POLITICAL EXPERTISE AND THE USE OF IDEOLOGY: MODERATING EFFECTS OF EVALUATIVE MOTIVATION

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Abstract  Much research suggests that political experts are more likely to structure attitudes toward different issues in an ideologically consistent fashion. Based on recent studies of motivational influences on social cognition, we hypothesize that only experts with a high need to evaluate—a strong motivation to establish evaluations of social objects—may “apply” ideology to a variety of issues. Data from the 1998 NES Pilot and 2000 NES are used to examine this hypothesis. While experts do show more ideological constraint, this relationship appears to be limited to individuals with a high need to evaluate. Additional analyses indicated that this interactive effect extended to other indices of the use of ideology as well.

Perhaps one of the most significant—and controversial—conclusions of modern public opinion research is that a large portion of the public does not structure its attitudes toward various political issues in terms of underlying ideological predispositions (Bennett 1989; Converse 1964; Judd and Krosnick 1989; Luskin 1987; Zaller 1992). One of the earliest and most influential demonstrations of this was provided by Converse (1964), who examined the attitudes of an “elite” group of congresspersons and those of a “mass” national probability sample. Converse reasoned that the “use” of ideology would manifest itself as consistency in one’s attitudes toward different issues at the same point in time (i.e., attitude constraint) and consistency in one’s attitudes toward the same issue over time.
(i.e., attitude stability). In the mass sample, he found that the average correlation between stands on a set of four issues was fairly weak and that the average correlation between attitudes toward the same issue at different points in time was generally quite low, casting doubt on the widespread existence of ideologically-structured attitudes in the general public. These findings echoed those presented earlier by the authors of The American Voter (Campbell et al. 1960), who had content-analyzed open-ended survey responses for evidence of ideologically-structured thinking. The results of this “levels of conceptualization” analysis indicated that only about 12 percent of the American public described what they liked and disliked about the major political parties and presidential candidates in ideological terms, with the rest thinking in terms of “group benefits,” “the nature of the times,” or no conceptual content at all.

Although there has been some debate as to whether the use of ideology is more prevalent than it used to be (Bishop et al. 1978; Nie et al. 1976; Sullivan et al. 1978) and whether or not it has even been assessed in a relatively error-free manner (Achen 1975; Judd et al. 1981), much of the research in this area has concluded that the average citizen remains ideologically unsophisticated (for a review, see Judd and Krosnick 1989; Zaller 1992). From the perspective of democratic theory, findings such as these are troubling, since they imply that a large portion of the public may express relatively meaningless, spur-of-the-moment opinions (i.e., non-attitudes; see Converse 1964; Zaller 1992). While a nonnegligible number of individuals in this segment of the mass public may be able to use simpler predispositions to structure their attitudes (e.g., core values; see Feldman 1988; Goren 2004), the fact remains that many citizens are unable to understand and structure their preferences in terms of the abstract ideological concepts that organize elite political discussion and activity, perhaps compromising their capacity to effectively engage the political system.

Political Expertise and the Use of Ideology

Concerns such as these have naturally led to an interest in factors that may facilitate the use of ideology. In this regard, researchers have zeroed in on one particularly important variable: namely, political expertise, which is usually defined as the possession of well-developed political schemas, or organized clusters of information about political institutions and actors (e.g., the roles and responsibilities of different institutions, the occupants of certain offices, etc.) and about abstract political ideas (such as liberalism and conservatism; Delli Carpini and Keeter 1996; Fiske et al. 1990; Hamill et al. 1985; Krosnick 1990; Zaller 1992). As a substantial body of research has indicated, expertise
in this sense is reliably associated with increased constraint and stability (Judd and Krosnick 1989; Kinder and Sears 1985). In fact, this pattern was evident in Converse’s (1964) original research. While the attitudes of his mass-public respondents showed little constraint or stability, the corresponding attitudes of his elite respondents were far more structured, suggesting that individuals who are more familiar with the political world are more likely to develop ideologically-structured attitudes and perceptions. Since Converse’s original article, this basic finding has been replicated a number of times (Bennett 1989; Hamill et al. 1985; Judd and Krosnick 1989; Luskin 1987; McClosky and Zaller 1984; Nie et al. 1976; Stimson 1975; Zaller 1992), using a variety of measures. In addition to replicating the finding that relatively expert elite samples show greater constraint and stability than relatively novice mass samples (Jennings 1992), this body of work also suggests that constraint and stability are more likely be found among members of the mass public who possess high levels of expertise (Judd and Krosnick 1989; Luskin 1987; Zaller 1992).

More generally, research on the consequences of expertise has shown that experts are able to process political information in ways that should facilitate the use of “sophisticated” constructs like ideology in the organization of attitudes and preferences. For example, a variety of studies suggest that experts are quicker and more accurate in their perceptions of political stimuli and memory for previously-presented political information (Fiske et al. 1990; Lodge and Hamill 1986), and that these “expert” patterns of political cognition are in turn associated with greater ideological constraint (Bennett 1989; Hamill et al. 1985; Judd and Krosnick 1989; Judd et al. 1981; Luskin 1987; Zaller 1992). Further evidence for the impact of expertise on the use of ideology has been provided by studies which have looked at the effects of thought on constraint. According to these studies, by increasing the likelihood of seeing how certain attitudes toward one object may ideologically imply attitudes toward others, thinking about a given domain should lead to increased consistency among one’s attitudes toward different objects within that domain (Millar and Tesser 1986). In line with this expectation, a number of studies have found that asking survey respondents to think carefully about a set of issues typically results in greater constraint among attitudes toward those issues (Judd and Downing 1990; Lavine et al. 1997; Zaller 1992). However, consistent with the idea that the development of constraint is contingent on the possession of well-articulated political knowledge structures, this effect appears to be limited to experts (Lavine et al. 1997). Findings of this sort imply that attitude relevant thought may not provide insight into the connections between attitudes toward different issues unless it is guided by an expert representation of abstract ideas, which offer some explanation as to why certain issue positions “go together.”
Motivational Influences on the Use of Ideology?  
The Moderating Role of Evaluative Motivation

Thus, a variety of evidence suggests that the formation of ideologically-informed attitudes and perceptions is dependent on political expertise. Consistent with these findings, scholarship in this area tends to depict the successful use of ideology as an informational problem: citizens will ideologically organize their attitudes and perceptions if they have acquired a conceptual knowledge of key ideological constructs. What it does not explicitly attend to is the role of motivational factors, i.e., the needs or goals that determine how individuals actually use the expertise they have acquired when making judgments. In particular, existing work has very little to say about why citizens use ideology once they have acquired an understanding of it. From the standpoint of contemporary research on the dynamics of social information processing, this is a problematic omission. More precisely, a growing body of work on “motivated social cognition” suggests that the possession of particular knowledge structures does not guarantee that they will be used in the same way under all conditions—or even that they will be used at all (Higgins and Sorrentino, 1990; Kruglanski 1996; Lavine 2002). Instead, people’s needs, goals, and wants determine how knowledge and information—such as that contained in political schemas—is used to make judgments. As such, the motivational void at the heart of contemporary work on the use of ideology may leave us with a decidedly incomplete account of how citizens form constrained attitudes and perceptions.

But what is the nature of the motivational process that leads citizens to make use of the ideological information embodied in political schemas? A closer, more critical look at previous research on the use of ideology suggests that the key motivational process may have to do with the goal of evaluation. Importantly, despite its lack of detailed attention to issues of motivation, the literature on ideology does (1) make a conceptual distinction between informational and motivational components of political judgment, and (2) assume that individuals who understand ideological constructs are also motivated to use them in an evaluative fashion, i.e., by forming a representation of their ideological self-placement and using this general representation as a basis for judging a variety of specific political objects (e.g., policy options, candidates, etc.) as “good” or “bad” (Federico 2004; Lavine 2002; Lodge and Hamill 1986; Lodge et al. 1989). Moreover, outside the realm of political psychology, formal and institutional work on ideology suggests that the latter is useful primarily because it helps individuals efficiently establish and organize a set of specifically evaluative conclusions about politics (i.e., attitudes toward a wide range of political issues) and map them onto simple but fundamentally evaluative political choices (i.e., voting; Hinich and Munger 1994; Sniderman and Bullock 2004). Thus, at the
institutional level, the functional significance of ideology may be at least partly evaluative: it may have evolved as a “solution” to problems of opinion formation and aggregation.

