

Testing a New Generation of Media Use Measures for the ANES

Scott L. Althaus

Department of Political Science and Department
of Speech Communication
University of Illinois at Urbana-Champaign

David H. Tewksbury

Department of Speech Communication and
Department of Political Science
University of Illinois at Urbana-Champaign

The degree to which people seek and retain information about politics is a key variable for understanding why people think, feel, and act as they do politically. But measuring information acquisition has proven to be fraught with challenges. As a consequence, in recent years political scientists have shifted their measurement strategies to focus on information retention, most commonly in the form of factual knowledge questions. Interest in this approach has grown so much that some political scientists have begun to question whether the traditional media exposure measures are still worth asking. We argue that while the existing ANES media exposure measures are problematic on methodological grounds, it is important to continue asking questions about the process of information acquisition. A measurement strategy based on information retention, we contend, requires survey instrumentation that is election-specific and unlikely to be valid over long stretches of time. The resulting problems of longitudinal continuity make this approach unsuitable as a stand-alone measurement strategy for the ANES.

Our consideration of the best ways to measure media use today and in the future raises serious questions about how we measure political information acquisition from mass media sources. We are concerned that the ANES has not kept up with important developments in our understanding of how people process information, and it is not well equipped to react to changes in the media environment that are already happening today. What is needed is a better way of measuring information exposure, one that not only addresses important methodological concerns with the existing media exposure measures, but more importantly one that can adapt to the changing media landscape without requiring changes in question wording or the addition of new questions. In other words, we are proposing the need to completely overhaul the existing media exposure battery, to bring it in line with advances in our understanding of the psychology of information acquisition as well as with the changing media landscape of the 21st century.

The current battery of media exposure items can be traced back to the 1980 and 1984 ANES surveys. Many items had been introduced in 1980 and refined in 1984 to improve upon the variety of media use measures that had been employed up to that time without much consistency or continuity (Traugott 1985; cf Erbring and Clark 1979). The validity of these items was rigorously tested for the first time in the 1989 ANES pilot study (Price & Zaller, 1993) and the items were subsequently updated after the 1995 pilot. In recent years, additional media use questions have been added to account for the growing importance of the Internet and local news as sources of information about national political campaigns. Our review of the available pilot study reports, technical reports, and methods publications detailing these media use measures suggests that there

has been no overall reconsideration of the purpose for and basic measurement strategy underlying this battery of questions since it was first introduced more than two decades ago.

Do We Still Need Media Use Measures at All?

The measurement problems associated with the current battery of media exposure items are by now well known. They are notoriously unreliable (Bartels 1993) and grossly overstate apparent media use far beyond levels obtained in behavioral measures such as Nielsen television ratings and newspaper circulation data (Price and Zaller 1990, 1993; Prior 2005). Moreover, an index of factual political knowledge turns out to predict the ability to recognize recent news stories better than measures of self-reported media exposure (Price and Zaller 1993). It would seem, in other words, that measuring both political knowledge and media exposure is at best redundant and at worst a waste of resources, if both measures tap the same concepts, and if retained knowledge is a more valid measure of “messages received.”

We disagree with this common perception for three reasons. First, the literature on online information processing reveals that “messages received” is not the same as “messages remembered,” and knowledge-based measures only tap the latter (e.g., Lodge and Stroh 1993). While knowledge-based measures may accurately assess the degree to which respondents can recall correct facts about politics from long-term memory, they will miss a sizable portion of the population that updates beliefs, values, feelings, and preferences immediately upon exposure to new information, but for reasons of cognitive efficiency never commits that information to long-term memory. In other words, the preferences of these respondents have been updated in response to information exposure, but they don’t show it when tested with knowledge-based measures. Actual information exposure is therefore more widespread in the population than would seem to be revealed by knowledge-based measures of information retention.

Second, the strategy of measuring information retention instead of information exposure begins to look less appealing when the task is not to predict knowledge for a specific year and topical domain, but to come up with a standard measure of knowledge that can be used 10, 20, or 30 years in the future. The experience of researchers who have used ANES knowledge measures over extended periods of time is not heartening (Althaus 2003; Neuman 1986; Smith 1989; Zaller 1992). As political referents change, either the knowledge questions must change as well, or the knowledge questions become increasingly difficult to interpret.¹ We believe that this problem is so severe that it would be unwise to rely solely on a knowledge-based measure of media exposure over long periods of time.

Third, the changing media landscape will increasingly invalidate knowledge-based measures of information retention. Back in 1989, when Price and Zaller were conducting their path-breaking validation study, CNN was a barely a fledgling network, and the networks dominated television news. Popular access to the Internet was highly limited, consisting mainly of e-mail and file exchanges using text-based software like Telnet, Gopher and FTP. The media landscape has changed dramatically since then, in part because of technological developments that have led to a

¹ In addition, the knowledge questions themselves are rarely validated (for an exception, see Delli Carpini and Keeter 1996), a process that requires labor-intensive content analysis that, to our knowledge, never has been done systematically or comprehensively. For instance, how do we know empirically that candidate A’s position on something like defense spending is really to the left of candidate B on a seven-point scale? Making such determinations becomes a critical issue if knowledge measures are to become stand-alone measures of both information exposure and retention.

blossoming of cable, satellite, and Internet news outlets, and in part because the evolving media environment now encourages news providers to cater to segmented rather than mass audiences. The number of news programs and formats on television has increased, and there has been an accompanying steady migration of audiences away from the network news programs and printed newspapers to these new options. Moreover, the overall trends away from traditional news outlets obscure important and dramatic changes in media use among younger cohorts of Americans, who are overwhelmingly turning to non-traditional and online sources for political information (Zukin et al. 2006). Not only are there more media outlets today, and as a result news audiences are now highly segmented into different media products, but there is mounting evidence that the content options on cable television are differentiating along ideological lines (Pew Research Center, 2004), a trend that may bring us back to a more powerful model of news effects. Of course, the online environment is rapidly changing as well, as news, campaign, discussion, and commentary options increase in number and reach.

