

Effects of Beliefs about the Stability or Malleability of Personality on Judgments of Political
Candidates' Character and Voting Behavior

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Abstract

Given the intense focus during political campaigns on the character and personality of the candidates, it is important to understand how voters assimilate and act upon this information. Previous research (Dweck, 1999; Molden & Dweck, 2006) has shown that those who believe that personality is a fixed and stable entity make more rapid and extreme judgments about others' personality, and are more likely to rely upon this personality information when interacting with others, than are those who believe that personality can incrementally grow and develop. This paper investigates how an item from the 2006 ANES pilot study that assessed beliefs about the stability or malleability of personality affected judgments of candidates' traits and how large a role these trait judgments played in voting decisions. Preliminary analyses confirmed that the single theory of personality item possessed acceptable psychometric properties, showed good discriminant validity, and replicated findings from previous studies which had employed more elaborate measures. Primary analyses demonstrated that, at least in several instances, those who believe that personality is stable showed a stronger relationship between their judgments of or feelings toward candidates' personality and their support of, and likelihood of voting for, these candidates.

Elections reflect a choice between persons as much as between policies. That is, voters' impressions of candidates' personality and character often receive as much attention and analysis as do the programs and legislation that these candidates advocate. For example, in the 2004 presidential election, the Republican Party made a great effort to cast President Bush as a much stronger and more decisive leader than his opponent, whereas the Democratic Party went to great lengths to portray John Kerry as more intelligent and knowledgeable than the President. Results from the 2004 ANES confirm that each party was highly successful in creating these desired impressions in voters. Understanding how such character differences may have helped to bring about a Bush victory, however, requires a more complete understanding of why and for whom these impressions created strong preferences for one candidate over the other.

Toward this purpose, I proposed including in the 2006 ANES pilot study a measure of people's basic assumptions, or *lay theories*, about personality, which has been shown to predict how prepared people are to make character judgments, as well as how much weight they give such judgments in their decisions and behaviors. In many previous studies, these beliefs have been found to profoundly influence (a) how readily people infer deep, enduring traits from a small sample of a person's behaviors, (b) how extreme these trait judgments tend to be, (c) how large a role these trait judgments play in people's overall evaluations of and liking for a person, and (d) the likelihood that people will alter their own behavior on the basis of these judgments (see Dweck, 1999; Molden & Dweck, 2006; Levy, Plaks, & Dweck, 1999). Therefore, measuring lay theories of personality in the ANES pilot study was intended to provide an opportunity for greater insight into (a) who developed stronger and more polarized judgments of Bush's and Kerry's personal attributes, and (b) who gave these judgments greater weight in their voting decisions.

The fundamental assumptions that people make about human beings have enormous influence on the way people judge those around them (Molden & Dweck, 2006; Nisbett, Peng, Choi, & Norenzayan, 2001; Wegener & Petty, 1998). That is, people's basic theories

about human traits can dramatically alter how they transform their observations of a person's behavior into judgments about this person's underlying attributes. Long ago, the philosopher Alfred North Whitehead (1938) noted that when one believes something to have fixed and enduring properties, one's task becomes to discern and judge those stable underlying qualities; however, when one believes something to have dynamic and fluid properties, one's task becomes to understand how those properties might change over time or across situations. In the same way, believing that people's core qualities are fixed and stable entities (i.e., holding an *entity theory* of personality) should create a desire to look for and judge stable traits. In contrast, believing people's characteristics to be subject to incremental growth and change through experience (i.e., holding an *incremental theory* of personality) should create a dissatisfaction with simple trait judgments and a desire for a more in-depth view of people's changing beliefs, goals, and emerging qualities (Dweck, 1999; Molden & Dweck, 2006; Levy, et al., 1999).

Numerous studies on social judgment and impression formation have confirmed these effects of holding an entity or incremental theory of personality. That is, people who believe that personality is a fixed entity have been found to make more rapid and extreme trait judgments from observing others' behaviors, often on a single occasion (Chiu, Hong, & Dweck, 1997; Levy, Stroessner, & Dweck, 1998). Even though these trait judgments are often spontaneous and effortless (McConnell, 2001; Molden, Plaks, & Dweck, 2006; Plaks, Stroessner, Dweck, & Sherman, 2001), entity theorists also display greater faith in them, for example, making confident predictions that their judgment will continue to hold true in the future (Chiu et al., 1997; Plaks, Grant, & Dweck, 2005). As a result of making more rapid, extreme, and confident judgments, entity theorists have further been shown to be more susceptible to forming polarized views of people as "trustworthy vs. untrustworthy," "strong vs. weak," "good vs. evil" or "competent vs. incompetent" (Hong, Chiu, Dweck, & Sacks, 1997; Levy et al., 1998). What is more, these polarized views have even been found to lead

entity theorists to rely more heavily upon their trait judgments when making important decisions about others (e.g., the guilt or innocence of a defendant) at the expense of other relevant sources of information (e.g., the quality of the evidence against the defendant; see Gervy, Chiu, Hong, & Dweck, 1999).

Such findings have important implications for the way in which people holding an entity or incremental theory of personality might differ in their evaluation of political candidates. Based on their observations of candidates' behaviors, entity theorists may form more extreme positive or negative impressions of the candidates' basic personality or character. Furthermore, given the results of the Gervy et al. (1999) research, those with fixed theories could rely more upon their personality impressions when deciding for which candidate they intend to vote. Finally, because attitude extremity and stability are important predictors of whether people will act upon their attitudes (Krosnick & Petty, 1995), the more extreme personality judgments made by entity theorists may even lead these individuals to turn out at the polls in greater numbers to support their preferred candidate.

The inclusion of an item measuring lay theories of personality in the 2006 ANES pilot study allowed a preliminary test of these hypotheses. A basic set of analyses was first conducted to examine the influence of people's theory of personality on (a) their judgments of the extent to which the candidates in the 2004 presidential election (i.e., George W. Bush and John Kerry) possessed a variety of different traits, and (b) how warmly and favorably they felt toward these candidates. Following this, an additional set of analyses was conducted to examine how lay theories of personality further affect how strongly these judgments and evaluations of the candidates relate to people's political impressions and decisions, such as how strongly they support a particular candidate and whether they do indeed cast a ballot for their preferred candidate.

Methods

Participants

Participants were 665 individuals (305 men and 360 women) who completed surveys as part of the ANES 2006 pilot study between November 13, 2006 and December 26, 2006. These participants were a sample drawn from the 1212 individuals who had completed the ANES 2004 time series study.

Materials

The extent to which participants held a fixed or malleable theory of personality was measured in the ANES 2006 pilot study using a single item (Mod1_1), which read: "How much do you think people can change the kind of person they are?" Participants responded either *completely* (1), *a lot* (2), *a moderate amount* (3), *a little* (4), or *not at all* (5). Thus, higher scores on this item represent stronger beliefs in the stability of personality and lower scores represent stronger beliefs in the malleability of personality.

Procedures

The ANES 2006 pilot study was a nationally representative survey conducted using telephone interviews. Complete details concerning the data collection procedures can be found at: <http://www.electionstudies.org/studypages/2006pilot/2006pilot.htm> .

Results

Descriptive Statistics

Of the 665 survey respondents, 661 provided valid responses on the theory of personality item ($M = 2.64$, $SD = .98$, Median = 3.0). There were no effects of gender on participants' responses ($F(1, 657) = .21$, $p = .64$), nor were there effects of the order in which the response options were presented ($F(1, 657) = .64$, $p = .42$). As shown in Figure 1, the distribution of responses shows a small positive skew (skew = .035), but is fairly even overall. In general, fewer participants reported extreme views concerning the fixedness of personality than concerning the malleability of personality.

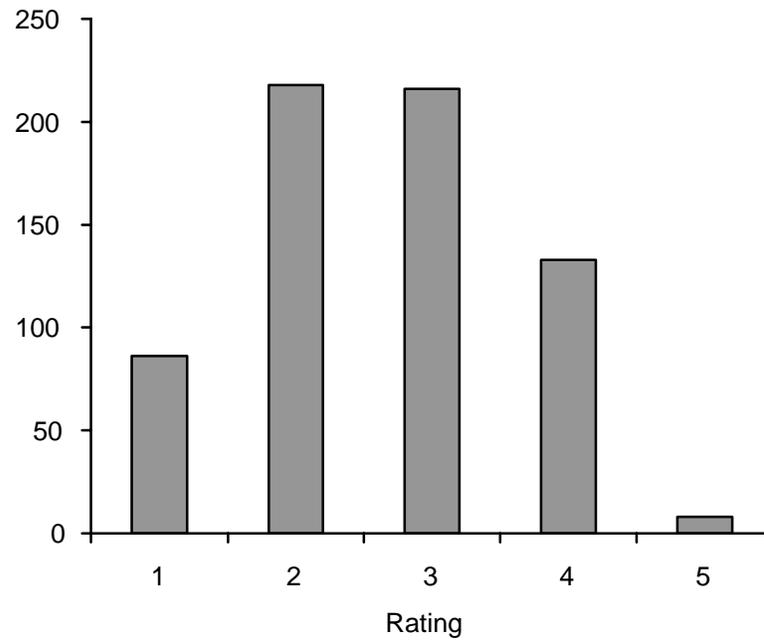


Figure 1: A histogram of responses to the theory of personality item with higher ratings indicating a greater belief in the stability of personality and lower ratings indicating a greater belief in the malleability of personality.

