Affective Intelligence or Personality?
State vs. Trait Influences on Citizens' Use of Political Information

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Employing a specially designed survey experiment with a large sample size and extensive measurement batteries, we examine and contrast the roles played by personality traits and emotional states in shaping political attention, openness to new ideas, and an inclination toward cooperation. Of particular concern is the possibility that the evident emotional effects on citizens' information processing might be a proxy for underlying and unexamined personality traits. The study utilizes a simulated news story on terrorist threats and assesses emotional reactions and choices about political attention, steadfastness of views, and an inclination toward compromise. We find that extant personality traits do play a role in patterns of political response, but controlling for those effects does not reduce or reverse the predicted emotional state effects predicted by Affective Intelligence Theory.

That people use their emotional systems to make sense of the surrounding political world is not exactly a controversial observation. In the past few years we have put forward a particular model, and some supporting evidence for how that dynamic might work, as a set of postulates we call Affective Intelligence Theory (Marcus and MacKuen 1993; Marcus, Neuman and MacKuen 2000, Marcus 2002). To our delight the model has attracted some attention and some appropriate controversy as colleagues raise questions and poke at the data to make sure we have this right (Redlawsk, Civettini and Lau 2007; Neuman et al. 2007; Ladd & Lenz 2008; Marcus et al. 2011). This paper addresses another alternative account: personality dispositions drive the "affective intelligence" results. Briefly, the notion is that the empirical findings we have used to validate affective intelligence could be spurious: the evidence might be driven by stable individual dispositions associated with personality rather than by contemporaneous affective processes. Of course, a third view accepts and incorporates both state and trait processes. As we shall see, personality *traits* and emotional *states* are not exclusive alternatives but instead work together. We here begin to explore their joint contributions.

We now know that individual differences affect how people deal with the flow of political information. For more than a half century, the scientific literature has confirmed dramatic heterogeneity in the public: some people pay a lot of attention to the political world and understand a great deal while others do not; some people readily identify their own interests and their preferences for government policy while other do not; some people develop psychological identifications with political parties, political actors, ideological labels and other political symbols while others do not; and so forth. All of these factors affect the quality of citizenship and the nature of contemporary democracy.

But a more fundamental analytic exists, one that is largely exogenous to the political system, and that is personality. People obviously differ in their individual personalities and how they deal with the world in general. We expect that personality factors might well shape how people handle politics.

The good news is that personality psychologists have, in the last generation, developed robust empirical representations of personality that lend themselves to the study of politics. In this investigation, we employ two conceptions of personality. The first, the "Need for Cognition" (Cacioppo and Petty 1982; Cacioppo, Petty and Kao 1984) assesses the inclination and ability of individuals to do cognitive work. This personality trait is especially relevant for affective intelligence.[1] And second, we use the broad five dimensional assessment of an individual's overall personality—commonly termed the "Big Five"—to capture traits that range far beyond cognition. This five factor model demonstrably characterizes people's personalities rather well in a low dimensional space. (For a history of

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[1] Need for Cognition, or cognitive capacity, offers a compelling alternative to the linkage we assign to anxiety as the state stimulus for engaging in attention and deliberation. People who enjoy and frequently deal with symbolic information will engage with political stimuli, seek more information, and enjoy the give and take of political debate.

the measures, see Digman 1990.) The five factors are robust over time, correspond between individual self-assessment and others' assessments, and appear to be common across nations and cultures. (For more on the five factor model and political psychology, see Mondak and Halperin 2008; and Mondak et al 2010.)

In this paper, we present an initial consideration of how personality informs our understanding of affective intelligence. Using a large-N survey experiment, one designed to assess the joint impact of personality and emotion, we present evidence on three related matters. First, we examine how personality traits shape people's political emotions and how they affect key features of citizen psychology. Second, we ask whether the extant empirical support for affective intelligence might be entirely spurious. It is entirely plausible that personality governs both individuals' emotional reactions to the world and the way that they deal with political information—and that the apparent affective intelligence connection is produced by heretofore unexamined personality characteristics. Finally, we examine the possibility that personality shapes the affective intelligence response. While current theory treats everyone as having the same emotional subsystems, we might well expect individual differences along this line.

The empirical work that we report here suggests three conclusions. First, personality proves important in how it affects political emotions and citizenship orientations. Next, the operation of affective intelligence stands up to the challenge that its supporting evidence might be spurious—people do use their emotional responses to guide their approach to political information. And finally, personality may shape the ways that affective intelligence operates but the evidence indicates that its conditioning effect is not dramatic but instead subtle in its operation.

