, counting the pre- and post-election surveys. These questions do not contain media use measures but do include measures of political knowledge (Price & Zaller, 1993; Zaller, 1996). The CCES, which is scheduled to run at least through 2010, completed surveys in 2006 and 2007 and fielded a 2008 survey with 37 participating research teams.²⁹

Also through Polimetrix, in 2008 the Cooperative Campaign Analysis Project conducted a six-wave, Web-based panel study of 20,000 respondents containing an over-sample of battleground and early primary states. As is the case with the CCES, CCAP participants purchase time to be included beyond the common content available to all co-investigators. For those political communication scholars unwilling to embrace Zaller’s (1996) suggestion to use political knowledge measures as a proxy for gauging media effects or purchase time on the surveys themselves, this common content would not be enough to do a great deal of political communication research.

Aside from data sources that are built around election cycles, there are many other resources available to the political communications scholar, including the General Social Survey and the data archives at the Roper Center (<http://www.ropercenter.uconn.edu/>), which provide a vast amount and wide array of survey data containing information about public attitudes, media use, social behavior, political behavior, and the like. Additionally, the Time Shared Experiments for the Social Sciences (TESS, www.experimentcenter.org), which has its roots in survey experiments conducted by Paul Sniderman (Sniderman & Carmines 1997), allows scholars to propose survey experiments that, if funded, are run on a national survey via the Internet and Web TV, helping to synthesize the generalizability of surveys with the ability to isolate causation afforded by experiments.

THE FUTURE OF THE ANES AND NAES: POTENTIAL INNOVATIONS

As the ANES and NAES further refine their research designs, one area to consider is the growing applications of biology, psychophysiology, and cognitive neuroscience to politics (Alford, Funk, & Hibbing, 2005; Hibbing & Smith, 2007; Lieberman, Schreiber, & Ochsner, 2003). While it would be impractical for the ANES and NAES to conduct physiological data collection or magnetic resonance imaging, the ANES could, given its face-to-face interviewing, collect genetic material (e.g., human cells drawn from a respondent’s cheek via a Q-tip) for analysis. While drawing blood is the best (and longest-lasting) way of collecting DNA, it can also be quite obtrusive and off-putting to respondents, driving down the ANES’ traditionally high response rate. Rather than giving blood, ANES respondents could simply consent to having their cheek swabbed to provide enough DNA for genetic analysis. As DNA-gathering technology improves, it is quite possible that relevant information from the respondent’s genetic material could be instantly downloaded onto the interviewer’s laptop, solving the problem of the shorter DNA “shelf life” of saliva samples compared to blood cells.

Of course, adding this measure would first require a sea change in the thinking of the ANES and the political science community more generally. Although “biopolitics” has existed as a recognized subfield for over two decades (Alford & Hibbing, 2008), with its own journal (*Politics and the Life Sciences*) and professional association, the biopolitical approach has not (as yet)

achieved mainstream status. Most behavioral genetics studies rely on samples of convenience (i.e. twins) (Segal, 1993; Neale & Cardon, 1992). With its multi-stage area probability design, the ANES could open doors for collaborations with behavioral geneticists and genetic scientists more generally to explore how particular political traits are represented in the population—and how these traits predict political dispositions, attitudes, and behaviors.

Adding questions from the Need for Cognition and Decisiveness scales will expand the ANES' psychological reach, though measures of other established cognitive perspectives, such as motivated reasoning, Bayesian updating, and online processing, remain absent from the ANES instrument (Barabas, 2008). Opening other information processing vistas, the NAES could employ response-latency timers on its CATI data. On the NAES' Web-based survey instrument, Implicit Association Test (IAT) technology could also be employed to study a wide array of political attitudes. The IAT is a technique used to induce people to reveal their implicit preferences about attitude objects (political views, racial/ethnic groups, etc.) that they may be unwilling or unable to intentionally reveal (see implicit.harvard.edu for demonstrations of IATs). Of course, such innovations are both financially expensive and costly in terms of respondent time, but their potential to generate new knowledge could be well worth the investment of both money and time.

Perhaps more affordable innovations could include the introduction of more survey-based (or "hybrid") experiments, as described by Iyengar (this volume). Examples include experiments that come in list form (Sniderman & Carmines, 1997), by varying whether issue frames are administered sans-label or with a partisan label (Sniderman & Theriault, 2004), and so forth. As the scholarship that has come out of the TESS project has illustrated, hybrid studies that incorporate probability sampling with experimental control can teach us a great deal about how citizens learn and use information in complex information environments.

