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# The Impact of Personality on Cognitive, Behavioral, and Affective Political Processes: The Effects of Need to Evaluate

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**ABSTRACT** Need to evaluate (NE) is a personality trait that reflects a person's proclivity to create and hold attitudes; people high in NE are especially likely to form attitudes toward all sorts of objects. Using data from the 1998 National Election Survey Pilot and the 2000 National Election Survey, NE was shown to predict a variety of important attitude-relevant cognitive, behavioral, and affective political processes beyond simply holding attitudes: NE predicted how many evaluative beliefs about candidates a person held, the likelihood that a person would use party identification and issue stances to determine candidate preferences, the extent to which a person engaged in political activism, the likelihood that a person voted or intended to vote, the extent to which a person used the news media for gathering information, and the intensity of emotional reactions a person felt toward political candidates. Thus, NE appears to play a powerful role in shaping important political behavior, emotion, and cognition.

After a personality measure is developed, subsequent research often shows that the measure has effects on phenomena far beyond the domain initially presented. For example, need for cognition measures the extent to which a person enjoys engaging in effortful mental processing (Cacioppo & Petty, 1982). Not surprisingly, initial research showed that need for cognition helped predict the extent to which people process persuasive messages (e.g., Cacioppo, Petty, & Morris, 1983). However, later research showed that need for cognition predicted phenomena beyond this initial area of study, including consumers' likelihood of abandoning a brand to which they felt loyal (Wood & Swait, 2002), jurors' propensity to ignore inadmissible testimony in court (Sommers & Kassin, 2001), and the extent to which people engage in metacognitive activities (Petty, Briñol, & Tormala, 2002).

In a similar vein, self-monitoring measures the extent to which a person engages in expressive control in reference to a social situation (Snyder, 1974). Initial research supported the validity of the self-monitoring scale by showing that high self-monitors were better able to control their outward appearance based on the social situation (e.g., Ickes & Barnes, 1977). But later research showed that self-monitoring predicted processes of a much broader scope: The construct has since been shown to predict the types of arguments people find persuasive (e.g., DeBono & Snyder, 1989) and whether physical appearance has an effect on personnel selection (Snyder, Berscheid, & Matwychuk, 1988). It is clear that individual-difference measures

often predict important phenomena considerably removed from their initial areas of application (see Cacioppo, Petty, Feinstein, & Jarvis, 1996, and Gangestad & Snyder, 2000, for more detailed descriptions of research involving these two constructs).

Need to evaluate (NE; Jarvis & Petty, 1996) is an individual difference variable that measures the extent to which people spontaneously evaluate objects or experiences as either good or bad. People high on this trait have many evaluative thoughts and hold attitudes toward a wide variety of objects, whereas people low on this trait engage in less evaluation and are therefore less likely to form attitudes. Although attitudes are a fundamental concept in psychology, surprisingly little research exists on how need to evaluate—the propensity to create and hold attitudes—can be used to predict meaningful mental and behavioral processes.

Because the political arena is one domain in which evaluation is an important process, the effects of need to evaluate might relate to a diversity of political outcomes. Many psychological and social factors may affect individual levels of political participation. For example, people who care more about the outcome of an election, people who have the cognitive skills needed to understand the political process, and people who have the economic wherewithal to donate to various organizations may be more likely to participate in and think about political processes, whereas those who lack interest, lack intelligence, and lack the economic resources will likely not do so to the same extent (e.g., Brady, Verba, & Schlozman, 1995; Verba, Schlozman, Brady, & Nie, 1993). Because attitudes toward political candidates and issues are at the heart of the political process, need to evaluate may provide important insights into people's proclivity to participate in the political process.

There are two primary goals of this paper. The first is to explore the implications of the personality construct of need to evaluate for a variety of behavioral, cognitive, and affective outcomes. Because attitudes influence a multitude of mental and behavioral processes, and because need to evaluate predicts a person's proclivity to form attitudes, the variable should be related to affective, cognitive, and behavioral processes that are associated with attitudes. The second goal is to, for the first time, examine need to evaluate in a nonlaboratory setting. To date, all research involving need to evaluate has relied exclusively on samples of undergraduate students. Some scientists (e.g., Sears, 1986) have argued that such samples can differ in

important ways from the general population. As such, the results yielded from "convenience samples" may be different from results taken from a more representative sample of the population. Because the studies in this paper used large-scale, nationally representative samples, they assess the usefulness of need to evaluate in predicting phenomena in the general population. Additionally, the use of real-world dependent variables in these studies, such as voter turnout and candidate preference, assesses whether need to evaluate has meaningful relationships with important, real-world phenomena.

We begin with a discussion of need to evaluate, including its conceptualization, measurement, and some supporting research. We then present hypotheses regarding how need to evaluate might relate to a person's propensity to engage in a variety of cognitive, behavioral, and affective processes in the political domain. We then present the results of our tests of these hypotheses using two separate nationally representative samples of U.S. citizens. Finally, we discuss how the present research advances our understanding of need to evaluate in particular and personality variables in general.

# THE CONSTRUCT OF NEED TO EVALUATE

#### Definition

Need to evaluate is an individual-difference construct that predicts the tendency of people to engage in evaluative responding (Jarvis & Petty, 1996; Petty & Jarvis, 1996). People high in need to evaluate (HNE) are more chronically engaged in evaluation of various aspects of their lives and environments than are people low in need to evaluate (LNE). To a greater extent than LNE people, HNE people spontaneously evaluate information they receive and experiences they have as good or bad, thus forming overall evaluations. Whereas LNE people tend not to evaluate unless they need to do so, HNE people enjoy the process of assessing the advantages and disadvantages of that which they observe. Thus, whereas someone low in need to evaluate might be content in knowing that a new product exists, someone high in need to evaluate would likely enjoy evaluating the new product.

#### Measurement

Need to evaluate is measured by a self-report battery in which respondents indicate how well a variety of statements describe themselves ("extremely characteristic," "somewhat characteristic," "uncertain," "somewhat uncharacteristic," and "extremely uncharacteristic"). The statements include "I form opinions about everything" and "I pay a lot of attention to whether things are good or bad." Sixteen such statements compose the need to evaluate scale developed by Jarvis and Petty (1996). Ten of the statements express high levels of need to evaluate, whereas six statements express low levels of need to evaluate.

There are two classes of statements, one regarding the number of opinions a person forms (e.g., "I have many more opinions than the average person") and the other about the extremity or strength of opinions (e.g., "I prefer to avoid taking extreme positions"). Whereas some assertions regard preferences (e.g., "I enjoy strongly liking and disliking new things"), others regard cognitive processes (e.g., "I form opinions about everything"). These statements have been shown to be internally consistent and to load on a single factor (Jarvis & Petty, 1996). Consistent with the notion that need to evaluate is a stable dispositional characteristic of individuals, 10-week test-retest correlations for this battery were shown to be extremely high (r = .84; Jarvis & Petty, 1996).