Before examining the primary hypotheses concerning the effects of people's theory of personality on their political impressions and actions, two series of validity analyses were conducted on the theory of personality item created for the 2006 pilot study. First, to establish that this item is indeed assessing an independent psychological construct not already captured by other measures in the ANES, discriminant validity analyses were conducted using a variety of personal belief and cognitive-style items featured in the 2006 pilot study, as well as a group of items from 2004 time series study. Second, to ensure that the single item adapted for the ANES captures the same psychological construct as the more elaborate theory of personality measures used in previous research, construct validity analyses were conducted using several sets of trait-judgment and *feeling thermometer* questions from the 2004 time series study.

Discriminant Validity

Table 1 displays the zero-order correlations between participants' theory of personality and measures of (a) defensive confidence (Mod2_1), (b) needs for cognitive closure (Mod3_1 – Mod 3_9; see Webster & Kruglanski, 1994), (c) belief in a just world (Mod4_1; see Lerner & Miller, 1978), (d) indices (α 's = .39 - .60) of self-monitoring (Mod5_1 – Mod5_B3; see Gangestad & Snyder, 2000), (e) optimism or pessimism (Mod12_A1 – Mod12_A4 and Mod12_B1 – Mod12_B4; see Scheier, Carver, & Bridges, 1994), and (f) identification with the democratic or republican party (Mod19_0) from the 2006 pilot study, and measures of (g) participants' ratings of their liberalism or conservatism (V045117), (h) an index (α = .65) of needs for evaluation (V045218 – V045219; see Jarvis & Petty, 1996), and (i) the enjoyment of complex cognitive activity (V045220- V045221; see Cacioppo, Petty, Feinstein, & Jarvis, 1996) from the 2004 time series study. In cases where two versions of a measure were included in the 2006 pilot study, results for each version are reported separately. The five items that typically represent different dimensions of the need for cognitive closure scale did not form a reliable index (α = .13) and are also reported separately.

Overall, results indicated that people's theory of personality is largely independent from these other constructs and that this item had strong discriminant validity (cf. Dweck, Chiu, & Hong, 1995; Levy, et al, 1998). The significant correlations that were found were uniformly small. Those more strongly supporting an entity theory that personality is fixed did report somewhat less confidence in being able to defend their opinions, as well as a lower need for evaluation. They also reported slightly weaker just-world beliefs. Finally, entity theorists also reported being slightly less likely to see both sides of a disagreement and to generally have strong needs for cognitive closure, as is consistent with their more stable and certain views of personality (see also Levy et al., 1998). Most important for the primary analyses reported below,

there was no significant relationship between people's theory of personality and their liberal vs. conservative mindset or their identification as a Democrat vs. a Republican.

Table 1
Correlations between Beliefs about the Stability or Malleability of Personality and Other Beliefs or Cognitive Styles

Measure	Belief that Personality is Stable		
	<i>r</i>	N	<i>p</i>
Confident in Defending Opinion	-.21	661	<.0001*
Is Disorganized	-.02	658	.61
Likes Unpredictability	-.07	658	.07
Often Confident in Decisions	-.02	659	.62
Uncomfortable with Uncertainty	.02	661	.59
Sees Both Sides of Disagreements	-.12	660	.002*
Need for Closure Index	.09	652	.02*
Belief in a Just World	-.09	660	.02*
Self-Monitoring (version 1)	-.07	337	.23
Self-Monitoring (version 2)	-.06	324	.28
Optimism (version 1)	-.05	323	.33
Optimism (version 2)	-.10	331	.08
Party Identification	.06	625	.15
Liberalism	-.03	544	.55
Need for Evaluation	-.08	636	.04*
Likes Responsibility for Thinking	-.03	631	.48
Likes Simple Problems	.05	628	.23

Note: Higher scores on the theory of personality item represent stronger beliefs in the stability of personality. Higher scores on the party identification item represent stronger identification with the Republican party. For all other items or scales, higher scores equal stronger needs, or higher endorsement of a trait or belief.

Construct Validity

Previous work on people's theory of personality has demonstrated across multiple studies that when evaluating people based on their membership in various social groups, entity

theorists pay more attention to, and are more likely to endorse, traits that are stereotypically associated with these social groups (Levy et al., 1998; Plaks et al., 2001, Plaks et al., 2005). As discussed earlier, if one believes that people possess stable and enduring qualities that make them who they are, then it only makes sense to show more concern with, and draw stronger inferences from, important social cues that might reveal these qualities. A replication of these types of effects using the single adapted theory of personality item included in the 2006 pilot study would provide evidence that the single item does validly assess such beliefs.

Several measures of stereotype endorsement were included in the 2004 time series study. These measures asked people to rate whether almost all of the members of certain social groups tend to be *lazy vs. hardworking*, *unintelligent vs. intelligent*, and *untrustworthy vs. trustworthy*. The social groups rated included *Blacks*, *Hispanics*, and *Asians* (see V045222 – V045232). Table 2 displays the zero-order correlations between participants' theory of personality and their stereotype endorsement. Results showed that, consistent with previous research, stronger beliefs about the fixedness of personality were related to stronger general endorsements of negative stereotypes about Blacks and Hispanics (although not about Asians).

Additional analyses revealed that several of the measures that showed some overlap with participants' theory of personality (see Table 1) were also related to the endorsement of stereotypic traits. Therefore, to ensure that the effects of theory of personality occurred above and beyond the effects of other variables, the set of participants' endorsements for all of the stereotypical traits were entered into a multivariate regression with theory of personality, need for evaluation, confidence in defending one's opinions, need for closure, and belief in a just world as the independent variables. Results revealed that participants' theory of personality remained a significant predictor of general stereotype endorsement ($F(9, 570) = 2.04, p = .03$) even when controlling for these additional measures, some of which had their own independent effects (those who reported higher needs for evaluation also showed a lesser tendency to endorse negative stereotypes, $F(9, 570) = 2.84, p = .003$).

Table 2
Correlations between Beliefs about the Stability or Malleability of Personality and the Endorsement of Ethnic Stereotypes

Stereotype	Belief that Personality is Stable		
	<i>r</i>	N	<i>p</i>
Blacks are Lazy	.05	626	.21
Blacks are Unintelligent	.09	622	.03*
Blacks are Untrustworthy	.07	622	.14
Black Stereotypes (mean)	.08	626	.05*
Hispanics are Lazy	.09	619	.02*
Hispanics are Unintelligent	.10	612	.01*
Hispanics are Untrustworthy	.08	615	.05*
Hispanics Stereotypes (mean)	.11	619	.004*
Asians are Lazy	.00	619	.93
Asians are Unintelligent	.06	615	.14
Asians are Untrustworthy	.02	612	.29
Asians Stereotypes (mean)	.04	619	.34

Note: Higher scores on the theory of personality item represent stronger beliefs in the stability of personality. Higher scores on the stereotype items represent stronger endorsement of those stereotypes.

Beyond direct measures of stereotype endorsement, the 2004 time series study also featured multiple measures of people's more general feelings toward a variety of social groups. These measures all took the form of *feeling thermometers* where people rated how "favorable and warm" they generally felt toward members of that group on a scale from 0 – 100 (see V45056 – V45086). If entity theorists are generally more likely to endorse stereotypes of social groups, then they should also feel less favorably toward those groups that are of lower status, or whom are generally stigmatized and to whom many negative stereotypes can be applied. Table 3 displays the zero-order correlations between participants' theory of personality and their feelings toward 13 different social groups that possess at least some kind of negative stigma.

Results indicate that, as predicted, stronger beliefs in the stability of personality were significantly associated with less favorable feelings toward 9 of the 13 groups. These findings replicate and extend the results reported above and in previous work (Levy et al., 1998; Plaks et al., 2001; Plaks et al., 2005).

Table 3
Correlations between Beliefs about the Stability or Malleability of Personality and Feelings of Warmth toward Social Groups

Social Group	Belief that Personality is Stable		
	<i>r</i>	N	<i>p</i>
Blacks	-.15	620	.002*
Hispanics	-.13	616	.001*
Asians	-.07	608	.08
Gays and Lesbians	-.07	620	.09
Immigrants	-.10	620	.02*
Jews	.00	609	.93
Muslims	-.09	594	.04*
Christian Fundamentalists	-.15	597	.002*
Women	-.05	624	.18
Old People	-.10	628	.01*
Poor People	-.08	620	.04*
Welfare Recipients	-.09	622	.03*
Southerners	-.08	618	.05*

Note: Higher scores on the theory of personality item represent stronger beliefs in the stability of personality. Higher scores on the social group items represent more warm and favorable feelings toward that group.

Additional analyses again revealed that several of the measures that overlapped with participants' theory of personality also predicted how favorably they felt toward these stigmatized social groups. Therefore, responses to the feeling thermometers for all 13 of these groups were entered into a multivariate regression with theory of personality, need for

evaluation, confidence in defending one's opinions, need for closure, and belief in a just world as the independent variables. As before, participants' theory of personality remained a significant predictor of their overall feelings toward these social groups ($F(13, 527) = 3.05, p = .0002$) even when controlling for the additional measures, some of which also had their own independent effects (those with higher needs for evaluation showed increased favorability toward stigmatized social groups, $F(13, 527) = 2.71, p = .001$, and those with higher needs for closure showed decreased favorability toward stigmatized social groups, $F(13, 527) = 3.59, p < .0001$).