Once made explicit, this implicit motivational assumption suggests two general points about the interplay between expertise and motivation in the use of ideology. First, the psychological process behind the use of ideology may begin not merely with a desire to understand and classify political objects, but with a desire to evaluate them as well. Second, and perhaps more importantly, it may be more appropriate to model the use of ideology as resulting not merely from the main effect of expertise, but from an interaction between expertise and the motivation to use expertise evaluatively. This argument about the impact of evaluative motivation is consistent with other findings in political psychology, particularly work on “process” models of political opinion (Lavine 2002). Specifically, research in this area suggests that the attitudes of citizens who approach politics with the goal of evaluating the objects they encounter tend to form via an online process, while the attitudes of citizens who approach politics without a strong motive to evaluate tend to form via a memory-based process (Lavine 2002; Lodge et al. 1989; Tormala and Petty 2001). In the online process, the evaluative content of details about an object is automatically extracted upon exposure and integrated into a evaluative tally. When asked for an opinion, individuals who rely on this form of processing simply recover the current tally from memory and report it; the original details about the object tend to be forgotten. Opinions formed in this way resemble “attitudes” as they are typically conceptualized, i.e., as precomputed evaluations stored directly in memory (Lavine 2002). In contrast, in the memory-based process, the original details are stored in memory, rather than an evaluative tally. When asked for an opinion, individuals must retrieve these details and integrate their evaluative implications into an “attitude” on the spot. Opinions formed in this way correspond more closely to the alternative notion of attitudes as temporary constructions (Zaller 1992).

To return to the question of when and how citizens make use of the ideological information provided by political expertise, these two motivated paths to attitude formation imply very different outcomes. While existing work on expertise suggests that all citizens with a high level of expertise should be able to use ideological constructs (Lavine 2002), we argue that this ability may have a differential impact among experts whose motivations lead them to rely on each process. On one hand, experts with a strong motive to evaluate should approach political objects not only with an overarching conceptual framework for establishing and organizing their attitudes, but also with an inclination to form online representations of their evaluations of various political objects. This combination of information and evaluative motivation should lead these experts to use the conceptual information embedded in their schemas to form a online summary of their
ideological self-placement, which can be thought of as a “master tally” for the political domain. In turn, this ideological master tally may be used as a general cue to inform and anchor judgments about a variety of specific political objects. On the other hand, experts who approach politics without a strong motive to evaluate should have little need to actually use the ideological constructs made available by their expertise to organize their attitudes and perceptions. Instead of using their knowledge to form an online ideological tally, these experts may construct evaluations of specific objects in a memory-based fashion when prompted. As such, their responses to different objects should be influenced less by a common ideological reference point than by whatever happens to be contextually salient. With these points in mind, our key hypothesis can be refined: “the presence or absence of a motive to evaluate may moderate the positive relationship between expertise and the use of ideology, such that this relationship is stronger among those who approach politics with a high level of evaluative motivation.”

Unfortunately, this hypothesis has yet to be thoroughly explored. In this regard, part of the problem has to do with the practical question how we might measure a generalized motive to evaluate. Fortunately, recent psychological research points toward a construct which maps on to this underlying dimension fairly well: the need to evaluate (Bizer et al. 2004; Jarvis and Petty 1996). Generally speaking, the need to evaluate refers to the extent to which an individual is motivated to spontaneously form evaluations of various social objects as either “good” or “bad.” Persons with a high need to evaluate think more frequently in evaluative terms and are more likely to have formed opinions about a variety of objects, while those with a low need to evaluate tend to have fewer evaluative thoughts about fewer objects. Consistent with this description, research suggests that individuals with a high need to evaluate are more likely to spontaneously form opinions of various objects, even novel ones which are difficult to assess in any straightforward fashion (such as works of abstract art; see Jarvis and Petty 1996). Importantly, other analyses have suggested that those with a high need to evaluate are more likely to form and represent precomputed opinions in an “online” fashion (Tormala and Petty 2001; Bizer et al. 2004). As a result, those with a high need to evaluate tend to respond more quickly when asked to provide an opinion. In contrast, individuals with a low need to evaluate tend to assemble their opinions in a more effortful “memory-based” fashion, on the basis of whatever attitude-relevant considerations are accessible at a given time. Consequently, they take longer to offer an opinion (see Tormala and Petty 2001, for details).

In the political realm, additional research suggests that those with a high need to evaluate are more likely to engage in behaviors indicative of well-formed preferences. For example, work by Bizer and his colleagues (2004)
suggests that a high need to evaluate is associated with a greater likelihood of (1) voting, (2) working on behalf of political candidates, (3) using the news media to gather political information, (4) expressing strong emotions in response to political stimuli, and (5) expressing reasons for preferring some candidates rather than others. Consistent with this picture, other studies indicate that the survey responses of individuals with a high need to evaluate are less prone to framing effects (Druckman and Nelson 2003).¹

Thus, research on the need to evaluate suggests that it corresponds rather well to the underlying dimension we are interested in. With this evidence in mind, we can reformulate our basic hypothesis in a more specific form: the relationship between political expertise and various manifestations of the use of ideology should be stronger among individuals with a high need to evaluate. However, there is one major inferential pitfall involved in testing this hypothesis: namely, the effects of the need to evaluate may overlap with the effects of other “cognitive motivations.” In particular, the need to evaluate tends to be moderately correlated with the need for cognition, or a general “tendency to engage in and enjoy effortful cognitive endeavors” (Bizer et al. 2004; Cacioppo et al. 1996; Federico 2004). Across contexts, the need for cognition is associated with a stronger tendency to make judgments based on the careful processing of larger amounts of information. Importantly, since attitude-relevant thought has been shown to increase constraint among political experts (Lavine et al. 1997)—as noted previously—it is possible that the tendency toward cognitive elaboration associated with the need for cognition may also strengthen the relationship between expertise and the use of ideology in general. In other words, the relationship between expertise and ideological structure may be stronger among those who are more willing to exert cognitive effort in general, rather than specifically evaluative forms of cognitive effort. Taken together, these points suggest that the effects of the need to evaluate may be confounded with the effects of the need for cognition. Therefore, in testing our primary hypothesis, we also considered the main effects of the need for cognition and its interaction with expertise.

¹. Analyses that have looked at the effects of both expertise and the need to evaluate suggest that they are relatively independent and that they interact to predict outcomes conceptually relevant to the use of ideology (Bizer et al. 2004; Federico 2004). For example, consistent with the idea that experts may be more likely to “use” their knowledge of ideology in the presence of a high need to evaluate, Federico (2004) found that the relationship between expertise and the tendency to clearly identify oneself as liberal or conservative was stronger among those high in the need to evaluate.
Overview of the Analyses

The goal of the present study was to formally test the hypothesis that the relationship between political expertise and various manifestations of the use of ideology should be stronger among individuals with a high level of evaluative motivation, as indexed by the need to evaluate. In doing so, we rely on several different analyses. First of all, regression analyses are used to examine the interactive effects of expertise and the need to evaluate with regard an individual-level measure of ideological constraint. In a second step, we conduct a similar analysis aimed at determining whether this interactive effect extends to the hierarchical aspect of ideological structure as well, i.e., the relationship between broad ideological preferences and positions on particular issues. Finally, we show that expertise and the need to evaluate also interact to predict the frequency with which the differences between the major political parties are conceptualized in ideological terms.

