

Need for Orientation and Attribute Agenda-Setting During a U.S. Election Campaign

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This study analyzes the relationships between need for orientation (NFO), frequency of media exposure, attention to media coverage of the 2008 U.S. presidential election, and second-level agenda-setting effects. Results suggest that NFO was a better predictor of media attention than sheer frequency of media use, and that media attention was a better predictor of second-level agenda-setting effects than media exposure. We did not find that NFO predicted in any significant way opinions regarding candidate attributes during this election. Instead, our study found consistent and moderately strong support for political ideology as a predictor of peoples' judgments about the most salient attributes of presidential candidates.

Keywords: Need for orientation, agenda setting, media effects, political communication, presidential election, candidate attributes

Introduction

This article examines the role of need for orientation (NFO; a measure of an individual's motivation to pay attention to news) in second-level agenda setting, using national survey data from the 2008 U.S. presidential election. Studies of the relationship between NFO and agenda setting have focused on the first level of agenda setting—the issues or topics considered more or less important—and not on the second level—the attributes of issues and objects most or least emphasized by various media and their audiences. Matthes (2008) did test NFO at the second level of agenda setting and found no influence of this measure on the perceived salience of affective attributes of the issue of unemployment.

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Cohen (1975) also looked at the influence of NFO on second-level agenda setting for a local environmental issue and found that the match between the attribute agenda of those with a low NFO and the newspaper's attribute agenda was only .26, whereas for those with a high NFO, the correlation was .77.

However, we still lack clear knowledge about the power of NFO to mediate second-level agenda-setting effects, especially in an electoral context. Previous studies have mainly investigated the relationship between NFO and the frequency of media use, even though research shows that *media attention* tends to be more relevant for media effects than mere *media exposure*. Also, previous research has focused mainly on the relationship between NFO and use of newspapers and television (Matthes, 2008; McCombs & Weaver, 1973; Weaver, 1977), even though the use of other media sources for political information, such as the Internet and radio talk shows, has seen an increase during the last decade. The aim of the present study is to deal with these shortcomings.

The present study analyzes the relationships between NFO and the attributes perceived to apply to the two leading candidates in the 2008 U.S. presidential election campaign, John McCain and Barack Obama. As such, it focuses on another kind of second-level agenda setting—candidate attributes—as opposed to Matthes' (2008) study that looked at the perceived salience of the attributes of one issue—unemployment. Moreover, it tests this relationship through a direct measure and also indirectly as mediated by news media use and attention paid to political news.

Theory and Literature Review ***Candidate Images During an Electoral Campaign***

Accentuating the role of "the civic teacher" that news media play in society, agenda-setting theory was originally conceptualized as a learning process about public affairs in which citizens' reflections on the most important issues "typically reflect the media's lessons" (McCombs, 2004, p. 51). By emphasizing certain attributes while describing objects/issues, news media draw their audiences' attention to those properties so that when people think or talk about those issues (objects), the same attributes are salient in their minds (Weaver, McCombs, & Shaw, 2004, p. 259). Translated into an electoral campaign context, news media emphasize the candidates competing for public office through their reporting of the campaign, contributing to the candidates' salience on the public's political agenda, and the news media also stress different attributes of these candidates, providing potential voters a more detailed picture of the various candidates.

Whether studied through the combined methods of survey and content analysis (McCombs, Lopez-Escobar, & Llamas, 2000) or through experimental design (Kiousis, Bantimaroudis, & Ban, 1999), multiple empirical studies have supported the above propositions (Ghanem, 1997; McCombs, 2004; Weaver et al., 2004).

The majority of second-level agenda-setting studies (Kiousis et al., 1999; Kiousis, 2005; McCombs et al., 2000; McCombs, Llamas, Lopez-Escobar, & Rey, 1997) have concentrated on substantive and affective attributes. Kiousis et al. (1999) defined substantive attributes as "pertaining

to those characteristics of news that help us cognitively structure news and discern among various topics," while affective attributes refer to "those facets of news coverage that elicit emotional reactions from its audience members" (pp. 416–417).

In terms of media coverage of candidates during an electoral campaign, McCombs et al. (1997) have identified three subcategories of substantive attributes—ideology and issue positions, qualifications and experience, and personality—and three subcategories of affective attributes—positive, negative, and neutral. Building on previous research in this area, the present study examines the following candidate attributes: job qualifications (leadership, knowledge, intelligence) and personality traits (moral, honest, caring, optimistic); and the positive and negative dimensions of those attributes.

Based on the previous literature that offers support for second-level agenda setting, we pose the first hypothesis, which sets the stage for the core aim of this study:

H1: Candidates' attributes portrayed positively in the news media will be significantly correlated with people's inclination to apply those attributes to the presidential candidates.

Need for Orientation and Media Use

Research suggests that members of the public are not slaves to the media agenda, however. Their media use is certainly driven by their motivations as described by uses and gratifications theory, among which NFO is one of the most influential contingent conditions (Weaver, 1980; Winter, 1981).