# Relation With Other Dispositions

Research indicates that need to evaluate is distinct from various frequently studied personality traits. For example, Jarvis and Petty (1996) found modest positive correlations of need to evaluate with desire for control (Burger & Cooper, 1979; r = .22, p < .05), need for cognition (Cacioppo & Petty, 1982; r = .35, p < .05), and affective intensity (Larsen, Diener, & Emmons, 1986; r = .17, p < .05), and no relation to constructs such as need for closure (Webster & Kruglanski, 1994; r = .06, ns), personal need for structure (Neuberg & Newsome, 1993; r = .03, ns), and self-monitoring (Snyder, 1974; r = -.04, ns). Research has also examined the relation of need to evaluate with the Big Five personality factors (Goldberg, 1990). Specifically, Tuten and Bosnjak (2001) found that need to evaluate showed small positive correlations with both extraversion (r = .24, p < .05) and openness to experience (r = .25, p < .05), a marginally

negative correlation with emotional stability (r = -.10, p < .10), and no correlation with agreeableness (r = .00, ns) or conscientiousness (r = .03, ns). These nonsignificant-to-modest correlations suggest that need to evaluate is distinct from other psychological dispositions (see Petty & Jarvis, 1996, for additional information regarding the relation between need to evaluate and other individual differences).

## The Effects of Need to Evaluate

Researchers have only begun to examine the effects of need to evaluate. Initial research on the construct demonstrated that HNE people express more evaluative thoughts toward both personally relevant attitude objects as well as more remote objects, like abstract art (Jarvis & Petty, 1996). HNE people are also more likely to have opinions on a diversity of social issues than LNE people, who are more likely to report not having an opinion (Jarvis & Petty, 1996).

Research by Hermans, Houwer, and Eelen (2001) suggests that need to evaluate also accounts for differences in the domain of automatic evaluative responding. In this research, after being primed with either a positive or negative word, participants evaluated a second word as being either positive or negative as quickly as they could. Results indicated that HNE participants more quickly identified words congruent with the prime valence than they did words incongruent with the prime valence. LNE participants, however, showed no difference in the time it took to identify evaluatively congruent and incongruent words. Hermans et al. (2001) proposed that their results were due to differences in object-evaluation association strength. That is, HNE individuals have stronger object-evaluation associations due to their chronic evaluative responding. Additional evidence for this view comes from research reported by Petty and Jarvis (1996), in which people high and low in need to evaluate reported their attitudes toward nearly 100 familiar attitude objects. As the names of these objects were flashed on a computer

<sup>1.</sup> This pattern of results is consistent with the higher-order, two-factor structure of the Big Five as proposed by Digman (1997): NE was positively correlated with each of the two traits Digman termed "beta," but neither of the three traits that Digman termed "alpha."

screen, participants provided their evaluations of these objects on a dichotomous good/bad measure. Participants high in need to evaluate reported their attitudes more quickly than those low in the need to evaluate.

The speed with which attitudes come to mind for people high versus low in need to evaluate suggests that HNE people are more likely to engage in online versus memory-based evaluative processing (Hastie & Park, 1986). Tormala and Petty (2001) argued that because HNE people are chronically engaged in evaluation, they would tend to form their opinions online, whereas LNE people would tend to form opinions only when required based on what they can remember. Consequently, HNE people are able to express their opinions more quickly than LNE people because they are more likely to have formed the attitude already when asked to express it. In contrast, when LNE people are asked to express an opinion, they are slower because they must construct it on the spot, retrieving and integrating whatever relevant information they can find in memory. Thus, for LNE individuals, attitudes are predicted by the valence of what can be recalled about the attitude object, whereas for HNE individuals, attitudes are relatively independent of recall (Tormala & Petty, 2001).

## Need to Evaluate and Political Processes

For people to engage in processes that depend on attitudes, they must, of course, hold an attitude in the first place. Among the classes of outcomes that attitudes have been shown to influence are affect. cognition, and behavior (see Eagly & Chaiken, 1993; Petty & Krosnick, 1995). Because of this, we expect that HNE respondents will manifest more attitude-relevant cognition in the form of more evaluative beliefs about political candidates and a greater likelihood of using issue stances and party identification in forming candidate preferences. We expect that HNE respondents will also manifest more attitude-relevant behavior in the form of greater political activism, greater likelihood of voting in elections, and greater likelihood of using the news media to learn about the political world. Finally, we expect that HNE respondents will manifest more attitude-relevant affect by feeling more emotional responses to political candidates. Below, we detail these primary hypotheses in more detail.

# Cognition

Evaluative beliefs about candidates. In order for individuals to make informed choices in an election, they must have an evaluative basis upon which to make these decisions: perceptions of good and bad features of the candidates. HNE people may have more such evaluative beliefs about candidates because they are more motivated to evaluate the pieces of information they encounter. That is, whereas a LNE individual might be content to learn about a candidate's behavior, a HNE individual would likely evaluate the behavior, creating or changing his or her attitude toward the candidate. Over time, the HNE individual should garner more such evaluative beliefs about candidates than do LNE individuals.

Processes of evaluating candidates. Need to evaluate may also be useful for understanding how people decide which candidates to support in democratic elections. In order to employ any criterion in making a vote choice, a person must have attitudes toward parties or policies or personality traits or economic conditions. Therefore, anything that enhances the extent to which a person possesses evaluative political beliefs and attitudes will enhance his or her potential to use these in making vote choices. Of course, need to evaluate may do just that. HNE people may be especially likely to identify with a particular party, to take stands on a wide range of policy issues, and to evaluate an incumbent's performance in office, whereas LNE people may be less likely to have formed such evaluations. Therefore, the former individuals may manifest stronger relations between all of these specific evaluative predictors and their global attitudes toward the candidates.

#### **Behavior**

Electoral activism. Need to evaluate should predict political activism, including behaviors such as contributing to candidates' campaigns, volunteering to work for candidates' campaigns, participating in lobbying groups, and attending rallies and protests. Because HNE people hold more numerous opinions, they should be more likely to act in support of the candidates and issues they endorse. LNE people, on the other hand, should be less likely to do anything to support particular issues or candidates because they are less likely to have opinions regarding them at all.

Turnout. Need to evaluate should also predict whether a person will vote in any given election, such that a person who has lots of evaluations about political candidates and issues will be more likely to vote. Holding evaluations about a candidate, whether positive or negative, would likely drive a person to vote either to help a preferred candidate be elected or to prevent another candidate's election. Similarly, holding positive or negative evaluations about a political issue might also drive a person to take the time to vote. However, people who do not have strong evaluative responses to either of the candidates or the relevant issues will likely be less motivated to vote in an election.