One reaction to the proliferation of news channels and content options would be to eschew the measurement of media exposure entirely and rely instead on general political knowledge. However, we believe that would be a mistake. We would not be surprised if the standard finding that general political knowledge is the best measure of news reception turns out to have been context dependent, an artifact of the homogeneous media system in place at the time much of the formative research in this literature was being undertaken. This research was conducted, for the most part, during an era in which audiences for mainstream news media were much larger than today and news content was more homogeneous across different news outlets. In such an environment, the source of information exposure was less important than whether the person was exposed at all, in large part because a news system catering to mass audiences tended to focus on the same news stories and report them in similar ways. We are no longer in such an era. We expect, to the contrary, that general political knowledge should become increasingly unreliable as a measure of both media exposure and news reception in an era of highly segmented news audiences, nontraditional news formats, and ideologically polarized media options

In sum, then, we believe that the necessity of accurately measuring media exposure is becoming stronger over time. As a result, we see an urgent need to improve the quality of the measures used in the ANES.

What Are the Problems with Current Media Use Measures?

The 2004 American National Election Studies contained eight media exposure items and 12 questions measuring attention to the presidential campaign in various media (see Table 2). Among the media exposure items, one question assesses the number of days in the past week that the respondent was exposed to national network news on television, while two similarly-worded questions tap exposure to local television news. Another question measures days in the past week that the respondent read a daily newspaper, followed by a similar question about reading a daily newspaper on the Internet (even though the first newspaper question did not exclude Internet newspapers as a possibility). One question asks whether people have been exposed to political talk radio, but the question is not measured as days in the past week and it excludes other forms of news exposure on the radio. A final exposure question asks whether the respondent has access to the Internet or the World Wide Web, without asking how frequently the respondent uses the Internet or

whether the respondent uses the Internet to keep up with news.² Even though the presidential campaign attention items also ask about magazines and radio news programs, no media exposure items ask respondents about their attentiveness to such media.

Not only are many of these questions inconsistently worded and thus difficult to compare, but the exposure questions are unevenly distributed across the contemporary media environment, with a heavy emphasis on newspapers and television programs but little coverage of the Internet or nontraditional sources of information about politics and current events. Yet, the challenges of using the standard ANES media exposure items run deeper than problems of comparability and unbalanced coverage of important media outlets. These questions have been criticized for well-known reliability and validity problems as well.

The “days in the past week” exposure questions are known to be highly unreliable (Bartels 1993), and this low reliability seems most likely to arise from the heavy cognitive demands that these questions place on respondents. Respondents must retrieve information about seven different days, as well as determine whether “past week” refers to the previous seven calendar days or the previous Sunday through Saturday week. Asking respondents about a “typical week” seems to produce responses with fewer reliability problems than the “past week” wording (Chang and Krosnick 2003), but this version of the question still requires respondents to accurately report the number of days in a typical week that they attend to particular media. Since daily media exposure is a type of event that should be neither memorable after the fact (unless such exposure is extremely rare) nor remarkable when it occurs, the ability of the typical respondent to generate accurate estimates of casual media exposure over an entire week would seem quite low.

A second source of reliability problems comes from measuring entire days rather than shorter time intervals when capturing self-reported exposure. This strategy may well capture habitual news exposure that occurs on a daily basis, but it completely ignores the variance in time spent using news media within a given day. For example, the Pew Center’s 2004 media use survey found that among the 42% of respondents who read a newspaper “yesterday,” 12% read newspapers for less than 15 minutes, 26% read newspapers for between 15 and 29 minutes, 40% read newspapers for between 30 minutes and an hour, and 21% read newspapers for an hour or more. There is clearly a large difference between less than 15 minutes of exposure and more than an hour of exposure, but this important source of daily variation is obscured in the standard ANES measures. Arguably, the amount of time spent each day with a news medium is likely to be more important than the number of days spent with a news medium: Five minutes of daily exposure over seven days yields a total of just more than half an hour a week, but half an hour of daily exposure over three days yields a total of an hour and a half. In this way, we can see that the standard measures do a better job of assessing whether respondents are habitually exposed to news than how much news they are exposed to.

These reliability problems are compounded by validity problems. The improbably high rates of self-reported news exposure generated by the standard ANES questions are thought to be produced not merely by the difficulty in accurately reporting such exposure, but also by the fact that news exposure is widely seen as a socially desirable behavior. If respondents are unable to accurately recall weekly media use on short notice, they may default to giving the answer that the interviewer

² This is a glaring omission given the widespread use of these “new” media for political surveillance. For example, a recently completed study of audiences for news during the 2000 early presidential primary season (Tewksbury, in press) found that the audience ratings for cable news and online political news were much more responsive to campaign events than were the audience rating for the network news programs.

wants to hear. Researchers today routinely believe that overestimates of media use are driven by social desirability effects, but to our knowledge this relationship never has been tested.

