

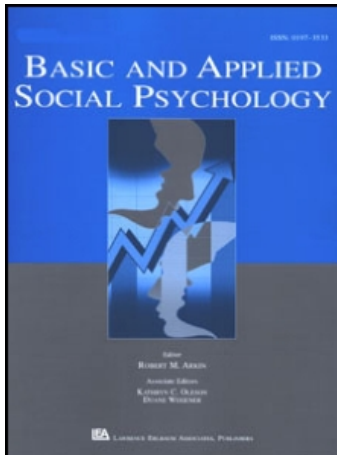
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Using Attitude Strength to Predict Registration and Voting Behavior in the 2004 U.S. Presidential Elections

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This study examined attitude strength in the context of the 2004 U.S. presidential election. Surveys of 299 undergraduates assessed attitudes and attitude strength constructs toward Bush/Kerry. The results suggest that (a) attitude strength constructs, especially importance and value-relevance, predict political behavior, (b) indicators of attitude strength may represent two underlying factors, and (c) attitude strength moderates the attitude-candidate choice relationship. Additional results offered some support for the validity of two new attitude strength constructs: higher order attitudes (participants' attitudes about their attitudes) and polarization of candidate attitudes (the absolute value of the difference in attitudes toward Bush and Kerry).

The attitude–behavior connection has had a long and complex history, filled with theoretical and methodological twists and turns. From Wicker's (1969) overarching claim that underlying attitudes do not constitute significant predictors of overt behaviors to Ajzen and Fishbein's (1977) assertion that oftentimes attitudes do constitute reliable behavior indicators, the literature reflects psychologists' quest of finding the true nature and the qualifiers of the attitude–behavior relationship (Eagly & Chaiken, 1993). Research strategies that have been used to this end include implementing the principle of compatibility (Ajzen, 1988), utilizing multiple-act criteria (Fishbein & Ajzen, 1974; Weigel & Neuman, 1976), measuring the mediating role of behavioral intention (Fishbein, 1967), and analyzing the role of attitude strength constructs as moderators of the attitude-behavior relationship (Raden, 1985).

The present study was designed to advance our understanding of the role of attitude strength constructs considered both as predictors of behavior and

as moderators of the attitude–behavior relationship as well as to examine the factor structure and the stability of attitude strength constructs over time, in the context of the 2004 U.S. presidential election. The act of voting can be viewed as the result of making two important decisions: The first decision concerns whether a registered voter chooses to vote, and the second decision concerns candidate choice. Both these behaviors are consequential, and we argue that identifying their antecedents may clarify the relationship between attitudes and voting behavior.

THE NATURE AND STRUCTURE OF ATTITUDE STRENGTH

Defined by Krosnick and Petty (1995) as “the extent to which attitudes manifest the qualities of durability and impactfulness” (p. 3), attitude strength represents a reliable criterion of differentiation between well-defined, stable, and consequential attitudes on one hand and vaguely defined, unstable, and minimally consequential ones on the other hand. Strong attitudes display a more powerful relationship with behavior than do weaker attitudes (Fazio & Zanna, 1978; Krosnick, Boninger, Chuang, Berent, & Carnot, 1993; Prislín, 1996) because

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they are persistent; resistant to change; and possess the ability to guide information processing, judgments, and behavior (Krosnick & Petty, 1995). An attitude's strength can be indexed by numerous specific dimensions such as extremity, intensity, importance, ambivalence, accessibility, cognitive-affective consistency, or vested interest (Krosnick et al., 1993; Raden, 1985).

Krosnick and Petty (1995) presented a theoretical taxonomy of attitude strength constructs based on four major categories. The first category includes aspects of the attitude itself, like extremity and valence. The second category is composed of aspects of the cognitive structure linked to the attitude and the attitude object in memory, such as accessibility, knowledge, and ambivalence. The third group includes subjective beliefs about attitudes and attitude objects (e.g., personal relevance, personal involvement, or importance), and the fourth group is composed of processes that lead to attitude formation (e.g., elaboration).

Most attitude strength dimensions were found to be moderately correlated with each other (Krosnick & Abelson, 1992), which directed researchers into a quest for discovering the latent structure of attitude strength constructs. The results have not led to a unified theoretical perspective, though. A survey of the literature written during the last two decades on the factorial structure of attitude strength indices reveals inconclusive results (Bizer & Krosnick, 2001). At one end of the spectrum stand researchers who argue that attitude strength is a unidimensional construct (Berger & Alwitt, 1996; Priester, Nayakankuppam, Fleming, & Godek, 2004; Verplanken, 1989). At the other end of the spectrum stand researchers who view each attribute as an independent and unique construct (Krosnick et al., 1993; Krosnick & Petty, 1995). Between these perspectives stand researchers who view attitude strength as composed of two latent dimensions (Bassili, 1996; Pomerantz, Chaiken, & Tordesillas, 1995), or three or four latent dimensions (Abelson, 1988; Prislin, 1996). One of the objectives of our study was to explore attitude strength factors, as indexed by attitude certainty, attitude importance, value-relevance of attitude, knowledge about the attitude object, information dissemination, information seeking, attitude ambivalence, attitude extremity, and higher order attitudes.

Attitude Strength Dimensions

The nine attitude strength constructs analyzed in this study include eight established constructs as well as one new attitude strength construct—the higher order attitude (HOA). The established attitude strength constructs represent indexes of strength frequently used by researchers and predictive of behavior; the higher order attitude construct was included to test for its

construct and predictive validity in the context of voting behavior.

Attitude certainty. Gross, Holtz, and Miller (1995) view attitude certainty as a subjective sense of conviction or validity of one's own attitudes. Attitude certainty represents the extent to which an individual is confident that his or her attitude toward an object is correct (Krosnick et al., 1993) and is usually measured through self-reports.

Attitude importance. Attitude importance refers to an individual's subjective sense of caring, concern, and significance attached to an attitude. It represents a personal commitment to one's attitudes and is usually operationalized via self-reports (Boninger, Krosnick, Berent, & Fabrigar, 1995; Krosnick et al., 1993).

Value relevance. The value-relevance of an attitude represents the extent to which the attitude occupies a significant place in an individual's axiological system, and it is measured meta-attitudinally. Attitudes that are closer to one's axiological system are more consequential than attitudes that are not (Campbell, Converse, Miller, & Stokes, 1960).

Knowledge. Knowledge refers to the amount of information an individual possesses with respect to an attitude object, illustrating accompanying cognitive structures; it can be assessed via self-reports, quizzes, or knowledge listings (Krosnick et al., 1993).