Thus far, analyses have revealed that, consistent with previous research (Levy et al., 1998; Plaks et al., 2001), entity theorists more strongly endorse negative stereotypes toward certain social groups and report less favorable feelings toward those groups. One further implication of people's theories of personality that can then be tested is the extent to which the first effect relates to the second. That is, does holding an entity of personality increase the likelihood that stereotyped impressions of a particular social group translate directly into prejudice toward that group (cf. Devine, Plant, & Amodio, 2002)? To test this hypothesis, which grows out of, but has not been directly examined by, previous studies (cf. Chiu et al., 1997), participants' feeling thermometer ratings for Blacks, Hispanics, and Asians were separately submitted to a hierarchical regression in which main effects of theory of personality and mean stereotypic trait endorsement (α 's = .73-.80) for the relevant social group were simultaneously entered in the first step, followed by the interaction between these two factors in the second step. In this analysis, a significant interaction effect indicates that the relationship between people's endorsement of stereotypical traits for a social group and their overall feelings toward that group differs depending upon whether they hold an entity or incremental theory of personality (see Cohen, Cohen, West, & Aiken, 2003).

Table 4 displays the results of these analyses, which reveal that participants' theories of personality significantly moderated the relationship between stereotype endorsement and

feelings of warmth toward social groups for both Hispanics and Asians. To illustrate the pattern of these effects, the final regression equations were used to plot predicted values of participants' feelings of warmth calculated at 1 SD above and below the mean scores on both the theory of personality and stereotype endorsement measures (see Aiken & West, 1991). These values are plotted in Figure 2. As can be seen, although high stereotype endorsement was associated with lower feelings of warmth toward the three social groups for all participants (t 's > 3.1, p 's < .002), this effect was significantly greater for those who believe personality is fixed in their evaluations of Hispanics and Asians. That is, generally believing that members of social groups possessed certain negative traits was more strongly related to the lack of warmth felt toward those groups for entity theorists than it was for incremental theorists. Once again, entering the additional measures that showed some overlap with participants' theory of personality into all of the

Table 4
Hierarchical Regressions Predicting Feelings of Warmth Toward Social Groups from Theories of Personality and the Endorsement of Stereotypical Group Traits

Social Group	Effect					
	Theory		Stereotype		Theory x Stereotype	
	β	p	β	p	β	p
Blacks ¹	-.11	.001*	-.33	<.0001*	-.04	.24
Hispanics ²	-.09	.02*	-.29	<.0001*	-.07	.05*
Asians ³	-.05	.20	-.25	<.0001*	-.08	.05*

Note: Higher scores on the theory of personality item represent stronger beliefs in the stability of personality. Higher scores on the mean stereotype endorsement measure represent stronger endorsement.
¹df = 612, ²df = 605, ³df = 598

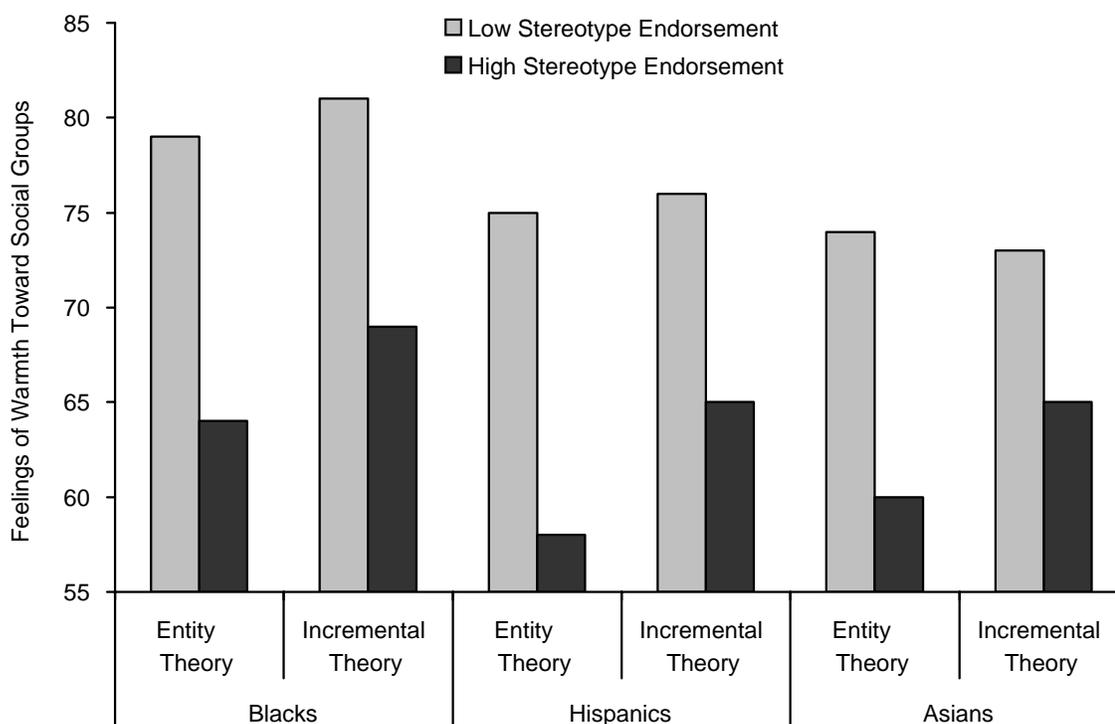


Figure 2: Feelings of warmth toward social groups as predicted by stereotype endorsement and theory of personality.

analyses described above did not alter any of the results presented. Furthermore, none of these other variables significantly influenced the relationship between participants' stereotype endorsement and their feelings of warmth toward any of the social groups examined.

In sum, the results reported in this section provide consistent evidence that the single theory of personality item adapted for the ANES has good construct validity and can replicate effects that have consistently been found in previous research with more elaborate measures (see Levy et al., 1998; Plaks, et al., 2001). As in previous studies, entity theorists made more extreme judgments about the traits possessed by members of certain social groups. Moreover, not only were entity theorists more likely to assign traits to others, these traits played a larger role in how entity theorists generally felt about these other individuals as well (cf. Chiu et al., 1997). The replications observed here are even more impressive when considering that participants' theory of personality was assessed nearly two years after their stereotype

endorsements and feelings toward social groups. Although people's theory of personality has been found to be largely stable across shorter periods of time (the one-month test-retest reliability was found to be .71; see Levy et al., 1998), the concurrent assessment of theory of personality and trait endorsement within the same testing session would decrease measurement error and could possibly reveal even stronger effects.

Influence of Theories of Personality on Political Beliefs and Actions

Having established some level of discriminant and construct validity for the theory of personality item in the 2006 pilot study, a final set of analyses was conducted to test how people's theory of personality influences their political impressions and voting behavior. First, to examine whether the trait judgment and favorability effects reported above for various social groups also extended to political figures, a series of trait judgment items was selected from the 2004 time series study. These items (V043117 – V043130) asked participants how well both President George W. Bush and Senator John Kerry were described by the traits *moral, provides strong leadership, really cares about people like you, knowledgeable, intelligent, dishonest, and can't make up his own mind*. In addition, a series of feeling thermometer ratings involving political figures, including Bush, Kerry, all of the congressional and senatorial candidates from the respondent's district or state, and other national political figures (see V043038-v043051 and V045043 – V045055), was also selected.

Simple correlations conducted between participants' theory of personality and either the 14 trait judgments or 21 feeling thermometer ratings did not reveal any significant effects. Further regression analyses that included simple and higher-order effects of participants' political party identification along with their theory of personality showed large effects of party identification, such that Democrats judged Kerry to possess more of the positive traits and less of the negative traits whereas Republicans judged Bush to possess more of the positive traits and less of the negative traits (all t 's > 9.0, p 's < .0001) and Democrats felt more warmly toward Democratic candidates and elected officials whereas Republicans felt more warmly toward

Republican candidates and elected officials (all t 's > 5.0, $p < .0001$), but only one trait rating and one feeling thermometer rating showed a main effect of theory of personality. Thus, little evidence was found that participants' theory of personality was associated with more generally polarized views of political figures or candidates.

Even if entity and incremental theorists do not differ in their trait judgments of and feelings toward political figures, however, they may still weight this information differently when considering their approval of and decision to vote for a particular candidate. That is, people who believe that personality is fixed may show a stronger correspondence between their trait judgments of a political figure and their liking for and support of that person than people who believe that personality is malleable (cf. Chiu et al., 1997; Levy et al., 1998). This possibility was investigated in several ways. First, tests were conducted of the interactive effects of either candidate trait ratings or feelings of warmth toward the candidates and theories of personality on people's liking of and preference for either candidate. Second, tests were conducted of these interactive effects on whether or not people acted upon their preferences and cast a vote for their preferred candidate. Once again, in all of these analyses, a significant interaction term in the regression model that involves participants theory of personality indicates that the relationship between people's trait or feeling ratings and their candidate preferences or voting behavior differs depending upon whether they hold an entity or incremental theory of personality (Aiken & West, 1991; Cohen et al., 2003). In all of the analyses reported below, additional tests were also run to examine whether identification as a Democrat or Republican further altered the influence of participants' theory of personality on their judgments of the candidates or voting behavior. Although political party identification had many main effects on candidate endorsement and voting behavior, it never further moderated any of the theory of personality effects described below and, therefore, is not discussed further.

The first set of interactive effects that were examined involved participants' liking for and support of George W. Bush and John Kerry in the 2004 presidential election. An initial analysis

focused on the total number of responses people offered when asked whether there was anything that they liked or disliked about Bush and Kerry (see V043007, V043009, V0430011 and V043013). The number of liked or disliked qualities for each candidate was submitted to separate hierarchical regressions in which main effects of these participants' theory of personality and mean trait ratings for each candidate (with ratings for negative traits reverse-scored, α 's = .86 - .89) were entered in the first step, followed by the theory of person x trait ratings interactions in the second step.