Despite such measurement problems, a wide range of research has concluded that media exposure remains conceptually valid, even if unreliably measured. Media exposure measures predict what we expect them to predict, on a regular basis. For example, Price (1993; Price and Zaller, 1993) shows that while general political knowledge may work as a proxy for exposure, media use adequately predicts knowledge in and of itself. Also, measures of supposedly stable traits, such as media gratifications (e.g., Palmgreen & Rayburn, 1982) and support for a civic duty to use the media (McCombs & Poindexter, 1983; Poindexter & McCombs, 2001), are reliably predictive of media use. Similarly, one might expect that men and women would differ in their exposure to certain types of news, and research that uses measures of news preferences has shown that they do (Bogart, 1989; Stone, 1987). Thus, media use measures of various sorts are both predictive of what we expect them to be and are well predicted by relevant constructs.

On the basis of these considerations, we believe the time is ripe for a new round of development and testing. Such an undertaking could include the use of selected open-ended measures to assess how people describe their media environment, the testing of new measures designed to increase measurement reliability, and a set of updated validation procedures to ensure that the media items are tapping the desired concepts. Incorporating these measures and tests within an ANES pilot study would be ideal.

A New Approach to Measuring Information Exposure

We propose testing an entirely new strategy for measuring information acquisition and information retention that is more consonant with important developments in social psychological research on information processing, and likely to be better suited than the current ANES measures to the new media environment of the 21st-century. Our proposed strategy is threefold: a new set of exposure questions that measure the amount of time in a typical weekday respondents spend with different types of news media, a new set of measures that assess interest in different types of news formats as well as attention to different types of political information, and a new set of measures that assess the information processing goals that guide respondents' news exposure as well as the degree to which they consciously reflect on the news to which they have been exposed. Specifically, we propose to increase both reliability and validity by:

1. Reducing cognitive demands on respondents for accurately reporting exposure to political information
2. Testing a more internally consistent battery of media exposure questions that are similarly worded and more sensitive to different amounts of news exposure
3. Including more comprehensive measures of media exposure that better map the current contours of the media landscape and will be more likely to remain valid over time
4. Gathering information about other sources of political information not currently captured in existing measures
5. Differentiating between habitual and event-driven news exposure
6. Differentiating between attention to international, national, and local news, since all three are now routinely available within local, cable and online news products
7. Clarifying the format of news programming that respondents are likely to be exposing themselves to (traditional news sources versus nontraditional information formats)
8. Getting information about the relative priority of news sources for each respondent

9. Identifying the information processing goals that should determine how information exposure is related to changes in beliefs, values, attitudes, and behaviors
10. Determining the likelihood that respondents elaborate on what they've been exposed to in the news
11. Explicitly testing for the impact of social desirability effects

Our proposed battery of questions for the pilot study is appended to this document and summarized in Table 1. In contrast to the eight media exposure items used in the 2004 ANES (see Table 2), we propose six new media exposure items. The 2004 ANES asked an additional 12 questions about attention to the presidential campaign that we believe are highly redundant in the current media environment. Although the pilot study will not be conducted during a presidential election year, we believe that one or two items measuring generic attention to presidential campaign information (instead of within each of multiple media, as is currently done) should be sufficient to assess attention to campaign information during presidential election years.³ Instead of the unnecessarily long battery of 12 attention measures (see Table 2), we propose testing a three-item scale to clarify whether news exposure tends to be habitual or event-driven, and a three-item scale to test preferences for traditional versus alternative news formats. In addition, our proposed battery of information acquisition questions would be rounded out by short scales to measure information processing goals and likelihood of news elaboration. We propose testing two different processing goal scales and two different elaboration scales in the pilot study, with the understanding that only the better performing scale within each category and the better-performing items within each scale would be retained. *In this way, if the pilot testing confirms the utility of this new approach to measuring media exposure, the total number of "new" information acquisition questions would remain about the same as (and could perhaps be fewer than) the number of "old" information acquisition questions used in previous ANES studies.*

A New Set of Media Exposure Questions

A crucial issue for the future utility of information acquisition items is the need for measures to remain both valid and informative over time. While we want to accurately measure what people are doing today, we also want to be able to see trends as they develop over time. This requires a set of measurement tools that will not become quickly dated as the media environment continues to evolve in unforeseen ways.

One option is clearly unworkable: trying to expand the range of self-reported exposure measures to encompass the full diversity and changing contours of political information outlets available within all existing media. The Pew Center currently attempts the most ambitious use of such an approach, which requires it to use an entire survey for measuring media exposure, and which also requires constant revision and rotation of relevant exposure measures. Clearly, such a strategy is not suitable to the ANES.