Information dissemination. Information dissemination describes the extent to which an individual is inclined to discuss his or her attitudes with other people. This construct is usually measured through self-reports and it is conceptually and operationally similar to Abelson's (1988) *discussion* dimension.

Information seeking. Also known as *interest in relevant information* (Krosnick et al., 1993), this attitude strength construct refers to the extent to which an individual is interested in collecting information about the attitude object, and it is assessed by self-report measures.

Attitude ambivalence. Attitude ambivalence is construed in the literature as the extent to which individuals' attitudes are both positively and negatively valenced at the same time, and it is represented in mathematical terms by the overlapping space between the positive and negative components of an attitude

(Thompson, Zanna, & Griffin, 1995). Attitude ambivalence can be measured through self-reports as well.

Attitude extremity. Being construed as the “common sense understanding of what it could mean to be more in favor of (or opposed to) something” (Abelson, 1995, p. 38), attitude extremity is operationalized as the distance of the attitude from the attitude scale middle point (Abelson, 1995; Krosnick et al., 1993).

Higher order attitude. The higher order attitude is defined as an individual’s attitude about an attitude. It applies the definition of an attitude (Eagly & Chaiken, 1993) by using an attitude as the attitude object. A positive higher order attitude corresponds to an attitude a person evaluates as good, and a negative higher order attitude corresponds to an attitude a person evaluates as bad. Representing a person’s evaluation of his or her own attitudes, HOA is different from the attitude it evaluates; for instance, some people may be very unfavorable toward the *Jerry Springer Show* but very favorable toward their negative attitudes regarding the show.

The HOA is conceptually linked to Petty, Briñol, and DeMarree’s (2007) Metacognitive Model of attitudes. The Metacognitive Model centers on the importance of validity information in influencing people’s decision-making processes and actions. Validation is represented by confidence and certainty, and it illustrates people’s conviction that their attitudes are true and correct. The HOA might be considered an extension of such validation processes. Thus, once attitudes are validated by the people who hold them, they may feel entitled to embrace positive HOA, thus evaluating their attitudes favorably. Higher order attitudes can be measured meta-attitudinally, through scales designed to assess directly participants’ evaluations of their attitudes.

Attitude Strength as an Antecedent of Behavior

Numerous studies have followed Raden’s (1985) guidelines and have employed the moderator approach in studying the attitude–behavior relationship. Although a majority of studies examined single attitude strength constructs, such as importance (Krosnick, 1988), accessibility (Fazio & Williams, 1986), or certainty (Fazio & Zanna, 1978), several studies have looked at multiple indicators of attitude strength, but only as moderators of the attitude–behavioral intention relationship (Franc, 1999) or of the temporal stability of an attitude (Prislin, 1996). The present study was designed to examine the moderating role of various attitude strength indexes on the relationship between attitudes toward the two

presidential candidates and candidate choice. It was hypothesized that attitude strength dimensions would moderate the candidate attitude – candidate choice relationship, so that participants with stronger and less ambivalent attitudes about a candidate would be more likely to vote according to their attitude.

Presidential elections provide a suitable context for studying not only the moderating power of attitude strength dimensions on the attitude–behavior relationship, as suggested by Raden (1985), but also for studying attitude strength as a direct predictor of behavior. In the context of highly polarized attitudes—such as political attitudes expressed during elections—attitude strength measures may constitute better indicators of certain behaviors (e.g., voting or not voting) than the attitude itself. The present study had the objectives of examining the role of various attitude strength constructs in predicting registration and voter turnout and of identifying which predictors provide unique variance over other predictors.

METHOD

Overview

One month prior to the 2004 U.S. presidential election, participants reported whether they were registered to vote and completed surveys assessing their attitudes and attitude strength toward George W. Bush and John Kerry. Attitude strength measures included eight established constructs (attitude certainty, attitude importance, value-relevance of attitude, knowledge about the attitude object, information dissemination, information seeking, attitude ambivalence, and attitude extremity) as well as the HOA. Following the presidential election, participants completed a second survey that assessed voting behavior as well as attitudinal change vis-à-vis the two candidates.

Participants

Three-hundred twenty-eight Northern Illinois University students participated in the study in exchange for course credit. Their participation was entirely voluntary. Surveys were administered in two steps, and participants’ names or self-chosen codes (written on sticky notes attached to the surveys) were used to match the first and the second parts. At the end of the matching process, any identifying information was discarded. Twenty-nine participants, who completed only the pre-election survey, were excluded from the analyses. The final sample was composed of 299 participants (218 women, 81 men; $M_{age} = 22.68$ years; $SD_{age} = 4.77$; range = 19–53).

Materials

The pre- and post-election surveys measured participants' attitudes toward the two presidential candidates, as well as the strength of their attitudes, as indexed by attitude certainty, attitude importance, value-relevance of attitude, knowledge about the attitude object, information dissemination, information seeking, higher order attitudes, attitude ambivalence, and attitude extremity. As recommended by Krosnick (1999), 5-point scales were used for unipolar scales and 7-point scales were used for bipolar scales. In addition, pre-election surveys assessed participants' age, gender, political affiliation, and whether they were registered to vote or not (coded 0 for *no* and 1 for *yes*), and post-election surveys gauged whether participants voted or not (coded 0 for *no* and 1 for *yes*).

Political affiliation. Party affiliation was assessed with the Party Closeness Scale. This scale was designed as a measure of general partisanship direction and asks the following question: "Which political party do you usually feel closest to?" (Barnes, Jennings, Inglehart, & Farah, 1988). Responses were coded in the following way: 1 was the code for Republican, 2 for Democrat, 3 for Independent, and 4 for Other.

Attitudes. Attitudes toward the two presidential candidates were measured via six 7-point semantic differential scales with the following anchors: *good–bad*, *favorable–unfavorable*, *positive–negative*, *in favor–against*, *beneficial–harmful*, *wise–foolish* (Tormala & Petty, 2002). On each scale, lower numbers reflected more favorable attitudes toward the candidate. The variables were reverse coded for analysis. Reliability for the semantic differential scales was .98 for attitudes about Bush and .97 for attitudes about Kerry; therefore, the semantic differential responses were averaged to form a composite attitude index for each candidate. Analyses were based on the semantic differential indices corresponding to attitudes about each presidential candidate.