News media use. News media exposure is one of the most useful tools people have for learning about the world of politics, so people who are especially motivated to do such learning presumably seek out the most exposure. Because HNE people may be especially motivated to evaluate political actors and policies, these people may be more likely to seek out political information in attempts to create and update their evaluations. Therefore, HNE people may be more attentive to political information provided by the news media.

# Affect

Emotional reactions to candidates. Individuals who have opinions about many social policies and initiatives should be more likely to react emotionally to candidates who could act in support or in opposition of those policies than individuals who have no opinions regarding those social policies and initiatives. Candidates who support a person's preferred policies may make that person feel proud or hopeful, whereas those who oppose a person's preferred policies may make that person feel angry or afraid. To the extent that a person has no opinion or weak opinions about political issues, that person should fail to react emotionally to candidates and their statements because their actions would have no affectively relevant implications or consequences. Therefore, in the domain of politics, being high in need to evaluate may be associated with having more frequent, strong emotional reactions to political actors and events.

# The Current Research

In the rest of this paper, we report the results of tests of these hypotheses that we conducted using data from the 1998 National Elec-

tion Survey (NES) Pilot Study and the 2000 NES. The 1998 NES Pilot Study involved preelection interviews with representative samples of 1,203 adult residents of three states in which gubernatorial elections were being held: California, Georgia, and Illinois. Interviews were conducted by telephone, lasted approximately 40 minutes on average and were completed between September 8 and November 3, 1998. The response rate for this survey was 41.5%.<sup>2</sup>

The 2000 NES involved preelection and postelection interviews. For the preelection wave, interviews were conducted with a nationally representative sample of 1,807 adults. A probability-area sample of 1,006 respondents were selected for face-to-face interviews, whereas a parallel random-digit-dialing sample of 801 respondents were selected for telephone interviews.<sup>3</sup> Preelection interviews were approximately 65 minutes long on average and occurred between September 5 and November 6, 2000. The response rate for the face-to-face mode was 64.8%, and the response rate for the telephone interviews was 57.2%.

For the postelection wave, 1,555 of the preelection respondents were reinterviewed between November 8 and December 21, 2000. The postelection reinterview response rate was 87.2% in the face-to-face mode and 85.8% by telephone.

#### Measure of Need to Evaluate

The original need-to-evaluate scale contains sixteen items, six of which are reverse-coded in attempts to avoid acquiescence bias, the tendency for individuals to agree with statements regardless of their meaning (Watson & Johnson-Laird, 1972; Yzerbyt and Leyens, 1991). Although inclusion of many items permits the use of reverse-scored items, the full NE scale would be prohibitively expensive to administer in general public surveys. We therefore wrote three new items to measure NE using varying response scales. The first item was as follows:

Some people have opinions about almost everything; other people have opinions about just some things; and still other people have

- 2. Response rates were calculated as the ratio of completed interviews to the total number of potential respondents. This corresponds to American Association for Public Opinion Research (AAPOR) Response Rate #1.
- 3. Some participants who were interviewed face-to-face for the preelection sessions were subsequently interviewed via telephone for the postelection sessions.

very few opinions. What about you? Would you say you have opinions about almost everything, about many things, about some things, or about very few things?

Respondents were scored 0 if they said "very few things," .33 if they said "some things," .66 if they said "many things," and 1.0 if they said "almost everything."

The second question asked,

Compared to the average person, do you have fewer opinions about whether things are good or bad, about the same number of opinions, or more opinions?

Respondents who said "fewer" or "more" were then asked whether they had "a lot" or "somewhat" fewer or more opinions. Respondents were scored 0 if they said "a lot fewer," .25 if they said "somewhat fewer," .50 if they said "about the same," .75 if they said "somewhat more," and 1.0 if they said "a lot more."

The third question was:

Some people say that it is important to have definite opinions about lots of things, while other people think that it is better to remain neutral on most issues. What about you? Do you think it is better to have definite opinions about lots of things or to remain neutral on most issues?"

Respondents who selected the first option were scored 1; respondents who selected the second option were coded 0; respondents who said they didn't know were coded .50.

In the 1998 NES Pilot, respondents' three scores were averaged to yield an index, with 1 indicating the maximal level of need to evaluate and 0 indicating the minimal level of need to evaluate. The reliability of this index was adequate, as indicated by a Cronbach's alpha of .58. In the 2000 NES, only the first two questions were asked, and the reliability of the resulting index was again adequate, as indicated by a Cronbach's alpha of .68.

# Pilot Study

Because these new forms of need to evaluate had not been used previously, we conducted a pilot study to assess the relation between the full 16-item scale and the shorter 3-item scales as used in the Na-

tional Election Survey. A total of 159 Ohio State University students took part in the pilot study in partial fulfillment of a course requirement. These students each used a computer with MediaLab software (Jarvis, 2000) to complete both the long and concentrated forms of need to evaluate. The computer program presented the 16 long-form items, and the first and third concentrated items one per screen. The second of the three concentrated-form items was presented in the full branching format.

The 3-item concentrated form was strongly correlated with the full 16-item form (r = .69, p < .01). This association was then corrected for attenuation due to measurement error by estimating the relationship between two latent factors with three and sixteen indicators, respectively. An analysis of this model using LISREL indicated a strong relation between these two factors (r = .90, p < .01). In addition, the reliability of the concentrated form was adequate, as indicated by Cronbach's alpha value of  $.69.^4$  Because of the magnitude of the association between the full and concentrated measures, and because of the strong reliability of the concentrated measure, we felt justified in using the concentrated form of need to evaluate.

# **Analysis Strategy**

Most of our hypotheses were tested by estimating the parameters of two LISREL models. In the first, age, education, gender, income, race, interest in politics, political knowledge, and strength of party identification were used to predict the dependent variable. Each of these predictors and the dependent variable was coded to range from zero to one, with zero indicating the lowest possible level of a construct, and one indicating the highest possible level, with the exception of gender, which was coded "0" for males and "1" for females, and race, which was coded "0" for Caucasians and "1" for all other races. In a second analysis, need to evaluate was then added to these predictors as a latent factor (with three indicators in the 1998 sample and two indicators in the 2000 sample). This two-step process allows us to understand the relation that need to evaluate has with the de-

4. Because the 2000 NES study only utilized the first two of the concentrated-form items, these analyses were recomputed with only those two items. Results were much the same: The two-item form was strongly correlated with the full 16-item form (r = .80, p < .01) without correction for attenuation; r = .83, p < .01 with correction); the reliability was similarly adequate  $(\alpha = .76)$ .

pendent measures of interest above and beyond that predicted by the demographic variables.