Data and Methods

The data used here were taken from two surveys in the National Election Studies (NES) series: the 1998 NES Pilot Study (n = 1,203) and the 2000 NES (n = 1,807). Both of these studies contained measures of issue attitudes, political expertise, and most importantly, a short form of the Need to Evaluate scale (Bizer et al. 2004). The 1998 NES interviewed respondents from three states where gubernatorial elections were being held that year: California, Georgia, and Illinois. The interviews were conducted in September of that year; AAPOR Response Rate 1 was 41.5 percent. The 2000 NES interviewed respondents both before and after the 2000 election using a nationally representative sample. Respondents were randomly assigned to be interviewed either face-to-face or via telephone. The pre-election interviews were conducted between September 5 and November 6; AAPOR Response Rate 1 was 64.3 percent in the face-to-face mode and 56.5 percent via telephone. In the post-election panel, 1,555 of the pre-election respondents were

2. The two surveys contained several question-wording experiments. In 1998, the experiments involved the ideology and services-and-spending measures (“haven’t thought” option versus no. “haven’t thought” option) and the knowledge items (explicit “don’t know” versus no explicit “don’t know”; Mondak 2000). In 2000, they involved the four expertise items dealing with political office-holders (explicit “don’t know” versus no explicit “don’t know”) and a split sample on survey mode (face-to-face versus telephone). To be sure that format had no effect on the results, we repeated all regressions in both datasets, adding terms for the three-way interactions between expertise, need to evaluate, and dummy variables for the format manipulations (as well as the equivalent three-way interaction involving need for cognition). In these analyses, the three-way interactions between expertise, need to evaluate, and format failed to reach significance in all cases, and the key two-way interactions between expertise and the need to evaluate remained significant.
interviewed again between November 8 and December 21. AAPOR Response Rate 1 for this wave was 86 percent in the face-to-face mode and 85.9 percent via telephone.

**KEY PREDICTORS**

Three primary predictors were considered in each data set: (1) political expertise, (2) the need to evaluate, and, as an additional control, (3) the need for cognition.

*Political expertise*

Consistent with research suggesting that political knowledge is the most valid predictor of expert-novice differences in political cognition (Delli Carpini and Keeter 1996; Fiske et al. 1990; Zaller 1992), expertise was measured in each data set using several NES factual-knowledge items. In 1998, four items were used: (1) who decides whether a law is constitutional; (2) who nominates federal judges; (3) which party controlled the House of Representatives prior to the election; and (4) which party controlled the Senate prior to the election. In 2000, eight items were included, which asked respondents to indicate (1) which party controlled the House of Representatives prior to the election; (2) which party controlled the Senate prior to the election; (3) the office held by Trent Lott; (4) the office held by William Rehnquist; (5) the office held by Tony Blair; (6) the office held by Janet Reno; (7) which state George W. Bush lived in at the time of the 2000 election; and (8) which state was Al Gore from. In both data sets, these items formed reliable scales (KR-20 = .64, M = .60, SD = .34, in 1998, and KR-20 = .88, M = 40, SD = .29, in 2000).

*Need to evaluate*

This was measured using a shorter version of the original scale developed by Jarvis and Petty (1996). The 1998 NES asked three separate questions about the degree to which a person was prone to evaluative thought. The first question asked, “Some people have opinions about almost everything; other people have opinions about just some things; and still other people have very few opinions. What about you?” Response included “almost everything,” “about many things,” “about some things,” or “about very few things.” 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?” Those who responded that they had “fewer” or “more” opinions than average were asked a follow-up question, where they were asked if they had “a lot” or “somewhat” fewer or more opinions. Finally, the third question asked, “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?” The possible responses were “prefer to have definite opinions” or “prefer to remain neutral.” Respondents’ scores in both samples were recoded on a 0 to 1 scale, where 1 indicated a high need to evaluate and a 0 indicated a low need to evaluate. The scores on the individual items were averaged to form the need to evaluate scale. In the 1998 NES, which used all three items, the reliability of this scale was adequate for a mass sample ($\alpha = .59; \bar{M} = .58, SD = .27$). In the 2000 NES, only the first two items were included, and they also formed a reliable scale ($\alpha = .70; \bar{M} = .56, SD = .23$).

**Need for cognition**

Finally, as an additional control, we also included a two-item measure of the need for cognition (Bizer et al. 2004; Cacioppo et al. 1996). The first question asked, “Some people like to have responsibility for handling situations that require a lot of thinking, and other people don’t like to have responsibility for situations like that. What about you?” Respondents were given the option to say that they neither liked nor disliked thinking situations. However, those who responded that they did “like” or “dislike” thinking situations were asked a follow-up question where they were asked if they liked or disliked thinking situations “a lot” or “somewhat.” The second question asked, “Some people prefer to solve simple problems instead of complex ones, whereas other people prefer to solve more complex problems. Which type of problem do you prefer to solve: simple or complex?” Again, responses to these questions were recoded on a 0 to 1 scale, where a 1 denotes a high need for cognition, and 0 denotes a low need for cognition. In both datasets, the items formed a reliable scale ($\alpha = .68, \bar{M} = .62, SD = .41$, in 1998; $\alpha = .67, \bar{M} = .60, SD = .35$, in 2000).

**OTHER CONTROL MEASURES**

**Political ideology**

In the 1998 NES, this was assessed using respondents’ self-placement on the standard seven-point NES ideology scale. In the 2000 NES, a two-item composite was used, based on: (1) respondents’ self-placement on the standard seven-point NES ideology scale, and (2) the difference between respondents’ “thermometer” ratings of conservatives and liberals ($\alpha = .68$). In both data sets, responses were re-coded to run from 0 to 1, with higher scores indicating greater conservatism ($\bar{M} = .62, SD = .48$, in 1998; $\bar{M} = .54, SD = .21$, in 2000).

3. Further psychometric information on the NES need to evaluate and need for cognition scales can be found in Bizer et al. (2004). Among other things, confirmatory factor analyses using the datasets examined here have shown that the need to evaluate and need for cognition items do in fact measure two distinct but correlated dimensions.
Party identification

In the 1998 NES, this was assessed using respondents’ self-identification on the standard seven-point NES measure of party identification. In the 2000 NES, a two-part composite was used, based on: (1) respondents’ self-identification on the seven-point NES measure of party identification, and (2) the difference between respondents’ thermometer ratings of the Republican and Democratic parties (\(\alpha = .80\)). In both data sets, responses were recoded to run from 0 to 1, with higher scores indicating stronger Republicanism (\(M = .47, SD = .35\), in 1998; \(M = .47, SD = .26\), in 2000).

Education and political interest

Since research has also pointed toward education (particularly the possession of a college degree) and political interest as factors in the development of constraint and other manifestations of the use of ideology (Fiske et al. 1990; Zaller 1992), variables measuring each of these constructs were included as controls. In both datasets, education was measured using the NES highest-degree item. Since earlier work on education has focused on the completion of a college degree as the critical experience responsible for the development of complex political attitude structures (Judd et al. 1981; Sniderman, Brody, and Tetlock 1991), responses to this item were used to create a dummy variable with two categories: one consisting of those who had not completed a bachelor’s degree (coded as 0; \(n = 801\) in 1998; \(n = 1,251\) in 2000) and another consisting of those who had (coded as 1; \(n = 402\) in 1998; \(n = 556\) in 2000).

Political interest was measured using five self-report items in the 1998 NES: (1) interest in political campaigns; (2) attention to the state’s gubernatorial contest in newspapers; (3) attention to the state’s gubernatorial campaign on local TV news; (4) the frequency with which the respondent discussed politics with family and friends; and (5) the degree to which the respondent followed “government and public affairs.” In the 2000 NES, a similar set of items was used: (1) interest in political campaigns; (2) amount of campaign-related television coverage watched; (3) the frequency with which the respondent discussed politics with family and friends; and (4) the degree to which the respondent followed “government and public affairs.” In both data sets, these sets of items formed reliable scales (\(\alpha = .77, M = .47, SD = .22\) in 1998; \(\alpha = .72, M = .53, SD = .28\) in 2000).