Higher order attitudes. Participants' opinions about their own attitudes toward Bush or Kerry were measured using scales similar to the attitude scales. Instructions for these questions were designed to distinguish attitudes from higher order attitudes, and they were identical for both candidates, except for the candidate name. For instance, higher order attitudes toward George W. Bush were assessed with the following question:

In question number 5 you indicated your opinion towards Bush. In the present question we are no longer asking about your attitude on the presidential candidate himself, but about your opinion about your attitudes

regarding Bush. For instance, some people can be very unfavorable to Bush, but very favorable towards their negative attitudes regarding Bush. Others can be in favor of Bush, but may not feel so favorable towards their own positive attitudes regarding him. Please indicate your opinion towards your own attitudes regarding Bush by choosing your position on the following scales:

Participants answered by recording their opinions on six 7-point semantic differential scales with the following anchors: *good–bad*, *favorable–unfavorable*, *positive–negative*, *in favor–against*, *beneficial–harmful*, *wise–foolish* (Tormala & Petty, 2002). On each scale, lower numbers reflected more favorable higher order attitudes. The variables were reverse coded for analysis. Coefficient alpha for the semantic differential scales was .97 for higher order attitudes about Bush, and .97 for higher order attitudes about Kerry. Consequently, semantic differential responses were averaged to form a composite higher order attitude index for each presidential candidate; the two semantic differential indexes were used in the analyses.

Attitude certainty. Attitude certainty was measured on a 5-point scale, using the following question, "How certain are you of your opinion toward George W. Bush/John Kerry?" with answers *not certain at all*, *somewhat certain*, *fairly certain*, *certain*, and *extremely certain*" (Krosnick et al., 1993; Lavine, Huff, Wagner, & Sweeney, 1998).

Attitude importance. Attitude importance was assessed on a 5-point scale, using the following question, "How important to you personally is your attitude about Bush/Kerry?" with answers *not important at all*, *somewhat important*, *fairly important*, *important*, and *extremely important* (Boninger et al., 1995; Pomerantz et al., 1995).

Value-relevance of attitude. Value-relevance of attitude was assessed by the following question: "How representative of your values is your attitude toward George W. Bush/John Kerry?" Answers were measured on a 5-point scale with the following response options: *not representative at all*, *somewhat representative*, *fairly representative*, *representative*, and *extremely representative* (Pomerantz et al., 1995).

Knowledge about attitude object. To appraise the extent to which participants were knowledgeable about the two presidential candidates, we asked the following question: "How knowledgeable are you about Bush/Kerry?" Answers were measured on a 5-point scale with answers *not knowledgeable at all*, *somewhat*

TABLE 1
Means, Standard Deviations, and Intercorrelations

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Attitude (B)	—	.25**	-.31**	-.22**	-.24**	-.24**	-.24**	-.14**	.24**	-.28**	-.08	-.10	-.62**	-.34**
2. HOA (B)		—	.16**	.09	.22**	.13*	.16**	.16**	-.12*	.22**	.05	.06	-.21**	.07
3. Attit. Certainty (B)			—	.53**	.47**	.54**	.43**	.41**	-.29**	.59**	.10	.23**	.16**	.28**
4. Attit. Importance (B)				—	.53**	.55**	.42**	.60**	-.23**	.43**	.20**	.31**	.22**	.24**
5. Value-Relevance (B)					—	.40**	.38**	.43**	-.27**	.43**	.07	.19**	.15**	.23**
6. Knowledge (B)						—	.58**	.70**	-.22**	.44**	.15**	.30**	.15**	.20**
7. Info Dissemination (B)							—	.61**	-.19**	.42**	.13*	.24**	.20**	.23**
8. Info Seeking (B)								—	-.14*	.37**	.17**	.27**	.16**	.26**
9. Attit. Ambivalence (B)									—	-.52**	-.02	-.08	-.18**	-.10
10. Attit. Extremity (B)										—	.12*	.20**	.13*	.19**
11. Registration											—	.54**	.12*	.14*
12. Voting Behavior												—	.17**	.15**
13. Attitude (K)													—	.48**
14. HOA (K)														—
15. Attit. Certainty (K)														
16. Attit. Importance (K)														
17. Value-Relevance (K)														
18. Knowledge (K)														
19. Info. Dissemination (K)														
20. Info. Seeking (K)														
21. Attit. Ambivalence (K)														
22. Attit. Extremity (K)														
23. Factor 1 (B)														
24. Factor 2 (B)														
25. Factor 1 (K)														
26. Factor 2 (K)														
27. Party Identification														
28. Age														
29. Gender														
30. Diff. in Attitudes														
Mean	3.4	4.69	3.62	3.32	3.33	3.15	2.75	3.12	1.54	1.54	.85	.72	4.52	5.13
Standard Deviation	1.7	1.64	1.01	1.05	1.02	.93	1.14	.94	1.34	.92	.36	.45	1.44	1.31

Note. N = 299, * $p < .05$. ** $p < .01$. Higher scores on the semantic differential scales indicate more positive attitudes toward the candidate and 0 = no and 1 = yes.

knowledgeable, fairly knowledgeable, knowledgeable, and extremely knowledgeable (Pomerantz et al., 1995).

Information seeking. Information seeking regarding the two presidential candidates was measured by two self-report questions, answered on 5-point scales: "How closely do you pay attention to information about George W. Bush/John Kerry?" with answers *not closely at all, somewhat closely, fairly closely, closely, and extremely closely*, and "How interested are you in obtaining information about Bush/Kerry?" with answers ranging from *not interested at all to extremely interested*. The two items ($r = .57, p < .001$ for Bush and $r = .64, p < .001$ for Kerry) were summed, according to Pomerantz et al.'s (1995) suggestions, to form an information-seeking index.