Tables 5 and 6 display the results, which reveal that participants' theory of personality did significantly influence the relationship between ratings of Kerry's traits and the number of qualities they reported disliking about him. To illustrate the pattern of this effect, the final regression equations were used to plot predicted values of how many disliked qualities participants offered calculated at 1 SD above and below the mean scores on both the theory of personality and trait rating measures (Aiken & West, 1991). These values are plotted in Figure 3. As can be seen, although more negative ratings of a candidate's traits were always strongly

Table 5
Hierarchical Regressions Predicting the Number of Liked and Disliked Qualities Reported for George W. Bush from Participants' Theory of Personality and Their Endorsement of Bush's Personality Traits

Effect	Quality			
	Likes ¹		Dislikes ²	
	β	p	β	p
Theory:	-.02	.59	.00	.80
Bush Trait Ratings	.59	<.0001*	-.64	<.0001*
Theory x Trait Ratings:	-.03	.43	-.06	.07

Note: Higher scores on the theory of personality item represent stronger beliefs in the stability of personality. Higher scores on the trait rating measure represent more positive impressions.

¹df = 638, ²df = 638

Table 6
Hierarchical Regressions Predicting the Number of Liked and Disliked

Qualities Reported for John Kerry from Participants' Theory of Personality and Their Endorsement of Kerry's Personality Traits

Effect	Quality			
	Likes ¹		Dislikes ²	
	β	p	β	p
Theory:	-.03	.33	.00	.98
Kerry Trait Ratings	.59	<.0001*	-.50	<.0001*
Theory x Trait Ratings:	-.03	.45	-.08	.03*

Note: Higher scores on the theory of personality item represent stronger beliefs in the stability of personality. Higher scores on the trait rating measure represent more positive impressions.

¹df = 603, ²df = 603

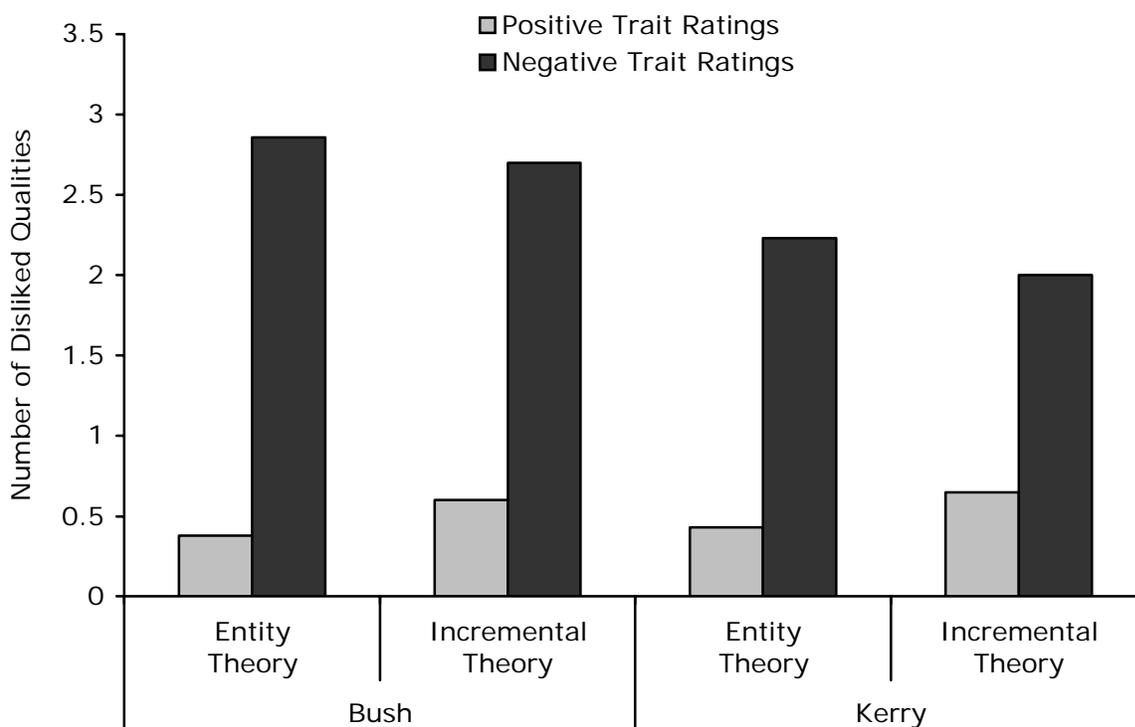


Figure 3: The number of qualities participants reported disliking about candidates by their ratings of the candidate's traits and theory of personality.

associated with a greater number of negative qualities being reported (t 's > 8, p 's < .0001), this effect was significantly (or near significantly) greater for entity theorists.

Repeating the above analyses and substituting participants' feeling thermometer ratings for their trait ratings in the regression model produced nearly identical results. As shown in Tables 7 and 8, participants' theory of personality significantly moderated the relationship between their feelings of warmth and the number of qualities they reported disliking about both Bush and Kerry. As can be seen in Figure 4, although lower feelings of warmth for either candidate were always strongly associated with a greater number of negative qualities being reported (t 's > 10, p 's < .0001), this effect was significantly greater for entity theorists.

A second analysis concerning participants' support of George W. Bush and John Kerry was conducted that involved participants' feelings that a particular candidate "represents [their] views reasonably well" (see V045249a). A coded variable representing whether participants chose Bush (coded as 1) or Kerry (coded as 0) as the candidate who represented their views was submitted to a hierarchical logistic regression, in which main effects of these participants'

Table 7

Hierarchical Regressions Predicting the Number of Liked and Disliked Qualities Reported for George W. Bush from Participants' Theory of Personality and Their Feelings of Warmth Toward Bush

Effect	Quality			
	Likes ¹		Dislikes ²	
	β	p	β	p
Theory:	-.04	.15	.02	.57
Bush Feeling-Ratings	.64	<.0001*	-.68	<.0001*
Theory x Feeling-Ratings:	-.03	.31	-.06	.04*

Note: Higher scores on the theory of personality item represent stronger beliefs in the stability of personality. Higher scores on the feeling measure represent more positive feelings.

¹df = 656, ²df = 656

Table 8

Hierarchical Regressions Predicting the Number of Liked and Disliked Qualities Reported for John Kerry from Participants' Theory of Personality and Their Feelings of Warmth Toward Kerry

Quality

Effect	Likes ¹		Dislikes ²	
	β	p	β	p
Theory:	.01	.81	-.02	.58
Kerry Feeling-Ratings	.59	<.0001*	-.56	<.0001*
Theory x Feeling-Ratings:	-.03	.28	-.08	.01*

Note: Higher scores on the theory of personality item represent stronger beliefs in the stability of personality. Higher scores on the feeling measure represent more positive feelings.

¹df = 650, ²df = 650

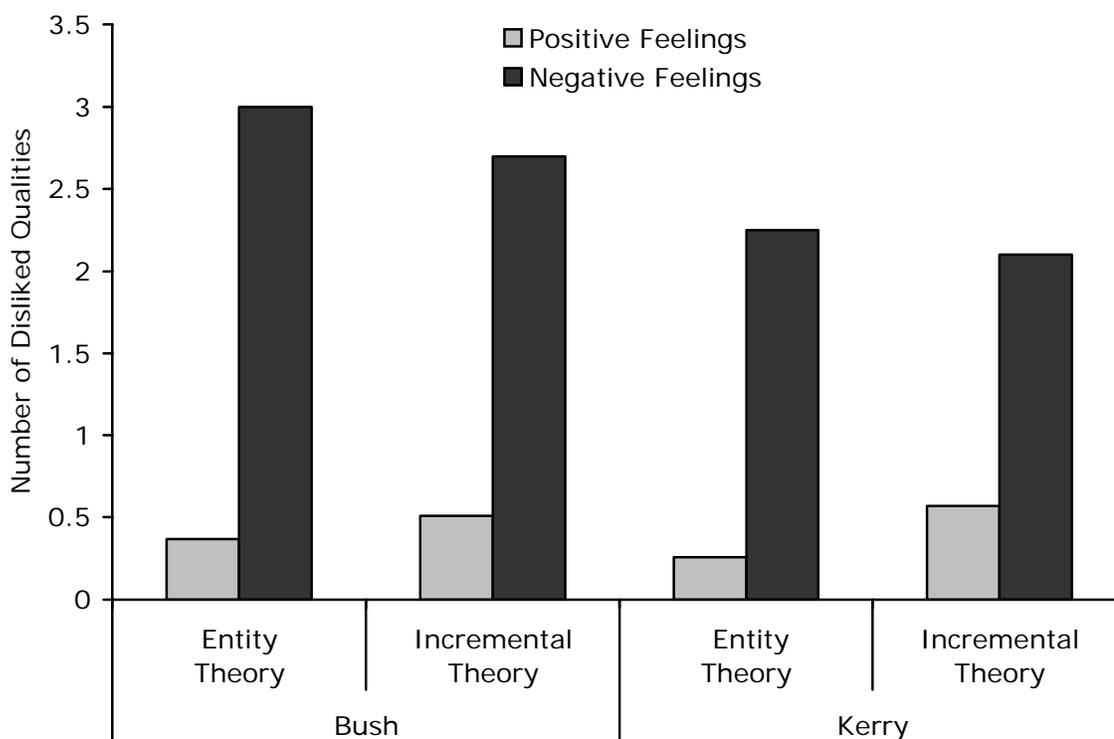


Figure 4: The number of qualities participants reported disliking about candidates by their feelings toward the candidate and theory of personality. theory of personality and mean trait ratings for each candidate (with ratings for negative traits reverse-scored) were entered in the first step, followed by the theory of person x trait ratings interactions in the second step.

