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THE RELATIONSHIP BETWEEN AFFECTIVE STATES AND THE STRUCTURE OF POLITICAL ATTITUDES

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RESUMEN

Dado que el clima político suele ir acompañado de estímulos afectivos inductores, es importante comprender la relación entre las emociones y la cognición política. Desde la investigación de la psicología social, este estudio se centra en investigar específicamente cómo las emociones provenientes de fuentes diferentes (es decir, de la vida diaria o las relativas al estado de la nación) afectan a la estructura y contenido de las actitudes políticas. A partir de los datos del *General Social Survey* de 1996 y de una encuesta diseñada específicamente para estudiar la relación entre las emociones y las actitudes políticas, mantenemos que el afecto influye en la estructura de las actitudes políticas de las personas a través del procesamiento de la información y que las personas usan sus reacciones emocionales a los sucesos políticos como un heurístico para fijar actitudes políticas.

ABSTRACT

Because the political climate is often ridden with affect-inducing stimuli, it is important to understand the relationship between emotions and political cognition. Drawing from research in social psychology, this study is designed to specifically investigate how emotions from different sources (i.e., everyday life or the state of the nation) influence the structure of political attitudes. Using data from the 1996 General Social Survey and a survey designed for the purpose of studying the relationship between emotions and political attitudes, we argue that general affective states influence the structure of people's political attitudes via information processing. In addition, we argue that people use emotional reactions to political events as a heuristic for determining political attitudes.

Key words: emotion, political attitudes, political cognition, information processing

The political world is full of emotionally-provocative events. Whether it is Hurricane Katrina, the Iraq War, or simply electoral wins and losses, political information has the power to evoke powerful emotional responses. As a recent case in point, CNN anchorman Anderson Cooper was so moved by the devastation wrought by Hurricane Katrina and the failure of government agencies to reach those in need that he broke down in tears during his on-the-spot coverage (Carter, 2005). His emotional display was greeted

by many in the public as admirable and heroic journalism, presumably because he revealed the emotions that many people in the public were feeling as they watched the victims with horror (Carter).

In the political context, people's emotional reactions are likely to become important as their identification with political groups increases. That is, when a person's identity becomes tightly tied to a group, s/he may become emotionally involved in issues related to the group (Mackie, Devos, & Smith, 2000). For example, many Democrats reported depressive symptoms after American voters reelected George W. Bush as president, whereas Republican partisans rejoiced, elated in their victory. Cognizant of the mobilizing power of emotions, campaign strategists frequently try to elicit emotional responses from the public in order to garner support for their own candidate or to detract support from the opposition (Calantone & Warshaw, 1985). Perhaps the most famous example of an advertisement designed to elicit fear and anxiety in viewers is Lyndon B. Johnson's "Daisy" ad. In this ad, a small girl is shown picking at a flower, counting down until a mushroom cloud envelops the screen, feeding into Cold War fears of nuclear disaster.

Given that the political climate is often ridden with affect-inducing stimuli, it is important to understand how emotional states influence people's political attitudes and the processing of information concerning political issues. Emotion may be particularly important for contexts in which people lack experience, knowledge and expertise as emotions in such contexts may represent the most salient and accessible source of information on which to base their attitudes. The political context certainly represents one of these domains (Delli Carpini & Keeter, 1996). In this paper, we use data from the General Social Survey and data from an experimental survey to make the case that emotional states influence the structure (i.e., organization) of political attitudes. We argue that general affective states influence the structure of people's political attitudes via an information processing mechanism. In addition, we argue that people may use emotional reactions to political events as a heuristic for determining their political attitudes.

The structure of political attitudes has received much attention ever since the groundbreaking studies of Campbell et al. (1960) and Converse (1964) showed that Americans' political attitudes lack ideological consistency. Since then, researchers of various stripes have debated numerous explanations for this inconsistency (e.g., Achen, 1975, Peffley & Hurwitz, 1985). One explanation that political psychologists have yet to consider centers on the role of emotions in structuring attitudes. Research on emotions indicates that different affective states correspond to different infor-

mation-processing strategies, which may influence attitude structure by altering what they pay attention to. For example, general positive affect, along with the discrete emotions of anger and disgust are associated with more heuristic processing, whereas anxiety and uneasiness are associated with more systematic (but not necessarily unbiased) information processing (Bodenhausan, Sheppard & Kramer, 1994; Tiedens & Linton, 2001). Within the political context, affective states might influence attitude structure by altering the role of one of the most important political heuristics: party identification (Lau & Redlawsk, 2006).

When people's affective states facilitate heuristic processing, they should be more likely to rely on general categories and as a result, their political attitudes should conform to a more partisan structure. Partisan structure, for example, would be evident in attitudes towards various social issues in line with the party platform. In contrast, when affective states facilitate unbiased systematic-processing, political attitudes might deviate more from partisan norms, presumably because under these conditions, people tend to think more carefully about the attitude object. In sum, people's general affective states may influence the overall structure of their political attitudes. Because general affective states fluctuate readily with day-to-day events, this might present a partial explanation for the seeming instability of political attitudes (Converse, 1964).