Attitude ambivalence. Participants' degree of attitudinal ambivalence regarding the two presidential candidates was assessed using the following two questions: "Considering only the positive things about Bush/Kerry and ignoring the negative things, how positive are those things?" and "Considering only the negative things about Bush/Kerry and ignoring the positive things, how negative are those things?" Answers were given on 5-point scales with answers ranging from *not positive/negative at all to extremely positive/negative*. The formula employed for calculating the ambivalence index was $Ambivalence = (positive + negative)/2 - |positive - negative|$ (Armitage & Conner, 2000; Thompson et al., 1995). We have implemented the objective measure of ambivalence in this study because, in preliminary studies in which both objective and

Between Attitudes, Attitude Strength Constructs, and Criterion Variables

15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
-.05	-.18**	-.23**	-.23**	-.26**	-.34**	-.04	-.11	-.31**	.23**	-.27**	-.30**	-.66**	.00	-.06	.92**
.02	-.05	-.02	.08	.04	.04	.06	.10	.20**	.82**	.02	.12*	-.25**	.13*	-.07	.26**
.46**	.34**	.37**	.44**	.36**	.34**	-.10	.36**	.74**	.21**	.48**	.28**	.10	.03	-.15**	-.27**
.42**	.63**	.47**	.50**	.43**	.53**	-.12*	.32**	.79**	.12*	.61**	.23	.12	-.01	.01	-.24**
.32**	.38**	.41**	.37**	.32**	.33**	-.12*	.31**	.70**	.20**	.44**	.21**	.07	.07	-.03	-.22**
.38**	.45**	.50**	.68**	.52**	.58**	-.12*	.26**	.81**	.16**	.64**	.18**	.08	.13*	-.15**	-.22**
.36**	.38**	.40**	.50**	.73**	.55**	-.12*	.22**	.76**	.19**	.60**	.18**	.08	.00	-.17**	-.24**
.37**	.48**	.48**	.61**	.57**	.73**	-.16**	.26**	.81**	.20**	.66**	.20**	.03	.10	-.03	-.17**
-.14*	-.19**	-.18**	-.18**	-.15**	-.14*	.35**	-.32**	-.29**	.32**	-.20**	.00	-.12	-.05	-.02	.24**
.28**	.28**	.26**	.31**	.31**	.28**	-.18**	.41**	.58**	.29**	.36**	.20**	-.02	.01	-.05	-.23**
.12*	.19**	.05	.19**	.18**	.24**	.06	.11	.19**	0.8	.21**	.18**	.10	.08	.03	-.11
.20**	.24**	.18**	.29**	.26**	.30**	-.01	.19**	.34**	.08**	.31**	.18**	.19**	.12*	.02	-.15*
.14*	.27**	.25**	.26**	.28**	.40**	.08	.29**	.24**	-.23**	.33**	.49**	.56**	-.06	.12*	-.88**
.37**	.28**	.36**	.28**	.31**	.34**	-.08	.48**	.32**	.08	.41**	.82**	.26**	.01	.03	-.45**
-	.63**	.56**	.59**	.52**	.45**	-.24**	.58**	.50**	.06	.77**	.36**	-.03	.03	-.07	-.10
-	-	.63**	.60**	.57**	.59**	-.18**	.48**	.58**	-.04	.82**	.30**	.21**	.04	-.08	-.24**
-	-	-	.62**	.52**	.56**	-.19**	.43**	.57**	-.02	.79**	.31**	.19**	.10	-.01	-.26**
-	-	-	-	.65**	.74**	-.18**	.47**	.67**	0.9	.85**	.30**	.16*	.11	-.08	-.27**
-	-	-	-	-	.70**	-.15**	.41**	.64**	.08	.82**	.30**	.16*	0.5	-.09	-.30**
-	-	-	-	-	-	-.12*	.37**	.67**	.07	.83**	.32**	.28**	.11	-.04	-.41**
-	-	-	-	-	-	-	-.37**	-.16**	.20**	-.22**	.37**	.10	-.04	.12*	-.06
-	-	-	-	-	-	-	-	.38**	.06	.56**	.54**	.08	.02	.05	-.21**
-	-	-	-	-	-	-	-	-	.24	.74**	.28**	.11	.07	-.11	-.31**
-	-	-	-	-	-	-	-	-	-	.05	.20**	-.06	.08	-.10	.26**
-	-	-	-	-	-	-	-	-	-	-	.39**	.20**	.09	-.04	-.33**
-	-	-	-	-	-	-	-	-	-	-	-	.12	-.01	.11	-.43**
-	-	-	-	-	-	-	-	-	-	-	-	-	-.10	.13	-.69**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	.06	.03
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-.10
3.41	3.26	3.21	2.98	2.72	3.19	1.8	1.24	3.21	.00	3.13	.00	1.68	22.68	1.73	-1.15
1.04	1.05	1.00	.95	1.17	.98	1.18	.90	.78	.72	.84	.74	.47	4.77	.44	2.82

more positive higher order attitudes (HOA). B = Bush; K = Kerry. Men were coded as 1; women were coded as 2. Registration and voting were coded as

subjective (i.e., self-report) measures were used, the objective measure provided us with stronger relationships with other variables (Farc & Sagarin, 2004).

Attitude extremity. To assess attitude extremity, we used participants' scores from the semantic differential measuring their attitudes toward Bush/Kerry. We computed the absolute value of the deviation of attitude scores from the midpoint of the scale (Abelson, 1995; Bassili, 1996; Lavine et al., 1998).

Procedure

The pre-election surveys were distributed to participants one month prior to the 2004 U.S. presidential election, and the post-election surveys were distributed one week after the election. Participants were instructed to complete the attitude, attitude strength, and behavioral

measures, and those who participated in the study at both collection times were included in the analyses.

RESULTS

Initial Analyses

Descriptive statistics. The total number of participants included in the analyses was 299. Two-hundred fifty-three (84.6%) participants registered to vote, and 216 (72.2%) participants voted (60 for Bush, 154 for Kerry, 2 for other candidates). Compared to our sample, average national vote registration was 72.9%, and average national voter turnout was 56.2% (Leip, 2005).

Interconstruct correlations. Means, standard deviations, and intercorrelations between attitudes toward

Bush/Kerry, attitude strength and criterion measures are presented in Table 1. With respect to Bush, Table 1 reveals significant correlations between attitudes about Bush and all the attitude strength constructs corresponding to Bush. With the exception of the correlations between the attitude about Bush on one hand and the higher order attitude and ambivalence on the other hand, all correlations were negative, indicating that the less favorable the attitudes about Bush became, the stronger they were. This finding might be a consequence of the generally negative attitudes expressed by participants about Bush. In addition, the correlation between the attitude itself and vote registration, as well as the correlation between the attitude and voting turnout were not significant. For Bush, HOA uniquely correlated positively with the attitude, even though HOA correlated positively with the other attitude strength constructs as well. The higher order attitude correlated significantly with most established attitude strength constructs except importance, thus demonstrating convergent validity with other attitude strength constructs. For each candidate, the limited size of the relationship between the higher order attitude and each established attitude strength construct (all r s < .23) illustrates the discriminant validity of the higher order attitude.