Demographics

Four demographics were considered in each dataset: age (in years), income (in thousands of dollars per year), race (0 = nonwhite, 1 = white), and gender (0 = female, 1 = male).
DEPENDENT VARIABLES

Horizontal constraint
In order to look at variance in horizontal constraint—i.e., ideological consistency among attitudes toward different political issues—as a function of expertise and the need to evaluate, an individual-level measure of the variable was generated using Barton and Parsons’ (1977) method, which takes the standard deviation of a set of attitude responses that have been rescaled to have the same numerical range and run in the same ideological direction. In the 1998 NES Pilot, four issues were used to construct this index: more versus less government services and spending, welfare, affirmative action and abortion. In the 2000 NES, 11 issues were considered: services and spending, defense, national health insurance, guaranteed jobs, aid to minorities, affirmative action, women’s rights, abortion, gays in the military, antidiscrimination laws for gays, and gun control. In order to construct the constraint indices, all items were recoded such that a higher response indicated a more conservative attitude; responses were also recoded to run from 0 to 1. The constraint indices were then created by taking the inverse of the standard deviation of each respondent’s scores on these items; these indices were then recoded to run from 0 to 1. Thus, higher scores indicate greater constraint ($M=.14$, $SD=.18$ in 1998; $M=.12$, $SD=.07$ in 2000).4

Hierarchical constraint
While useful, the Barton–Parsons measure considers only certain elements of the constraint construct. As Converse (1964) noted in his original work on the subject, horizontal consistency among issue preferences—as captured by the Barton–Parsons measure—is only one aspect of constraint: the latter also implies a hierarchical consistency between these preferences and the higher-order construct of ideology itself (i.e., one’s placement on the left–right continuum). Therefore, in order to measure this facet of the construct under investigation, we created a measure of hierarchical constraint in the 2000 NES data, which contained the widest variety of issue items. This was done

4. One problem with the Barton–Parsons measure is that respondents who tend to use the midpoint across attitude items receive relatively high constraint scores. While a high score may represent use of relevant ideological concepts among some of these individuals, it may also reflect non-attitudinal responding (i.e., use of the midpoint as a “safe” response). In order to deal with this possibility, the ordinary least square (OLS) regressions reported below were replicated using a corrected constraint index. This index was generated by (1) regressing Barton–Parsons scores on a variable indicating the number of times the respondent used the midpoint on the full set of attitude items in each dataset and (2) taking the residual from these regressions for each respondent. Analyses using this index did not produce different results, so the basic index was used in the analyses reported subsequently.
by scaling scores on ideology and each of the issue items to run from 0 to 1 and taking the absolute value of the difference between ideological self-placement and each of the issue items. This score was then reversed by subtracting it from one. Finally, since this constraint score that is partly a function of respondents’ overall ideological self-placement, there is a risk that its relationships with other variables may be confounded with basic political predispositions. In order to deal with this problem, scores were “purged” of contamination by left–right self-placement by regressing them on a composite of ideology and party identification (α = .70) and taking the resulting residual.6 This eliminated variance in constraint scores attributable merely to individual differences in political predispositions. Higher scores on the final measure indicate greater hierarchical constraint (M = .57, SD = .10).

**Ideological thinking about party differences**

In order to conceptually replicate our constraint analyses, we looked at an additional variable closely linked to constraint: the extent to which respondents conceptualized politics in terms of the overarching ideological principles thought to structure attitudes in the domain of politics. More precisely, we looked at the degree to which respondents thought about the differences between the two major parties in ideological terms. This index was created by examining answers to six open-ended 2000 NES items asking respondents to describe the differences between the Democratic and Republican parties. If respondents referred to ideological or ideologically-relevant philosophical differences (e.g., regarding the size of government, etc.) between the parties on any given item, their response was coded as 1; otherwise, they were given a score of zero. This scoring was done using the coding categories created by the Inter-University Consortium for Political and Social Research (Burns et al. 2002). Responses were then summed across the six items to create a count variable (M = .54, SD = 1.04).7

5. In the social–psychological literature on attitudes, analogous indices have been used by Chaiken et al. (1995) to assess hierarchical consistency within single attitudes, e.g., evaluative consistency between one’s overall attitude toward an object and one’s particular beliefs about it.

6. Results for the hierarchical-constraint analyses using an “unpurged” constraint measure produced similar results. Moreover, so did analyses using hierarchical-constraint measures that were purged in other ways, namely, by regression on ideology alone, party identification alone, or on both the ideology and party identification measures at the same time.

7. Conceptually, this index is similar to the well-known “levels of conceptualization” measure originally used in The American Voter (Campbell et al. 1960).
Results

Intercorrelations between all variables but the demographics in each dataset are shown in table 1. Looking at these intercorrelations, we find some support for some of the basic assumptions of this study: in both 1998 and 2000, the need to evaluate was only modestly correlated with expertise (i.e., \( r = .27 \) in 1998; \( r = .23 \) in 2000). It was not highly correlated with the need for cognition either (i.e., \( r = .22 \) in 1998; \( r = .33 \) in 2000). Thus, in accordance with previous results (Bizer et al. 2004), the need to evaluate appears to be distinct from expertise and a more general tendency to engage in cognitive elaboration.

EXPERTISE, THE NEED TO EVALUATE, AND HORIZONTAL CONSTRAINT

As noted earlier, our primary hypothesis was that the relationship between political expertise and constraint—as measured in the traditional, “horizontal” sense—would be moderated by the need to evaluate. In order to test this interactive hypothesis, a series of OLS regression models were estimated using the 1998 and 2000 NES data. In these models, horizontal (Barton–Parsons) constraint was regressed on expertise, the need to evaluate, need for cognition, and the two-way interactions between expertise and of the latter. Eight controls—age, income, race, gender, possession of a college degree, interest in politics, ideology, and party identification—were also included in each model. In order to guard against possible inefficiency introduced by heteroskedasticity, HC3 robust standard errors were used in the analyses (as recommended by Long and Ervin 2000). In the analyses which follow, the 0–1 coding scheme described earlier was used for all variables (except for age and income), in order to facilitate interpretation of the coefficients.

For the 1998 data, the results of these analyses are summarized in table 2. As a first step, Model 1 simply examined the main effects of expertise, need to evaluate, and need for cognition in a multivariate context. In this model, only these three variables and the controls were included as predictors. As the unstandardized coefficients in the first column of table 2 indicate, none of the controls were significantly related to ideological constraint net of the effects of the other predictors (all \( ps > .10 \)). Of the key independent variables, only expertise had a significant effect on constraint (\( b = .08, p < .001 \)). In contrast, neither the need to evaluate nor the need for cognition was significantly related to constraint net of the other predictors’ effects (both \( ps > .10 \)). Thus, the 1998 data replicate the traditional finding that higher levels of political expertise are associated with greater constraint, while suggesting that the need to evaluate was unrelated to constraint on its own.

However, our primary interest was in whether the key relationship between expertise and constraint was moderated by the need to evaluate. Model 2 tested this hypothesis by adding the two-way interaction between expertise
Table I. Intercorrelations for Key Predictors (1998 and 2000 NES)

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<th>1998 NES</th>
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<tr>
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<td></td>
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<td></td>
</tr>
<tr>
<td>3. Ideology</td>
<td>–.04</td>
<td>.13***</td>
<td>–</td>
<td></td>
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<td></td>
</tr>
<tr>
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<td>.04</td>
<td>.45***</td>
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<td>.36***</td>
<td>.01</td>
<td>.07*</td>
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</tr>
<tr>
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<td>.07*</td>
<td>.10***</td>
<td>.27***</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td>7. Need for cognition</td>
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<td>.16***</td>
<td>–.05</td>
<td>.003</td>
<td>.20***</td>
<td>.22***</td>
<td>–</td>
</tr>
<tr>
<td>8. Horizontal constraint</td>
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<td>.08**</td>
<td>.003</td>
<td>.02</td>
<td>.17***</td>
<td>.07*</td>
<td>.03</td>
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<table>
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<tr>
<th>2000 NES</th>
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<th>4</th>
<th>5</th>
<th>6</th>
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<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Interest in politics</td>
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<td>–</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<tr>
<td>3. Ideology</td>
<td>–.04†</td>
<td>.05*</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>4. Party identification</td>
<td>.08***</td>
<td>–.06**</td>
<td>.55***</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Political expertise</td>
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<td>.63***</td>
<td>.02</td>
<td>.11***</td>
<td>–</td>
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<td></td>
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<tr>
<td>6. Need to evaluate</td>
<td>.13***</td>
<td>.36***</td>
<td>–.03</td>
<td>.02</td>
<td>.23***</td>
<td>–</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>7. Need for cognition</td>
<td>.28***</td>
<td>.25***</td>
<td>.04†</td>
<td>.06**</td>
<td>.23***</td>
<td>.33***</td>
<td>–</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Horizontal constraint</td>
<td>.07**</td>
<td>.05*</td>
<td>–.09***</td>
<td>–.07**</td>
<td>.12***</td>
<td>.03</td>
<td>–.04</td>
<td>–</td>
<td></td>
</tr>
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<td>9. Hierarchical constraint</td>
<td>.13***</td>
<td>.15***</td>
<td>.14***</td>
<td>.11***</td>
<td>.24***</td>
<td>.05†</td>
<td>–.01</td>
<td>.48***</td>
<td></td>
</tr>
<tr>
<td>10. Ideological thinking</td>
<td>.27***</td>
<td>.33***</td>
<td>.17***</td>
<td>.23***</td>
<td>.40***</td>
<td>.19***</td>
<td>.17***</td>
<td>.05*</td>
<td>.14***</td>
</tr>
</tbody>
</table>