Of course, both surveys should seek to introduce (NAES) or add to (ANES) psychological measures relating to how people process information. Now that a mountain of evidence demonstrates the existence of the "big five" personality factors, the previously intermittent attention political scientists and communication scholars paid personality is no longer justified (Mondak & Halperin, 2008). Given that variations in human personality affect a wide variety of attitudes and that there is considerable variation with respect to the ways in which humans engage in the political world, it is crucial to better understand whether there are "personality-based" antecedents to political behavior. A new cottage industry of work examining the role of personality, political preferences (Hibbing, Theiss-Morse, & Whitaker, 2008), and political behavior (Mondak & Halperin, 2008) provides the ANES and NAES with useful measures of personality and clues into how future scholars may combine political psychological approaches with political communication research (see Crigler, 1998).

In the end, the ANES and NAES are extraordinarily valuable, but often frustrating, data resources, each with their share of strengths and limitations. Both datasets provide scholars with the opportunity to estimate effects of communication processes on political preferences, behaviors, and outcomes. While the ANES asks more "political" questions and the NAES includes more media- and communication-related measures, both surveys provide ample opportunities to examine campaign dynamics as well as the political preferences, values, and civic participation of citizens.

Large research undertakings such as the NAES and ANES are fertile ground for collaborations and interdisciplinary projects, as they each generate data across a wide range of political variables, including candidate evaluations, political behavior, knowledge, psychology, and communication. Following Herrnson (1995) and King's (1995) call for greater replication in the social sciences, scholars can fruitfully employ the measures offered in the ANES and NAES to pursue the most important questions animating political communication research. With the NAES' emphasis on communication and electoral processes and the ANES' greater focus on political outcomes,

scholars would be wise to use these data resources in concert with each other to further uncover media effects, improve the generalizability of findings, and examine how variables present in one dataset but not the other bear on questions that animate political communication research. While the health of the measures tracing the body politic has been uneven at times, long-standing practices and recent innovations from both the “classic” (ANES) and “up and coming” (NAES) data sources bode well for the future of political communication research.

NOTES

1. I am grateful to R. Lance Holbert and Erik Bucy for their helpful, detailed comments and suggestions. I am also thankful to Diana Mutz for providing information on the 2008 NAES study. All interpretations of the ANES and NAES in this chapter and any remaining errors are solely my own responsibility.
2. The General Social Survey (GSS) is another prominent, over-time data source for scholars interested in political communication, though the survey construction has a more sociological orientation.
3. See <http://www.natcom.org/nca> and [http://www.natcom.org/nca/files/ccLibraryFiles/FILENAME/0000000181/NRC—Presentation%20Version%202.ppt#284,2,Communication Research](http://www.natcom.org/nca/files/ccLibraryFiles/FILENAME/0000000181/NRC—Presentation%20Version%202.ppt#284,2,Communication%20Research)
4. The sample universe for the ANES is all U.S. households in the “lower 48” states and the District of Columbia. Presently, the ANES uses a multi-stage area probability design (Erikson & Tedin, 2007). For more information, see www.electionstudies.org/overview/overview.htm
5. During the 2006 midterm elections, several other survey studies (most notably the 2006 Congressional Elections Study) sought to keep particularly important elements of the midterm time-series alive. In the interest of full disclosure, I was the project director for the 2006 CES at the Center on Congress at Indiana University. Ted Carmines was principal investigator. Co-PIs included Robert Huckfeldt, Jeff Mondak, John Hibbing, Walt Stone, Herb Weisberg, and Gary Jacobson.
6. The length of time that the NAES is in the field gives scholars interested in issues of political communication that are unrelated to elections plenty of data to analyze that is gathered 6 to 9 months before a federal election.
7. www.electionstudies.org/overview/implement.htm[0]
8. Census Enumeration Districts are specific geographic areas assigned to a census taker. Typically, an “ED” is simply a part of a town or county.
9. The current Board of Overseers includes political scientists John Aldrich, Stephen Ansolabehere, Henry Brady, Brandice-Canes Wrone, Kenneth Goldstein, Donald Green, John Mark Hansen (Chair), Vincent Hutchings, Paula McClain, Kathleen McGraw, Walter Mebane, Vincent Price, Gary Segura, Daron Shaw, and Paul Sniderman. It also includes sociologists Karen Cook and Lynn Smith-Lovin; social psychologist Richard Petty; and economists Catherine Eckel, Randy Olsen, and V. Kerry Smith.
10. Thanks to Arthur Lupia for this information about the 2008 ANES. The Online Commons Web address (registration required) is <http://www.electionstudies.org/onlinecommons.htm>
11. Web-interviews were added to the 2008 research design.
12. The Canadian National Election Studies pioneered the RCS in 1988 and 1993 (Johnston et al., 2004).
13. Face-to-face interviews typically have a higher response rate than telephone surveys.
14. Questions relating to direct mail and voter contact were included from January to March 2004.
15. In August 2004, a few questions were added about the “Swift Boat” ads, although they were asked for only a few days.
16. Bowers, Burns, Ensley, and Kinder (2005) and Bowers and Ensley (2003) discuss important differences in the results from the ANES’ RDD and CAPI respondents in 2000, suggesting that the mode of interviewing is important when it comes to comparing results across years. Indeed, NAES project director Richard Johnston expects respondents to be “franker” in the NAES Web-based surveys as compared to telephone surveys (http://www.annenbergpublicpolicycenter.org/Downloads/OnTheRecords/OntheRecord2_final_sept2007.pdf).
17. The 2008 ANES survey instrument included the 2006 Althaus/Tewksbury battery as a split sample with the traditional ANES media battery, allowing scholars to directly compare the two.