In Kerry's case, Table 1 indicates a significant relationship between the attitude about Kerry and all attitude strength constructs except attitude ambivalence. All attitude strength constructs corresponding to Kerry that correlated significantly with the attitude about Kerry showed positive correlations. Thus, unlike Bush's case, an increase in favorable attitudes about Kerry was associated with an increase in attitude strength. This finding might be a consequence of the generally positive attitudes expressed by participants about Kerry. In addition, the attitude about Kerry was significantly and positively associated with both vote registration and vote turnout, illustrating that more positive attitudes about Kerry were associated with higher levels of registration and voting behavior. An examination of the cross-relationships among attitude and attitude strength variables corresponding to Bush and Kerry shows that the attitudes correlated negatively but the attitude strength constructs corresponding to Bush and Kerry were themselves positively correlated, indicating that participants who held strong attitudes about Bush held strong attitudes about Kerry as well.

The high positive correlations present between the attitude index and the HOA index, especially in Bush's case, led us to suspect that some participants did not understand the instructions properly before they completed the HOA scale and reported, in many cases, identical responses for the attitude and the HOA scales corresponding to each candidate. The problem might stem from the way the HOA concept was operationa-

lized. Namely, it was measured in a manner similar to the attitude itself—via a semantic differential scale that looked identical to the scale used to measure the attitude. Indeed, by eliminating participants with identical responses through exploratory analyses, the attitude–HOA correlations decreased for each candidate and the relationships between HOA and other measures of attitude strength become stronger. For instance, eliminating people who had ten or more identical answers on the semantic differential scales for Bush and Kerry combined brought the HOA–attitude correlations from $r = .25$ to $r = .16$ in the case of Bush, and from $r = .48$ to $r = .36$ in the case of Kerry.

With respect to party identification, the correlation matrix revealed that Democrats had, as expected, positive attitudes about Kerry and negative attitudes about Bush. (Participants affiliated as Independent or Other were not included in these analyses.) Participants who identified with the Democratic Party also evaluated their own attitudes toward Kerry positively and their attitudes toward Bush negatively. In addition, Democrats were more likely to vote than Republicans and reported Kerry-related attitudes that were more important and more relevant to their value system. Democrats also reported higher levels of knowledge about Kerry, as well as higher levels of Kerry-related information seeking and dissemination.

Moreover, age correlated positively and significantly only with knowledge about Bush and with voting behavior, so that older participants reported more knowledge about Bush and a more active voting record. Finally, gender-wise, women reported significantly less certainty, less knowledge, and less efforts to spread information about Bush. Female participants also reported more positive but also more ambivalent attitudes about Kerry.

Factor Analyses of Strength Measures

Exploratory factor analyses were performed to assess whether the attitude strength constructs have a unidimensional or multidimensional nature. Because of the likely correlations among attitude strength factors, we chose to run an oblique rotation (i.e., promax). The factor loadings for each of the analyses, as well as the percentage of variance explained by each factor, are presented in Table 2. Factor analyses results were similar for Bush and Kerry, revealing the presence of two underlying factors with eigenvalues greater than 1. Scree plot results indicated the presence of two factors as well.

The first factor accounted for 46% of the variance in attitude strength measures regarding Bush and for 52% of the variance in attitude strength measures regarding Kerry. The attitude strength constructs that loaded positively and reliably on this factor were attitude certainty, attitude importance, value-relevance of attitude, knowledge about the attitude object, information

TABLE 2
Factor Loadings for Attitude Strength Measures

Strength Construct	Bush		Kerry	
	Factor 1	Factor 2	Factor 1	Factor 2
Attitude certainty	.53	.35	.59	.33
Attitude importance	.75	.06	.77	.08
Value-relevance	.49	.30	.74	.08
Knowledge	.88	-.07	.88	-.04
Information dissemination	.79	-.06	.87	-.10
Information seeking	.95	-.20	.93	-.17
Higher order attitude	-.05	.47	.29	.38
Attitude ambivalence	.21	-.91	.28	-.91
Attitude extremity	.23	.71	.25	.70
Variance (%)	46	13	52	12

Note. $N = 299$.

dissemination, and information seeking. The first factor corresponds to Bassili's (1996) meta-attitudinal factor.

The second factor accounted for 13% of the variance in attitude strength measures regarding Bush and for 12% of the variance in attitude strength measures regarding Kerry. The attitude strength constructs that loaded reliably on this factor were higher order attitudes, attitude ambivalence, and attitude extremity, illustrating its similarity to Bassili's (1996) aggregate of operational measures. Higher order attitudes and attitude extremity loaded positively, whereas attitude ambivalence loaded negatively on the second factor (all three loadings are compatible with each other; thus, a strong attitude is characterized by lower scores on the ambivalence measure and by higher scores on the HOA and the extremity measures).

Based on the results obtained through factor analysis, we created two composite variables for each candidate.

The first factor for each candidate represented meta-attitudinal attitude strength constructs, and the second factor was a composite of the operationally defined attitude strength constructs (ambivalence was reverse coded and all three variables were standardized before aggregation). None of the factors displayed excessive correlations with each other; multicollinearity diagnostics indicated that all $r_s < .74$, tolerance indices were greater than .30, and the variance inflation factor was < 3 for all factors.

Registration and Voting Behavior as a Function of Attitude Strength

Predicting who registered. Two logistic regression analyses were conducted to test for the ability of the attitude strength constructs to differentiate between participants who registered to vote and participants who did not (registration was coded 1 for registered participants and 0 for non-registered participants). The constructs tested included attitude certainty, attitude importance, value-relevance of attitude, knowledge about the attitude object, information dissemination, information seeking, the higher order attitude, attitude ambivalence, and attitude extremity (see Table 3).

First, a logistic regression analysis was run in which registration status was regressed on all nine attitude strength constructs regarding Bush, entered simultaneously. Attitude importance was the only significant predictor of registration status ($B = .50$, $p < .05$). Participants for whom the attitude about Bush was more important had higher odds of registering to vote in the 2004 presidential election.

Next, a logistic regression analysis was run in which registration status was regressed on all nine attitude

TABLE 3
Regression Coefficients for Registration Status (Registered/Did Not Register) and Voting Status (Voted/Did Not Vote) Logistically Regressed on Attitude Strength Constructs

Strength Construct	Bush				Kerry			
	Registration		Vote		Registration		Vote	
	B	SE B	B	SE B	B	SE B	B	SE B
Attitude certainty	-.05	.23	.09	.19	.02	.23	.02	.19
Attitude importance	.50*	.22	.42*	.19	.42 [†]	.24	.16	.20
Value-relevance	-.23	.21	-.06	.17	-.68**	.26	-.18	.20
Knowledge	.01	.28	.29	.23	.24	.31	.29	.25
Information dissemination	.13	.20	.17	.16	.10	.23	.13	.18
Information seeking	.10	.28	.02	.24	.46	.30	.32	.24
Higher order attitude	.06	.11	.02	.09	.20	.15	.03	.13
Attitude ambivalence	.10	.15	.01	.13	.25	.18	.15	.14
Attitude extremity	.26	.27	.11	.22	.10	.27	.24	.22

Note. $N = 299$.