NFO, which describes individual differences among people in their desire to understand a new environment or situation by turning to the media, was introduced in a 1972 study of the U.S. presidential election in Charlotte, North Carolina (McCombs & Weaver, 1973; Weaver, 1977; Weaver, 1980). When devising a model for the concept of NFO, McCombs and Weaver (1973) relied heavily on cognitive utilitarian theories (Jones & Gerard, 1967; McGuire, 1974) to explain the motivations for information seeking, emphasizing relevance and uncertainty as two important factors that differentiate various levels of NFO. Relevance refers to a person's interest in a subject matter. Uncertainty exists when people do not feel they have all the information they need about a topic. Under conditions of high uncertainty and high relevance, NFO is high, and first-level media agenda-setting effects tend to be strong. The more people feel that something is of interest and that they do not know enough about it, especially to make an important decision such as voting, the more attention they pay to news stories about that topic. Conversely, when the relevance of a topic is low and people feel little uncertainly, NFO is low and media agenda-setting effects typically are weaker (Takeshita, 1993).

Active audiences and need for orientation. The concept of NFO envisions "active audiences" who are oriented toward particular sources of information based on utility, or the benefits they obtain for their personal use (Blumler, 1979). According to this concept, interest in particular issues and uncertainty about them leads to a higher NFO, and thus a higher likelihood of media use. Media use in these instances can be conceptualized as instrumental use of information that is purposive, as opposed to ritualized use "habitually to consume time and diversion" (Rubin, 2009, p. 172).

Social psychology literature assumes some type of information processing in both instances, yet also emphasizes differences in the mechanisms that underline these processes. While the ritualized media orientation might represent a mindless process, an instance of minimal information processing that is rather habitual, the instrumental media orientation is clearly more related to the concept of mindfulness (Langer, 1992, 1997). According to Langer (1992), "Mindfulness is a state of conscious awareness in which the individual is implicitly aware of the context and content of information" (p. 289).

Novelty and a lack of information are among the main factors that cause mindfulness. Thus, mindfulness represents a state in which an individual is open to new information and is willing to actively construct categories and distinctions for the newly processed information (Langer & Moldoveanu, 2000). Consequently, mindful people tend to pay more attention to their present surroundings, while "The most important end motive that drives mindfulness appears to be a desire to learn (curiosity)" (Reiss, 2000, p. 68).

Thus the concept of mindfulness is intrinsically related to the uncertainty element of the NFO concept. When people face situations of ambiguity and uncertainty, they are more likely to initiate mindfulness and to pay more attention to the news media they consume as they seek to fill the information gap regarding issues of interest. Psychological research, on the other hand, has explored the relationship between interest, attention, and learning, suggesting that when people have a prior interest in particular information, their learning is enhanced due to the extra attention allocated to the information of interest (Anderson, 1982; Reynolds & Anderson, 1982).

While media exposure can be driven by an array of different motives, not always implying mindfulness and attentive processing of the information to which citizens are exposed, when media content serves to fulfill a need for information, people's mindfulness is elevated as is their attention to the content they receive. Thus, NFO might be a better predictor of media attention, as citizens with a high NFO are seeking information with a purposeful intention, but it might not necessarily predict citizens' media exposure to the same degree. Thus, we propose the following hypothesis:

H2: NFO will be a better predictor of media attention than of media exposure.

Media Exposure and Agenda-Setting Effects

Since the mid-1980s, scholars who study media effects have suggested a need to distinguish between attention and frequency of exposure to various media messages (Chaffee & Schleuder, 1986; Drew & Weaver, 1990; McLeod & Kosicki, 1986; McLeod & McDonald, 1985). Empirical studies have found a significant increment of public affairs knowledge gain associated with media attention, even after exposure to a medium was controlled for (Chaffee & Choe, 1979; Chaffee & Schleuder, 1986). McLeod and McDonald (1985) found a positive correlation between knowledge of economic news and attention to television news, but null or negative correlations with four other aspects of television exposure. Chaffee and Schleuder (1986) interpreted the findings of these studies as helpful in explaining the disparity in media effects research, especially for television news effects on audience knowledge of public affairs.

Drew and Weaver (1990) found in a survey using six attention and five exposure measures that these two groups of measures tended to load highly on different factors, supporting their hypothesis that attention and exposure are not simply different labels for the same concepts. They also found that the attention measures were more consistent predictors of not only issue knowledge but also of strength of opinions and actual behavior, than were the exposure measures. Similar results were found in relation to interest in U.S. presidential election campaigns, the learning of issue positions of the leading candidates in those campaigns, and intentions to vote (Drew & Weaver, 2006).

Yet, most agenda-setting studies follow some variant of the original Chapel Hill content-based design and do not measure exposure or attention at all. This study follows attention-based design research that explicitly measures levels of exposure and/or attention (see Stromback & Kiousis, 2010, for a full elaboration). These studies suggest that frequency of media exposure is a significant mediator of agenda-setting effects, at least at the first level of issue importance (Einsiedel, Salomone, & Schneider, 1984; Lasorsa & Wanta, 1990; Mullins, 1977; Shaw & Clemmer, 1977; Weaver, McCombs, & Spellman, 1975; Wanta 1997; Wanta & Hu, 1994). Moreover, Stromback & Kiousis (2010) found a strong causal relationship between general political news attention and perceived issue salience. This literature, however, does not explicitly compare the relative power of exposure versus attention measures for agenda-setting effects. Consistent with our expectation that NFO will be a better predictor of media attention than media exposure, we also hypothesize that media attention will be a better mediator between NFO and attribute agenda setting than will media exposure:

H3: Media attention will be a better predictor of second-level agenda-setting effects than media exposure.