# **RESULTS**

# Demographics, Indicators of Political Engagement, and Political Ideology

Before testing our hypotheses, we wanted to understand the relation between need to evaluate and demographic and political-engagement variables that often account for variance in behavioral and cognitive political processes. Because demographic variables often predict important political phenomena, we wanted to understand the relation between them and NE (e.g., age, education, race, income, and gender all have been shown to predict the likelihood that a person will vote in an election; Doppelt & Shearer, 1996; Flanagan & Zingale, 1998). In addition, we wanted to understand the relation between NE and the political-engagement variables of political knowledge and political interest because they too have been shown to predict important political behaviors (e.g., Delli Carpini & Keeter, 1996; Rosenstone & Hanson, 1993). Columns 1 and 3 of Table 1 show that NE was indeed correlated with most of these demographics and indicators of political engagement. For example, in 1998 and 2000, people higher in need to evaluate had more education (r = .18, p < .01, r = .15, p < .01), more political knowledge (r = .20, p < .01; r = .18, p < .01), more political interest (r = .27, p < .01; r = .31, p < .01), and higher income (r = .10, p < .01; r = .11, p < .01). Women scored lower in need to evaluate than men (r = -.05, p < .01; r = -.05, p < .05);non-Caucasians were lower in need to evaluate than Caucasians (r = -.04, p < .10; r = -.08, p < .01), and age was unrelated to need to evaluate (r = .05, ns; r = -.02, ns).

When we simultaneously regressed need to evaluate on all of the demographics and indicators of political engagement, the patterns changed a bit (see columns 2 and 4 of Table 1). Higher need to evaluate was associated with more political interest (b = .23, p < .01; b = .25, p < .01) and being younger (b = -.10, p < .05; b = -.13, p < .05). In 1998, higher need to evaluate was also associated with having more education (b = .07, p < .05) and higher political knowledge (b = .06, p < .05), but not in the 2000 sample (b = .03, ns and b = .02, ns, respectively). The significant associations between need

Table 1
Bivariate Associations and Multivariate Regressions
Using Demographics and Political Involvement Variables
to Predict Need to Evaluate

	1998 N	ES Pilot	2000 NES			
Predictor	Bivariate	Multivariate	Bivariate	Multivariate		
	Associations	Regressions	Associations	Regressions		
Age	.05	10**	02	13**		
	(1202)	(.04)	(1792)	(.03)		
Race	04**	03	08**	02		
	(1202)	(.02)	(1775)	(.02)		
Gender	05**	.00	05*	.01		
	(1202)	(.02)	(1800)	(.01)		
Income	.10**	.02	.11 <b>**</b>	.03		
	(1094)	(.02)	(1514)	(.04)		
Education	.18 <b>**</b>	.07*	.15 <b>**</b>	.03		
	(1199)	(.03)	(1798)	(.03)		
Political Knowledge	.20 <b>**</b>	.06*	.18 <b>**</b>	.02		
	(1202)	(.03)	(1800)	(.02)		
Political Interest	.27**	.23**	.31**	.25**		
	(1202)	(.03)	(1540)	(.02)		
$R^2$ $N$	_	.14	_	.10		
	_	1093	_	1490		

*Note*. The two multivariate regression columns display unstandardized regression coefficients with standard errors in parentheses. The two bivariate association columns display correlation coefficients with numbers of cases in parentheses. \*\*p < .01; \*p < .05; \*p < .05; \*p < .10.

to evaluate and these variables suggest that they should be included in all regressions herein because we want to understand whether NE predicts meaningful variance not already accounted for by the traditionally studied demographic variables.

In addition, we assessed the relations between need to evaluate with party identification and political ideology. In the 1998 pilot study, those high in need to evaluate were more likely to identify themselves as Republicans (r = -.14, p < .01) and identify them-

selves as being political conservatives (r = -.08, p < .05). These relations did not, however, appear in the 2000 sample (rs > -.03, ns).

# Cognitive Effects of Need to Evaluate

Evaluative beliefs about candidates. If people who like to evaluate generate more evaluative beliefs about candidates, they should be able to retrieve and report more of their beliefs about any given candidate from memory. There was no measure of beliefs about the gubernatorial candidates in the 1998 NES Pilot, but in the 2000 NES, respondents were asked to list reasons why they would vote for and against each of the major-party presidential candidates. We counted the number of the evaluative beliefs each respondent gave to each of these four questions and recoded the total to range from 0 to 1. As shown in Table 2, people higher in need to evaluate did in fact generate more reasons to like and dislike the candidates (b = .13, p < .01).

Processes of Evaluating Candidates. Next, we explored whether NE regulates the processes by which people form candidate evaluations. Specifically, HNE respondents' candidate preferences should be more consistent with their attitudes toward relevant issues and policies than are LNE respondents' candidate preferences. In the 1998 NES pilot study, respondents were asked to rate each of the two major-party candidates for governor on 101-point feeling thermometer scales; in the 2000 NES study, respondents were asked to rate the two major party candidates for president on 101-point feeling thermometer scales. Overall candidate preference scores were computed by subtracting the score for the Republican candidate from the score for the Democratic candidate. These difference scores were then recoded to range from 0 to 1, with 0 indicating the strongest possible preference for the Republican candidate and 1 indicating the strongest possible preference for the Democratic candidate.

Our first task was to understand which issue stances predicted candidate preference across the complete sample. That is, in order to understand whether HNE respondents were more likely to use issue stances in determining candidate evaluations, we needed to learn which issues predicted candidate preferences at all. To do so, we conducted a series of OLS regressions, predicting candidate prefer-

**Table 2**Results of Covariance-Structure Analysis Predicting Evaluative
Beliefs in the 2000 Sample

Predictor	Evaluativ	ve Beliefs
Age	.01	.03
	(.02)	(.02)
Race	01	01
	(.01)	(.01)
Gender	.01	.00
	(.01)	(.01)
Income	.06*	.06*
	(.03)	(.03)
Education	.12**	.12**
	(.02)	(.02)
Political Knowledge	.06**	.06**
	(.01)	(.01)
Political Interest	.10**	.07**
	(.02)	(.02)
Party-I.D. Strength	.04**	.04**
	(.01)	(.01)
Need to Evaluate		.13**
		(.02)
$R^2$	.22	.24
N	1259	1259

*Note:* Cell entries are unstandardized parameter estimates with standard errors in parentheses. Root mean square error of approximation for the second column value was  $\varepsilon = .03$ , while the first column provided perfect fit due to the saturated model. \*\*p < .01; \*p < .05; \*p < .05;

ence with age, race, gender, income, political knowledge, political interest, education, party identification, and stances on one of the policy issues respondents were asked about. In the 1998 NES pilot study, respondents were asked to report their stances on the issues of health care, welfare reform, abortion, and affirmative action. In the 2000 NES study, respondents were asked to report their stances on government services, defense spending, government responsibility for employment and standard of living, help for blacks, abortion, gun control, capital punishment, immigration, government-provided medical insurance, affirmative action, the priorities of jobs versus the

environment, homosexuals in the military, English as the official language, allowing homosexual couples to adopt children, the role of women, environmental regulations, and government responsibility for employment equality for blacks. Responses to these items were coded to range from 0 to 1, with 0 indicating the most conservative position a respondent could espouse and 1 indicating the most liberal position a respondent could espouse.