[†] $p < .10$. * $p < .05$. ** $p < .01$.

strength constructs regarding Kerry, entered simultaneously. Value-relevance of attitude was the most significant predictor of registration status ($B = -.68$, $p < .001$). Participants whose attitude about Kerry was more representative of their values showed lower odds of registering to vote in the 2004 presidential election. However, because the zero-order correlation between value relevance of attitude and registration in Kerry's case is $r = .05$, this is probably a suppression effect. In addition, attitude importance emerged as a marginally significant predictor of vote registration behavior ($B = .42$, $p < .10$). Participants for whom the attitude about Kerry was more important were more likely to register to vote.

Moreover, logistic regression analyses were run by regressing registration status on the two factors corresponding to Bush/Kerry separately. The meta-attitudinal index was the only significant predictor of registration status for both Bush ($B = .64$, $p < .01$) and Kerry ($B = .69$, $p < .01$). Next, registration status was logistically regressed on all four attitude strength factors corresponding to Bush and Kerry, entered simultaneously. The meta-attitudinal strength factor corresponding to Kerry was a marginal predictor of registration ($B = .57$, $p < .10$), and no other factors predicted likelihood of registering to vote significantly. Participants who had stronger attitudes about Bush or Kerry—as measured by the meta-attitudinal index—had higher odds of registering to vote in the 2004 presidential election.

As previously discussed, exploratory analyses suggested that the operationalization of HOA led to an artifactual positive relationship between HOA and attitudes, and that this positive relationship was attenuated when participants with identical responses on HOA and attitudes were eliminated. With respect to registration, when such participants were eliminated, the HOA regarding Kerry became a marginally significant unique predictor of registration, ($B = .35$, $p < .06$).

Predicting who voted. Two logistic regression analyses were conducted to test for the ability of the attitude strength constructs to distinguish between participants who voted and participants who did not. The constructs tested included attitude certainty, attitude importance, value-relevance of attitude, knowledge about the attitude object, information dissemination, information seeking, the higher order attitude, attitude ambivalence, and attitude extremity (see Table 3).

First, voting behavior was logistically regressed on all Bush-related attitude strength constructs, entered simultaneously. As with registration, attitude importance was the only significant predictor of voting behavior ($B = .42$, $p < .05$). Participants for whom the attitude about

Bush was more important were more likely to vote in the 2004 presidential election. Next, a logistic regression analysis was run in which vote registration was regressed on all nine attitude strength constructs regarding Kerry, entered simultaneously. No Kerry-related attitude strength construct predicted voting behavior.

Two logistic regression analyses were also conducted to test for the ability of the attitude strength factors to distinguish between participants who voted and participants who did not. Voting behavior was regressed on both factors regarding Bush/Kerry. The meta-attitudinal index was the only significant predictor of voting behavior for both Bush ($B = 1.02$, $p < .001$) and Kerry ($B = .86$, $p < .001$). Participants who had stronger attitudes about Bush or Kerry—as measured by the meta-attitudinal index—had higher odds of voting in the 2004 presidential election. In addition, voting behavior was logistically regressed on all four attitude strength factors corresponding to Bush and Kerry, entered simultaneously. The meta-attitudinal strength factor corresponding to Bush emerged as the only significant predictor of likelihood to vote, ($B = .72$, $p < .05$).

Attitude Strength as a Moderator of the Candidate Attitude – Candidate Choice Relationship

A series of logistic regressions tested the power of each attitude strength construct to moderate the relationship between participants' attitudes about Bush/Kerry and their chosen candidate. A dichotomous variable was created to reflect candidate choice, with a value of 1 for Bush voters and 2 for Kerry voters. The candidate choice variable was then logistically regressed on attitudes toward each candidate, on the attitude strength construct, and on the attitude by attitude strength interaction. Results describing significant and marginal moderations are presented in Table 4.

Logistic regression results indicate that in general, attitudes about Bush/Kerry constituted the best predictor of candidate choice. More positive attitudes about Bush predicted votes for Bush, and more positive attitudes about Kerry predicted votes for Kerry. With respect to moderation effects, for Bush, the relationship between candidate attitude and candidate choice was moderated by knowledge and marginally moderated by attitude importance. Thus, participants more knowledgeable about Bush and participants who considered their attitudes about Bush as more important were more likely to vote in accordance with their attitudes.

For Kerry, the relationship between candidate attitude and candidate choice was moderated by attitude extremity and marginally moderated by knowledge. Voters with more extreme attitudes and a higher level

TABLE 4
Logistic Regression Coefficients for Attitude Strength Constructs Moderating the Attitude–Candidate Choice (Bush/Kerry) Relationship

Variable	Attitude		Attitude Strength Construct		Interaction	
	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>SE B</i>	<i>B</i>	<i>SE B</i>
Bush						
Knowledge	−2.12**	.35	.57	.45	−.72*	.34
Attitude importance	−2.00**	.32	.44	.36	−.46 ⁺	.28
Absolute difference in attitudes	−3.24**	.81	.713	.49	−1.08**	.91
Kerry						
Knowledge	1.75**	0.26	.14	.26	−.47 ⁺	.24
Attitude extremity	1.93**	.28	−.34	.29	−.53*	.24
Absolute difference in attitudes	3.74**	.81	1.17**	.37	1.62**	.41

Note. $N = 217$. Attitude and attitude strength construct variables were centered previous to performing logistic regressions. Each row represents one logistic regression. For instance, the first row represents candidate choice logistically regressed on (a) attitude about Bush, (b) self-reported knowledge about Bush, and (c) the interaction of attitude and knowledge about Bush.

⁺ $p < .10$. * $p < .05$. ** $p < .01$.

of knowledge about Kerry were less likely to vote in line with their attitude about Kerry.

None of the four attitude strength factors moderated the relationship between attitude and candidate choice significantly.

Exploring Polarization of Attitudes about Bush and Kerry

A new attitude variable was created by subtracting the attitude scores corresponding to Kerry from the attitude scores corresponding to Bush. It is notable that as a whole, participants viewed Kerry more positively, thus the mean difference was negative ($M = -1.15$). The difference score variable predicted candidate choice significantly ($B = -1.54$, $p < .001$). Thus, lower difference scores (which indicated a preference for Kerry) were associated with a lower likelihood of choosing Bush as president, while higher difference scores (which indicated a preference for Bush) were associated with a higher likelihood of choosing Bush as president.