NFO and Agenda-Setting Effects

Even though some media scholars have relied on cognitive psychology to argue that agenda-setting effects of mass media occur through the accessibility model of information processing (Iyengar, 1991; Scheufele & Tewksbury, 2007), recent empirical evidence suggests that agenda setting occurs through more complex systems of information processing that are closer to some form of "deliberative" model (Wanta & Hu, 1994; Wanta & Wu, 1992). McCombs (2004) claimed that "agenda setting effects are more than the result of how accessible or available an issue is in the minds of the public . . . the salience of an issue among the public is not simply a matter of its cognitive availability" (p. 59). News media employ different implicit and explicit cues to convey the message that an issue or object is important, and their audiences pick up those cues to infer that some issues are worth thinking about (Miller & Krosnick, 2000). Edelstein (1993) operationalized "thinking about" through the cognitive criterion variable he calls "the problematic situation." According to him, problematic issues identified in news media reports induce their audiences' thinking not only about the topics but also about the meaning in topics.

The most widely accepted psychological explanation for the agenda-setting effects lies in the concept of NFO (Matthes, 2006, 2008; Weaver, 1977, 1980). Research shows that NFO explains variations in media effects on political discussion and political knowledge (Weaver, 1980), and it

explains variations in voters' adoptions of the media issue agenda during an electoral campaign (McCombs & Weaver, 1973; Weaver, 1977) and in a non-electoral context (Matthes, 2008). This evidence, which mostly comes from studies that have investigated this contingent factor at the first level of issue agenda setting, provides strong evidence for the above theoretical claims.

Empirical evidence that tests whether NFO behaves the same way at the second level of attribute agenda setting is scarce, however. In the only study we could find that has analyzed NFO at the second level of agenda setting, Matthes (2008) found that for the issue of unemployment, "NFO has no influence on the perceived salience of affective attributes" (p. 450). Yet, NFO predicted the variations in the salience of this issue on the national agenda, supporting agenda-setting effects at the first level. The effects of NFO on second-level agenda setting have not been tested in an electoral setting where the attributes of the candidates are scrutinized—a setting where second-level agenda-setting effects often have been supported. The present study is set in the context of the 2008 U.S. presidential campaign, and it investigates media effects on perceived candidate attributes. Moreover, this study's measure of NFO differs from Matthes' (2008). Whereas Matthes' (2008) approach defines the concept of NFO through the specific aspects of the process by which the need is expressed, we rely on Weaver's (1977) original NFO conceptualization and operationalization that combine interest and relevance.

Based on the above theoretical and empirical evidence, we predict a direct relationship between NFO and second-level agenda setting.

H4: People with a high NFO will be more likely to apply to the presidential candidates the attributes emphasized most in the news media than people with a low NFO.

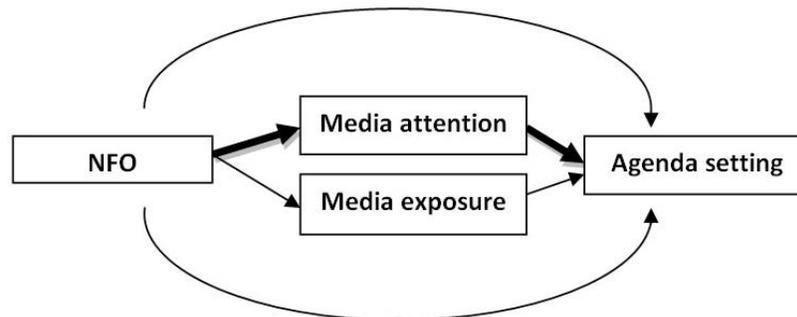


Figure 1. The relationship between NFO, media use, and agenda-setting effects.

Methods

Survey

This study relied on the data from the American National Election (ANES) Time Series Study of 2008. The data for our study come from the ANES pre-election survey in which a total of 2,323 participants were selected and interviewed from a probability sample representing the voting age citizens of the United States. These interviews were conducted from September 2 through November 3, 2008.²

The independent variable that measured the concept of NFO was constructed from more specific measures of uncertainty and interest. The uncertainty measure was composed from questions about the strength of the respondents' political party identification. If respondents identified themselves as strong Democrats or strong Republicans, they were considered to have low uncertainty; if they claimed to be "not very strong" Democrats, "not very strong" Republicans, Independents, or did not have a party preference, they were categorized as highly uncertain. The use of political party identification to measure uncertainty dates back to the original study of NFO (Weaver, 1977).³

Further, two slightly different questions on political campaign interest were combined into a single variable with two values that measured interest. If respondents were not interested at all, not much, somewhat, slightly, or moderately interested in the political campaign, they were classified in the low-interest category. If the respondents said they were very, very much, or extremely interested in the political campaign, they were placed into the high-interest category.