18. This study used survey data from the 2006 Congressional Elections Study which is referenced later in this chapter.
19. The instrument also includes “number of days” questions for use of the Internet and talk radio.
20. See Mondak, Carmines, Huckfeldt, Mitchell, and Schraufnagel (2007) for analyses showing how institution-specific questions—in this case about Congress—can improve our understanding of relevant political knowledge.
21. See Hayes (2005) for an analysis using the ANES measures of different traits from 1980–2004 and how they are ascribed to particular parties by voters.
22. Feeling thermometers measure favorable and unfavorable evaluations of attitude objects by asking respondents to rate their feelings about the attitude object (e.g., a candidate or political party); a temperature of 0 degrees represents very cool or negative feelings, 50 degrees represents moderate or lukewarm feelings, and 100 degrees represents very warm or positive feelings.
23. Unfortunately, the ANES’ abortion question changed its wording in 1980.
24. Lexis-Nexis enables searches of news coverage from a wide variety of newspaper and magazine sources, along with national television news program transcripts. Scholars can search the full text of newspaper stories, television transcripts, congressional testimony, and the like.
25. The Vanderbilt Television News Archive contains video copies and news summaries of major network newscasts (ABC, CBS, and NBC) from 1968 to the present, CNN from 1995 to the present, and Fox News from 2004 to the present.
26. The Video Monitoring Service provides abstracts from local television newscasts in media markets throughout the country. The abstracts typically contain information on the subject and length of the story, the issues discussed, and sources interviewed.
27. The “big five” personality dimensions include openness, conscientiousness, extraversion, agreeableness, and neuroticism.
28. For information on “matching” a random sample to the population of Polimetrix respondents, see <http://web.mit.edu/polisci/portl/cces/sampledesign.html>
29. Thanks to Stephen Ansolabehere for this information.

REFERENCES

- Alford, John R., & Hibbing, John R. (2008). The new empirical biopolitics. *Annual Review of Political Science*, 11, 183–203.
- Alford, John R., Funk, Carolyn L., & Hibbing, John R. (2005). Are political orientations genetically transmitted? *American Political Science Review*, 99(2): 153–68.
- Althaus, Scott L. (2001). Who’s voted in when the people tune out? Information effects in congressional elections. In Roderick P. Hart & Daron Shaw (Eds.) *Communication in U.S. elections: New agendas*. Lanhan, MD: Rowman and Littlefield Publishers.
- Althaus, Scott L. & David H. Tewksbury. (2007). “Toward a New Generation of Media Use Measures for the ANES.” Report to the Board of Overseers for the American National Election Studies, ANES Pilot Study Report, No. nes011903.
- American National Election Studies. (2004). *The 2004 national election study*. Ann Arbor, MI: University of Michigan, Center for Political Studies, www.electionstudies.org
- Barabas, Jason. (2008). “Measuring Media Exposure in the 2006 ANES Pilot Study and Beyond,” in *Political Communication Report*, http://www.jour.unr.edu/pcr/1801_2008_winter/index.html
- Bowers, Jake, & Ensley, Michael J. (2003). Issues in analyzing data from the dual mode 2000 American National Election Study. *National Election Studies Technical Report* (available at www.umich.edu/~nes).
- Bowers, Jake, Burns, Nancy, Ensley, Michael J., & Kinder, Donald R. (2005). Analyzing the 2000 National Election Study, *Political Analysis*, 13, 109–111.
- Brewer, Paul R. (2003). Values, political knowledge, and public opinion about gay rights: A framing-based account, *Public Opinion Quarterly*, 67, 173–201.