In the 1998 NES pilot study, the issues of welfare reform and abortion accounted for variance in candidate preference not accounted for by the other variables (bs > .03, ps < .05; other bs < .03, ns), and in the 2000 NES study, the issues of government services, defense spending, government responsibility for employment and standard of living, help for blacks, abortion, gun control, capital punishment, government provided medical insurance, the priorities of jobs versus the environment, homosexuals in the military, allowing homosexual couples to adopt children, the role of women, enregulations, and government responsibility employment equality for blacks accounted for variance in candidate preference not accounted for by the other variables (bs > .025, ps < .05; other bs < .025, ns). In each case in which the impact of issue stance was significant, more liberal stands on the issue were associated with significantly greater preference for the Democratic gubernatorial or presidential candidate. Therefore, stances on these issues were averaged to yield a composite measure of issue stances for our main analyses.

To test whether NE moderates the impact of party identification and issue stances on candidate evaluations, we used a procedure for estimation of interaction terms by means of latent variable scores in LISREL (see Jöreskog, Sörbom, Du Toit, & Du Toit, 2001; this procedure utilizes a model proposed by Kenny & Judd, 1984). First, we assessed the consistency of candidate evaluations with issue attitudes and party identification. To do so, we entered the main effects of age, race, gender, income, education, political knowledge, political interest, issue stances, party identification, and estimated factor scores for need to evaluate into a model predicting candidate preference (see Jöreskog, Sörbom, Du Toit, & Du Toit, 2001). As shown in the first and fourth columns of Table 3, whereas issue stances (b = .07, p < .01; b = .39, p < .01) and party identification (b = .22, p < .01; b = .29, p < .01) were significant predictors of candidate preference, need to evaluate (b = -.04, ns; b = .01, ns) was not. More

Table 3

Results of Covariance-Structure Analyses Using Need to Evaluate, Party Identification, and Issue Stances to Predict Candidate Preferences

Predictor	199	8 NES P	ilot	2000 NES			
Age	.00 (.03)	00 (.04)	00 (.03)	.06* (.03)	.06*	.06*	
Race	00	00	00	.00	.00	.00	
	(.01)	(.01)	(.01)	(.01)	(.01)	(.01)	
Gender	00	00	.00	.01	01	01	
	(.01)	(.01)	(.03)	(.01)	(.01)	(.01)	
Income	00 (.02)	00 (.02)	00 (.02)	09** (.03)	09** (.03)	09 <b>**</b> (.03)	
Education	.04	.03	.04*	.05*	.05*	.05**	
	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	
Political Knowledge	01	01	01	.00	.00	.00	
	(.02)	(.02)	(.02)	(.01)	(.01)	(.01)	
Political Interest	.05 <b>**</b>	.05**	.06 <b>**</b>	02	.01	.01	
	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	
Issue Stances	.07 <b>**</b>	.07**	.07**	.39 <b>**</b>	.39 <b>**</b>	.38 <b>**</b>	
	(.02)	(.02)	(.02)	(.04)	(.04)	(.04)	
Party Identification	.22** (.02)	.21** (.02)	.21 <b>**</b> (.02)	.29** (.01)	.28** (.01)	.29 <b>**</b> (.01)	
Need to Evaluate	04 (.04)	16** (.06)	22** (.06)	.01 (.03)	24* (.04)	11* (.03)	
NEval × Issue Stances		.30* (.14)			.44* (.20)		
NEval × Party ID			.33** (.09)			.16 <b>**</b> (.07)	
$R^2$ $N$	.25	.25	.26	.57	.55	.55	
	888	888	888	953	953	953	

Note: Cell entries are unstandardized parameter estimates with standard errors in parentheses.

<sup>\*\*</sup>*p* < .01; \**p* < .05; +*p* < .10

importantly, however, as shown in the second and fifth columns of Table 3, there was a significant interaction of need to evaluate and issue stance, indicating that individuals high in need to evaluate were more likely to use their own stances on political issues in forming evaluations of the candidates than were those individuals low in need to evaluate. This result was found in both the 1998 and 2000 surveys (b = .30, p < .05; b = .44, p < .05). Also, as shown in the third and sixth columns of Table 3, there was a similar interaction of need to evaluate and party identification: HNE individuals were more likely to use their own party identifications in forming candidate preferences than were individuals low in need to evaluate. Again, this result held for both the 1998 and 2000 surveys (b = .33, p < .01; b = .16, p < .01).  $^5$ 

# Behavioral Effects of Need to Evaluate

Electoral activism. A person who likes or dislikes various political candidates or policies should be more likely to behave in ways that support or oppose the relevant candidates or policies. And because HNE people are more likely to hold these attitudes, we expected that these people would be especially likely to engage in electoral activism. In the 1998 NES Pilot, respondents were asked to what extent they engaged in four forms of electoral activism: (1) encouraging others to vote, (2) attending a political rally, (3) wearing a political button, and (4) working for a political candidate. In the 2000 NES Study, respondents were also asked if they had contributed money to a candidate's election campaign. After coding each behavior to equal either 0 (the respondent did not engage in the behavior) or 1 (the respondent did), these four or five variables were averaged to yield an activity index. As shown in second panel of Table 4, respondents in the 1998 NES survey who were higher in NE were more likely to engage in electoral activism (b = .39, p < .01). Respondents in the 2000 survey showed the same effect as shown in the second column of Table 5 (b = .04, p < .01).

5. We considered including perceptions of candidate personality traits as control variables, but found that they mediated the effects of the issue-preferences-by-NE and party-identification-by-NE interactions on candidate evaluations. Therefore, to estimate the effects of these interactions, we report those analyses that did not include perceptions of traits.