Media exposure items

Our proposed alternative is to focus on a core set of six exposure questions that is flexible enough to ensure that changes in the media landscape will be measured and retained. Two types of questions form this battery. The first is an open-ended prompt that captures the main sources of political news

³ In addition, the standard ANES campaign interest measure should be highly predictive of attention to information about presidential campaign.

used by respondents, before any other media exposure questions are asked. This question, based on an item used by the Pew Research Center, asks people to report their main sources of information about politics: “How have you been getting most of your information about politics? From television, from newspapers, from radio, from the Internet, or from some other source?”⁴ This question is not designed to quantify exposure, but rather to prioritize and record the most important sources from which people feel they are getting information about politics. This measure has the advantage of allowing people to volunteer other sources of political news, such as interpersonal conversations or Weblogs or comedy programs, that they consider primary sources of information about politics before those sources are formally recognized as such by political scientists. We anticipate that responses to this question will show, over time, how people respond to changing options in the media environment. Such information can then be used as the empirical basis for further expansion and development of the media exposure battery over time.⁵

A second type of question forms the backbone of the battery. Conceived as direct replacements for the existing ANES exposure measures, a set of five items (modified from standard Pew Center questions) is designed to measure frequency of exposure to different types of news media. To correct for the high cognitive demands placed on respondents by the standard ANES “days in the past week” question, these questions ask about exposure to newspapers, television, radio, Internet,

⁴ Interviewers would record up to three responses. If only one response is given, the interviewer would probe for an additional response. If the respondent says “other,” the interviewer would record a verbatim identification of the source. For each medium named, further prompts would be given. If the response is television (or satellite or cable television), interviewer would ask “What channel?” and once channel is given, would ask “What programs?” If the response is newspapers, the interviewer would ask “What newspapers?” If response is radio, the interviewer would ask “Is that news broadcasts or shows that invite listeners to call in to discuss current events, public issues, and politics?” If response is Internet, the interviewer would ask “What Web sites?”

⁵ Pew has been asking this question for some time. Our adapted question stem drops references to magazines, since magazines are clearly a secondary source of information for most people. Here are the trends the Pew Center observes for their version of the question:

	TV	Papers	Radio	Magazines	Internet	Other(vol)	DK/Ref.
June, 2005	74	44	22	5	24	2	1
December, 2004	74	46	21	4	24	2	3
October, 2003	80	50	18	4	20	2	1
August, 2003	79	46	15	3	18	2	1
Early July, 2003	79	45	16	5	19	1	*
March, 2003	89	24	19	*	11	2	*
February, 2003	83	42	19	4	15	3	*
January, 2003	81	44	22	4	17	2	1
January, 2002	82	42	21	3	14	2	*
Mid-September, 2001	90	11	14	*	5	1	1
Early September, 2001	74	45	18	6	13	1	*
February, 2001	76	40	16	4	10	2	1
October, 1999	80	48	19	5	11	2	*
January, 1999	82	42	18	4	6	2	*
January, 1996	88	61	25	8	--	2	*
September, 1995	82	63	20	10	--	1	1
January, 1994	83	51	15	10	--	5	1
September, 1993	83	60	17	9	--	3	*
January, 1993	83	52	17	5	--	1	1
Early January, 1991	82	40	15	4	--	1	*

and other sources of news⁶ in a “typical weekday.” This is a slight modification of the standard Pew wording, which asks about “yesterday” with modifications for interviews conducted on Sundays. We believe this “typical weekday” version of the Pew question addresses important concerns about the validity of “yesterday” questions when asked on Sundays and Mondays,⁷ while also retaining the desirable properties of the “typical week” version of ANES exposure questions, which may yield more reliable self-reports than the “past week” version by reducing the cognitive demands placed on respondents (Chang and Krosnick 2003).

The Pew Center has been using this approach with great success for over a decade, but to our knowledge no one has ever conducted a head-to-head analysis of the reliability and validity of these measures compared to those used in the ANES.⁸ Our pilot study proposal would be the first to do this, by using a split ballot to run both sets of questions on the pilot study sample. We see our modifications to the standard Pew measures as likely to improve the reliability of responses while also improving individual-level validity compared to the standard “yesterday” question. These gains can be realized while still allowing for inter-media comparisons at the aggregate level and the analysis of trends over time. We also advocate limiting the number of media to what are now the four major channels for news outlets (television, newspapers, Internet, and radio) plus a catchall category for other sources of political information (not necessarily in the form of formal news content) that respondents use to acquire news about politics. Additional items could be added in future years if new trends are uncovered using the “other” item or the open-ended prompt that begins the battery. This channel-centered approach has the added value of retaining conceptual clarity in an age where the same outlets are spread across different media (e.g., CNN on cable versus CNN.com, or a printed newspaper versus its online counterpart, or the fact that local news broadcasts now routinely report international and national stories). By asking only about time spent monitoring news across a comprehensive set of standard media channels, this approach should capture the full range of time spent acquiring information through whatever outlets and in whatever form those outlets disseminate information.

Habitual exposure questions

Our proposed set of information acquisition questions also includes three items to measure habitual patterns of news exposure. Often researchers want to know whether citizens tend to be regularly exposed to a broad flow of political information, or whether they more selectively and occasionally

⁶ Although the ANES has retained a few questions about magazine and talk radio exposure, we believe the audiences for these outlets are so small and specialized that continuing to track them would require a poor investment of scarce survey resources. Our solution is to adopt a more flexible question scheme that allows respondents to spontaneously report such exposure while also measuring likelihood of seeking out such specialized sources of news.

⁷ The immediate issue with the “yesterday” wording is whether it sacrifices too much individual-level validity for the sake of obtaining greater reliability. Bogart (1989) provides some evidence that bears on this question. First, he reports that a validation exercise in 1982 found that the yesterday question (yes/no, in this case) over-reported reading for 7% of the sample and understated it for 10% of it. So, the reliability of this sort of measure seems relatively high. Moreover, he finds that, “of the people who read the paper on any given weekday, 73% had read it on all five of the last 5 weekdays. (Nine percent had read it on four days, 4% on three, 7% on two, and 8% on one.)” (1989, p. 80). Thus, there is evidence (in 1987, at least) of some stability in readership, which means that the day of the week on which the question is asked may not be an important determinant of response accuracy. Similarly, Bogart finds that 80% of yesterday readers claim that this exposure was routine. However, the main problem with the yesterday question comes when it is posed on Sundays and Mondays, for weekend news exposure is much lower than mid-week exposure, and patterns of exposure are also different than for weekdays. The “yesterday” wording should therefore yield a highly reliable estimate of news exposure for an entire population, while yielding an unreliable estimate of news exposure at the level of individuals unless a correction is made for divergent patterns of weekend news exposure.