- Bucy, E. P., & Gregson, K. S. (2001). Media participation: A legitimizing mechanism of mass democracy, *New Media and Society: An International Journal*, 3(3), 359–382.
- Cacioppo, John T., & Petty, Richard E. (1982). The Need for Cognition, *Journal of Personality and Social Psychology*, 42, 116–131.
- Campbell, Angus, Converse, Phillip, Miller, Warren, & Stokes, Donald. (1960). *The American Voter*. New York: Wiley.
- Carmines, Edward G., Gerrity, Jessica C., & Wagner, Michael W. (2008). Did the media do it? The influence of news coverage on the 2006 congressional elections. In Jeffrey J. Mondak & Dona-Gene Mitchell (Eds.), *Fault lines: Why the Republicans lost Congress*. London: Routledge.
- Carmines, Edward G. & Huckfeldt, Robert. (1996). Political behavior: An overview. In R. E. Goodin & H.-D. Klingemann (Eds.), *A new handbook of political science* (pp. 223–254). Oxford: Oxford University Press.
- Carsey, Thomas M., & Layman, Geoffrey C. (2006). Changing sides or changing minds? Party identification and policy preferences in the American electorate. *American Journal of Political Science*, 50(2), 464–477.
- Crigler, Ann (Ed.). (1998). *The psychology of political communication*. Ann Arbor: University of Michigan Press.
- Druckman, James N. (2004). Political preference formation: Competition, deliberation, and the (ir)relevance of framing effects. *American Political Science Review*, 98(4), 671–686.
- Engstrom, Richard N. (2005). District geography and voters. In Peter F. Galderisis (Ed.), *Redistricting in the new millennium* (pp. 65–84). Lanham, MD: Lexington Books.
- Erikson, Robert S. & Tedin, Kent L. (2007). *American public opinion: Its origins, content, and impact* (7th ed.). Boston: Allyn and Bacon.
- Fazio, Russell H. (1990). A practical guide to the use of response latency in social psychological research. In C. Hendrick & M. S. Clark (Eds.), *Review of personality and social psychology: Vol. 11. Research methods in personality and social psychology* (pp. 74–97). Newbury Park, CA: Sage.
- Goodin, Robert E. & Klingemann, Hans-Dieter. (1996). *A new handbook of political science*. New York: Oxford University Press.
- Hayes, Danny. (2005). Candidate qualities through a partisan lens: A theory of trait ownership. *American Journal of Political Science*, 49, 908–923.
- Herrnson, Paul S. (1995). Replication, verification, secondary analysis, and data collection in political science. *PS: Political Science and Politics*, 28, 452–455.
- Hershey, Marjorie Randon. (1992). The constructed explanation: Interpreting election results in the 1984 presidential race. *Journal of Politics*, 54(4):944–976.
- Hibbing, John R. & Smith, Kevin B. (2007). The biology of political behavior: An introduction. *The Annals of the American Academy of Political and Social Sciences*, 614, 6–14.
- Hibbing, John R., Theiss-Morse, Elizabeth, & Whitaker, Eric. (2008). Americans' perceptions of the nature of governing. In Jeffrey J. Mondak & Dona-Gene Mitchell (Eds.), *Fault lines: Why the Republicans lost Congress*. London: Routledge.
- Holbrook, Thomas M. (1996). *Do campaigns matter?* Thousand Oaks, CA: Sage.
- Huckfeldt, Robert, Johnson, Paul E., & Sprague, John. (2004). *Political disagreement: The survival of diverse opinions within communication networks*. New York: Cambridge University Press.
- Huckfeldt, Robert, Sprague, John, & Levine, Jeffrey. (2000). The dynamics of collective deliberation in the 1996 election: campaign effects on accessibility, certainty, and accuracy. *American Political Science Review*, 94(3), 641–651.
- Iyengar, Shanto, & Kinder, Donald R. (1987). *News that matters*. Chicago: University of Chicago Press.
- Jamieson, Kathleen Hall & Kenski, Kate. (2006). Why the National Annenberg Election Survey? In Daniel Romer, Kate Kenski, Kenneth Winneg, Christopher Adasiewicz, & Kathleen Hall Jamieson, *Capturing campaign dynamics 2000 & 2004*. Philadelphia: University of Pennsylvania Press.
- Johannes, John R. & McAdams, John C. (1981). Does casework matter? A reply to Professor Fiorina. *American Journal of Political Science*, 25, 581–604.
- Johnston, Richard, Hagan, Michael, & Jamieson, Kathleen Hall. (2004). *The 2000 presidential election and the foundations of party politics*. New York: Cambridge University Press.