Table 4

Results of Covariance-Structure Analyses Using

Need to Evaluate to Predict Electoral Activism, Turnout,

Media Use, and Emotions in the 1998 Sample

Predictor	Activ	vism	Tur	nout	Media Use		Emotions	
Age	02 (.03)	.00 (.03)	.11 <b>**</b> (.03)	.12** (.03)	.23** (.03)	.24** (.03)	.06 <sup>+</sup> (.03)	.08*
Race	.01 (.03)	.03 (.03)	.00 (.03)	.01 (.03)	.02 (.03)	.03 (.03)	.03 (.03)	.04 (.03)
Gender	09 <b>**</b> (.03)	09 <b>**</b> (.03)	.04 (.03)	.04 (.03)	04 (.03)	04 (.03)	02 (.03)	02 (.03)
Income	04 (.04)	05 (.03)	.02 (.03)	.02 (.03)	04 (.03)	05 (.03)	06 (.04)	06 <sup>+</sup> (.04)
Education	04 (.04)	06 <sup>+</sup> (.04)	.07 <sup>+</sup> (.03)	.05 (.03)	.05 (.03)	.04 (.03)	05 (.04)	07* (.04)
Political Knowledge	.02 (.04)	.00 (.04)	.06 <sup>+</sup> (.04)	.05 (.04)	.02 (.03)	.01 (.03)	05 (.04)	03 (.04)
Political Interest	.23 <b>**</b> (.04)	.16 <b>**</b> (.04)	.21 <b>**</b> (.04)	.16 <b>**</b> (.04)	.34 <b>**</b> (.03)	.31 <b>**</b> (.04)	02 (.04)	08* (.04)
Party-I.D. Strength	.10 <b>**</b> (.03)	.08* (.03)	.13 <b>**</b> (.03)	.11 <b>**</b> (.03)	.04 (.03)	.03 (.03)	06 <sup>+</sup> (.03)	09* (.03)
Need to Evaluate		.39 <b>**</b> (.09)		.28 <b>**</b> (.08)		.17* (.08)		.32** (.09)
$R^2$ $N$	.09 956	.12 956	.14 956	.16 956	.24 956	.25 956	.02 956	.04 956

*Note:* Cell entries are unstandardized parameter estimates with standard errors in parentheses. Root mean square error of approximation for the second, fourth, sixth, and eighth column values were  $\varepsilon = .05$ , .05, .05, and .06 respectively, while the first, third, fifth, and seventh columns provided perfect fit due to saturated models. \*\*p < .01; \*p < .05; \*p < .05; \*p < .05;

*Turnout*. Next, we tested whether need to evaluate would predict people's propensity to say that they would vote or had voted in the election. We expected that because LNE respondents are less likely to hold attitudes toward political candidates and issues, they would be less likely to vote. In the 1998 NES Pilot, respondents were asked

Table 5

Results of Covariance-Structure Analysis Using Need to Evaluate to Predict Electoral Activism, Turnout, Media Use, and Emotions in the 2000 Sample

Predictor	Activism		Turnout		Media Use		Emotions	
Age	01 (.02)	.00 (.01)	.30 <b>**</b> (.04)	.31 <b>**</b> (.04)	.23 <b>**</b> (.03)	.25 <b>**</b> (.03)	.02 (.02)	.03* (.02)
Race	.00	.00	.01	.00	.02	.02	.01	.01
	(.02)	(.02)	(.02)	(.02)	(.02)	(.02)	(.01)	(.01)
Gender	.00	.00	.04*	.04*	.01	.01	.03**	.02**
	(.01)	(.01)	(.02)	(.02)	(.01)	(.01)	(.01)	(.01)
Income	.04**	.04 <b>**</b>	.16 <b>**</b>	.16 <b>**</b>	.08*	.08*	01	01
	(.01)	(.01)	(.05)	(.05)	(.04)	(.04)	(.02)	(.02)
Education	.01	.01	.23**	.23**	.02	.02	02	02
	(.01)	(.01)	(.04)	(.04)	(.03)	(.03)	(.02)	(.01)
Political Knowledge	.01	.00	.12**	.11**	.03*	.03+	.02*	.02*
	(.01)	(.01)	(.02)	(.02)	(.02)	(.01)	(.01)	(.01)
Political Interest	.06**	.05**	.19**	.16**	.34**	.30 <b>**</b>	.14 <b>**</b>	.11**
	(.01)	(.01)	(.03)	(.03)	(.02)	(.02)	(.01)	(.01)
Party-I.D. Strength	.02**	.02**	.18 <b>**</b>	.17**	.09**	.09 <b>**</b>	.05 <b>**</b>	.05 <b>**</b>
	(.01)	(.01)	(.02)	(.02)	(.02)	(.02)	(.01)	(.01)
Need to Evaluate		.04 <b>**</b> (.01)		.10 <b>**</b> (.04)		.13** (.03)		.10 <b>**</b> (.02)
$R^2$ $N$	.14	.16	.29	.29	.30	.31	.16	.19
	1259	1259	1259	1259	1259	1259	1256	1256

*Note:* Cell entries are unstandardized parameter estimates with standard errors in parentheses. Root mean square error of approximation for the second, fourth, sixth, and eighth column values were  $\varepsilon = .03$ , .04, .03, and .04 respectively, while the first, third, fifth, and seventh columns provided perfect fit due to saturated models. \*\*p < .01; \*p < .05; \*p < .05;

how likely they were to vote in the 1998 gubernatorial election. In the 2000 NES Study, respondents were asked in the preelection interview whether they would vote in the 2000 presidential election and whether they had voted in the 1996 presidential election. In the postelection interview, they were asked whether they had voted in the 2000 presidential election. The 2000 NES items were coded 0 if

the respondent said he or she would not or had not voted and 1 if he or she would or had and averaged together to form an index. As shown in the fourth columns of Tables 4 and 5, people higher in need to evaluate were more likely to say they would vote or had voted (b = .28, p < .01; b = .10, p < .01), consistent with the notion that having a candidate preference inspires the desire to express that preference.<sup>6</sup>

News media use. People who like to evaluate should be more attracted to all sorts of information about politics because they likely hold attitudes about various political figures and issues. And because newspapers and television news programs are accessible means for such information, HNE people may be more likely to use the media to learn about political figures and issues.