Table 9 displays the results of these analyses, which reveal that participants' theory of personality significantly moderated the relationship between participants' ratings of Kerry's traits

and their choice of which candidate represented their views. To illustrate the pattern of this effect, the final regression equations were used to plot the predicted probability of selecting Bush or Kerry calculated at 1 SD above and below the mean scores on both the theory of personality and trait rating measures (Aiken & West, 1991). These values are plotted in Figure 5. As can be seen, although more positive ratings of Kerry's traits were always strongly associated with a higher probability of selecting him as the candidate who represented one's views ($\chi^2 > 22, p < .0001$), and more positive ratings of Bush's traits were always strongly associated with a higher

Table 9
Hierarchical Logistic Regression Predicting Participants' Choice of Whether George W. Bush or John Kerry Represents Their Views Well from Their Theory of Personality and Their Ratings of the Candidates' Traits

Effect ¹	Candidate Who Shares Views		
	B	χ^2	<i>p</i>
Theory	.30	1.59	.21
Bush Trait Ratings	3.3	57.4	<.0001*
Kerry Trait Ratings	-2.5	39.6	<.0001*
Theory x Bush Trait Ratings	.77	2.92	.09
Theory x Kerry Trait Ratings	-1.62	9.51	.002*

Note: Choosing Bush was coded as 1 and choosing Kerry was coded as 0. Higher scores on the theory of personality item represent stronger beliefs in the stability of personality. Higher scores on the trait rating measures represent more positive impressions.

¹df = 428

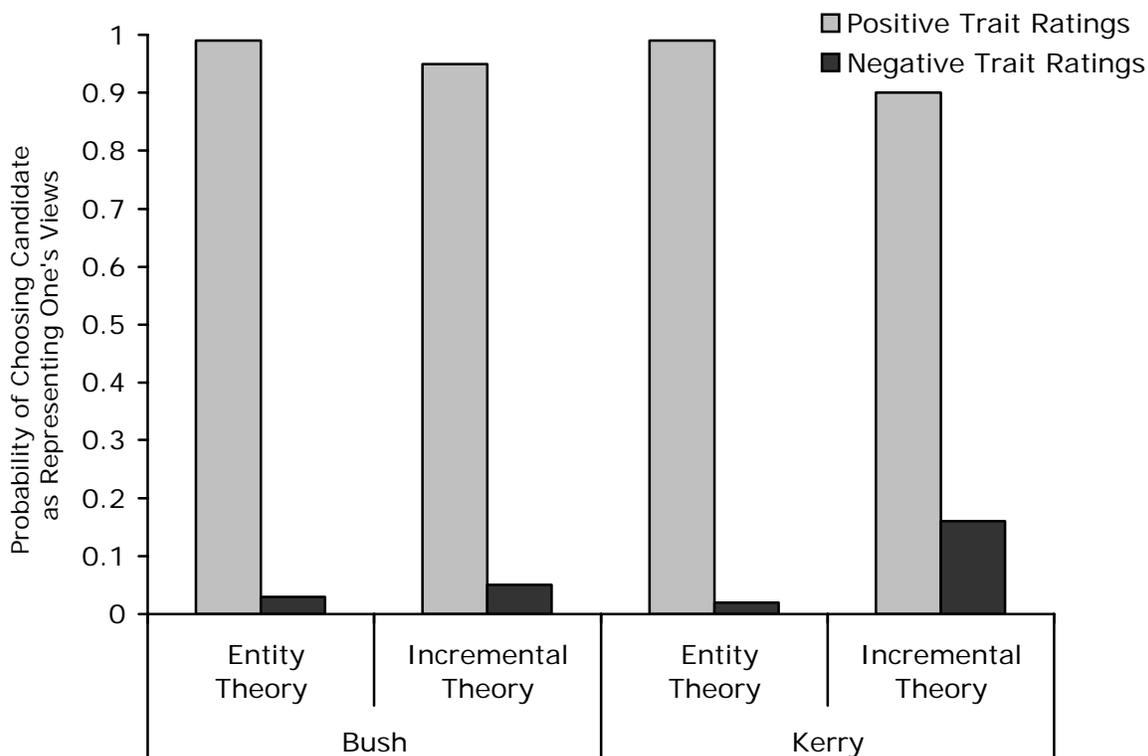


Figure 5: Probability of participants choosing a candidate as representing their values by their ratings of the candidate's traits and theory of personality

probability of selecting him as the candidate who represented one's views ($\chi^2 > 26, p < .0001$), this effect was significantly (or near significantly) greater for entity theorists.

Repeating the above analyses substituting participants' feeling thermometer ratings for their trait ratings in the logistic regression model produced nearly identical (if slightly weaker) results. As shown in Table 10, the moderation by participants' theory of personality of the relationship between their feelings of warmth toward Bush and Kerry their probability of selecting either candidate as representing their views was near significant. As can be seen in Figure 6, although greater feelings of warmth toward a candidate were always strongly associated with a greater probability of selecting this candidate as the person who represented one's views (χ^2 's $> 15, p$'s $< .0009$), this effect was near significantly greater for entity theorists.

A third analysis concerning participants' support of George W. Bush and John Kerry that

Hierarchical Logistic Regression Predicting Participants' Choice of Whether George W. Bush or John Kerry Represents Their Views Well from Their Theory of Personality and Their Feelings of Warmth Toward the Candidates

Effect ¹	Candidate Who Shares Views			
	B	χ^2	<i>p</i>	
Theory		.08	0.10	.75
Bush Feeling-Ratings		3.8	58.4	<.0001*
Kerry Feelings-Ratings		-2.2	32.55	<.0001*
Theory x Bush Feeling-Ratings		.97	3.56	.06
Theory x Kerry Feeling-Ratings		-.72	2.77	.10

Note: Choosing Bush was coded as 1 and choosing Kerry was coded as 0. Higher scores on the theory of personality item represent stronger beliefs in the stability of personality. Higher scores on the feeling measures represent more positive feelings.

¹df = 464

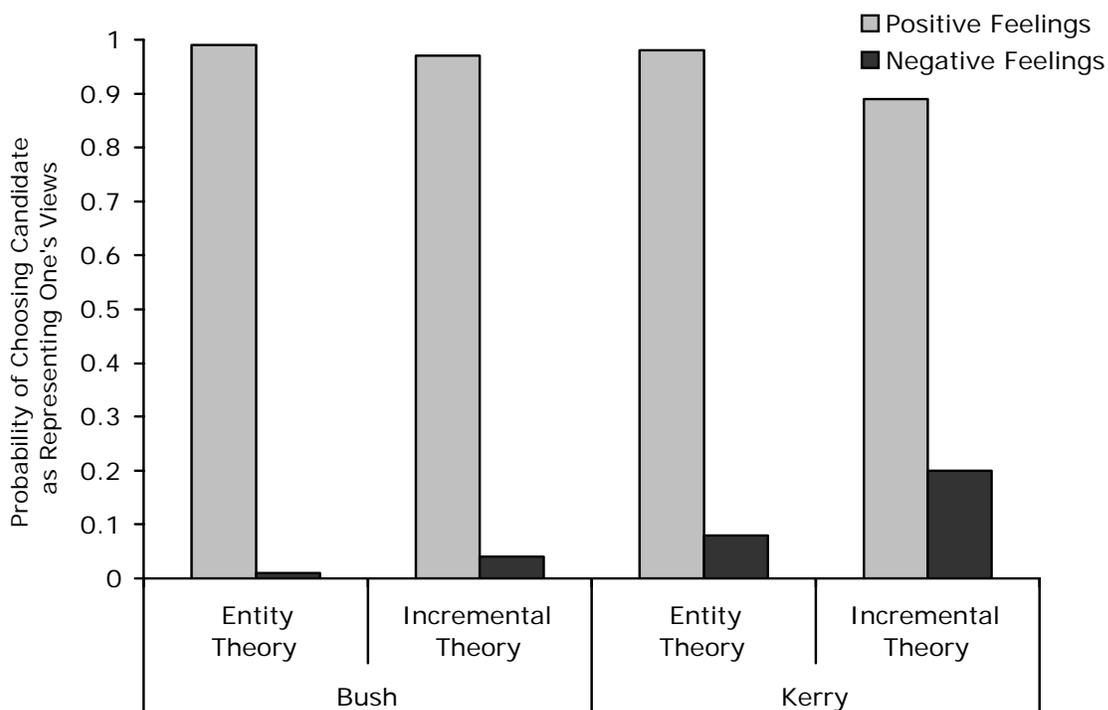


Figure 6: Probability of participants choosing a candidate as representing their values by their feelings toward the candidate and theory of personality was conducted involved the strength of participants' preference for Bush or Kerry in the 2004 presidential election. Among people who both reported that they intended to vote and indicated

knowing for whom they were going to vote, an scale was created from a question that asked whether their preference was “strong” or “not strong” (seeV042304). Higher ratings were coded as indicating a strong preference for Bush and lower ratings were coded as indicating a strong preference for Kerry. This scale was then submitted to two separate hierarchical regressions in which main effects of participants’ theory of personality, and either (a) mean trait ratings for each candidate (with ratings for negative traits reverse-scored) or (b) feelings of warmth toward each candidate were entered in the first step, followed by the theory of person x trait ratings or the theory of person x feeling ratings interactions in the second step, as appropriate.