Finally, the above two sub-measures were combined to form the NFO measure, which contained three values. In the "low" NFO category were respondents with low political interest regardless of level of uncertainty; in the "moderate" NFO category were respondents with low uncertainty and high political interest (partisans); and the "high" NFO category included respondents with high uncertainty and high political interest (interested independents).

Combining relevance and uncertainty into a single conceptual construct has important theoretical and methodological advantages (Weaver, 1980). As Weaver (1980) explained, the combined NFO measure taps into "the major aspects of many utilitarian theories of motivation in a single, fairly abstract concept which may be applied to a wide variety of settings" while offering a parsimonious

² This study relies on the secondary survey data from the American National Election (ANES) Time Series Study of 2008. This is the 28th study in a series of biennial election studies conducted by ANES since 1948, considered to be the largest and most comprehensive national election studies conducted in the United States. Other studies have successfully used these data previously (Kiousis, 2005; Kiousis & McCombs, 2004).

³ See Weaver, 1977, pp. 112-113, for a comparison of this measure of uncertainty with three others: congruity of friend's perceived vote intention, congruity of family's perceived vote intention, and certainty about choice of presidential candidate.

variable that facilitates "partitioning a sample to observe media use-media effect relationships, or media gratifications-media use relationships" (p. 365).

The dependent variables measured respondents' evaluations of the traits of the Democratic presidential candidate, Barack Obama, and the Republican presidential candidate, John McCain. The ANES data only measure the degree to which people apply positive attributes to candidates. The survey participants were asked how well the following attributes described each of the two presidential candidates: He is "MORAL," "PROVIDES STRONG LEADERSHIP," "REALLY CARES ABOUT PEOPLE LIKE YOU," "KNOWLEDGEABLE," "INTELLIGENT," "HONEST," and "OPTIMISTIC."⁴

The moderator variables included media exposure and media attention.⁵ The survey measured respondents' media exposure with the following questions: During a typical week, how many days do you watch, read, or listen to news on the INTERNET, TV, printed NEWSPAPERS, RADIO, not including sports? The answers ranged from 0 days to 7 days per week. Further, the respondents were asked to assess their media attention with the following questions: How much attention do you pay to news about national politics on the INTERNET, TV, printed NEWSPAPERS, RADIO? The respondents could choose from the following answers: none at all, a little, a moderate amount, a lot, and a great deal.⁶

Political science research asserts an important causal role for ideological and partisan predispositions for more specific political attitudes and behavior (Campbell, Converse, Miller, & Stokes 1960; Finkel, 1993). As Bartels (2002) claims, partisanship is a "pervasive dynamic force shaping citizens' perceptions of, and reactions to, the political world," which "plays a crucial role in perpetuating and reinforcing sharp differences in opinion between Democrats and Republicans" (p. 138).

⁴ The pre-election 2008 survey included two slightly different sets of questions to measure respondents' evaluation of candidate attributes. For the purpose of this study, they were combined into a single set of measures. Half of the sample could choose from the following answer categories: 1. "not well at all," 2. "not too well," 3. "quite well," and 4. "extremely well." The answers for the second half of the sample included: 1. "not well at all," 2. "slightly well," 3. "moderately well," 4. "very well," and 5. "extremely well." Answers 3 (moderately well) and 4 (very well) from the second half of the sample were merged into a single answer (3. quite well), and merged with the rest of the sample to produce consistent results.

⁵ Also, the survey included two slightly different sets of questions to measure respondents' media use. Half of the sample was asked an older version of the questions used in previous ANES studies, while the other half selected in a random manner were asked the new set of methodologically "improved" questions on the same measure. We decided to use the new set of questions, given that they were more comprehensive and included a battery of questions on Internet news usage.

⁶ The sample size for the media attention measures was significantly lower than the sample size for the media exposure measures, because survey participants who responded "0" days to the exposure questions were not asked the media attention questions. To maximize the number of cases in the final sample, we decided to add the lowest value for media attention (none at all) to the respondents who said they did not expose themselves to media content.

The expressed political ideology of voters and the proximity between voter and candidate positions on the liberal-conservative continuum influence their evaluation of presidential candidates (MacDonald & Rabinowitz, 1993; Wyer et al., 1991). Data from political psychology studies emphasize the importance of partisanship in information processing. During electoral campaigns, voters rely on political party stereotypes to process new information, while party label cues are consequential in shaping individuals' perceptions about political candidates (Rahn, 1993).

Given the above evidence on the important role of political ideology for candidate trait evaluations, this study incorporated political ideology as a control variable. Respondents were asked to place their political values on a 7-point scale that ranged from 1 (extremely liberal) to 7 (extremely conservative). Two additional control variables were age and education.⁷

Content Analysis

Since the ANES survey had a national scope, a mix of print and broadcast media were selected based on their national character, prominence, readership/viewership, and national agenda-setting role. The election campaign coverage of NBC, *The New York Times*, and National Public Radio (NPR) from August 1 to November 1, 2008, was analyzed. Given that the pre-election ANES survey was conducted from September 2 through November 3, 2008, our content analysis time frame ranged from one to three months prior to the survey administration. In one of the most frequently cited time-lag studies of agenda-setting effects, Winter and Eyal (1981) suggested that the optimal effect span is a four-to-six-week period between media coverage and the measurement of the public agenda.