Respondents in the 1998 NES Pilot who reported that they had read about the campaign in the newspaper on at least one day in the past week were asked, "How much attention did you pay to newspaper articles about the campaign for governor of [state]?" Similarly, respondents who reported that they had watched local television news at least one day in the past week were asked, "How much attention did you pay to news on local news shows about the campaign for governor?" Respondents in the 2000 NES Study were asked these questions about the campaign for president and were also asked, "How much attention do you pay to news on national news shows about the campaign for president?" Response options for all questions were "a great deal," "quite a bit," "some," "very little," and "none," with answers coded 0 through 1, with higher numbers indicating greater attention. Participants who reported not reading a newspaper to learn about the campaign or not watching local or national TV news were given a score of zero. These scores were averaged to yield an index of paying attention to the news to learn

6. An additional analysis was conducted only among the subset of the participants in the 2000 study who were asked if they had voted in that year's Presidential election. This dichotomous yes/no response was entered as the dependent measure into a pair of logistic regression analyses. This more traditional measure of turnout yielded similar, though weaker, effects: in both analyses, the variables of age, income, education, political knowledge, political interest, and strength of party identification predicted turnout. When included in a second analysis, although NE still showed a positive coefficient, b = .28, SE = .30, this effect was not statistically significant.

about the campaign. As shown in the sixth columns of Tables 4 and 5, HNE respondents were indeed more likely to have used the media to follow the political campaign in both the 1998 and 2000 samples (b = .17, p < .05; b = .13, p < .01).

#### Affective Effects of Need to Evaluate

If HNE people are especially likely to evaluate objects in their environment as good or bad, then they may be particularly likely to respond emotionally to the information they encounter. In the 1998 NES pilot study, respondents were asked if the gubernatorial candidates made them feel proud, afraid, hopeful, and angry. One-third of the respondents were asked, "Has [candidate] ever made you feel [emotion]?" People who said "yes" were then asked, "How often have you felt this way?" Response options were "very often," "fairly often," "occasionally," and "rarely." Another third were asked, "Has [candidate], because of the person he is or because of something he has done, made you feel [emotion]?" Those who responded "yes" were subsequently asked if they felt that way "very often," "fairly often," "occasionally," or "rarely." The remaining participants were asked, "Thinking about [candidate], do you feel [emotion]?" Those who responded "yes" were subsequently asked whether they felt that "very" or "somewhat" strongly about that emotion. In the 2000 NES study, respondents were asked the first pair of questions from the 1998 study about the presidential candidates. Responses for all participants in both surveys were coded to range from zero to one (with one indicating maximal frequency and zero indicating minimal frequency) and were averaged to yield an overall index of emotional response frequency. As shown in the eighth columns of Tables 4 and 5, such responses were more common among people higher in need to evaluate (b = .32, p < .01; b = .10, p < .01).

## **DISCUSSION**

Using data from two nationally representative samples, we found that need to evaluate predicts phenomena far beyond merely holding more attitudes. Need to evaluate predicted important cognitive, behavioral, and affective outcomes within the political world. Specifically, need to evaluate was linked to holding evaluative beliefs and using party identification and issue stances in forming attitudes to-

ward candidates. Need to evaluate described the behavioral outcomes of political activism, voting, and news media usage. And need to evaluate predicted which respondents were more likely to feel emotional responses to the various candidates. Thus, as need to evaluate predicts who is likely to hold attitudes, the likely results of holding those attitudes—attitude-relevant cognitions, behaviors, and affective responses—were more likely among HNE respondents.

# New Insights Into Need to Evaluate

Research has only recently begun to examine the effects that need to evaluate can have on cognition, behavior, and affect. Our research, then, adds to this developing line of knowledge. In particular, we have presented new evidence that need to evaluate can predict important cognitive, behavioral, and emotional outcomes in the political domain. And the consistent effects across the two different samples supports the notion that need to evaluate is a valid and useful construct.

Perhaps more importantly, we have also for the first time examined the predictive validity of need to evaluate outside of the laboratory setting using a representative sample. Need to evaluate was developed through the use of undergraduate college students, the majority of whom were enrolled in introductory psychology courses (Jarvis & Petty, 1996). Furthermore, all published research since the construct's development has also used similar college-aged samples. Many researchers (see Sears, 1986) have questioned the generalizability of research on college-aged participants, suggesting that "the college sophomore" may not behave and think in a manner consistent with that of the general population. This reliance on student samples is not uncommon within the field of personality psychology, as recent studies have shown (Endler & Speer, 1998; Mallon, Kingsley, Affleck, & Tennen, 1998). The current investigation speaks to these problems by examining the construct of need to evaluate in nationally representative samples of respondents who did not provide data in a laboratory setting. Because our array of results is consistent with the notion that need to evaluate does indeed predict the extent to which a person creates and holds attitudes, we have shown that NE is an important construct outside of the college population. Need to evaluate as a personality measure does indeed predict meaningful processes in the general public.

# "Concentrated" Measures of Personality

The standard need-to-evaluate scale constructed by Jarvis and Petty (1996) contains 16 statements. This multiple-item, self-report format is not unusual in personality scales: Need for cognition, for example, is typically measured with 18 items (Cacioppo, Petty, & Kao, 1984), right-wing authoritarianism is measured with a 30-item scale (Altemeyer, 1988), and need for closure is measured with a full 42 items (Kruglanski, Webster, & Klem, 1993; Webster & Kruglanski, 1994). Although these scales each measure different facets of personality, they use the same multiple-response format with various items reverse-coded so as to minimize effects of confirmatory biases. As discussed earlier, because confirmatory biases lead people to agree with items more often than they should, the use of multiple-item scales can increase reliability and reduce biases such as the confirmation bias.

Unfortunately, such lengthy scales are often prohibitively expensive to administer in many applications. On occasion, however, these scales have been replaced with shorter measures. For example, in another large-scale national survey, O'Malley and Bachman (1983) used a four-item scale to measure self-esteem, while Robins, Hendin, and Trzesniewski (2001) found that a one-item self-esteem scale provided an adequate measure of the construct. Our research provides additional support for the notion that shorter, concentrated scales can exhibit adequate internal consistency and reliably predict important phenomena. Indeed, instead of 16 questions to measure need to evaluate, the respondents in the 1998 survey answered only 3 questions, while the respondents in the 2000 survey only answered 2.

Our ability to predict meaningful variance through the use of a "concentrated" version of the need-to-evaluate scale suggests that other researchers may find similar success in concentrating scales as well. Indeed, future research may provide evidence that such scales allow more efficient administration while still sufficiently gauging the individual differences of interest. It should be noted, however, that reliable effects with concentrated measures may, in some cases, necessitate large samples like the ones used in the present studies. Future research may determine the extent to which concentrated measures may be successfully used with smaller samples as well.

#### **Effect Sizes**

Although the relations between need to evaluate and the primary dependent measures were all statistically significant, we decided to assess the magnitude of these relations as recommended by a many researchers as well as the American Psychological Association (see Nickerson, 2000, for a review). We found that all of the effect sizes of NE as well as the nondemographic predictors on the dependent measures were in the range characterized as small to medium by Cohen (1998) such that they each individually accounted for 1 to 5 percent of the variance. In our LISREL models, the average main effect size for need to evaluate (d = .24) was somewhat smaller than that for political interest (d = .34), and somewhat larger than those for political knowledge (d = .11) and political party identification strength (d = .18). Effect sizes were also computed using OLS multiple regression analysis and including need to evaluate as a manifest variable. The average main effect size in these analyses was similar for need to evaluate (d = .21) and party identification strength (d = .22), somewhat smaller for political knowledge (d = .12), and somewhat larger for political interest (d = .44).