In addition, we utilized the absolute value of the difference score as an attitude strength measure and studied its role in predicting registration and voting behavior, as well as in moderating the relationship between attitudes and candidate choice. The absolute value of the difference score did not predict the odds of registering for or voting in the election, but it moderated the relationship between attitude and candidate choice significantly for both candidates. Table 4 presents the results of the analyses, indicating that participants who felt more

strongly about one candidate over the other were more likely to vote in line with their attitudes.

Pre- and Post-election Measures of Attitude Strength

Attitude strength scores recorded prior to the 2004 presidential election were compared to attitude strength scores recorded after the election through a series of paired samples t tests. With respect to Bush, after the election took place, participants indicated increased levels of certainty, $t(298) = -3.29$, $p < .01$; of value-relevance, $t(298) = -2.38$, $p < .05$; and of knowledge, $t(298) = -3.67$, $p < .001$.

In Kerry's case, analyses indicate increased levels of reported certainty, $t(298) = -2.56$, $p < .05$; knowledge, $t(298) = -3.09$, $p < .01$; and extremity, $t(298) = -2.15$, $p < .05$, as well as decreased levels of information seeking, $t(298) = 4.41$, $p < .001$. In addition, attitudes about Kerry became significantly more positive in the aftermath of the presidential election, $t(298) = 4.03$, $p < .001$.

To find out whether attitudes and attitude strength scores fluctuated differently for Republicans and Democrats, separate paired samples t tests were run. The results indicate that after the election took place, Republicans became more certain of their attitudes toward Bush, $t(68) = -2.57$, $p < .05$; more knowledgeable, $t(68) = -2.00$, $p < .05$; and the relevance of their attitudes to their value system increased as well, $t(68) = -2.16$, $p < .05$. Republicans also reported more positive attitudes about Kerry, $t(68) = -2.07$, $p < .05$,

and significantly less information seeking levels regarding Kerry, $t(68) = 2.58, p < .05$.

In the case of Democrats, t tests indicate that they did not change either their attitudes or the strength of their attitudes about Bush significantly. They did, however, report significantly more positive attitudes about Kerry in the aftermath of the election, $t(150) = -3.50, p < .001$. Similar to Republicans, Democrats sought less information about Kerry, $t(150) = 2.82, p < .01$, but they became more certain, $t(150) = -3.12, p < .01$; knowledgeable, $t(150) = -2.71, p < .01$; and extreme, $t(150) = -2.94, p < .01$, in their attitudes.

DISCUSSION

The research presented here examined (a) the underlying structure of nine attitude strength constructs reflecting strength of attitudes toward Bush and Kerry, (b) the role of attitude strength constructs in predicting registration and voter turnout in the context of the 2004 U.S. presidential election, and (c) the moderating role of indexes of attitude strength in the context of the attitude toward candidate–candidate choice relationship. The study also attempted to assess the temporal stability of various attitude strength dimensions, the role of two new attitude strength constructs—the Higher Order Attitude and the extremity of the polarization of candidate attitudes—as well as the relationship between party affiliation and attitudes and attitude strength.

Correlations among attitude, attitude strength, and behavioral scores for each presidential candidate illustrate interesting features of the dynamic of the presidential race between George W. Bush and John Kerry. First, the strength and direction of the relationship between attitudes and a majority of the attitude strength constructs indicated that the stronger the attitude about Bush, the less favorable participants viewed the Republican candidate, whereas in Kerry's case, the stronger the attitudes about Kerry, the more favorably participants viewed the Democratic candidate. As previously mentioned, this finding may represent a sampling effect: Data were collected on a college campus located in a "blue" state, and the sample was formed of predominantly young voters. As a result, people who participated in our study generally exhibited more positive attitudes about Kerry and more negative attitudes about Bush.

In addition, correlations between Bush and Kerry variables illustrate how polarized participants were during the election season. For instance, the high negative correlation extant between attitudes about Kerry and attitudes about Bush indicates little approval for the opposing candidate. A different picture emerged, though, for Bush and for Kerry supporters with respect

to the strength of their attitudes: Strength of attitudes regarding Bush was positively correlated with strength of attitudes regarding Kerry.

The relationships among demographic variables and attitude constructs indicate that older participants went out to vote more than younger participants. They also present intriguing gender differences; for instance, women showed a tendency to associate themselves with the Democratic Party, evaluating Kerry more positively than Bush, but they also reported feeling less certain of their Bush-related attitudes, less knowledgeable about Bush, less willing to talk about him, and more ambivalent toward Kerry. Women's weaker attitudes are puzzling, and they may tap into societal stereotypes about men being more involved in politics.

Party affiliation displayed the expected relationship with attitudes toward candidates (i.e., Democrats had more positive attitudes about Kerry and more negative attitudes about Bush, and Republicans exhibited an opposite pattern) as well as an interesting relationship with individual strength constructs. In Bush's case, Democrats evaluated their attitudes less positively than Republicans evaluated their own attitudes about Bush. For Kerry, Democrats reported higher levels of attitude importance, value-relevance, knowledge, dissemination of information, and information seeking. They also evaluated their attitudes toward Kerry more positively than Republicans did. Moreover, Democrats went out to vote more than Republicans did, which might be explained by their dissatisfaction with the status quo becoming a motivator for voting.

The strong relationship present between the HOA and the attitude in the case of both candidates made us suspect the partly artifactual nature of this relationship, which might stem from the fact that the HOA was operationalized in a way similar to the attitude itself. Exploratory analyses indicated that, indeed, by eliminating participants with identical responses on the attitude and HOA measures, the HOA became a marginally significant predictor of registration, the attitude–HOA correlations decreased for each candidate, and the relationships between HOA and other measures of attitude strength became stronger. These analyses suggest the potential value of the HOA as a new attitude strength construct, particularly if its artifactual relationship with attitudes could be remedied. Future strategies for dealing with such measurement issues include a separation of the attitude scale from the HOA scale in the survey, as well as finding a different way to operationalize the HOA.