News content for this study was obtained from the Lexis-Nexis database in several steps. First, candidate salience was searched using the last name of the Democratic and the Republican candidates (Obama or McCain) as keywords. Second, the attribute search was done within the stories collected in the first step. Following previous research studies (Kim & McCombs, 2007; Kiousis, 2005), this study measures candidate qualifications (leadership, knowledge, intelligence) and personality traits (morality, honesty, caring, and optimistic).

To trace the candidate trait coverage, a list of synonyms and antonyms was developed for each attribute that became the keywords in the main Lexis-Nexis search, including both synonyms and antonyms. Similar to Kiousis (2005), we initially generated a long list of attribute synonyms and antonyms from conventional dictionaries and thesauruses, which after the pre-testing was narrowed down to only the keywords that produced relevant stories. Only the attribute keywords that appeared within 10 words of the candidates' surnames were considered in order to increase the possibility that the attributes were discussed in relation to the candidates.

⁷ When asked the political ideology question, a considerable number of respondents claimed not to have thought about this question much or did not have an opinion (30% of the total sample). To preserve a large sample size, the missing values for this variable were replaced by the total sample mean value.

The collected data were coded by a human coder. The unit of analysis was a paragraph. Adopting the McCombs et al. (2000) approach, each mention of attributes in a paragraph was individually coded, and a single paragraph could have more than one attribute that referred to one or both candidates. The first step in the coding process was to mark the presence (1) or absence (0) of each attribute. If an attribute was coded as present, the next step was to code for the affective dimension, positive (1) or negative (2). In order to decide whether the attribute was presented as positive or negative, the coder was guided by the attribute synonyms and antonyms and by the verbs in the sentence where the attribute appeared.

A total of 160 news stories containing 520 paragraphs that emphasized one or more attributes were coded for the NBC network news (243 for Obama and 277 for McCain). *The New York Times* yielded 173 relevant news stories, from which 486 paragraphs emphasizing one or more attributes were coded (293 for Obama and 193 for McCain). Finally, the content of NPR contained 159 relevant stories, with 450 paragraphs mentioning one or more of the attributes of interest (260 for Obama and 190 for McCain).

A graduate student in mass communication was trained to code 10% of the news content for the intercoder reliability test. Scott's Pi reliability coefficients between the two coders were within the acceptable norms of .70 and higher (Riffe, Lacy, & Fico, 2005). The coefficients for candidates' cognitive attributes ranged from .77 to .96, while the coefficients for the candidates' attribute valence ranged between .75 and .94.

Measuring Attribute Agenda-Setting Effects

This study relies on two types of data to measure attribute agenda-setting effects. First, similar to previous studies that have followed the original Chapel Hill design (McCombs & Shaw, 1972), we used aggregate data in order to test the H1 and H4. The list of seven candidate attributes (leadership, knowledge, intelligence, morality, honesty, caring, and optimistic) was compared between the opinion survey and media content analysis data through rank-order correlations. This measure is used in the analysis presented in Tables 1 and 5.

Further, this study was interested in the individual level agenda-setting effects of the candidate attributes. As a proxy for this variable, we constructed two indexes for candidate traits from the public opinion survey data. The measures for each candidate showed internal consistency based on Cronbach's Alpha (for Obama attributes, Alpha = .88, and for McCain attributes, Alpha = .88). As an additional measure of internal consistency, the candidate attribute measures were subject to a factor analysis (with Varimax rotation) that extracted two factors exhibiting high loadings for "Obama attributes" (leadership .811, knowledgeable .764, intelligent .743, moral .787, honest .788, caring .795, and optimistic .687) and "McCain attributes" (leadership .784, knowledgeable .748, intelligent .747, moral .783, honest .778, caring .739, and optimistic .739). High loadings for the two indexes suggest that the respondents differentiated between the two political candidates and were consistent in their evaluation. This index was used in the data analysis presented in Tables 3 and 4.

Findings

Before exploring the mediating power of the variables of interest—NFO, media exposure, and media attention—for the second-level agenda-setting effects, we needed to establish that such effects occurred during the 2008 U.S. presidential elections.

H1 claimed that *candidates' attributes portrayed positively in the news media will be significantly correlated with people's inclination to apply those attributes to the presidential candidates*. H1 is mostly supported. Spearman's Rho correlation coefficients between the public's perceptions that the seven attributes tested in this study applied to the candidates (Barack Obama and John McCain) and the positive media coverage of these candidate traits are positive and mostly significant (see Table 1). However, these correlations are higher and more significant for Obama than McCain. One explanation for these findings might have to do with the candidates themselves and the nature of the race. Given that the attributes tested in this study were mostly positive, Obama might have had an advantage, as he was a relatively new candidate in the game of politics with relatively less political baggage compared to McCain, who was a more seasoned candidate. What is more, Obama's campaign made an effort to link McCain's campaign and candidacy to failed Bush policies, which might have suppressed peoples' positive feelings toward McCain. Moreover, media coverage of Obama was more positive than the McCain coverage during the 2008 campaign.