⁸ Personal communication with Scott Keeter, Director of Survey Research for the Pew Center, May 15, 2006.

enter the information stream in response to high-profile events of particular interest. We propose including a three-item scale used by the Pew Center to differentiate habitual from occasional news audiences. These questions can be scaled to produce a measure of likely news exposure that is independent of the self-reported exposure in the previous battery and unlikely to be affected by cognitive demand problems, as it measures general tendencies rather than specific behaviors. They can also be used to measure chronic attentiveness to political news in three different domains: international news, national news, and local news. These questions can therefore yield important information about the type of news flows most likely to be attracting respondent attention that is recorded in the media exposure questions.

Cognitive processing goals

One emerging feature of the new media environment is the growth of partisan information sources, particularly online. We believe that part of accurately assessing the impact of political information in the changing media environment comes from being able to predict what people will do with the availability of partisan information. Thus, a second approach to acknowledging changes in the media landscape is to shift the focus from trying to assess exposure to every possible partisan source in the media environment to identifying the individual-level tendencies that motivate the acquisition of partisan information about politics. Research in selective exposure (e.g., Frey, 1986) suggests that one action people may take when given a choice of information is to focus their exposure to those sources most consonant with their pre-dispositions. Indeed, this is precisely what some people predict may be a broad effect of the Internet (Sunstein, 2001). However, it also seems apparent that people seek more than purely partisan information when it is available, as continuing popular interest in network nightly news broadcasts so clearly demonstrates. Sorting out the degree to which individual-level information flows originate in partisan or traditional journalistic news sources will therefore be of great importance for understanding the effects of information exposure as well as the types of information gained from exposure to different sources.

We believe that researchers will increasingly need to rely on individual-level measures of information processing goals to understand how people are acquiring information in a complex media environment. Psychologists have suggested that people have relatively stable traits that may affect which path they choose (e.g., Kruglanski, 1990). A central focus of our proposal is an assessment of whether citizens' cognitive styles are related to news exposure, its measurement, and its relationship with general political knowledge. If so, the ANES would do well to measure processing goals and cognitive styles in addition to more conventional elements of information acquisition.

Research on cognitive styles has demonstrated that people tend to have chronically accessible information-search and information-processing goals. The literature in psychology has frequently identified two meta-goals that help determine how people seek, acquire, and process information. Kruglanski (1990) has referred to the domains as *hypothesis generation* and *validation*. When hypothesis generation is the dominant processing goal, people avoid closure in their thinking and seek to continually test and refine their opinions in the pursuit of judgmental accuracy (e.g., Chaiken, Liberman, & Eagly, 1989). When validation is the dominant processing goal, people seek rapid closure in their thinking that encourages them to avoid exposure to potentially dissonant information. Validation is a defensive processing goal, and it should inoculate such processors against having their views changed by the flow of information to which they are exposed. Kruglanski and colleagues (Kruglanski, Webster, & Klem, 1993; Webster & Kruglanski, 1994) have developed and validated a Need for Closure scale with several subscales. Decisiveness and

closed-mindedness are two subscales that seem particularly well suited for assessing individual-level processing goals in the ANES (see question appendix for details).

People seeking closure should be drawn to contemporary news content that is heavier on opinion than on balanced information. Indeed, the most partisan presentations of politics should be the most appealing for people seeking closure or reinforcement of their opinions. At the same time, need for closure may condition the effects of exposure to political information. A recent study of the effects of exposure to a message critical of President Bush found an interaction of party identification and need for closure (Holbert & Hansen, 2006). The key finding from this study was that Independents who were high in need for closure felt less ambivalence after exposure relative to a non-exposed control group. Thus, the need for closure may have motivated them to take available information and come to a conclusion about the president.

By pilot testing both of these short scales, our hope is to validate them against longstanding ANES measures that may be useful proxies for direct measurement of processing goals. In particular, we believe that time of decision for choosing between presidential candidates, strength of partisanship, and ideological extremity might be usefully employed as domain-specific measures of individual-level processing goals relevant to political information. If this proves to be the case, we could rely on existing ANES items to operationalize these concepts without adding any new questions to ongoing surveys.

News format preferences

Related to the importance of documenting cognitive processing goals, we also propose a new scale consisting of three questions that assess respondent preferences for traditional versus alternative news formats. These questions are designed to elicit the degree to which respondents prefer to get news from the perspective of people who think like they do, and in the form of opinions rather than mostly facts. The scale should correlate with processing goals, as defensive processors may be more likely to prefer news from the perspective of people who think like they do, and accuracy processors may prefer news that challenges their way of thinking about politics and that consists mostly of facts. Not only is this scale likely to be useful in itself for predicting exposure to nontraditional news formats, but it will also be helpful for validating the processing goal scales, which are not domain-specific to politics but should nonetheless predict domain-specific processing styles. The news format scale would be used to confirm this assumption.