In spite of their "moderate" d scores, there are several reasons why the magnitudes of the effects of need to evaluate are impressive. First, as already noted, the effect size of need to evaluate was nearly identical to that of political interest and slightly larger than political knowledge and strength of political party identification. This is especially compelling as these other variables are routinely included in national election surveys precisely because they are so effective in predicting behavioral and cognitive political processes. For example, party identification is one of the most widely studied constructs in electoral politics (e.g., Campbell, Converse, Miller, & Stokes, 1960; Franklin & Jackson, 1983; Meier, 1975; Miller, 1991) and has been

7. Some variables had effects on the dependent variables that were in a direction contrary to the predicted effect, and these were given negative Cohen's d estimates in computing the average effect size. Using the absolute values of all effect sizes does not substantially change any analyses. As reported, all effects of need to evaluate were in the predicted direction and so are unchanged in these analyses. The alternate LISREL effect sizes for the other variables are: political knowledge (d=.12), political interest (d=.38), and political party identification strength (d=.22). The alternate OLS regression effect sizes for the other variables are: political knowledge (d=.16), political interest (d=.44), and political party identification strength (d=.22).

found to be an important predictor of vote choice (e.g., Campbell, et al., 1960; Miller, 1991) and participation in voting and campaign behavior (e.g., Abramson, 1982; Conway, 1991; Dalton, 1988; Peterson, 1990; Verba, Nie, & Kim, 1978).

Political knowledge has also been widely studied (e.g., Delli Carpini & Keeter, 1996; Jennings, 1996; Lanoue, 1992) and is believed to be important in electoral politics. Indeed, Delli Carpini and Keeter (1996) have argued that "factual knowledge about politics is a critical component of citizenship, one that is essential if citizens are to discern their real interests and take effective advantage of the civic opportunities afforded them" (p. 3). Similarly, political interest has been found to be an important predictor of voting and other forms of political participation (e.g., Olsen, 1976; Rosenstone and Hansen, 1993). Furthermore, political interest is an important factor as individuals acquire, evaluate, and integrate information from the media about political people and issues (e.g., Kazee, 1981; MacKuen, 1984). That need to evaluate, a non-domain-specific individual-difference variable, predicts similar variance as these political-domain predictors is noteworthy.

Second, data used in the current research were collected through the use of face-to-face and telephone surveys rather than the standard pencil-and-paper studies so ubiquitous in contemporary psychological research. The effects of socially desirable responding (see Demaio, 1984; Schlenker & Weingold, 1989) and conversational conventions (Clark, 1992, 1996; Grice, 1975) on measurement are well documented. Because these sources of error may be more likely to take place when a respondent is interacting with an interviewer (see Sudman & Bradburn, 1974; Dillman & Tarnai, 1991), the current measures could suffer from such error to a greater degree than the standard pencil-and-paper study conducted in the controlled laboratory.

Third, the behaviors examined in the current research are important to the democratic process. Actively seeking information about candidates and issues, engaging in political activism, and exercising one's right to vote are cornerstone behaviors of the ideal democratic citizen (e.g., Galston, 1991). Despite the crucial importance of these behaviors, citizens routinely fail to engage in them (Oldfield, 1990). The fact that need to evaluate has a significant effect on these important behaviors is important and worthy of attention, even if the effects are modest in size (Prentice & Miller, 1982).

# Implications and Future Research

Although citizens have the right to vote and participate in the political process, it is a well-known fact that not all citizens exercise this right. For example, the national turnout rate was only 54.7% in the 2000 Presidential election (U.S. Census Bureau, 2002). Various "getout-the-vote" organizations spend a great deal of time, money, and effort in attempts to raise voting rates by emphasizing how important such voting behavior is. But our research suggests the possibility that the perception that voting is important, if not accompanied by a relevant attitude to guide that voting behavior, may not lead people to take the time to cast a ballot. Similarly, direct-mail and other appeals might not be effective unless they are successful in creating an attitude that will guide the target behavior, whether it be donating money, signing a petition, or showing up at a rally. Thus, leading people to create and hold attitudes may be one of the most efficient ways in which to promote political behavior. Future research may demonstrate how creating attitudes may prove to be an especially effective and efficient technique for promoting political participation, especially among LNE people.

Our research also speaks to the inclusion of personality variables in nationally representative, large-scale surveys. The 1998 survey marked one of the relatively few inclusions of personality variables in the administration of the National Election Study. The ability of need to evaluate to predict such a variety of important political processes attests to the importance of such measures in the world of political science and other social sciences. Surveys such as the General Social Survey may also benefit from the inclusion of need to evaluate and other measures of personality variables.

Another arena for future study involves the notion of mediation. Although we have provided theoretical rationales for the effects of need to evaluate on a variety of processes, the data set we used did not provide measures of constructs hypothesized to serve as mediators. For example, we suggested that HNE participants would be more likely to recall more evaluative beliefs about political candidates because, over time, they had garnered more such evaluative beliefs. It is also conceivable that HNE people are able to better recall those evaluative beliefs. Similarly, we proposed that HNE participants would be more likely to use the news media to learn about politics in an attempt to create and maintain attitudes toward

political figures and issues. But it may also be possible that because reports in the news media are often evaluative in nature (either explicitly or implicitly), HNE individuals are drawn to them more than are LNE individuals. Although these mediational effects could not be tested using the NES data sets, such mediation could be tested through the use of smaller-scale studies in which potential mediational variables can be measured.

A final arena for future research involves the influences that behavior, cognition, and affect may have on a person's level of need to evaluate. Although we have argued that the positive coefficients within this paper indicate an effect of need to evaluate on a variable, it is also conceivable that the reverse effect may to some extent be taking place as well. Even though need to evaluate has been demonstrated to be a relatively stable and enduring personality trait, a person's NE level might change over the course of his or her lifetime. Participating in the political world may, to the extent that evaluation leads to rewards or punishments, serve to raise or lower a person's level of need to evaluate. Future research may attempt to parse apart the reciprocal effects that may exist between need to evaluate and behavior, cognition, and affect.

In sum, we found that need to evaluate predicted a wide variety of important political cognitions, emotions, and behavioral outcomes. Our findings attest to the validity of need to evaluate, both the construct and the concentrated measure we used herein. But because need to evaluate largely measures the extent to which a person is likely to hold attitudes, our research in turn underscores the importance of attitudes as a fundamental psychological construct as well.

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