**Note:** All coefficients are Pearson correlations.

† p < .10.
* p < .05.
** p < .01.
*** p < .001.
and need to evaluate, as well as the interaction between expertise and need for cognition. The results of this analysis are shown in the second column of table 2. As predicted, the interaction between expertise and the need to evaluate was significant and in the right direction ($b = .17$, $p < .05$); the other interaction did not reach significance ($p > .50$). Given the variable codings, this suggests that the relationship between expertise and constraint was stronger for respondents with a stronger need to evaluate. In order to probe the interaction more closely, we computed simple slopes for the relationship between expertise and constraint at need-to-evaluate levels one standard deviation above (high need to evaluate) and below (low need to evaluate) the variable’s mean, using Aiken and West’s (1991) method. These analyses indicated that the relationship between expertise and constraint was significant at the high need-to-evaluate level ($b = .13$, $p < .001$), but weaker and non-significant at the low need-to-evaluate level ($b = .03$, $p > .10$).

**Table 2.** Expertise and Need to Evaluate as Predictors of Horizontal Constraint (1998 NES Pilot)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
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<tbody>
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<td></td>
<td>$b$</td>
<td>SE $b$</td>
<td>$b$</td>
<td>SE $b$</td>
</tr>
<tr>
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<td>$(.0004)$</td>
<td>$-.0002$</td>
<td>$(.0004)$</td>
</tr>
<tr>
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<td>$-.0004$</td>
<td>$(.003)$</td>
<td>$-.001$</td>
<td>$(.003)$</td>
</tr>
<tr>
<td>White</td>
<td>$.01$</td>
<td>$(.01)$</td>
<td>$.01$</td>
<td>$(.01)$</td>
</tr>
<tr>
<td>Gender</td>
<td>$-.005$</td>
<td>$(.01)$</td>
<td>$-.004$</td>
<td>$(.01)$</td>
</tr>
<tr>
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<td>$.01$</td>
<td>$(.01)$</td>
<td>$.01$</td>
<td>$(.01)$</td>
</tr>
<tr>
<td>Interest in politics</td>
<td>$.02$</td>
<td>$(.03)$</td>
<td>$.01$</td>
<td>$(.03)$</td>
</tr>
<tr>
<td>Ideology</td>
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<td>$(.03)$</td>
<td>$.01$</td>
<td>$(.03)$</td>
</tr>
<tr>
<td>Party identification</td>
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<td>$(.02)$</td>
<td>$.005$</td>
<td>$(.02)$</td>
</tr>
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<td>Political expertise</td>
<td>$.08***</td>
<td>$(.02)$</td>
<td>$.08***</td>
<td>$(.02)$</td>
</tr>
<tr>
<td>Need to evaluate</td>
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<td>$(.03)$</td>
<td>$.03$</td>
<td>$(.03)$</td>
</tr>
<tr>
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<td>$(.02)$</td>
<td>$-.01$</td>
<td>$(.02)$</td>
</tr>
<tr>
<td>Expertise $\times$ Need to evaluate</td>
<td>–</td>
<td>–</td>
<td>$.17*$</td>
<td>$(.17)$</td>
</tr>
<tr>
<td>Expertise $\times$ Need for cognition</td>
<td>–</td>
<td>–</td>
<td>$.01$</td>
<td>$(.04)$</td>
</tr>
<tr>
<td>Constant</td>
<td>$.14***</td>
<td>$(.02)$</td>
<td>$.14***</td>
<td>$(.02)$</td>
</tr>
<tr>
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<td>$(11,861)**$</td>
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<td>$(13,859)**$</td>
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<tr>
<td>$R^2$</td>
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<td>.037</td>
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<tr>
<td>$N$</td>
<td>873</td>
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<td>873</td>
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</table>

*NOTE.—Entries are unstandardized OLS regression coefficients and HC3 robust SEs.

$^p < .10$.

$^*P < .05$.

$^{**}P < .01$.

$^{***}P < .001$. 
The results for the 2000 NES were similar, and are summarized in table 3. Again, Model 1 simply looked at the main effects of the three key independent variables. The results of this analysis again provided evidence of a positive net relationship between expertise and constraint ($b = .03$, $p < .01$), and they also suggested that a high need for cognition was associated with lower levels of constraint ($b = -.03$, $p < .001$). Examination of the other coefficients indicated that constraint was higher among males ($b = .01$, $p < .001$) and respondents with a college degree ($b = .02$, $p < .01$), but lower among respondents who were more ideologically conservative ($b = -.04$, $p < .001$). Model 2, which added the two-way interaction terms, again provided evidence for the predicted interaction between expertise and need to evaluate, which was significant and in the right direction ($b = .09$, $p < .05$).
The interaction between expertise and need for cognition did not reach significance ($b = -0.04, p > .20$). In order to probe the critical interaction between expertise and the need to evaluate, simple slopes were again computed in the fashion described earlier. These analyses indicated that the relationship between expertise and constraint was significant at high need-to-evaluate levels ($b = 0.05, p < .01$), but weaker and nonsignificant at low need-to-evaluate levels ($b = 0.01, p > .30$).

**EXPERTISE, THE NEED TO EVALUATE, AND HIERARCHICAL CONSTRAINT**

All of the analyses thus far are supportive of our main hypothesis: controlling for the effects of the need for cognition, expertise was more strongly associated with constraint those with a strong need to evaluate. However, as noted above, the Barton–Parsons measure considers only the horizontal aspect of constraint, i.e., linkages between issue positions, rather than linkages between issue positions and overall ideological self-placement. Therefore, we replicated the above analyses using the index of hierarchical constraint described earlier; this was done only in the 2000 NES, which contained the widest variety of issue items. With regard to this aspect of constraint, our hypothesis suggests that that expertise should increase the consistency between ideological self-placement and issue positions most markedly among those with a high need to evaluate.

This version of our hypothesis was tested by regressing the hierarchical-constraint index on the demographics, education, political interest, expertise, the need to evaluate, the need for cognition, and the Expertise × Need to Evaluate and Expertise × Need for Cognition interactions; ideology and party identification were excluded as predictors, since the dependent measure is already purged of their influence by construction (see earlier). The results of this analysis are summarized in table 4. Model 1 looked only at the effects of demographics and the main effects of expertise, the need to evaluate, and the need for cognition. This model revealed the expected positive relationship between expertise and hierarchical constraint ($b = 0.07, p < .001$), as well as a negative relationship between the need for cognition and hierarchical constraint ($b = -0.02, p < .05$); the main effect of the need to evaluate was again nonsignificant ($p > .50$). Moreover, hierarchical constraint was also higher among Whites and men (both $p$s < .001) and among respondents with a college degree ($p < .05$). In turn, Model 2 added the Expertise × Need to Evaluate and Expertise × Need for Cognition interactions. Consistent with the results for horizontal constraint, the critical interaction between expertise and the need to evaluate was significant ($b = 0.09, p < .05$). When simple-slope analyses were used to decompose this interaction, the results indicated that the relationship between expertise and hierarchical constraint was stronger among those with a need to evaluate ($b = 0.09, p < .001$) than those with a low need to evaluate ($b = 0.05, p < .01$). This suggests that the particular
combination of a high need to evaluate and high expertise was associated with a stronger relationship between ideology and issue attitudes. On the whole, then, the data suggest that our hypothesis also holds with regard to hierarchical forms of constraint.\(^8\)