Table 1. Spearman's Rho Correlations between Public Opinion and Media Coverage of Candidate Traits.

| | Obama (N = 7) | McCain (N = 7) |
|-----------------|------------------|-------------------|
| NY Times | .873* | .532 |
| NBC | .893** | .595 |
| NPR | .786* | .829* |

Note: * $p < .05$ ** $p < .01$

Need for Orientation and News Media Use

H2 predicted that NFO would be a stronger predictor of media attention than media exposure. This hypothesis was supported for all media (see Tables 2a and 2b).

As predicted, the ANOVA test with NFO as the between-subjects factor and news media exposure as the dependent variable resulted in a significant main effect for television, the Internet, radio, and newspapers. These results indicate that, depending on the level of NFO, respondents were

exposed to news media to a different degree. The post-hoc pairwise comparisons with Bonferroni adjustments revealed that respondents with moderate NFO tended to exhibit the most frequent exposure on average across all media types (see Table 2a). While the difference between the television exposure means between a moderate NFO ($Mean = 5.77, SD = 2.02$) and a high NFO ($Mean = 5.06, SD = 2.39$) were statistically significant, the difference between these two categories was not significant for the other media types.

Table 2a. Mean Scores of Media Exposure by Levels of Need for Orientation.

| | TV (<i>N</i> = 1138) | Internet (<i>N</i> = 1138) | Radio (<i>N</i> = 1138) | Newspaper (<i>N</i> = 1137) |
|----------------------------|---------------------------------|---------------------------------------|------------------------------------|--|
| | 4.61 _a | 1.76 _a | 2.02 _a | 2.09 _a |
| Low NFO | (2.49) | (2.57) | (2.64) | (2.53) |
| | [574] | [574] | [574] | [574] |
| Moderate NFO | 5.77 _b | 2.77 _b | 2.60 _b | 3.19 _b |
| | (2.02) | (2.97) | (2.86) | (2.87) |
| | [283] | [283] | [283] | [282] |
| High NFO | 5.06 _c | 2.76 _b | 2.64 _b | 2.73 _b |
| | (2.39) | (2.87) | (2.85) | (2.88) |
| | [281] | [281] | [281] | [281] |
| F | 24.20** | 19.10** | 6.74** | 16.78** |
| η^2 | .041 | .033 | .012 | .029 |

Note: * = $p < .05$, ** = $p < .001$. Standard deviations appear in parentheses below means; the number of cases appears in brackets. Means with different subscripts within columns are different from each other at least at .05 significance level based on Bonferroni post-hoc paired comparisons.

Another ANOVA test was performed to test the relationship between NFO and media attention. Similarly, this test showed main effects for all media types, suggesting variations in media attention between different levels of NFO. The Bonferroni post-hoc paired comparisons suggested that respondents with a moderate NFO tended to exhibit the highest media attention for television ($Mean = 3.77, SD = 1.13$), the Internet ($Mean = 2.42, SD = 1.50$), and newspapers ($Mean = 2.81, SD = 1.46$) (see Table 2b).

To directly test H2, we looked at the magnitude of effects as depicted by η^2 . A comparison of the results in Table 2a and Table 2b shows that NFO was a stronger predictor of media attention than media exposure, given that the η^2 s across all media types were notably higher than the η^2 s for media exposure. NFO best predicted television attention ($\eta^2 = .198$), followed by newspaper ($\eta^2 = .121$), Internet ($\eta^2 = .107$), and radio attention ($\eta^2 = .076$).

Table 2b. Mean Scores of Media Attention by Levels of Need for Orientation.

| | TV (N = 1132) | Internet (N = 1129) | Radio (N = 1127) | Newspaper (N = 1132) |
|----------------------------|-------------------------|-------------------------------|----------------------------|--------------------------------|
| | 2.51 _a | 1.56 _a | 1.65 _a | 1.78 _a |
| Low NFO | (1.02) | (.99) | (.99) | (.93) |
| | [572] | [567] | [567] | [572] |
| Moderate NFO | 3.77 _b | 2.42 _b | 2.38 _b | 2.81 _b |
| | (1.13) | (1.50) | (1.54) | (1.46) |
| | [281] | [282] | [280] | [280] |
| High NFO | 3.37 _c | 2.32 _b | 2.38 _b | 2.48 _c |
| | (1.22) | (1.38) | (1.49) | (1.39) |
| | [279] | [278] | [280] | [280] |
| F | 139.00** | 67.62** | 46.05** | 77.78** |
| η^2 | .198 | .107 | .076 | .121 |

Note: * = $p < .05$. ** = $p < .001$, Standard deviations appear in parentheses below means; the number of cases appears in brackets. Means with different subscripts within columns are different from each other at least at .05 significance level based on Bonferroni post-hoc paired comparisons.