Another goal of our present study was to analyze the factor structure of the nine attitude strength constructs utilized in the analyses. Two factors emerged for each candidate, and they were strikingly similar to Bassili's (1996) meta-attitudinal and operational

factors, both in structure and in amount of variance explained by each. The higher order attitude loaded on the operational factor. In contrast to Bassili's results, operational attitude strength constructs did not exhibit higher predictive power than meta-attitudinal constructs, neither when they were analyzed separately nor when they were grouped into a composite operational factor. The results of this study indicate that the meta-attitudinal factor consistently outperformed the operational one in predicting registration and voting, for both Bush and Kerry. It is possible that the conscious evaluations and validity inferences people make about their political attitudes are highly accessible during election season and they guide political behaviors (Petty et al., 2007).

Although participants generally indicated more positive attitudes about Kerry than about Bush, the equivalent factor structure of indices of attitude strength corresponding to Bush and Kerry suggests that the attitudes corresponding to both candidates displayed similar properties. In addition, the consistency with which the meta-attitudinal factor uniquely predicted registration and voting for both Bush and Kerry variables suggests that using the meta-attitudinal factor in future studies could increase the consistency of findings in the attitude strength domain.

With respect to the predictive power of attitude strength constructs, logistic regression analyses indicated that some of the attitude strength variables constituted valid unique predictors of voting registration and turnout, whereas others did not. When all nine predictors were entered simultaneously into the logistic regression equation, for Bush, attitude importance constituted a significant predictor of both registration and voting behavior. In Kerry's case, only registration was significantly predicted by the value-relevance of the attitude and marginally predicted by attitude importance. Thus, participants whose attitude about Kerry was more representative of their values were less likely to register to vote. It is likely that this unexpected finding represents a suppression effect stemming from the nonsignificant zero-order correlation between value relevance and registration and the intercorrelation between value relevance and other attitude strength constructs. As with attitudes about Bush, participants whose attitudes about Kerry were more important were more likely to register to vote.

The powerful influence of attitude importance on behavior or behavioral intentions has been observed in other studies as well, indicating important attitudes are more accessible (Bizer & Krosnick, 2001; Van Harreveld & Van der Pligt, 2004) and better predictors of behavior (Krosnick, 1988; Schuman & Presser, 1981). In fact, many researchers have considered attitude importance as the most significant attitude strength measure, because attaching personal importance to an attitude object

causes individuals to search for attitude relevant information and to think more about the attitude (Boninger et al., 1995). The significant and almost singular effect of attitude importance on registration and voting behavior stands as testimony to the fact that if, because of time or pecuniary constraints, one would have to choose only one of the many attitude strength constructs described in the scientific literature, attitude importance may constitute a valid and parsimonious choice.

Another purpose of our study was to examine the extent to which attitude strength constructs moderate the candidate attitude-candidate choice relationship. For Bush, the relationship was moderated by knowledge and marginally moderated by attitude importance. Participants who possessed more knowledge about Bush and participants for whom their attitudes about Bush were more important were more likely to vote in harmony with their attitudes. In Kerry's case, the relationship between attitude and candidate choice was moderated by attitude extremity and marginally moderated by knowledge, so that voters with more extreme attitudes and a higher level of knowledge about Kerry were less likely to vote in line with their attitudes. We acknowledge the odd reversal of moderation effects in Kerry's case as a phenomenon that needs more exploration.

Both attitude importance and attitude extremity are considered among the most germane attitude strength constructs, because of their relevance to a great number of social phenomena (Krosnick & Abelson, 1991) and the fact that they moderated the attitude-behavior relationship significantly in our study confirms their primacy on the attitude strength front. With respect to knowledge, one explanation for the significant moderating effect of knowledge on the attitude-behavior relationship in the context of the 2004 U.S. presidential election is grounded in Haddock, Rothman, and Schwartz's (1996) finding that knowledge represents a stable attitude strength construct, not easily affected by contextual manipulations. It can be inferred that stability lends knowledge more moderating power in the context of the attitude-behavior relationship.

Moreover, exploratory analyses revealed the predictive power of a new measure of attitude polarization: A new attitude variable created by subtracting the attitude scores corresponding to Kerry from the attitude scores corresponding to Bush predicted candidate choice significantly. Thus, the lower the difference scores, the greater participants' preference was for Kerry and the lower the likelihood of choosing Bush as president. The higher the difference scores were, the greater the preference for Bush and the likelihood of choosing him as president.

In addition, we utilized the absolute value of the difference score in a novel way—as an attitude strength measure, defining the extent to which participants had

different attitudes about the two candidates—and studied its relationship with registration and voting outcomes, as well as its moderating power in the attitude–candidate choice relationship. The absolute value of the difference score moderated the relationship between attitude and candidate choice significantly for both candidates. Participants who felt more strongly about one candidate over the other were more likely to vote in line with their attitudes. Indeed, this new attitude strength measure emerged as the most reliable attitude strength moderator we tested.

Finally, the results of a series of *t* tests assessing whether attitude strength constructs changed after the presidential election took place showed that several attitude strength constructs changed significantly. Post-election, participants reported being more certain and more knowledgeable about Bush; they also considered their attitude more relevant to their value system. Reported attitude certainty, knowledge, and extremity increased in Kerry's case as well, whereas information-seeking behaviors showed a decrease. The decrease in information-seeking behaviors may be explained by Kerry's losing the race and thus taking a step back from the spotlight, as well as by the fact that after the election, information about Kerry became much less relevant for participants' future well-being.

When *t* tests assessing whether attitude strength constructs changed after the presidential election took place were conducted separately for Republicans and for Democrats, it was interesting to note that supporters of both parties reported no change in attitudes regarding Bush, but attitudes regarding Kerry became more positive for participants across the political spectrum. Having lost the election, Kerry seemed to be looked upon with more generosity, but also with less curiosity. Moreover, each group reported more changes in attitude strength constructs corresponding to their own candidate. Thus, Republicans became more certain, more knowledgeable, and more focused on their values regarding Bush, whereas Democrats became more certain, more knowledgeable, and more extreme in their attitudes regarding Kerry.

LIMITATIONS AND CONCLUSIONS

One of the limiting aspects of the present study is due to measuring attitude strength constructs via the survey structure alone. It would be interesting to see if our results change through the inclusion of more objective measures of attitude strength (e.g., attitude accessibility as measured via response times). Also, a worthwhile project would be to extend the present methodology to a more diverse sample to ensure that the results are

applicable not only to the student body but to the general population as well.

In conclusion, the findings of our study reveal interesting and challenging points about the role of attitude strength constructs in predicting the attitude–behavior relationship in general and the attitude–registration/vote relationships in particular. Attitude strength matters in issues of public interest and a proper understanding of its role and qualifications is vital to deciphering the complexity of the attitude–behavior relationship.

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