Elaboration likelihood

In addition to assessing whether people may be drawn to particular classes of information, it seems increasingly important that researchers assess what people will do with the information they receive. For the purpose of predicting how much knowledge is acquired from exposure to information, communication researchers have been looking at news elaboration. News elaboration can be roughly defined as the amount of active thought people give to information they receive from the news. The greater the likelihood of elaboration on news content, the greater the likelihood of knowledge retention and subsequent changes in beliefs, attitudes, and behaviors resulting from news exposure. Eveland (2002) has demonstrated that the amount of elaboration that goes into news exposure is positively related to the acquisition of political knowledge from news content. Indeed, in his Cognitive Mediation Model (Eveland, 2001), Eveland argues that level of elaboration of news content is an important mediator in the relationship between attention to news media and audience public affairs knowledge. We believe that news elaboration should be included the ANES pilot

because of its central place in the news exposure and processing sequence. We propose testing Eveland's (Eveland, Shah, & Kwak, 2003) measure of news elaboration, adapted to refer to news, in general, as well as a short version of Petty and Cacioppo's Need for Cognition scale. Testing both would allow us to identify the better-performing scale, which could be retained for subsequent ANES use.

When used in conjunction with measures of media exposure, elaboration should help predict the amount of information people acquire, even after taking their self-reported attention into account (Eveland, Shah, & Kwak, 2003). Elaboration scales are not context-dependent and so should have a longer shelf life than factual knowledge measures of information retention. Because they should predict both knowledge acquisition and retention, they may therefore provide a superior measure of information acquisition and retention in a complex media environment than can be provided by a short battery of political knowledge questions.

Procedure and Validation

We propose to include this new battery of information acquisition questions in a split-sample design within the 2006 Pilot Study. Half of the respondents would answer the standard ANES media exposure questions, while the other half would answer a proposed battery of six media exposure questions. All respondents would then answer questions measuring news format preferences, habitual exposure, processing goals, and elaboration likelihood. We also propose to include a short social desirability scale to clarify the extent to which response differences between the two sets of exposure questions are related to social desirability effects. Our proposed media exposure questions are explicitly designed to minimize the likelihood of eliciting socially desirable responses. The media exposure items should minimize socially desirable answers by letting respondents claim having watched or read the news in a typical weekday, while allowing them to "admit" that the exposure was for a short period of time. This design should load socially desirable responses into the low end of the exposure scales, close to the "no exposure" values. Furthermore, questions tapping news format preferences, habitual exposure, processing goals, and news elaboration allow for equally "face saving" response options, and should not be conflated by socially desirable answers. By including a battery of social desirability measures, we can explicitly test for the first time the degree to which social pressures influence over-reporting of media exposure.

The 1989 pilot study used a novel and sophisticated procedure to validate the various measures of media exposure. This procedure assessed the degree to which respondents recognized recently-breaking news stories. This procedure also produced complications when it came to analyzing results, as different groups of respondents were asked about different news stories, so there was no way to use all cases at once in the validation testing (Price and Zaller 1993). Our proposed approach uses a less complicated and more conventional method of convergent and divergent construct validation. Aside from the validation measures built in to the questions in our proposed battery, we propose validating different measures of information acquisition against a wide range of convergent measures from the 2004 ANES, including factual knowledge items, voting behavior, summary scales of political activity, and self-reported interest in politics and campaigns. We will also be using new validation techniques specific to the features of the new media environment, such as measuring whether the degree of polarization in candidate placements is a function of preference for nontraditional news formats or tendencies toward favoring defensive processing goals.

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Table 1: Proposed Media Exposure Questions*Media Exposure Items*

How have you been getting most of your information about politics? From television, from newspapers, from radio, from the Internet, or from some other source?
[RECORD UP TO THREE RESPONSES, WITH FOLLOW-UP PROMPTS]

On a typical weekday, do you read a daily **newspaper**, or not? [IF YES] About how much time do you spend reading a daily newspaper on a typical weekday?

On a typical weekday, do you watch the news or any news programs on **television**, or not? [IF YES] About how much time do you spend watching the news or any news programs on television on a typical weekday?

On a typical weekday, do you listen to the news or any news programs on **radio**, or not? [IF YES] About how much time do you spend listening to the news or any news programs on the radio on a typical weekday?

On a typical weekday, do you get any news online through the **Internet**, or not? [IF YES] About how much time do you spend getting news online on a typical weekday?

On a typical weekday, do you get any information about politics from **some other source** than a news outlet, or not? [IF YES] And what source was that? [RECORD VERBATIM] About how much time do you spend getting information about politics from that source on a typical weekday?

News Format Preferences

Would you rather get news from the perspective of someone who thinks about politics like you do, or from the perspective of someone who thinks differently than you do?

Would you rather get news that mixes facts with opinions, or news that presents mostly just facts?

Would you rather get news that challenges your way of thinking about politics, or news that is consistent with your way of thinking?

Habitual Exposure Questions

Which of the following two statements best describes you: "I follow INTERNATIONAL news closely ONLY when something important is happening" OR "I follow INTERNATIONAL news closely most of the time, whether or not something important is happening"?

I'd like to ask the same question, but about NATIONAL news. Which best describes you: "I follow NATIONAL news closely ONLY when something important is happening" OR "I follow NATIONAL news closely most of the time, whether or not something important is happening"?

And just once more about LOCAL COMMUNITY news. Which best describes you: "I follow LOCAL COMMUNITY news closely ONLY when something important is happening" OR "I follow LOCAL COMMUNITY news closely most of the time, whether or not something important is happening"?