Not only do researchers question Americans' ability to organize their attitudes, but Delli Carpini and Keeter (1996) find that Americans know surprisingly little about the American political system. In other words, voters do not even seem to know enough facts about politics to formulate beliefs, let alone organize their thoughts into coherent belief systems. And when people who do not know much about politics they may use their affective state as a heuristic in determining their attitude towards a political target. Indeed psychological research indicates that people sometimes do use their emotional experiences as information about how they feel about a particular object (Albarracin & Kumkale, 2003; DeSteno, Petty, Rucker, Wegener, Braverman, 2004; Gasper & Clore, 2000). In this case, affect may influence the *attitude* towards an object when the person identifies the emotions as relevant, but not when s/he discounts the emotion as irrelevant to the judgment task. The relevance of an emotion should vary as people experience emotions related to a wide variety of political objects and to their everyday life. One way to assess the differential effects of these two sources of affect is to simply ask participants the extent to which they have felt different emotions with respect to a particular attitude object (such as

the nation as whole or the party with which they most closely identify) or their general, everyday life.

Research on affect in political psychology

Although much attention has been directed towards the relationship between affect, cognition and attitudes within the field of social psychology, surprisingly little research has explored the effect of emotions on cognitive processing in political contexts. Research in the field of social psychology, as stated above, has revealed that emotional states can indeed influence attitudes and information processing (Albarracin & Kumkale, 2003; Bless, Clore, Schwartz, Golisano, Rabe, & Wolk, 1996; Innes-Ker & Niedenthal, 2002). In addition, research on attitudes and persuasion indicates that issue involvement is related to an increase in motivation to systematically process information (Eagly & Chaiken, 1993). Because involvement should also increase with partisanship (personal relevance) and interest in political events, it is necessary to systematically examine how emotional responses and political identities interact to influence subsequent information processing about political issues.

When the subfield of political cognition addresses the role of emotions, it is usually in the realm of a diffuse positive or negative affect that is, unfortunately, poorly operationalized. For example, Sears & Henry's (2003) theory of symbolic politics posits that affect blends with beliefs in order to influence political attitudes. That is, they argue that symbolic attitudes (e.g., towards political institutions, political groups, particular individuals) are heavily affect laden. However, the primary measure of affect that they use is the feeling thermometer, which asks participants to rate their feelings towards a relevant group from cold (zero degrees) to warm (100 degrees) (Sears & Henry, 2003; Sears & Henry, 2005). The problems with this measure are twofold: (1) it is impossible to know where individuals anchor their feelings; and (2) it is unclear which emotions comprise a warm (e.g., could be any or all of happy, calm, proud) feeling versus a cold (e.g., could be any or all of angry, sad, scared, and disgusted) feeling. Thus, this measure does little to address the specific mechanisms by which affect influences attitudes. Moreover, Sears and Henry fail to specify what it means to have a "blend" of affect and beliefs and such a "blend" is never measured.

Another prominent theory in political psychology, Marcus, Neuman and MacKuen's (2000) Affective Intelligence, also raise measurement concerns. To clarify, first, the theory of Affective Intelligence argues that there are two distinct yet interactive emotional systems. The dispositional system monitors every day interactions and provides feedback regarding habitual

routines such that success will evoke enthusiasm and failure will evoke frustration and depression. The surveillance system, in contrast, monitors the environment for novel or threatening signals. In this system, a lack of signal induces relaxation and calmness whereas novelty or threat triggers feelings of anxiety or unease, thus indicating the need to reassess habitual responses. Applied to the political domain, the theory of Affective Intelligence argues that unless anxious, people should rely on the on their political habits (i.e., party ID) when making decisions. Marcus et al. also claim that emotions—specifically anxiety—actually make people more rational. Specifically, they argue that people who are anxious will be motivated to engage in an unbiased search for new political information, and that this tendency should be greater among strong partisans.

As alluded to earlier, methodological problems warrant that empirical tests of this theory be interpreted with caution. Marcus et al. (2000) clearly argue that anxiety and enthusiasm are the relevant emotions for understanding the role of affect on political information processing, although their evidence is correlational in nature. Moreover, in a study testing their hypothesis, Marcus and MacKuen (1993) measured "anxiety" as a composite of anger, fear, uneasiness and disgust. Clearly, these emotions correspond to different experiences and are unique from anxiety (Frijda, Kuipers, & ter Schure, 1989; Smith & Ellsworth, 1985). In fact, research in social psychology indicates that anger and disgust are associated with more heuristic processing, whereas anxiety and uneasiness are associated with more systematic (but not necessarily unbiased) information processing (Bodenhausen, Sheppard, & Kramer, 1994; Tiedens & Linton, 2001).