Table 11 displays the results, which reveal that participants’ theory of personality significantly moderated the relationship between participants’ feelings toward Bush and the strength of their preference for their chosen candidate. To illustrate the pattern of this effect, the final regression equations were used to plot predicted values of the strength of participants’ preference at 1 SD above and below the mean scores on both the theory of personality and feeling thermometer measures (Aiken & West, 1991). These values are plotted in Figure 7. As can be seen, although more positive feelings toward Bush were always strongly associated with stronger preferences for him in the 2004 presidential election (t 's > 11, p 's < .0001), this effect was significantly greater for entity theorists than incremental theorists. Participants’ theory of personality did not influence the impact of ratings of candidate’s traits on preferences for that candidate.

Thus far, participants’ theory of personality has been found to interact with their judgments of and feelings toward George W. Bush and John Kerry in predicting how much they supported and preferred each candidate in the 2004 presidential election. Additional analyses were performed to examine whether this influence of participants’ theory of personality might extend to their voting behavior. The first analysis involved simply whether or not participants

Table 11
Hierarchical Regressions Predicting the Strength of Participants’ Preference for George W. Bush or John Kerry in the 2004 Presidential

Election from Their Theory of Personality and Their Feelings of Warmth Toward the Candidates

Effect ¹	Strength of Preference	
	β	p
Theory	.01	.73
Bush Feeling-Ratings	.54	<.0001*
Kerry Feeling-Ratings	-.30	<.0001*
Theory x Bush Feeling-Ratings	.06	.05*
Theory x Kerry Feeling-Ratings	.05	.10

Note: Higher scores on the preference measure indicate stronger preferences for Bush and lower scores indicate stronger preferences for Kerry. Higher scores on the theory of personality item represent stronger beliefs in the stability of personality. Higher scores on the feeling measures represent more positive feelings.

¹df = 600

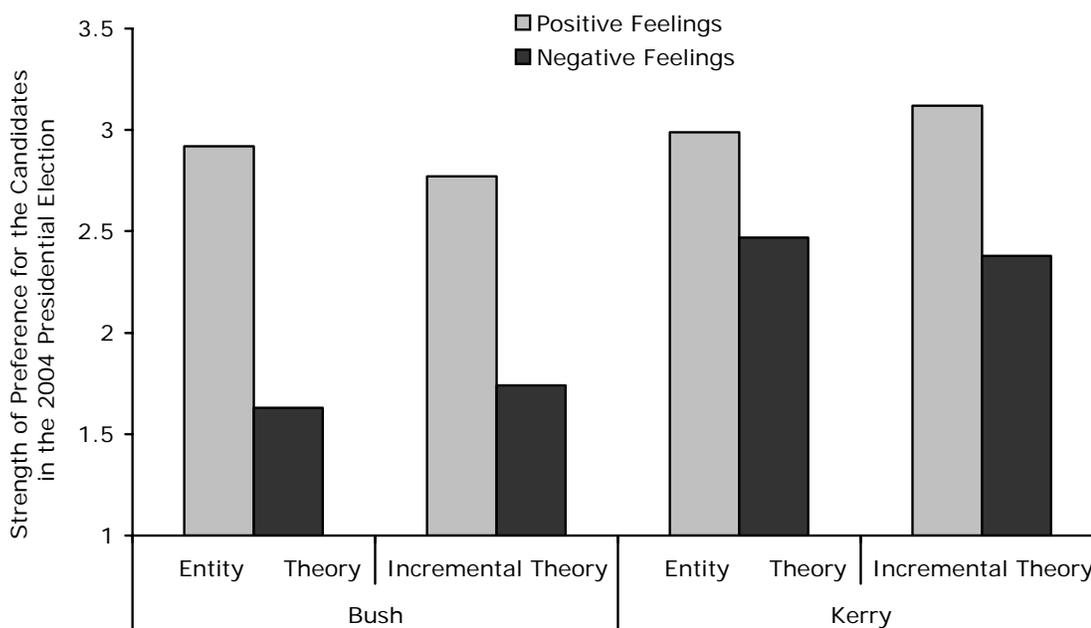


Figure 7: The strength of participants' preference for the candidates by their reported having cast a ballot in the election, regardless of whom they supported. A coded variable (adapted from V045018x) representing whether participants had voted (coded 1) or not (coded 0) was submitted to hierarchical logistic regressions in which main effects of participants'

theory of personality, and either (a) mean trait ratings for each candidate (with ratings for negative traits reverse-scored) or (b) feelings of warmth toward each candidate were entered in the first step, followed by the theory of person x trait ratings or the theory of person x feeling ratings interactions in the second step, as appropriate.

Table 12 displays the results, which reveal that participants' theory of personality significantly (or near significantly) moderated the relationship between their feelings toward Bush and Kerry and whether or not they voted. To illustrate the pattern of these effects, the final regression equations were used to plot the predicted probability of voting at 1 SD above and below the mean scores on both the theory of personality and feeling thermometer measures (Aiken & West, 1991). These values are plotted in Figure 8. As can be seen, for entity

Table 12
Hierarchical Logistic Regression Predicting whether Participants Voted in the 2004 Presidential Election from Their Theory of Personality and Their Feelings of Warmth Toward the Candidates

Effect ¹	Whether Participant Voted		
	B	χ^2	p
Theory	-.02	0.03	.87
Bush Feeling-Ratings	-.04	0.06	.81
Kerry Feeling-Ratings	.07	0.19	.67
Theory x Bush Feeling-Ratings	-.27	3.28	.07
Theory x Kerry Feeling-Ratings	-.30	4.28	.04*

Note: Voting was coded as 1 and not voting was coded as 0. Higher scores on the theory of personality item represent stronger belief in the stability of personality. Higher scores on the feeling measures represent more positive feelings.

¹df = 619

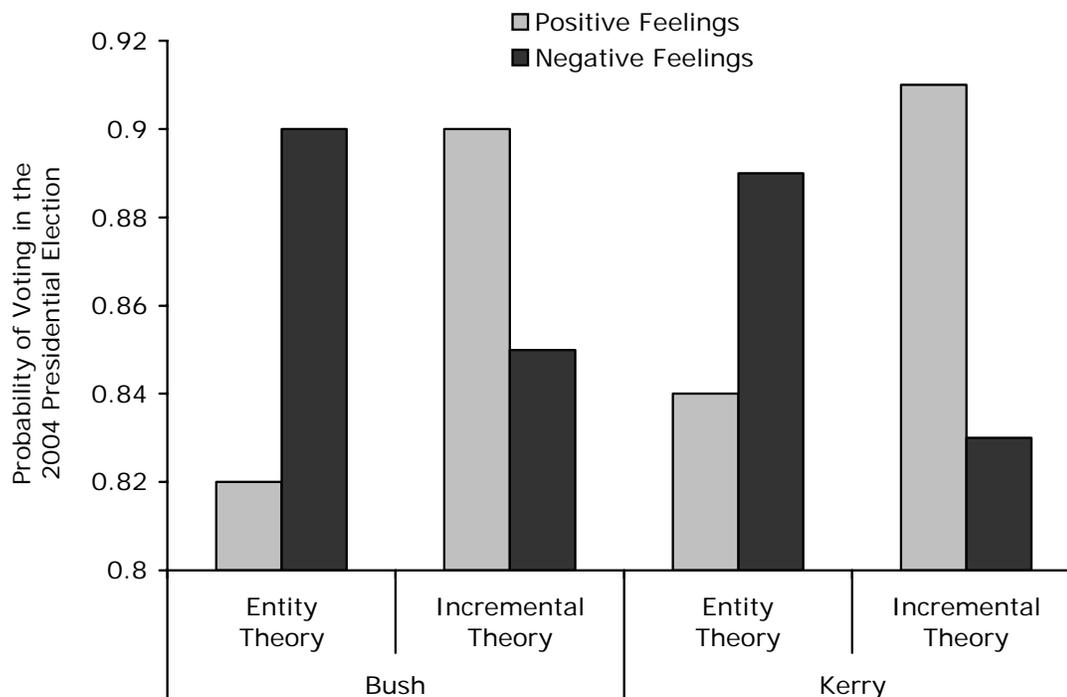


Figure 8: The probability that participants voted in the 2004 presidential election by their feelings toward the candidates and theory of personality.

theorists negative feelings about either Bush or Kerry were associated with a greater likelihood of voting, whereas for incremental theorists, positive feelings about either Bush or Kerry were associated with a greater likelihood of voting. However, none of these simple effects reached significance (χ^2 's < 3, p 's > .09). Participants' theory of personality did not influence the impact of ratings of candidate's traits on preferences for that candidate.

A second set of analyses examined whom those participants who did vote chose as their preferred candidate for president in the 2004 election (see V045026), and whether they selected the Democratic or Republican candidate in the races for the House of Representatives and the Senate (see V045032x and V045038x). A coded variable representing whether participants voted for George W. Bush (coded 1) or John Kerry (coded 0) was submitted to hierarchical logistic regressions in which main effects of participants' theory of personality, and either (a) mean trait ratings for each candidate (with ratings for negative traits reverse-scored) or (b) feelings of warmth toward each candidate were entered in the first step, followed by the theory

of person x trait ratings or the theory of person x feelings of warmth interactions in the second step, as appropriate. Because specific trait ratings for the congressional candidates were not available, coded variables representing whether participants voted for the Republican candidate (coded 1) or the Democratic candidate (coded 0) were submitted to hierarchical logistic regressions in which main effects of participants' theory of personality and their general feelings of warmth toward Congress as a whole (V045076) were entered in the first step followed by the theory of person x feelings of warmth interaction in the second step.