\(^8\) This pattern was confirmed in a LISREL multigroup analysis, where a latent variable corresponding to ideology (with the components of the two-item ideology composite as indicators) was specified as a predictor of the eleven issue positions. This model was estimated in four subgroups created by median splits on the need to evaluate (NE) and expertise: a low-NE, low-expertise group (\(n = 406\)); a low-NE, high-expertise group (\(n = 366\)); a high-NE, low-expertise group (\(n = 357\)); and a high-NE, high-expertise group (\(n = 671\)). This analysis revealed that the mean effect of ideology on issue attitudes—correcting for measurement error—was strongest in the high-NE, high-expertise group (mean \(\gamma = .66\)), consistent with our predictions about the interactive effect of expertise and the need to evaluate; the effect of ideology was

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Model 1</th>
<th></th>
<th></th>
<th>Model 2</th>
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<td>(b)</td>
<td>SE (b)</td>
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<td>.02***</td>
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<td>(.01)</td>
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<td>.01*</td>
<td>(.01)</td>
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<td>.01</td>
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<td>(.01)</td>
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<td>.07***</td>
<td>(.01)</td>
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<td>(.01)</td>
<td></td>
<td>-.003</td>
<td>(.01)</td>
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<td>(.01)</td>
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<td>-.02**</td>
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<td>Expertise \times Need to</td>
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<td>–</td>
<td>.09*</td>
<td>(.04)</td>
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<td></td>
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<tr>
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<td>–</td>
<td>.01</td>
<td>(.03)</td>
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<td>(.01)</td>
<td>.55***</td>
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<td>.087</td>
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<td>1,420</td>
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</tbody>
</table>

\(\dagger\) \(p < .10\).

* \(P < .05\).

** \(P < .01\).

*** \(P < .001\).

\(\dagger\) Entries are unstandardized OLS regression coefficients and HC3 robust SEs.
EXPERTISE, THE NEED TO EVALUATE, AND IDEOLOGICAL THINKING ABOUT PARTY DIFFERENCES

While our primary focus was on antecedents of ideological constraint in respondents’ issue positions, we decided to conceptually replicate our findings by examining another outcome variable related to the use of ideological constructs, namely, the frequency with which respondents described the differences between the Democratic and Republican parties in ideological terms. However, since only the 2000 NES included the necessary items, the 1998 data were not considered. These analyses used the same set of predictors included in the constraint models. Nevertheless, since the outcome variable took the form of a count (i.e., the number of times respondents described the differences between the parties in ideological terms), estimation using Poisson regression was preferable to OLS. However, we were also faced with the problem of a large number of zero counts (i.e., 1,097 out of 1,517 valid cases for the analysis). Therefore, in order to deal with the possibility that different processes may account for the zero and nonzero counts on the ideological-thinking variable, we used a zero-inflated Poisson regression model, which uses maximum-likelihood estimation to simultaneously model count size and the “inflation” of zero counts as a function of different independent-variable parameters (Long 1997). 9 Robust SEs were again used.

The results of this analysis are shown in table 5. Model 1, which looked only at the influence of the main effects and controls, found that expertise was modestly associated with a greater number of ideological mentions on the party-differences count variable ($b = .38, p < .10$). Moreover, need for cognition was again associated with the use of ideology in this analysis. However, in contrast to what was found for the consistency measure, it was associated with an increased likelihood of ideological thinking on the party-differences measure ($b = .31, p < .05$). Turning to Model 2, which added the two interaction terms, we again find evidence for the predicted interaction between expertise and the need to evaluate, which was significant and in the noticeably smaller in the other groups ($\gamma = .27$ in the low-NE, low-expertise group; $\gamma = .46$, in the low-NE, high-expertise group; $\gamma = .38$, in the high-NE, low-expertise group; $\gamma = .37$, averaged across the three groups).

9. Confirming this decision, Vuong’s statistic (Long 1997) indicated that the zero-inflated model was more appropriate than the conventional Poisson regression model, $z = 9.20, p < .0001$. Moreover, a likelihood-ratio test indicated that there was no significant level of overdispersion in the count variable ($p > .50$), suggesting that the Poisson estimator was acceptable. The functional form for the inflation model was the logistic. In each of the regressions shown in table 5, the inflation model contained the same set of predictors as the actual count model, with one addition: an interviewer variable indicating the respondents’ level of resistance to the interview. This variable was used to account for zero-inflation due to a general disinterest in answering the survey.
correct, positive direction \( (b = 1.43, p < .05) \). The other interaction was not significant \( (p > .10) \). In order to probe the key interaction between expertise and the need to evaluate, simple-slope analyses were again performed. These analyses indicated that the relationship between expertise and ideological thinking was significant and positive at high need-to-evaluate levels \( (b = .66, p < .01) \), but weak and nonsignificant at low need-to-evaluate levels \( (b = -.003, p > .10) \). Thus, our key finding extends not only to constraint itself, but also to measures of the degree to which people use the higher-order concepts thought to form the basis of ideological constraint.\(^{10}\)

\(^{10}\) One objection to the regression models as presented is that the Expertise × Need to Evaluate interaction may not hold up once the interactions between other sophistication-related variables and the motivational variables (need to evaluate and need for cognition) are considered. One such variable is education, which after expertise is perhaps the variable most frequently linked to the

### Table 5. Expertise and Need to Evaluate as Predictors of Ideological Thinking About Party Differences (2000 NES)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( b )</td>
<td>( SE ) ( b )</td>
</tr>
<tr>
<td>Age</td>
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<td>(.003)</td>
</tr>
<tr>
<td>Income</td>
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<td>(.01)</td>
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<tr>
<td>White</td>
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<td>Gender</td>
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<tr>
<td>College degree</td>
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<td>Interest in politics</td>
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<td>(.25)</td>
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<td>Political expertise</td>
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<td>(.22)</td>
</tr>
<tr>
<td>Need to evaluate</td>
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<td>(.20)</td>
</tr>
<tr>
<td>Need for cognition</td>
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<td>(.15)</td>
</tr>
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<td>Expertise × Need to evaluate</td>
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<td>–</td>
</tr>
<tr>
<td>Expertise × Need for cognition</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Constant</td>
<td>(.53^{**})</td>
<td>(.18)</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>(-1248.73)</td>
<td>(-1247.02)</td>
</tr>
<tr>
<td>Wald ( \chi^2 ) (degrees of freedom)</td>
<td>57.18</td>
<td>57.47</td>
</tr>
<tr>
<td></td>
<td>(11)**</td>
<td>(13)**</td>
</tr>
<tr>
<td>( N )</td>
<td>1,517</td>
<td>1,517</td>
</tr>
</tbody>
</table>

\textbf{Note.}—Entries are zero-inflated Poisson regression coefficients and robust SEs. The functional form for the inflation model was the logistic; estimates for this model are not shown.  
\( \dagger p < .10. \)
\( ^* p < .05. \)
\( ^{**} p < .01. \)
\( ^{***} p < .001. \)
Discussion

A long line of public opinion research suggests that political expertise is reliably associated with higher levels of constraint and other manifestations of the use of ideology. These phenomena are usually thought to result from an informational process in which the knowledge of abstract ideological concepts provided by political expertise is used to formulate ideologically-constrained opinions, thus linking attitudes toward individual political objects together in a higher-order fashion. However, in this article, we argue that this informational process may be moderated by the degree to which individuals are motivated to establish and cognitively represent standing political decisions. As such, the purpose of our analyses was to examine the hypothesis that this motivation—measured in terms of the need to evaluate—would moderate the relationship between expertise and the use of ideology, controlling for the main and interactive effects of the need for cognition (i.e., a general tendency to engage in cognitive elaboration, apart from evaluative goals).

Data from two samples provided a strong pattern of support for this hypothesis. In this vein, our first set of analyses not only replicated the common finding of a positive relationship between expertise and the traditional, “horizontal” form of ideological constraint, but also suggested that this relationship was moderated by the need to evaluate: expertise was more strongly associated with horizontal constraint among those with a strong need to evaluate. Moreover, this result held up even after the general propensity for cognitive effort represented by the need for cognition was taken into account. Confirming these basic findings, a second set of analyses using the 2000 NES indicated that the hierarchical aspect of ideological constraint—i.e., consistency between left–right self-placement and attitudes toward particular issues—was also strongest among individuals who were high in both expertise and the need to evaluate. Finally, additional analyses using the 2000 NES indicated that the interactive effect of expertise and the need to evaluate—again controlling for the main and interactive effects of the need for cognition—extended to a more conceptually-oriented index of the use of ideology, namely, the frequency with which respondents described the differences between the two major parties in ideological terms.