The Present Studies

With the analyses reported here, we begin closing the gap between social-psychological research on emotions and research in the field of political opinion. In particular, we compare the effects of emotions with different referent sources and explore how different emotions relate to interattitudinal structure.

In our first study, we use data from the 1996 General Social Survey as a starting point. These data contain information corresponding to interviewees' general affective states and emotional reactions to events in the United States. Respondents also provide information regarding various social and political attitudes, which can be used to create an index of attitude structure, i.e., issue constraint (e.g., Barton & Parsons, 1977).

In our second study, we use a survey-experiment to more specifically test whether political knowledge moderates the effect of emotions—related

to either general-everyday life, or a person's political party—on interattitudinal structure. To test whether specific emotional states differentially impact information processing and attitude structure, participants list their thoughts about both their own and the opposing political party, in addition to answering a series of questions regarding social attitudes.

For both of these studies, we hypothesize that positive affect should be more predictive of attitude consistency, as positive affect tends to facilitate heuristic processing. We also predict a moderating role for political knowledge, which we test in Study 2. Because people high in political knowledge tend to be more engaged, not only should they be more likely to experience emotions related to politics, but they should be more able to discount irrelevant affect. Thus, we expect that general affective states should be more predictive of attitudinal structure among low-knowledge participants, whereas party-specific affect should be more predictive among high-knowledge participants. People high in political knowledge should also be more capable and motivated to maintain consistency across attitudes. In contrast to people low in political knowledge, we expect that high knowledge participants will engage in more ego-defensive, one-sided processing and should demonstrate more attitudinal constraint when experiencing negative emotions such as anxiety.

Study 1

Data from the 1996 General Social Survey contain information corresponding to interviewees' general affective states (i.e., how an individual has been feeling lately, without reference to a specific source), and emotional reactions tied to the United States. Using attitudinal items related to respondents' confidence in different political institutions and attitudinal items related to support for government intervention, we test the differential ability of general affect and U.S.-specific emotions to predict the structure of political opinions. Specifically, we hypothesize that general affective states should be more predictive of attitudinal structure, consistent with an information processing approach. For example, if an emotion is associated with heuristic processing, we should see increased consistency in attitudes, whereas emotions associated with unbiased, systematic processing should predict less attitude consistency. Because the general affect questions tap the extent to which a respondent felt each emotion recently, these items should be more likely to affect information processing and as a result, predictive of how people structure and report information. In contrast, because the average citizen tends to not know much and to not pay attention to poli-

tics, we expect the national mood items to be less relevant to attitude structure.

Data

The predictions set forth above require information from the same respondents concerning both their general emotional states without referent to any specific source, and emotional states related to a political referent. In 1996, the General Social Survey asked a nationally representative sample of respondents to report the extent to which they had been feeling a number of emotions in the past week. In addition, the 1996 GSS also asked respondents how often they felt different emotions when thinking of the United States. As the sole year in which both of these kinds of emotion items have been asked, we utilize the 1996 GSS for all analyses.

Participants

In the 1996 GSS, a total of 1460 people participated. Respondents' ages ranged from 18 to 89, with a mean age of 45 years. It should be noted that women represented a disproportionate amount of the sample, 821 of the total respondents (56.2%), whereas there were 639 (43.8%). We had 694 (47.55%) Democrats in the sample and 525 (36%) Republicans, and 241 (16.5%) participants did not identify themselves with either of the parties.

Measures

General Affect. In the interview, survey respondents reported the number of days within the past week that they felt 19 different emotions: anxious, at ease, calm, contended, fearful, happy, lonely, excited, blue, outraged, ashamed, worried, overjoyed, sad, restless, mad, angry, embarrassed, and proud.

Principle-axis factor analysis, using Oblimin rotation, revealed two factors with eigenvalues above one (5.135 and 2.506, respectively). The first factor represented an overall negative and the second factor represented an overall positive emotion factor. The two factors explained 35.29% of the variance combined, negative emotion factor accounted for 24.66% and the positive emotion factor accounted for 10.63% of the total variance in the items.

An overall negative affect composite was calculated using the 12 negatively-valenced emotions ($\alpha = .838$; $M = 1.48$, $SD = 1.176$). The seven positively-valenced emotions were collapsed into a general positive affective-score ($\alpha = .753$; $M = 3.803$, $SD = 1.45$).

National Mood. All participants reported how often they felt different emotions when thinking about the United States. These emotions included worry, anger, enthusiasm, frustration, hope, satisfaction, and upset. Respondents answered on a 1-5 scale ranging from always to never. All responses were recoded such that higher numbers indicated more frequently experienced emotion and lower numbers corresponded to less frequently experienced emotion.