No significant interactions emerged concerning which candidate participants chose for President or for the Senate, but Table 13 displays the results for the candidate participants chose for the House of Representatives. Participants' theory of personality significantly moderated the relationship between their feelings toward Congress and whether they voted for a Republican or a Democrat. To illustrate the pattern of this effect, the final regression equation was used to plot the predicted probability of voting Republican at 1 SD above and below the mean scores on both the theory of personality and feeling thermometer measures

Table 13
Hierarchical Logistic Regression Predicting whether Participants Voted for A Republican or Democrat for the House of Representatives in the 2004 Election from Their Theory of Personality and Their Feelings of Warmth Toward Congress

Effect ¹	Party for whom Participant Voted			
	B	χ^2	<i>p</i>	
Theory		.13	1.69	.19
Congress Feeling-Ratings		.03	27.1	<.0001*
Theory x Congress Feeling-Ratings		..01	4.05	.04*

Note: Voting Republican was coded as 1 and voting Democrat was coded as 0.. Higher scores on the theory of personality item represent stronger belief in the stability of personality. Higher scores on the feeling measure represent more positive feelings.

¹df = 629

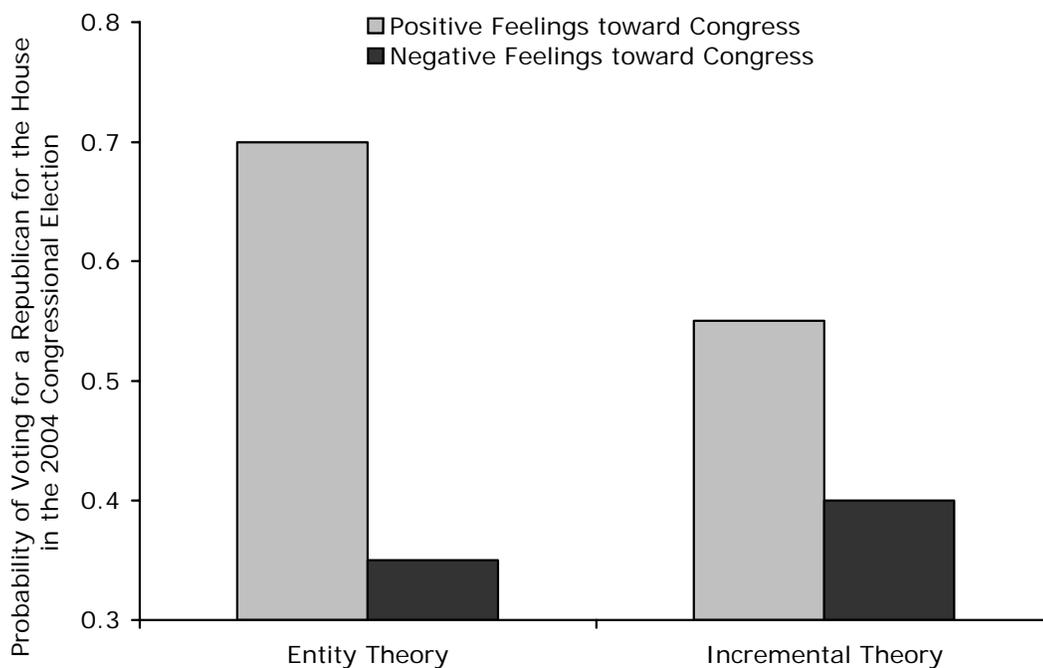


Figure 9: The probability that participants voted for a Republican instead of a Democrat in the 2004 congressional election by their feelings toward Congress and theory of personality

(Aiken & West, 1991). These values are plotted in Figure 9. As can be seen, although for all participants warmer feelings toward Congress were significantly associated with a greater likelihood of voting Republican (χ^2 's > 5.5, p 's < .02), the party in control of the House at the time, this effect was significantly greater for entity theorists.

A third and final set of analyses examined whether these effects of people's theory of personality on their voting behavior would also emerge in the 2006 election survey as well. The 2006 pilot study did not include any feeling thermometer ratings or specific trait ratings of members of Congress. Therefore, participants' 2004 reports of their feelings toward Congress were used as a proxy for their feelings in the 2006 election. Although it is likely that people's attitudes had shifted somewhat over those two years, some degree of attitude stability can be assumed, and the increased measurement error would only make it more difficult to detect any effects. This final set of analyses began with an examination of whether or not participants

reported having cast a ballot in the 2006 Congressional election, regardless of whom they supported (Mod26_2summ). A coded variable representing whether participants had voted (coded 1) or not (coded 0) was submitted to a hierarchical logistic regression in which main effects of participants' theory of personality and their feelings of warmth toward Congress were entered in the first step, followed by the theory of person x feelings of warmth interaction in the second step.

Table 14 displays the results, which reveal that participants' theory of personality significantly moderated the relationship between their feelings toward Congress and whether they voted in the 2006 election. To illustrate the pattern of this effect, the final regression equation was used to plot the predicted probability of voting at 1 SD above and below the mean scores on both the theory of personality and feeling thermometer measures (Aiken & West, 1991). These values are plotted in Figure 10. As can be seen, for entity theorists, negative feelings about Congress were marginally associated with a greater likelihood of voting (χ^2 (1, N=623) = 2.76, $p = .10$), whereas for incremental theorists, positive feelings about

Table 14
Hierarchical Logistic Regression Predicting whether Participants Voted in the 2006 Congressional Election from Their Theory of Personality and Their Feelings of Warmth Toward Congress

Effect ¹	Whether Participant Voted			
	B	χ^2	p	
Theory		.08	0.80	.37
Congress Feeling-Ratings		.03	0.11	.74
Theory x Congress Feeling-Ratings		-.25	5.91	.02*

Note: Voting was coded as 1 and not voting was coded as 0. Higher scores on the theory of personality item represent stronger belief in the stability of personality. Higher scores on the feeling measure represent more positive feelings.

¹df = 629

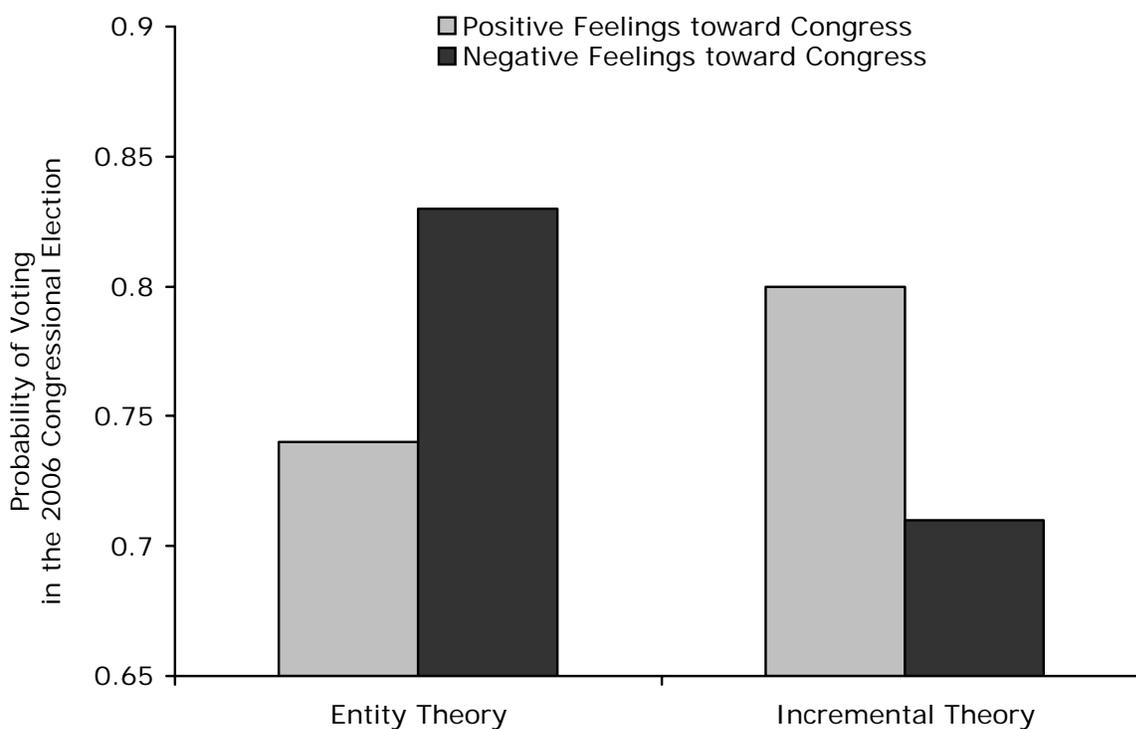


Figure 10: The probability that participants voted in the 2006 congressional election by their feelings toward Congress and theory of personality

Congress were marginally associated with a greater likelihood of voting ($\chi^2 (1, N=623) = 3.41, p = .06$). This is the same pattern of effects as was observed in the relationship between people's feelings of warmth toward both presidential candidates and their likelihood of voting in the 2004 election, described above.