Processing Goals

Decisiveness Scale (5 items, see appendix)

Closed-Mindedness Scale (5 items, see appendix)

Elaboration Scales

Need for Cognition (6 items, see appendix)

News Elaboration (4 items, see appendix)

Social Desirability Scale (7 items, see appendix)

Table 2: Media Exposure and Presidential Campaign Attention Questions from the 2004 ANES

Media Exposure Items

How many days in the past week did you watch the national network news on TV?
(PRE)

How many days in the past week did you watch the local TV news shows such as "eyewitness news" or "action news" in the late afternoon or early-evening? (PRE)

How many days in the past week did you watch the local TV news shows in the late evening? (PRE)

How many days in the past week did you read a daily newspaper? (PRE)

How many days in the past week did you read a daily newspaper on the Internet (online)? (PRE)

How many days in the past week did you watch the news on TV? (POST)

There are a number of programs on radio in which people call in to voice their opinions about politics. Do you ever listen to political talk radio programs of this type?
(POST)

Do you have access to the Internet or the World Wide Web? (POST)

Presidential Campaign Attention Items

How much attention do you pay to news on national news shows about the campaign for president -- a great deal, quite a bit, some, very little, or none? (PRE)

How much attention do you pay to news on local news shows about the campaign for president -- a great deal, quite a bit, some, very little, or none? (PRE)

Did you read about the campaign in any newspaper? (PRE)

How much attention do you pay to newspaper articles about the campaign for president -- a great deal, quite a bit, some, very little, or none? (PRE)

Did you watch any programs about the campaign on television? Would you say you watched a good many, several, or just one or two? (POST)

How much attention did you pay to news on TV about the campaign for president -- a great deal, quite a bit, some, very little, or none? (POST)

Did you read about the campaign in any magazines?

How much attention did you pay to magazine articles about the campaign for President -- a great deal, quite a bit, some, very little, or none? (POST)

Did you listen to any speeches or discussions about the campaign on the radio?
(POST)

Would you say you listened to a good many, several, or just one or two? (POST)

In general, how much attention did you pay to news about the campaign for President - a great deal, quite a bit, some, very little, or none? (POST)

Have you seen any information about this election campaign on the (Internet/Web)?
(POST)

Appendix: Proposed Questions for the 2006 NES Pilot Study in Order of Presentation

Media Exposure Items (adapted from Pew)

1) How have you been getting most of your information about politics? From television, from newspapers, from radio, from the Internet, or from some other source?

* Interviewers would record up to three responses. If only one response is given, the interviewer would probe for an additional response.

* If the respondent says “other,” the interviewer would record a verbatim identification of the source.

* For each medium named, further prompts should be given

I) If response is television (or satellite or cable):

a) Is that a local or national channel?

If national,

1. “What channel?”

2. Once channel is given, “What programs?”

II) If response is newspapers

a) Is that a local or national newspaper?

If national,

1. What newspaper is that?

III) If response is radio

a) Is that mainly a news program or one that encourages people to share their opinions on current events, public issues, and politics?

b) Is that a local or national program?

If national,

1. What program is that?

IV) If response is Internet

a) Is that mainly a news site or one that encourages people to share their opinions on current events, public issues, and politics?

b) What Web site is that?

Now, on another subject...

2) On a typical weekday, do you read a daily newspaper, or not?

IF "YES" ASK:

2a) About how much time do you spend reading a daily newspaper on a typical weekday? [DO NOT READ]

- Less than 5 minutes.
- 5-15 min.
- 15-29 min.
- 30-59 min.
- 1-2 hours
- 3-5 hours
- More than 5 hours
- Don't know

3) On a typical weekday, do you watch the news or any news programs on television, or not?

IF "YES" ASK:

3a) About how much time do you spend watching the news or any news programs on television on a typical weekday? [DO NOT READ]

- Less than 5 minutes.
- 5-15 min.
- 15-29 min.
- 30-59 min.
- 1-2 hours
- 3-5 hours
- More than 5 hours
- Don't know

4) On a typical weekday, do you listen to the news or any news programs on radio, or not?

IF "YES" ASK:

4a) About how much time do you spend listening to the news or any news programs on the radio on a typical weekday? [DO NOT READ]

- Less than 5 minutes.
- 5-15 min.
- 15-29 min.
- 30-59 min.
- 1-2 hours
- 3-5 hours
- More than 5 hours
- Don't know

5) On a typical weekday, do you get any news online through the Internet, or not?

IF "YES" ASK:

5a) About how much time do you spend getting news online on a typical weekday? [DO NOT READ]

- Less than 5 minutes.
- 5-15 min.
- 15-29 min.
- 30-59 min.
- 1–2 hours
- 3–5 hours
- More than 5 hours
- Don't know

6) On a typical weekday, do you get any information about politics from some other source than a news outlet, or not?

IF "YES" ASK:

6a) And what source was that? [RECORD VERBATIM]

About how much time do you spend getting information about politics from that source on a typical weekday? [DO NOT READ]

- Less than 5 minutes.
- 5-15 min.
- 15-29 min.
- 30-59 min.
- 1–2 hours
- 3–5 hours
- More than 5 hours
- Don't know

News Format Preferences

There are a lot of different ways the news is presented these days. I'm going to read different ways that news is presented, and I'd like you to tell me which is closer to the kind of presentation you prefer. [ROTATE ORDER OF ITEMS, AND ORDER OF OPTIONS WITHIN ITEMS]

7) Would you rather get news from the perspective of someone who thinks about politics like you do, or from the perspective of someone who thinks differently than you do?