Factor analysis using Oblimin rotation revealed two factors; a negative and a positive with eigenvalues above 1 (3.047 for negative and 1.407 for positive). Combined, the two factors accounted for 50.347%. The negative factor accounted for 36.79% of the total variance and the positive factor accounted for 13.557% of the total variance. A negative affect towards the U.S. composite was created using worry, anger, frustration and upset (α = .798, M = 2.69, SD = .697). An overall positive affect towards the U.S. was created using enthusiasm, hope and satisfaction (α = .694; M = 3.44, SD = .732).

Confidence in United States institutions. All participants reported whether they felt "a great deal," "only some," or "hardly any" confidence with respect to the people running different institutions in the United States. These institutions consisted of the executive branch of the federal government, the press, the U.S. Supreme Court, and congress. Participants responded on a three-point scale recoded such that higher numbers corresponded to more confidence.

Reliability analyses revealed a relatively low alpha (α = .655) indicating that there is some variance within the reported attitudes. This allows for an individual difference variable to be created representative of attitudinal constraint. To do this, a horizontal constraint variable was created based on the standard deviation of each respondent's attitude towards the different institutions. As such, smaller deviations correspond to more consistent answers across institutions, and thus higher constraint. Larger standard deviations, in contrast, correspond to more variance and less constraint across institutions. In sum, this variable allows us to examine one component of structure (i.e., the consistency, or constraint) of respondents' attitudes within the domain of political institutions.

Social Attitudes. The GSS contains four items concerning the extent to which the government should help different subgroups. One corresponds to a more general attitude concerning whether the government should do more or less to solve the country's problems. The three other items ask respondents the same question for specific groups: Blacks, the poor, and the sick. Respondents answered on a one-to-five scale coded such that higher num-

bers indicate that the government should do less. A general attitudinal measure for government help for social problems was created based on all four items ($\alpha = .650$).

As in the case of confidence towards U.S. institutions, attitudinal items towards government involvement contain enough variance to create a constraint variable of attitudinal structure. This variable was created based on the standard deviation of respondents' answers to the four "help" items. Again, higher numbers correspond to less constraint, whereas lower numbers correspond to more constraint.

Results

Attitudinal Structure

Attitudes towards government intervention. Information-processing perspectives on attitudes suggest that positive affective states should facilitate heuristic processing, whereas general negative affective states should encourage systematic processing. Here, we operationalize more constrained attitudes as evidence of heuristic processing. This assumes that people who are not motivated to think deeply about an issue should be more consistent and rely on heuristics (such as party identity) when reporting attitudes within a domain.

Table I

Attitudes towards government intervention

	Whole Sample		Democrats		Republicans	
Predictor	*b*	SE	*b*	SE	*b*	SE
General Positive Affect	-.022+	(.013)	-.013	(.019)	-.046*	(.02)
General Negative Affect	.038*	(.016)	.026	(.023)	.029	(.028)
Constant	.932***	(.063)	.938***	(.092)	.99***	(.098)
F (degrees of freedom)	5.971 (2, 906)**		1.198 (2, 435)		2.849 (2, 319)*	
Adjusted R^2	.011		.001		.017	
N	908		437		321	

Note. Entries are unstandardized OLS regression coefficients and standard errors.
$^{+}p<.10$. $*p<.05$. $**p<.01$. $***p<.001$.

In the case of attitudes towards government intervention for helping less-advantaged people, this is what we find. General positive affect predicts marginally decreased variance in support for intervention ($\beta = -.022$,

p<.086), whereas general negative affect predicts increased variance in support for different government interventions (β = .038, p<.018). In other words, the more positive people felt in the week prior to the interview, the more consistent their attitudes; the more negative people felt in the previous week, the less consistent their attitudes. As in the entire sample, positive affect predicted significantly less variance in Republicans' attitudes towards government intervention (β = -.046, p<.024).

This was not the case for emotions reported with respect to feelings about the United States. This is consistent with the idea that people are not very engaged with politics and are thus less likely to experience processing effects of emotions related to politics.

Table II
Attitudes towards government intervention

	Whole Sample		Democrats		Republicans	
Predictor	*b*	SE	*b*	SE	*b*	SE
Positive Affect towards U.S.	-.051	(.039)	-.017	(.056)	-.116+	(.064)
Negative Affect towards U.S.	.010	(.040)	-.025	(.062)	.068	(.066)
Constant	1.069***	(.202)	1.061***	(.3)	1.105***	(.331)
F (degrees of freedom)	1.177 (2, 452)		.096(2, 212)		3.089* (2, 159)	
Adjusted R^2	.001		.000		.025	
N	459		213		161	

Note. Entries are unstandardized OLS regression coefficients and standard errors.
$^{+}p<.10$. $^{*}p<.05$. $^{**}p<.01$. $^{***}p<.001$.

Confidence in institutions. Among the entire sample, neither general positive nor general negative affect predicted variance in reported confidence levels across institutions. However, among just the Democrats in the sample, general negative affect significantly predicted increased variance in attitudinal confidence (β = .025, p<.035).