Audience Characteristics and Candidate Attributes

H3 predicted that media attention would be a better predictor of second-level agenda-setting effects than media exposure. Given that our content analysis data suggested a slight variation in the way in which different media sources emphasized different substantive and affective attributes of the two candidates, we expected to find variations in effects across different media as well. Further, mean scores of media use and attention presented in Tables 2a and 2b showed that some respondents were

more exposed and paid more attention to some media than others. As shown in Table 3, only attention to television and radio content had a significant positive relationship with candidate attributes.

Table 3. OLS Regressions of Media Attention and Exposure on Candidate Trait Evaluations.

| | Obama (N = 1092) | McCain (N = 1092) |
|--------------------------------|----------------------------|-----------------------------|
| TV News Attention | .145** | .011 |
| TV News Exposure | .010 | .062 |
| Internet News Attention | -.018 | -.009 |
| Internet News Exposure | -.004 | .035 |
| Radio News Attention | -.013 | .117** |
| Radio News Exposure | -.047 | -.089* |
| Newspaper Attention | .070 | -.050 |
| Newspaper Exposure | -.037 | .062 |
| NFO | .014 | .042 |
| Political ideology | -.192** | .267** |
| Age | -.074* | .002 |
| Education | .028 | .152** |
| Adjusted R² | .073 | .108 |

*Note: Standardized regression (Beta) coefficients reported. [^]p < .1; * p < .05; **p < .01*

Television attention was positively and significantly associated with the evaluation of Obama traits, suggesting that people who paid more attention to television news were more likely to think that knowledge, intelligence, morality, honesty, and caring described Obama. However, neither attention to other media sources nor exposure to news alone had any significant relationship with the evaluation of the Obama traits. The coefficients for political ideology and age were negative and statistically significant, suggesting that younger people with liberal views were more likely to think that positive attributes applied to Obama.

For the McCain model, radio attention was positively associated with McCain attributes, suggesting that people who paid more attention to radio news were more likely to think that positive attributes applied to McCain. Moreover, political ideology and education had a positive and statistically significant relationship with McCain trait evaluation, implying that highly educated conservatives had more favorable opinions of McCain as a presidential candidate.

When controlling for media attention, the coefficients for different media exposure variables in the two OLS models did not show significance, except for radio news exposure that had a slight but statistically significant negative relationship with McCain attributes. However, a comparison of the results in the two models in Table 3 shows that the size of the significant media coefficients is stronger for media attention than for exposure.

Moreover, the results in Table 4 suggest that even after controlling for media exposure, political ideology, age, and education, NFO is a significant predictor of media attention for all four media types. These results offer support for H3, which stated that media attention is a stronger predictor of second-level agenda-setting effects than media exposure and serves as a better mediator between NFO and attribute agenda-setting effects than does frequency of media exposure, at least for television and radio.

Table 4. OLS Regressions of NFO on Media Attention and Candidate Trait Evaluations.

| | TV | Internet | Radio | NP | Obama | McCain |
|-------------------------------|-----------|-----------------|--------------|-----------|--------------|---------------|
| NFO | .126** | .091** | .082** | .076** | .014 | .042 |
| TV Attention | | .144** | .163** | .228** | .145** | .011 |
| Internet Attention | .244** | | .124** | .169** | -.018 | -.009 |
| Radio Attention | .236** | .105** | | .100** | -.013 | .117* |
| NP Attention | .261** | .114** | .079** | | .070 | -.050 |
| Political Ideology | .037 | -.033^ | .011 | -.060** | -.192** | .269** |
| Age | .027 | -.048* | .036^ | -.004 | -.074* | .002 |
| Education | .055* | .040* | .078** | .004 | .028 | .154** |
| Adjusted R² | .452 | .677 | .621 | .522 | .073 | .118 |
| N | 1092 | 1092 | 1092 | 1092 | 1092 | 1092 |

*Note: Coefficients are standardized regression (Beta) coefficients controlling for variables in each block that also include individual media exposure. ^p < .1; * p < .05; **p < .01.*

To test H4, which stated that people with higher NFO will be more subject to agenda-setting effects than people with low NFO, we relied on two types of data. First, we used Spearman's Rho correlations to examine the aggregate correlations between the public's perceptions of candidates' traits and positive coverage of these attributes by media, controlling for different levels of NFO. The results, presented in Table 5, do not support H4 for Obama, but they tend to partially support H4 for McCain, although the moderate NFO category is not consistent with this prediction for either candidate.

Contrary to our expectations, the aggregate correlations between respondents' attribute evaluations for Obama and media coverage of these attributes were higher for people with low NFO, and the lowest for moderate NFO. However, for McCain the pattern of correlations was a bit closer to our prediction, given that Rho coefficients for people with a high NFO (.58, .67, .90) were slightly larger than for people with a low NFO ($r = .52$, $r = .59$, $r = .83$) across all media types, even though only the NPR coefficient was statistically significant.