- someone who thinks about politics like R
- someone who thinks differently than R
- [VOLUNTEERED] neither
- [VOLUNTEERED] don't know / no opinion

8) Would you rather get news that mixes facts with opinions, or news that presents mostly just facts?

- news that mixes facts with opinions
- news that presents mostly just facts

- [VOLUNTEERED] neither
- [VOLUNTEERED] don't know / no opinion

9) Would you rather get news that challenges your way of thinking about politics, or news that is consistent with your way of thinking?

- news that challenges R's way of thinking about politics
- news that is consistent with R's way of thinking
- [VOLUNTEERED] neither
- [VOLUNTEERED] don't know / no opinion

Habitual Exposure Questions (Pew Center)

ROTATE SUBJECT OF QUESTIONS, KEEPING QUESTION WORDING IN ORDER:

10) Which of the following two statements best describes you: "I follow INTERNATIONAL news closely ONLY when something important is happening" OR "I follow INTERNATIONAL news closely most of the time, whether or not something important is happening"?

- Follow INTERNATIONAL news closely ONLY when something important is happening
- Follow INTERNATIONAL news closely MOST of the time
- Don't know/Refused

11) I'd like to ask the same question, but about NATIONAL news. Which best describes you: "I follow NATIONAL news closely ONLY when something important is happening" OR "I follow NATIONAL news closely most of the time, whether or not something important is happening"?

- Follow NATIONAL news closely ONLY when something important is happening
- Follow NATIONAL news closely MOST of the time
- Don't know/Refused

12) And just once more about LOCAL COMMUNITY news. Which best describes you: "I follow LOCAL COMMUNITY news closely ONLY when something important is happening" OR "I follow LOCAL COMMUNITY news closely most of the time, whether or not something important is happening"?

- Follow LOCAL COMMUNITY news closely ONLY when something important is happening
- Follow LOCAL COMMUNITY news closely MOST of the time
- Don't know/Refused

Processing Goals (Kruglanski, Webster, & Klem, 1993; Webster & Kruglanski, 1994)

13. Decisiveness Scale

- a) I tend to struggle with most decisions (r)
- b) I would describe myself as indecisive (r)
- c) I usually make important decisions quickly and decisively
- d) When trying to solve a problem I often see so many possible options that it's confusing (r)
- e) When faced with a problem I usually see the one best solution very quickly

1 2 3 4 5 6

strongly
disagree

strongly
agree

14. Closed-Mindedness Scale

- a) When thinking about a problem, I consider as many different opinions on the issue as possible (r)
- b) When considering most conflict situations, I can rarely see how both sides could be right
- c) I always see many different solutions to problems I face (r)
- d) I do not usually consult many different opinions before forming my own view
- e) Even after I've made up my mind about something, I am always eager to consider a different opinion (r)

1	2	3	4	5	6
strongly disagree					strongly agree

Elaboration Likelihood Scales

15. News Elaboration Scale (Eveland, Shah, & Kwak, 2003)

- a) I often find myself thinking about what I have seen in the news.
- b) I often tie what I see in the news with ideas I've had before
- c) I often try to relate what I see in the news to my own personal experiences
- d) I often try to think about how what I see in the news relates to other things I know

1	2	3	4	5	6	7
strongly disagree						strongly agree

16. *Need for Cognition Scale* (Adapted from Cacioppo and Petty 1982) Note: items 16a and 16b were asked in the 2004 ANES (V045220, V045221). We propose to repeat them in the pilot test not only to yield a more reliable six-item need for cognition scale in the pilot, but also to assess the over-time stability of need for cognition by comparing 2006 responses to those obtained in 2004.

- a) Some people like to have responsibility for handling situations that require a lot of thinking, and other people don't like to have responsibility for situations like that. Do you like having responsibility for handling situations that require a lot of thinking, do you dislike it, or do you neither like it nor dislike it?
- b) Some people prefer to solve simple problems instead of complex ones, whereas other people prefer to solve more complex problems. Which type of problem do you prefer to solve: simple or complex?
- c) Some people prefer thinking abstractly, while other people enjoy thinking in more concrete terms. Which do you prefer: abstract or concrete thinking?
- d) Some people only like to think as hard as they have to, while other people like to think as hard as they can. Which do you prefer: thinking as hard as you have to, or thinking as hard as you can?
- e) Some people would rather do something that requires little thought, while others would rather do something that is sure to challenge their thinking abilities. Which do you prefer:

something that requires little thought, or something that is sure to challenge your thinking abilities?

- f) Some people try to avoid situations where there is a good chance that they will have to think hard about something, while others try to seek those situations out. Which do you prefer: avoiding situations where there is a good chance that you will have to think hard about something, or seeking out situations where there is a good chance that you will have to think hard about something?

Social Desirability Scale (Fischer & Fick, 1993; Strahan & Gerbasi, 1972)

- 17) I am always willing to admit it when I make a mistake
- 18) I have never been irritated when people expressed ideas very different from my own
- 19) I have never deliberately said something that hurt someone's feelings
- 20) I like to gossip at times
- 21) There have been occasions when I took advantage of someone
- 22) I sometimes try to get even rather than forgive and forget
- 23) At times I have really insisted on having things my way

1	2	3	4	5	6	7
strongly disagree						strongly agree