Among the entire sample, national mood failed to predict attitude constraint. Among the Republican subgroup, however, the more often participants reported feeling positive emotions about the United States, the more variance they had in confidence levels towards different institutions (β = .074, p<.038).

Table III
Attitudes towards confidence in institutions

	Whole Sample		Democrats		Republicans	
Predictor	*b*	SE	*b*	SE	*b*	SE
General Positive Affect	.008	(.007)	.014	(.01)	.010	(.012)
General Negative Affect	.014	(.009)	.025*	(.012)	.004	(.016)
Constant	.449***	(.035)	.410***	(.048)	.478***	(.058)
F (degrees of freedom)	5.416 (2, 904)		2.619 (2, 434)+		.345 (2, 317)	
Adjusted R^2	.001		.007		-.004	
N	906		436		319	

Note. Entries are unstandardized OLS regression coefficients and standard errors.
$^{+}p<.10$. $^{*}p<.05$. $^{**}p<.01$. $^{***}p<.001$.

Table IV
Attitudes towards confidence in institutions

	Whole Sample		Democrats		Republicans	
Predictor	*b*	SE	*b*	SE	*b*	SE
Positive Affect towards U.S.	.029	(.21)	.005	(.029)	.074*	(.035)
Negative Affect towards U.S.	.008	(.022)	.002	(.032)	-.011	(.036)
Constant	.373***	(.110)	.491**	(.154)	.291	(.184)
F (degrees of freedom)	.983 (2, 445)		.015(2, 209)		2.744+ (2, 156)	
Adjusted R^2	.000		.000		.022	
N	447		211		158	

Note. Entries are unstandardized OLS regression coefficients and standard errors.
$^{+}p<.10$. $^{*}p<.05$. $^{**}p<.01$. $^{***}p<.001$.

Discussion

The analyses reported above provide preliminary evidence for the utility of affective states in explaining the structure of political attitudes. Not only should affective states influence the overall evaluative content of attitudes, but affective states may interact with cognitive processing in order to influence the structure of attitudes. Previous research in social psychology indicates that negative affective states are associated with more systematic processing, whereas positive affective states are associated with heuristic processing (Bless, Clore, Schwartz, Golisano, Rabe, & Wolk, 1996; Bless,

Mackie, & Schwartz, 1992). Using a construct based on the standard deviation of related attitudinal variables, the results of this study provide suggestive evidence of information-processing effects in the political context.

With respect to confidence levels for various institutions, general negative affect predicted less horizontally constrained attitudes among Democrats. Contrary to expectations, however, the more positive Republicans reported feeling towards the United States, the more variance they demonstrated in confidence levels across institutions. This could be a result of the fact that at the time of the survey, a Democrat held the executive office while the Republicans controlled congress. In this case, Republicans who felt happy may still have been relying excessively on the party ID heuristic in determining attitudes leading to decreased confidence in federal branch, increased confidence in legislative, and hence, overall more variance.

The attitudinal items for government intervention are more ideologically consistent across items (i.e., all concern whether the government should help less advantaged groups) and thus represent a more readily interpretable test for information-processing effects. Indeed, the results are more consistent with previous research. General positive affect predicted more horizontally-constrained attitudes, as would be expected for participants relying on a party-based heuristic. General negative affect, in contrast, predicted less constrained attitudes, as would be expected if people considered each individual case more carefully.

These results reveal that the literature on political opinion does indeed benefit from taking into account the role of emotional states. The analyses reported here indicate that general affective states can influence the structure of political attitudes such that positive affect predicts more ideologically consistent attitudes, whereas negative affect seems to facilitate less ideologically consistent attitudes. The fact that both general and politically-related affective states predict attitudes suggests that people do not always discount irrelevant emotional states.

Because political novices tend to have less crystallized attitudes (Zaller, 1992), we expect that people less-knowledgeable about politics might be more likely to use irrelevant affect when constructing their political attitudes. Moreover, because politically-knowledgeable people are more likely to experience emotions related to politics (Lodge & Taber, 2004; cited in Clore & Schnall, 2005), we expect that politically-relevant affect should be more predictive of their political attitudes, as compared to low-knowledge people. The General Social Survey dataset for 1996 does not contain items relevant to political expertise or knowledge and thus, a test of these hypotheses is impossible. As such, we designed study 2 to contain a measure

of political knowledge along with an extensive list of affective items related to either a general emotional state, or emotions related specifically to an individual's political party.

Study 2

In order to explore the effects of emotions on attitudinal structure in more detail, we collected data at a large Midwestern university. This study allowed us to use a more extensive measure of affective responses. Furthermore, we asked participants to provide ratings of their emotions with respect to either (1) how they have been feeling lately in the last couple of weeks (General Affect condition) or (2) how they have been feeling lately about the party they most closely identify with (Party condition). Following the affect items, participants responded to a variety of measures including Need for Closure, social and political attitude items, political knowledge items, and demographics. Participants were also asked to list their thoughts about their own party and the party that is opposing their party.