In order to account for this, we re-estimated the OLS models (for horizontal constraint in 1998 and 2000 and hierarchical constraint in 2000) and the zero-inflated Poisson model (for ideological thinking in 2000) with the Education × Need to Evaluate and Expertise × Need for Cognition interactions added. This change had little effect. In all models, the interaction between expertise and the need to evaluate remained significant and in the right direction ($b = .13, p = .07$, in the 1998 horizontal constraint model; $b = .09, p < .05$, in the 2000 horizontal constraint model; $b = .10, p < .05$, in the 2000 hierarchical constraint model; and $b = 2.31, p < .005$, in the 2000 ideological thinking model).
At the simplest level, these findings provide further evidence for the political relevance of evaluative motivation in general and the need-to-evaluate construct in particular. As noted earlier, previous research on the need to evaluate suggests that it is reliably associated with a higher frequency of evaluative thought and a greater likelihood of opinion formation, as well as a more-pronounced tendency to engage in behaviors consistent with the possession of well-formed preferences (Bizer et al. 2004; Jarvis and Petty 1996). The present study extends these findings by suggesting that the need to evaluate may also condition the use of abstract evaluative criteria made available by political expertise. More precisely, our data implies that political experts—citizens who are more likely to have a good understanding of abstract ideological concepts—are more likely to use the evaluative criteria furnished by these concepts in order to structure their attitudes toward particular issues, when they are particularly motivated to form opinions in general. In this regard, our results more generally suggest that the need to evaluate may have some of its most important effects in interaction with other social-cognitive variables. Previous work has provided abundant evidence for a “main effect” of the need to evaluate with respect to the formation and expression of preferences in many domains (Bizer et al. 2004; Jarvis and Petty 1996). In contrast, researchers have paid little attention to how the need to evaluate may interact with other factors to influence the organization of attitude and perceptions. The findings presented here provide a step in this direction, and point toward a fruitful avenue for future work.

At another level, however, our findings underscore the need for students of political psychology and political behavior to better explore the dynamics of “motivated social cognition” in the construction and organization of political attitudes. As noted earlier, a number of perspectives in both political science (Lavine 2002; Lodge et al. 1989) and social psychology (Kruglanski 1996) imply that judgments are a joint product of informational factors—such as the possession of well-developed knowledge structures in a given domain—and motivational factors that determine how this information is used to construct attitudes and beliefs. While this general perspective has been applied fruitfully to the analysis of cognitive processes behind phenomena like stereotyping (Kruglanski 1996) and persuasion (e.g., Cacioppo et al. 1996), its relevance to the issue of how and when citizens make use of ideology has not been considered in any great detail. Instead, existing treatments of the topic have focused largely on the role of political schemas and their availability, and they have assumed that citizens who possess the schemas needed for an understanding of ideological constructs are also motivated to use them as a basis for standing political decisions. Nevertheless, several studies demonstrate that expertise and evaluative motivation are only modestly correlated (Bizer et al. 2004; Druckman and Nelson 2003). This suggests that existing approaches to the use of ideology
may benefit from an analysis in which the informational and motivational antecedents of the former are considered independently and in interaction with one another.

Taking a step in this direction, the present study strongly suggests that the possession of relevant conceptual knowledge is more likely to be associated with the use of ideology in the presence of a motivation to apply this knowledge in a broadly evaluative fashion. In this respect, the findings reported here dovetail nicely with the results of other recent studies. As noted earlier, Federico (2004) found that expertise and the tendency to clearly identify oneself as liberal or conservative were more strongly related among those with a high need to evaluate. This finding is consistent with one of the background assumptions of the present study, namely, the idea that experts may be more likely to translate a knowledge of ideology into standing decisions about politics when they are highly motivated to engage in evaluation. Our current findings take this analysis one step further, demonstrating that the interactive effect of expertise and evaluative motivation also extends to various phenomena (e.g., constraint) that should accompany the establishment of standing ideological decisions. Importantly, given our simultaneous consideration of the need for cognition, they also suggest that this evaluatively-focused motivational effect is distinguishable from the effects of a general motivation to think carefully about attitude objects.

In summary, we think our analyses shed new light on the workings of the “black box” responsible for the formation and organization of political attitudes and perceptions. However, we would like to conclude by pointing out some limitations of our analyses. Most obviously, the correlational nature of the data used here limits our ability to make definitive causal inferences. While our findings are consistent with the hypothesis that the need to evaluate has a causal impact on organization of issue preferences in conjunction with political expertise, our lack of control over variation in each of these constructs makes it difficult to confidently draw this conclusion. A related issue is raised by the cross-sectional nature of the NES measures used in this study. More precisely, our data does not allow us to look at how the gradual acquisition of political expertise may have different longitudinal effects on the development of ideologically-structured attitudes and thinking among groups of individuals differing in the need to evaluate. Nevertheless, previous work on ideological structure suggests that it is something which develops over time via experts’ acquisition and use of ideological schemas (Judd and Downing 1990; Lavine et al. 1997). As such, future studies will need to consider the interactive effects of expertise and the need to evaluate from this perspective—a step which should help us get a better look at relevant causal processes.
Appendix: Items from the 1998 and 2000 National Election Studies

Political expertise

“Who has the final responsibility to decide if a law is constitutional or not...is it the President, Congress, or the Supreme Court?” (v344, v348, and v349); “And whose responsibility is it to nominate judges to the Federal Courts...the President, Congress, or the Supreme Court?” (v345, v350, and v351); “Do you happen to know which party has the most members in the House of Representatives in Washington?” (v346, v352, and v353); and “Do you happen to know which party has the most members in the U.S. Senate?” (v347, v354, and v355).

Need to evaluate

Item 1: v118 and v387; Item 2: v119 and v388; Item 3: v122 and v391. (Wordings given in text.)

Need for cognition

Item 1: v395; Item 2: v393, v394, and v392. (Wordings given in text.)

Ideology

Constructed from v291 and v294, both of which began with: “We hear a lot of talk these days about liberals and conservatives. Think of a seven-point scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative, where 1 stands for extremely liberal, 2 for liberal, 3 for slightly liberal, 4 is moderate or middle, 5 stands for slightly conservative, 6 for conservative and 7 stands for extremely conservative.” The item ended in either “Where would you place yourself on this scale, or haven’t you thought much about this?” (v291) or “Where would you place yourself on this scale” (v294), based on random assignment.

Party identification

Based on the constructed 7-point NES summary variable, ranging from “strong Democrat” to “strong Republican” (v329). Responses were used to create a three-point scale: “strong” and “weak” Democrats were given a score of 0, independents and independent leaners were given a score of .5, and “strong” and “weak” Republicans were given a score of 1.
Issue attitudes: Services and spending

“Some people think the government should provide fewer services even in areas such as health and education in order to reduce spending. Suppose these people are at one end of a scale, at point 1. Other people feel it is important for the government to provide many more services even if it means an increase in spending. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2, 3, 4, 5 or 6. Where would you place yourself on this scale, or haven’t you thought much about this?” (v331) or an identical item without the “haven’t thought” clause (v332). Welfare: “Another proposal is to put a two year limit on how long someone can receive welfare benefits. Do you favor or oppose this two-year limit?” (v333), “Do you favor the two-year limit strongly or not strongly?” (v334), and “Do you oppose the two-year limit strongly or not strongly?” (v335). Affirmative action: “Some people think that if a company has a history of discriminating against Blacks when making hiring decisions, then they should be required to have an affirmative action program that gives Blacks preference in hiring. What do you think? Should companies that have discriminated against Blacks have to have an affirmative action program?” (v340), “Do you feel strongly or not strongly that they should have to have affirmative action?” (v341), and “Do you feel strongly or not strongly that they should NOT have to have affirmative action?” (v342). Abortion: “There has been some discussion about abortion during recent years. Which one of the following opinions best agrees with your view? (1) By law, abortion should never be permitted, (2) The law should permit abortion only in case of rape, incest, or when the woman’s life is in danger, (3) The law should permit abortion for reasons other than rape, incest, or danger to the woman’s life, but only after the need for the abortion has been clearly established, or (4) By law, a woman should always be able to obtain an abortion as a matter of personal choice” (v339).