- Johnston, Richard. (2008). Modeling campaign dynamics on the web in the 2008 National Annenberg Election Study. *Journal of Elections, Public Opinion, and Parties*, 18(4), 401–412.
- Kellstedt, Paul M. (2003). *The mass media and the dynamics of American racial attitudes*. Cambridge: Cambridge University Press.
- King, Gary. (1995). Replication, replication. *PS: Political Science and Politics*, 28, 444–452.
- Kiousis, Spiro, & McCombs, Max. (2004). Agenda setting effects and attitude strength: political figures during the 1996 presidential election. *Communication Research*, 31, 36–57.
- Kruglanski, Arie W., Webster, Donna M., & Klem, Adena. (1993). Motivated resistance and openness to persuasion in the presence or absence of prior information. *Journal of Personality and Social Psychology*, 65, 861–876.
- Lasswell, Harold. (1950). *Politics: Who gets what, when, how*. New York: P. Smith.
- Lieberman, Matthew D., Schreiber, Darren, & Ochsner, Kevin N. (2003). Is political thinking like riding a bicycle? How cognitive neuroscience can inform research on political thinking. *Political Psychology*, 24, 681–704.
- McCombs, Maxwell E., & Shaw, Donald L. (1972). The agenda-setting function of the mass media. *Public Opinion Quarterly*, 36, 176–187.
- Mondak, Jeffrey J., Carmines, Edward G., Huckfeldt, Robert, Mitchell, Dona-Gene, & Schraufnagel, Scot. (2007). Does familiarity breed contempt?: The impact of information on mass attitudes toward congress. *American Journal of Political Science*, 51, 34–48.
- Mondak, Jeffrey J., & Halperin, Karen D. (2008). A framework for the study of personality and political behavior. *British Journal of Political Science*, 38(2): 335–362.
- Neale, M.C., & Cardon, L.R. (1992). *Methodology for genetic studies of twins and families*. Dordrecht, The Netherlands: Kluwer Academic Press.
- Page, Benjamin I., & Shapiro, Robert Y. (1992). *The rational public: Fifty years of trends in Americans' policy preferences*. Chicago: University of Chicago Press.
- Petrocik, John R. (1996). Issue ownership in presidential elections, with a 1980 case study. *American Journal of Political Science*, 40(3), 825–850.
- Price, Vincent, & Zaller, John. (1993). Who gets the news? Alternative measures of news reception and their implications for research. *Public Opinion Quarterly*, 57(2), 133–64.
- Prior, Markus. (2007). *Post-broadcast democracy: How media choice increases inequality in political involvement and polarizes elections*. New York: Cambridge University Press.
- Romer, Daniel, Kenski, Kate, Winneg, Kenneth, Adasiewicz, Christopher, & Hall Jamieson, Kathleen. (2006). *Capturing campaign dynamics, 2000 and 2004: The National Annenberg Election Survey*. Philadelphia: University of Pennsylvania Press.
- Segal, Nancy L. (1993). Twin, sibling, and adoption methods. *American Psychologist*, 48(9), 943–956.
- Sniderman, Paul M., & Carmines, Edward G. (1997). *Reaching beyond race*. Cambridge, MA: Harvard University Press.
- Sniderman, Paul M., & Theriault, Sean M. (2004). The structure of political argument and the logic of issue framing. In Willem E. Saris & Paul M. Sniderman (Eds.), *Studies in public opinion*. Princeton, NJ: Princeton University Press.
- Wagner, Michael W. (2007a). The utility of staying on message: Competing partisan frames and public awareness of elite differences on political issues. *The Forum*, 5(3), 1–18.
- Wagner, Michael W. (2007b). Beyond policy representation in the U.S. House: partisanship, polarization, and citizens' attitudes about casework. *American Politics Research*, 35, 771–789.
- Winburn, Jonathan C., & Wagner, Michael W. (Forthcoming). Carving voters out: redistricting's influence on political information, turnout, and voting behavior. *Political Research Quarterly*.
- Yiannakis, Diane Evans. (1981). The grateful electorate: Casework and congressional elections. *American Journal of Political Science*, 25(3), 568–580.
- Zaller, John R. (1996). The myth of massive media impact revived: New support for a discredited idea. In Diana C. Mutz, Paul M. Sniderman, & Richard A. Brody (Eds.), *Political persuasion and attitude change*. Ann Arbor: University of Michigan Press.
- Zaller, John R. (2002). The statistical power of election studies to detect media exposure effects in political campaigns. *Electoral Studies*, 21, 297–329.