Consistent with the information processing findings established in social psychology, we expect that positive affect will predict increased inter-attitudinal constraint. Also consistent with previous research in social psychology, we expect hostility to predict increased constraint and fear to predict decreased constraint (e.g., Bodenhausen et al., 1994; Tiedens & Linton, 2001). Furthermore, we expect party-related affect to better predict attitude constraint for those high in political knowledge, as their expertise and involvement in the political domain may make political events more emotionally relevant compared to those who do not know much about politics (Lodge & Taber, 2004; cited in Clore & Schnall, 2005).

Participants

A total of 210 undergraduates (109 females, 99 males; 51.9% and 47.1%, respectively) participated in this study in return for extra course credit or $5. Participants were run in classrooms and in small groups; and they completed the survey individually. There were 101 Democrats (48.1%) in our sample, and only 58 (27.6%) Republicans. The number of people who did not indicate a party preference was 51 (24.3%).

Because political identities are important predictors of people's perceptions of and reactions to political stimuli, we planned on running our analyses separately for Democrats and Republicans. Unfortunately, the number of Republicans in the sample is not large enough to give us sufficient power to run our predictive models. Therefore we used data only from Democrats in the analyses we report below.

Measures

Predictors

Positive Affect. We measured positive affect using 10 items (α = .916, *M* = 3.01, *SD* = .89) that constitute the positive affect subscale of the Positive and Negative Affect Schedule – Expanded Form (PANAS-X; Watson & Clark, 1994). These items were active, alert, attentive, determined, enthusiastic, excited, inspired, interested, proud, and strong.

Fear. We used the fear subscale of the PANAS-X. The 5 items in this subscale are afraid, scared, frightened, nervous, jittery, and shaky (α = .813, *M* = 1.74; *SD* = .628).

Hostility. The 6 items (α = .717, *M* = 1.78, *SD* = .600) made up the fear subscale of the PANAS-X were angry, hostile, irritable, scornful, disgusted, loathing.

Need for closure. The individual difference measure, NFCS, was administered to all participants. This scale consists of 42 Likert-style items in which participants are asked to rate the degree that they agree/disagree with each statement. Each statement is designed to tap one of five aspects related to the construct: a desire for predictability, a preference for order and structure, discomfort with ambiguity, decisiveness, and closed mindedness. Previous studies have consistently shown the scale to have a reliability of at least .80 (Shah, Kruglanski, & Thompson, 1998; Kruglanski & Webster, 1996). Our own analyses are consistent with this: α = .849 (*M* = 4.27, *SD* = .587) .

Political Knowledge. We computed a political knowledge for each participants based on his/her answers to an 11-item political knowledge scale. This scale included questions on a variety of topics including the term of office for a U.S. senator, the political office held by Dick Cheney, and which of the parties control the House and the Senate. We ran our analyses separately for those high and low on political knowledge, based on a median split (median= 4.0). Thus, those respondents with political knowledge scores between 0 and 4 were in the "low knowledge" group, whereas those with scores between 5 and 11 were in the "high knowledge" group.

Dependent Variables

Constraint Cognitive Responses for Own and Other Party. Participants were asked to write in their thoughts about the party that they most closely identify with as well as the party that opposed their own party. Participants also indicated whether their comment was positive, neutral, or negative by circling the letters "N," "O," or "P" next to each of their thoughts. In order to calculate the constraint measure, we used the formula that Thompson,

Zanna and Griffin (1995) advanced. Conceptually, our constraint measure indexes the extent to which people's reactions to their own party and the opposing party represent attitudinal opposites, such that they are writing more positive than negative responses for their own party, and more negative than positive responses for the opposing party.

Standard Deviation of Social Attitudes. This measure, also an index of horizontal issue-constraint (e.g., Barton & Parsons, 1977), was calculated by taking the standard deviation of 8 social attitude items ($\alpha = .568$). These items cover a variety of topics including social spending, death penalty, abortion, defense spending and affirmative action, rated on a 1 ("strongly disagree") to 7 ("strongly agree") scale. High scores on this standard deviation measure indicate that one's thinking on these issues is more varied. In other words, low scores would conceptually equal higher constraint in social attitudes.

Results

Cognitive responses towards own and other party. To the extent that an emotion facilitates heuristic processing, we expect that people's cognitive responses towards their own and other party should be more evaluatively constrained. Selecting just participants self-identified as Democrats, calculation of the simple slope reveals that among people low in political knowledge, positive affect towards own party significantly predicts decreased evaluative consistency ($b = -1.969$, $p = .046$). Thus, the more positively low-knowledge participants report feeling towards their own party, the less consistent their cognitive responses are towards their own and the opposing party. In addition, we find a marginally significant effect for fear towards own party such that increased levels of reported fear predict more constrained cognitive responses ($b = 6.439$, $p = .084$).