Education

Based on the NES summary measure (v426).

Political interest

“What some people don’t pay much attention to political campaigns. How about you? Would you say that you have been very much interested, somewhat interested or not much interested in the political campaigns so far this year?” (v101), “How much attention did you pay to newspaper articles about the campaign for Governor of [R’s state] - a great deal, quite a bit, some, very little, or none?” (v105), “How much attention did you pay to news on local
news shows about the campaign for Governor - a great deal, quite a bit, some, very little, or none?” (v107), “How many days in the past week did you talk about politics with family or friends?” (v116), and “Some people seem to follow what’s going on in government and public affairs most of the time, whether there’s an election going on or not. Others aren’t that interested. Would you say you follow what’s going on in government and public affairs most of the time, some of the time, only now and then, or hardly at all?” (v376).

Demographics

2000 NATIONAL ELECTION STUDY

Political expertise
“Do you happen to know which party had most members in the House of Representatives before the election (this/last) month?” and “Do you happen to know which party had most members in the US Senate before the election (this/last) month?” (v1356 and v1357); “Now we have a set of questions concerning various public figures. We want to see how much information about them gets out to the public from television, newspapers and the like. The first name is Trent Lott. What job or political office does he NOW hold?” (v1447), “William Rehnquist” (v1450), “Tony Blair” (v1453), and “Janet Reno” (v1456); and “What U.S. state does George W. Bush live in now (v1458); “Which U.S. state is Al Gore from originally? (v1462).

Need to evaluate
v862 and v866. (Wordings given in text.)

Need for cognition
v870 and v871. (Wordings given in text.)

Ideology
Based on (1) “We hear a lot of talk these days about liberals and conservatives. When it comes to politics, do you think of your self as a liberal, a conservative, or a moderate, or haven’t you thought much about this?” or “We hear a lot of talk these days about liberals and conservatives. When it comes to politics, do you think of your self as extremely liberal, liberal, slightly liberal, moderate or middle of the road, slightly conservative, conservative, extremely conservative or haven’t you thought
much about this?” (v446), and (2) a difference score constructed from the 0–100 feeling thermometers for conservatives (v1310) and liberals (v1311).

**Party identification**

Based on (1) the constructed 7-point NES summary variable, ranging from “strong Democrat” to “Strong Republican” (v523); and (2) a difference score constructed from the 0–100 feeling thermometers for the Republican (v370) and Democratic (v369) parties.

**Issue attitudes. Services and spending (v550)**

“Some people think the government should provide fewer services even in areas such as health and education in order to reduce spending. Suppose these people are at one end of a scale, at point 1. Other people feel it is important for the government to provide many more services even if it means an increase in spending. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2, 3, 4, 5 or 6. Where would you place yourself on this scale, or haven’t you thought much about this?” (face-to-face) or “Some people think the government should provide fewer services even in areas such as health and education in order to reduce spending. Other people feel it is important for the government to provide many more services even if it means an increase in spending. Which is closer to the way you feel or haven’t you thought much about this?” (telephone).

**Defense (v587)**

“Some people believe that we should spend much less money for defense. Suppose these people are at one end of a scale, at point 1. Others feel that defense spending should be greatly increased. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2, 3, 4, 5, or 6. Where would you place yourself on this scale, or haven’t you thought much about this?” (face-to-face) or “Some people think that we should spend much less money for defense. Others feel that defense spending should be greatly increased. Do you have an opinion on this issue, or haven’t you thought much about this? [If R has an opinion: Do you feel the government should decrease defense spending, increase defense spending, or is the government spending on defense about the right amount now?]” (telephone).

**National health insurance (v614)**

“There is much concern about the rapid rise in medical and hospital costs. Some people feel there should be a government insurance plan which would
cover all medical and hospital expenses for everyone. Suppose these people are at one end of a scale, at point 1. Others feel that all medical expenses should be paid by individuals through private insurance plans like Blue Cross or other company paid plans. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2, 3, 4, 5 or 6. Where would you place yourself on this scale, or haven’t you thought much about this?” (face-to-face) or “There is much concern about the rapid rise in medical and hospital costs. Some people feel there should be a government insurance plan which would cover all medical and hospital expenses for everyone. Others feel that all medical expenses should be paid by individuals through private insurance plans like Blue Cross or other company paid plans. Which is closer to the way you feel or haven’t you thought much about this?” (telephone). 

Guaranteed jobs (v620): “Some people feel the government in Washington should see to it that every person has a job and a good standard of living. Suppose these people are at one end of a scale, at point 1. Others think the government should just let each person get ahead on their own. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2, 3, 4, 5, or 6. Where would you place yourself on this scale, or haven’t you thought much about this?” (face-to-face) or “Some people feel the government in Washington should see to it that every person has a job and a good standard of living. Others think the government should just let each person get ahead on their own. Which is closer to the way you feel or haven’t you thought much about this?” (telephone).

Aid to minorities (v645): “Some people feel that the government in Washington should make every effort to improve the social and economic position of Blacks. Suppose these people are at one end of a scale, at point 1. Others feel that the government should not make any special effort to help blacks because they should help themselves. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2, 3, 4, 5, or 6. Where would you place yourself on this scale, or haven’t you thought much about this?” (face-to-face) or “Some people feel that the government in Washington should make every effort to improve the social and economic position of Blacks. Others feel that the government should not make any special effort to help Blacks because they should help themselves. Which is closer to the way you feel or haven’t you thought much about this?” (telephone).

Affirmative action (v806) “Some people say that because of past discrimination, Blacks should be given preference in hiring and promotion. Others say that such preference in hiring and promotion of Blacks is wrong because it gives Blacks advantages they haven’t earned. What about your opinion—are you for or against preferential
hiring and promotion of Blacks? [Do you favor/oppose preference in hiring and promotion strongly or not strongly?]"

Women’s role (v760): “Recently there has been a lot of talk about women’s rights. Some people feel that women should have an equal role with men in running business, industry, and government. Suppose these people are at one end of a scale, at point 1. Others feel that a woman’s place is in the home. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2, 3, 4, 5 or 6. Where would you place yourself on this scale, or haven’t you thought much about this?” (face-to-face) or “Recently there has been a lot of talk about women’s rights. Some people feel that women should have an equal role with men in running business, industry, and government. Others feel that a woman’s place is in the home. Which is closer to the way you feel or haven’t you thought much about this?” (telephone).

Abortion (v694): “There has been some discussion about abortion during recent years. Which one of the following opinions best agrees with your view? (1) By law, abortion should never be permitted, (2) The law should permit abortion only in case of rape, incest, or when the woman’s life is in danger, (3) The law should permit abortion only in case of rape, incest, or danger to the woman’s life, but only after the need for the abortion has been clearly established, or (4) By law, a woman should always be able to obtain an abortion as a matter of personal choice” (face-to-face) or “There has been some discussion about abortion during recent years. I am going to read you a short list of opinions. Please tell me which one of the opinions best agrees with your view?” (telephone; same options as face-to-face are presented).

Gays in the military (v727): “Do you think homosexuals should be allowed to serve in the United States Armed Forces or don’t you think so? [Do you feel strongly or not strongly that homosexuals should/should not be allowed to serve?] Antidiscrimination laws for gays (v1481): “Recently there has been a lot of talk about job discrimination. Do you favor or oppose laws to protect homosexuals against job discrimination? [Do you favor/oppose such laws strongly or not strongly?]”

Gun control (v731): “Do you think the federal government should make it more difficult for people to buy a gun than it is now, make it easier for people to buy a gun, or keep these rules about the same as they are now? [A lot easier/more difficult or somewhat easier/more difficult?]”

Education

Based on the NES summary measure (v913).

Political interest

“Some people don’t pay much attention to political campaigns. How about you? Would you say that you have been very much interested, somewhat interested or not much interested in the political campaigns so far this year?”
(v1201), “Would you say you watched a good many, several, or just one or two [programs about the campaign on TV]?” (v1203), “How many days in the past week did you talk about politics with family or friends?” (v1205), and “Some people seem to follow what’s going on in government and public affairs most of the time, whether there’s an election going on or not. Others aren’t that interested. Would you say you follow what’s going on in government and public affairs most of the time, some of the time, only now and then, or hardly at all?” (v1367).

Demographics


References