Additional analyses further examined whether participants selected the Democratic or Republican candidate in the races for the House of Representatives and the Senate in the 2006 election (Mod26_15 and Mod26_18). Coded variables representing whether participants voted for the Republican candidate (coded 1) or the Democratic candidate (coded 0) were submitted to hierarchical logistic regressions in which main effects of participants' theory of personality and their general feelings of warmth toward Congress as a whole (V045076) were entered in the first step followed by the theory of person x feelings of warmth in the second step.

No significant interactions emerged concerning which candidate participants chose for the House, but Table 15 displays the results for the candidate participants chose for the Senate. Participants' theory of personality significantly moderated the relationship between their feelings toward Congress and whether they voted for a Republican or a Democrat. To illustrate these moderation effects, the final regression equations were used to plot the predicted probability of voting for a Republican at 1 SD above and below the mean scores on both the theory of personality and feeling thermometer measures (Aiken & West, 1991). These values are plotted in Figure 11. As can be seen, whereas for entity theorists warmer feelings toward Congress were strongly associated with a greater likelihood of voting for Republicans ($\chi^2 (1, N = 309) = 13.3, p = .0003$), the party in control of the Senate at the time, for incremental theorists feelings of warmth were not significantly associated with an increased likelihood for voting for either party ($\chi^2 (1, N = 309) = 1.07, p = .30$).

Table 15
Hierarchical Logistic Regression Predicting Whether Participants Voted for A Republican or Democrat for the Senate in the 2006 Congressional Election from Their Theory of Personality and Their Feelings of Warmth Toward Congress

Effect ¹	Party for whom Participant Voted		
	B	χ^2	p
Theory	.12	0.98	.32
Congress Feeling-Ratings	.03	11.6	.0007*
Theory x Congress Feeling-Ratings	.02	4.8	.03*

Note: Voting Republican was coded as 1 and voting Democrat was coded as 0. Higher scores on the theory of personality item represent stronger belief in the stability of personality. Higher scores on the feeling measure represent more positive feelings.

¹df = 305

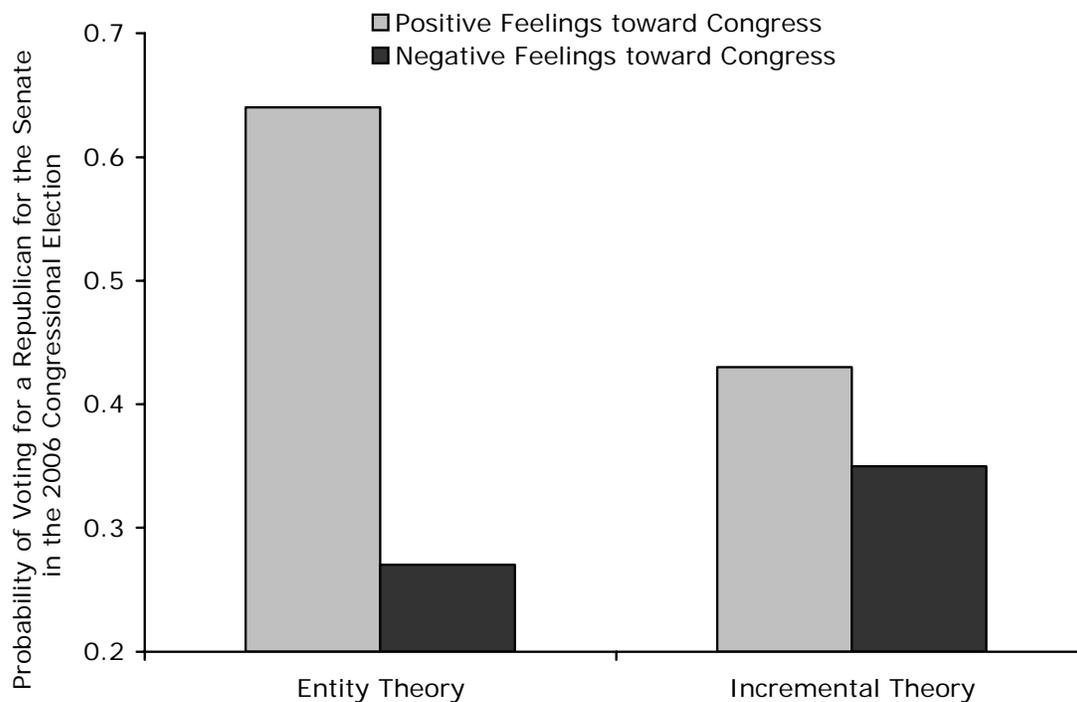


Figure 11: The probability that participants voted for a Republican instead of a Democrat in the 2006 congressional election by their feelings toward Congress and theory of personality

Discussion

The primary objective of the analyses presented here was to test hypotheses concerning how people's beliefs about the stability or malleability of personality (see Dweck, 1999; Molden & Dweck, 2006) might influence (a) their judgments and evaluations of political candidates' personality, and (b) the role such judgments and evaluations play in their decisions to support and vote for these candidates. After an initial set of analyses provided evidence that the question assessing theories of personality in the ANES 2006 pilot study (Mod1_1) showed acceptable psychometric properties, possessed good discriminant validity, and adequately replicated results from previous research using a more elaborate measure (see Levy, et al., 1998; Plaks, et al., 2001; Plaks, et al., 2005), the main set of analyses provided little support for the first hypothesis, but some support for the second hypothesis. That is although, participants' beliefs about personality did not generally influence the judgments that they made about

candidates' personality traits or how warmly they felt toward the candidates, these beliefs did influence how personality judgments and feelings of warmth translated into preferences for one candidate over another and whether such preferences were supported by voting behavior.

As compared to people who held the theory that personality can incrementally grow and develop, i.e., incremental theorists, people who held the theory that personality is a fixed and stable entity, i.e., entity theorists, showed a stronger correlation between either their impressions of a candidate's personality traits or their feelings of warmth toward a candidate and a variety of political attitudes and behaviors. For entity theorists, judgments of both the number of qualities they disliked about each of the 2004 presidential candidates and which candidate best represented their values were more strongly related to both their trait impressions and feelings of warmth than was the case for incremental theorists. Furthermore, for entity theorists, feelings of warmth toward the 2004 presidential candidates were also more strongly related to how much they reported preferring one candidate over another than was the case for incremental theorists. Finally, for entity theorists, feelings of warmth toward Congress as a whole were more strongly related to their likelihood of voting for the majority party (i.e., the Republican candidate) than was the case for incremental theorists in both contests for the House of Representatives in 2004 and the race for the Senate in 2006.

These findings are all highly consistent with past research showing that, because entity theorists believe that people's personality and character is relatively stable, they give greater weight to character information in their judgments and decisions than do incremental theorists (see Dweck, 1999; Molden & Dweck, 2006; Levy et al., 1999). Thus entity theorists do appear to be more likely to be "character voters" who are swayed by information about the personal attributes of whomever is running for office in contrast to this person's favored policies or platform. In future research it could be fruitful to directly examine whether entity theorists are indeed more swayed than incremental theorists by political advertising that either exalts or disparages a candidate's character.

There were, however, two additional findings concerning people's theory of personality that fit a somewhat different pattern. In both the 2004 and 2006 election, entity theorists were more likely to have voted the more negatively (i.e., less warm) they felt toward the presidential candidates or Congress as whole, whereas incremental theorists were more likely to have voted the more positively they felt toward the presidential candidates or Congress as a whole. Much research has shown that negative information generally has a stronger influence than positive information on attitudes and behavior (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Thus, if entity theorists are more concerned that someone with the appropriate character is elected, they may be relatively more inspired to vote to the extent to which they feel the need to prevent the election of a candidate who they see as the wrong person for the job. However, if incremental theorists are more concerned that someone who can adapt to changing circumstances and grow with the requirements of the office is elected, they may instead be relatively more inspired to vote to the extent to which they have positive feelings that this growth is possible. This is, of course, a highly speculative explanation that needs to be tested further, but it could have important implications. In a race where negative campaigning becomes generally prevalent, more entity theorists may end up at the polls, and may then be more likely to support an established incumbent toward whom they have a long history warm feelings.

Despite the general promise of these findings, there were some significant limitations. Although the interactive effects of people's theory of personality were generally consistent across a variety of measures and were conceptually replicated several times within this data set, these effects were not always particularly strong, nor did they always appear where expected. For example, although entity theorists did show a stronger association than incremental theorists between how warmly they felt toward the candidates or the majority party and how they chose to vote in a few races, this was not the case in others. Also, in some cases entity theorists' judgments and feelings about one candidate were more associated with their

support of that candidate than were incremental theorists', but this was not the case for the other candidate.

As mentioned earlier, one likely contributing factor to these limitations in the results is the increased measurement error that is introduced by analyzing responses from participants that were assessed two years apart. In all analyses, either participants' theory of personality or their general feelings toward Congress was measured at a different time point than the primary judgment or outcome that was examined. Despite some degree of stability that would be expected in these attitude and belief measures, this separation in time greatly attenuates the power of the analyses to detect smaller, but reliable effects. Therefore, that so many consistent results did appear may in fact indicate a robustness of these effects in the face of considerable measurement error. Those results that were found suggest that it could be valuable to include the theory of personality item in future ANES panel and time series studies so that the present findings could perhaps be replicated and extended when the theories are measured concurrently with people's candidate judgments and voting decisions.

To conclude, people's theory of personality was found to have some important influences on what variables determine their preferences for and support of different political candidates. For entity theorists who believe that personality is stable, character judgments played a more prominent role in their political evaluations and decisions than was the case for incremental theorists who believe that personality is malleable. Future research should more thoroughly explore how these theories of personality may influence who at election time pays more attention to personality and who pays more attention to policy.

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