Table V
Cognitive responses towards own and other party, for Democrats only

	Low Knowledge		High Knowledge	
Predictor	*b*	SE	*b*	SE
Need for Closure	-.071	(1.349)	-1.118	(1.709)
Party (Dummy variable)	3.320	(2.135)	1.975	(1.980)
Positive Affect	2.983	(2.041)	4.319*	(2.052)
Fear	-.753	(2.772)	2.189	(2.278)
Hostility	2.865	(3.897)	.403	(2.114)

Positive x Party	-4.952*	(2.412)	-5.005*	(2.379)
Fear x Party	7.192+	(4.067)	-3.164	(3.630)
Hostility x party	-3.72	(4.687)	.107	(3)
Constant	4.217	(5.903)	11.786	(7.321)
F (degrees of freedom)	1.376 (8, 43)		.880(8, 36)	
Adjusted R^2	.056		.000	
N	51		44	

Note. Entries are unstandardized OLS regression coefficients and standard errors.
$^{+}p<.10$. $*p<.05$. $**p<.01$. $***p<.001$.

Among Democrat participants high in political knowledge, both general and party-specific positive affect predict cognitive-response constraint. The more positively high-knowledge Democrats report feeling in general, the more evaluatively consistent their cognitive responses (b = 4.319, p = .042). Interestingly, the relationship between positive affect and constraint significantly weakens and changes direction, for positive affect felt specifically for participants' own party (b = -.686, p = .042).

Standard deviation of social attitudes. Among low-knowledge participants self-identified as Democrats, general levels of hostility predicted larger standard deviations for the eight social attitude variables (b = .688, p = .032). Hostility also significantly interacted with condition such that increased levels of hostility reported towards own party predicted decreased standard deviations for social attitude items (b = -.124, p = .036). That is, the more hostile low-knowledge participants felt towards their own party, the more constrained their social attitudes.

Democrats high in political knowledge, in contrast, only showed a marginally significant effect for positive affect towards own party (b = -.251, p = .069) such that more positive feelings towards the Democratic party predicted less variance, or more constraint, in social attitudes.

Table VI
Standard deviation of social attitudes, for Democrats only

	Low Knowledge		High Knowledge	
Predictor	*b*	SE	*b*	SE
Need for Closure	.317**	(.108)	.278+	(.145)
Party (Dummy variable)	-.030	(.171)	-.028	(.169)
Positive Affect	.141	(.163)	.128	(.175)

Fear	-.358	(.221)	-.06	(.194)
Hostility	.688*	(.311)	-.012	(.18)
Positive x Party	-.262	(.193)	-.379+	(.203)
Fear x Party	.429	(.325)	.512	(.309)
Hostility x party	-.812*	(.375)	-.332	(.255)
Constant	.584	(.472)	.584	(.632)
F (degrees of freedom)	1.586 (8, 43)		1.825(8, 36)	
Adjusted R^2	.084		.130	
N	51		44	

Discussion

The analyses of the evaluative consistency variable for cognitive responses towards own and opposing political parties, as well as the standard deviation of social attitudes, revealed that at least for participants high in political knowledge, positive affect tends to predict more interattitudinal constraint. Participants high in political knowledge tended to list a greater number of positive and fewer negative thoughts about their own party and a greater number of negative and fewer positive thoughts about the opposing party. In other words, participants' responses indicated that they thought of the two parties as evaluative opposites. Positive affect about own party also predicted less variance in social attitudes among high-knowledge participants. Democrats who reported feeling more positive about their own party tended to give more consistent attitudes. The results for both of these dependent variables are consistent with the hypothesis that positive affect should be associated with a more partisan thought structure.

The effect of negative emotions follows a more complex pattern in our data. The more fearful low-knowledge Democrats reported feeling about their own party, the more evaluatively consistent their cognitive responses towards their own and opposing party. Note that although this effect was marginally significant, it runs counter to the prediction of Markus et al. (2000) that anxiety should decrease reliance on partisan habits. Also noteworthy are our results for hostility. Among low-knowledge participants, general hostility predicted increased variance in social attitudes, whereas party-specific hostility predicted decreased variance. Such a result attests to the importance of considering affect's contextual influence. Previous research on hostility has consistently found an association between hostility (or anger) and heuristic processing (e.g., Bodenhausen et al., 1994). Further

research is necessary to understand the contextual effect observed in this study that general hostility predicted more ideologically varied social attitudes.

We also hypothesized that party-specific affect would better predict attitude structure among high-knowledge participants, whereas general affective states would better predict attitudes among low-knowledge participants. These analyses do not confirm our predictions entirely. Positive affect towards own party predicted increased horizontal constraint in social attitudes only among high-knowledge participants. Although we did find that party-specific positive affect did predict more partisan cognitive responses among high-knowledge participants, the effect was stronger for general positive affect. Moreover, low-knowledge participants also showed an effect for party-specific positive affect and fear for the cognitive responses and party-specific hostility for social attitudes.