Table 5. Spearman's Rho Correlations Between Media Coverage of Attributes and Public Opinion by NFO.

| | | Low NFO | Moderate NFO | High NFO |
|-----------------|--------|---------|--------------|----------|
| NY Times | Obama | .873* | .436 | .655 |
| (N = 7) | McCain | .523 | .360 | .577 |
| NBC | Obama | .893* | .393 | .714 |
| (N = 7) | McCain | .595 | .505 | .667 |
| NPR | Obama | .786* | .393 | .643 |
| (N = 7) | McCain | .829 | .829 | .901* |

Note: * $p < .05$ ** $p < .01$

This is not too surprising, given the results of the regression analyses in Table 4 that show that levels of NFO are not significantly associated with public evaluation of attributes for the two candidates. Instead, data suggest that NFO might have an indirect effect on second-level agenda setting through increasing people's attention to political information in news media, especially television and radio. It is likely that those who were less interested in the campaign were less likely to be partisans who critically evaluate the media coverage of candidate traits, which would help to explain the higher correlations for Obama among those people with low levels of NFO. This speculation is also supported by the finding that political ideology is the strongest predictor for both Obama and McCain attribute salience in the regressions in Tables 3 and 4.

These results presented in Tables 3 and 4 show that NFO did not have a direct effect on respondents' assessments of Obama and McCain attributes. Thus, H4 was not supported with these individual-level data. Instead, our study found consistent and moderately strong support for the assumption that people tend to see candidates' attributes through the lens of their own political ideology. Because the political ideology variable was measured on a 7-point scale ranging from 1 (extremely liberal) to 7 (extremely conservative), the negative coefficients in Tables 3 and 4 suggest that the more respondents held conservative political views, the less they were inclined to see the Democratic presidential candidate as having the seven attributes that were included in this study. The opposite was true for McCain.

Conclusions

Our study thus offers some support for the importance of NFO as a predictor of frequency of exposure and amount of attention to national political news in various media. Moreover, this study suggests that at the second level, the NFO relationship with agenda-setting effects is mostly mediated by attention to news media, with a moderator or contingent condition of political ideology.

However, this study offers very little support for the importance of NFO as a direct predictor of which attributes of the candidates were considered most applicable. This finding is consistent with that of Matthes (2008), who found that "NFO has no influence on the perceived media salience of affective issue attributes" (p. 440). As he put it, "NFO does predict that individuals will turn to news media in order to gather information, but it fails to predict which specific issue attributes will be chosen as orienting cues" (p. 450).

Thus, in addition to the attention to the attributes emphasized by prominent news media, of high importance was what respondents brought to the media messages in terms of prior political beliefs and attitudes. This finding suggests that at the second level of agenda setting, where attributes of issues and objects are the main focus, the prior beliefs and attitudes of people matter more than at the first level of agenda setting. This study thus supports Iyengar et al.'s (1984) assumption that "the criteria people apply in reaching social judgments have both internal and external origins; they reflect both predisposition and circumstance" (p. 786).

This study has its own limitations, and its results should be taken cautiously. First, because of the nature of the ANES data used in this study, we combined cognitive and affective dimensions of attributes instead of measuring them separately. The ANES data also limited our study to measuring only the transfer of the positive candidate attributes from media to the public agenda. Previous research shows that media may be more powerful in transferring cognitive attributes than affective attributes, while recent research suggests that negative media content might have a more powerful agenda-setting effect than positive coverage (see Coleman & Wu, 2010).

The second limitation of this study has to do with the measurement of the news agenda. This study disaggregates news attention in different media platforms instead of measuring general news attention. Stromback and Kiousis' (2010) study suggested that to detect agenda setting, "general

political news attention might be a better measure than attention to specific media outlets" (p. 288). However, their study tested for the transfer of issues rather than attributes. Given the polarization of the media in the United States and the importance of political ideology for agenda-setting effects, another future venue for research might be to differentiate between independent versus politically biased media platforms. The failure to do so in this study might explain our conflicting results regarding the transfer of candidate attribute salience from the media agenda to the public agenda.

As our study suggests, previous beliefs and attitudes are important when people assess political candidates, while political attitudes are also found to guide media selection (Mutz, 2006). Our study found that people with moderate levels of NFO, that is, those with high interest and low uncertainty, are most likely to turn to mass media for political information. Given that uncertainty was measured by political party identification, this study suggests that partisans have a tendency to pay more attention to news media during an electoral campaign. However, in most of our cases, the difference between high-NFO and moderate-NFO people was not statistically significant. Thus, it is reasonable to believe that the level of political interest (the first dimension of NFO) is more likely to determine general media exposure and attention, while the level of political uncertainty (the second NFO dimension) is more likely to determine specific media sources. Cognitive dissonance, with its key concepts of selective exposure (Festinger, 1957), offers a relevant theoretical framework that helps explain which media sources people will choose in order to satisfy their NFO and the impact that the information they receive might have on their political judgments. These findings open new directions for future research, including studies of framing effects. The specific media sources that people choose as a way to satisfy their political uncertainty undoubtedly frame various issues, parties, and candidates differently, and these differences are likely to lead to different ways of thinking about them. More research is needed to explore these differences.

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