General Discussion

In these two studies, we examined the relationship between affective states and political attitude structure. How people structure their political attitudes has been one of the most debated topics in public opinion research (e.g., Achen, 1975; Campbell et al., 1960; Converse, 1964; Peffley & Hurwitz, 1985). These scholars have devoted much effort to explaining the seeming incoherence and instability of American public opinion. The role of affect in this domain has been all but completely ignored. Research in social psychology suggests that affect is associated with processing effects, which may be consequential for how people form and organize their attitudes.

Using data from the 1996 General Social Survey, in our first study, we found evidence indicative of a relationship between affect and attitude structure. Our analyses showed that the more positively people felt in general, the less variance they showed in attitudes towards different forms of government intervention. When people use heuristics, such as party ID, we expect them to show more consistent, and hence less varied, attitudes. As such, we interpret this result as consistent with the social-psychological hypothesis that positive affect encourages more heuristic processing. Furthermore, social-psychological research indicates that general negative affect facilitates systematic processing. In the GSS data set, in fact, we found that general negative affect predicted increased variance in attitudes towards different forms of government intervention as well as confidence in U.S. institutions. However, note that inconsistent with our hypotheses, positive affect actually predicted increased variance in confidence towards

U.S. institutions. This result may be due to the fact that different parties had control of the executive and legislative branches at the time of the survey.

In this study, general affect better predicted attitude structure compared to affect felt specifically in reference to the United States. Generally, we would expect that emotions related to politics would better predict opinions of those who are high in political knowledge because these people tend to be more engaged in politics, and hence are more likely to be exposed to and react to political information. This might explain why the GSS analyses revealed a stronger effect for referent-free affect, as the general American population tends to know little about politics (see Delli Carpini & Keeter, 1996). To explore the potential moderating role of political knowledge, we designed a survey in which we also varied the affective referent. Study 2 also included more negative emotions in order to tease apart the potentially nuanced effects of different negative emotions.

We find some evidence that discrete negative emotions are associated with differential effects. For example, for low-knowledge people, fear about their own party predicted increased evaluative consistency (in cognitive responses), whereas general hostility predicted decreased horizontal constraint (in social attitudes). This is in line with the idea that negative emotions should not be lumped together under a general negative affect umbrella and should be differentiated in order to better understand the nature of affective influences. Interestingly, while general hostility predicted decreased constraint, party-specific hostility predicted increased constraint in social attitudes, once again emphasizing the importance of specifying the emotional referent.

Future research should further examine the differential effects of discrete emotions. In the GSS study, the negative affect composite was calculated based on an array of affective items. Support for such an endeavor comes from research on discrete emotions that indicates that anger and disgust are associated with more heuristic processing, whereas anxiety and uneasiness are associated with more systematic information processing (Bodenhausan, Sheppard, & Kramer, 1994; Tiedens & Linton, 2001). As such, aggregating these scores to form a predictor for degree of information processing would be inconsistent with relevant research.

One of the main limitations of this study is its use of correlational data. In the case of affect pertaining to evaluations of the United States, it is impossible to know which came first: the attitude or the emotion. People could have positive or negative attitudes towards a given object and this could cause them to feel increasingly negative or positive. With the regres-

sion analyses reported here, the direction of causality is impossible to determine.

Future research should also consider other relevant outcomes that may affect attitude structure. For example, we do not know the motivational effects of emotions on information seeking. We expect that positive affect will encourage a more one-dimensional (if any) information search. Any study that seriously evaluates the role of information processing should consider both biased and unbiased information searches. The dominant theory on emotions and political attitudes, Affective Intelligence, makes the specific prediction that anxiety should provoke an unbiased search for new information. According to the Heuristic-Systematic model (HSM) of attitudes and persuasion, however, systematic processing does not necessarily have to be accuracy-motivated or unbiased (Eagly & Chaiken, 1993). Chaiken's HSM (from social psychology) posits that people can engage in effortful and deep processing of information in a biased fashion. This can happen when people are motivated to defend something relevant to their identity—ego defensive—or under circumstances when a person wants to express important values—value expressive. Both of these motivations may be relevant to political cognition and to strong partisans in particular. For instance, people who are anxious about the political group that they identify with may be motivated to seek out information that would reaffirm their identity and reduce anxiety, a behavior in direct opposition to the prediction of Affective Intelligence. The strongest test for this hypothesis would include an experimental manipulation of affective states.

Clearly, research on the relationship between emotions and political cognition can take many different directions. The effect that different emotional states can have on information processing and political attitudes is likely to be highly nuanced. It is imperative, then, that as this line of research expands, it remains mindful of relevant research in social psychology.

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