Some Theoretical Background

The theory of affective intelligence arises from the work of neurophysiologists and neuropsychologists.[2] It posits the existence of two subsystems: one that codes the individual's dispositions toward the outside world and governs habitual actions, and the second that monitors the outside environment and indicates when an individual needs to interrupt those habitual actions and instead focus attention on what is happening. The two neurological subsystems are often experienced as emotions by individuals; the dispositional system is felt mainly in terms of enthusiasm and aversion (sometimes anger) while the alarm system is most often experienced as fear or anxiety. The basic idea is that most people most of the time deal with the world, and the political world, in habitual ways—dealing with rewarding or punishing information with standard operating procedures. Occasionally, however, the incoming information suggests signals that those standard operating procedures will not suffice and that the environment calls for active scrutiny and consideration.

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[2] Our early work relied heavily on the ideas of Jeffrey Gray (1987). The fields of neurophysiology and neuropsychology have, of course, seen considerable movement during the last quarter century.

Thus, affective intelligence suggests that when people encounter political information that is either pleasing or displeasing, as long as it is familiar, then they will typically rely on habitual responses. On the other hand, when they experience anxiety, they may turn to a fuller consideration of the matter and engage their focused intelligence to make sense of the world and decide what to do about it.

This theory resembles other work in psychology and political psychology and has found some support in its application to political science. Our original empirical work rested mainly on survey research, using both purpose-built surveys as well as existing surveys of the ANES and others. Making causal inferences from survey data is, of course, difficult but, as far as they went, the data supported the affective intelligence hypotheses. Subsequently, we and others have turned to experimental research techniques to better assess both the causal nature and the operation of the processes (the early decisive work was Brader 2005, 2006). In recent years, others have taken this initial idea and begun to develop rich and promising lies of theoretical inquiry. [3]

One extension that we have pursued suggests that emotional responses shape citizen psychology beyond the original attention mechanism. In particular, we have found that emotional responses affect a commitment to one's own ideas and a resistance to others views—steadfastness. Emotional states also alter people's willingness to seek compromise and find cooperative solutions to political problems. Together, emotional responses appear to influence the inclination of individuals, and thus the polity, to seek common ground or to polarize into opposing camps (MacKuen, Wolak, Keele, and Marcus 2010).

While the weight and variation of this work supports the affective intelligence model as originally put forward, we welcome the exercise of increasingly stringent tests to clarify that the inferences are not spurious and that the model itself is not in error and subject to misspecification. In this paper we address the hypothesis that personality drives the evidence.

The argument goes something like this. We have reason to believe that people's personalities shape their emotional response to stimuli. In the case of a news story some people (say neurotics) are more likely to be emotional in their reaction and be much quicker to say that the news story makes them feel anxious or angry. Those same people may, by dint of their personal traits, be more likely to seek further information or reject compromise or ignore the views of others. Were this the case, the observed empirical linkage between emotional responses to the news and subsequent behavior could be due to extant personality *traits,* throwing into question the operation of the *state* variables—the emotional reactions to political stimuli.

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[3] A large number of colleagues have done a great deal of innovative work in this area and expanded our understanding considerably. For some of the current work, see Brader, Valentino, and Suhay 2008; Gadarian 2007; Gadarian and Albertson 2009; Huddy et al 2005; Huddy, Feldman, and Cassese 2007; Just, Crigler and Belt 2007; Ladd and Lenz 2008; Miller 2007; Redlawsk, Civiti and Lau 2007; Steenbergen and Ellis 2006; Valentino, Hutchings and White 2002; Valentino et al 2008 and 2009.

Figure 1 illustrates the problem. The top half of the diagram suggests that personality is likely to mold both emotional responses to the external world and also orientations toward citizenship. These two theoretical relationships might plausibly generate an empirical correlation between those emotional states and citizenship orientations…one that is not genuinely causal in nature but instead spurious, due to personality's impact. On the other hand, affective intelligence expects that the external environmental states (in addition to personality traits) shape those emotional responses that, in turn, substantively and importantly lead to citizenship orientations. This view is shown in the bottom panel. In this depiction, long-term personality dispositions and the dynamic affective intelligence systems link emotions to citizenship orientations. The first question is whether the data continue to support our previous inferences about affective intelligence after we conceptually and statistically hold personality traits constant. If both components are shown to exist, then we may explore the more subtle relationships between personality and affective intelligence, between trait and state.

The Experiment

In the late spring of 2010, we conducted a large scale survey experiment to assess the role of personality in the operation of affective intelligence. This special purpose design has two main features that will prove helpful in our ability to draw our inferences. First, our experiment includes 1545 participants who represent a broad cross-section of American adults.[4] We know that we want to be able to assess with some precision personality's importance and its operation. Given the nature of survey measurement error and individual differences in both personality and other background factors, we anticipated that we would need the enhanced statistical power of a large-N study. Equally important, we dedicated a large portion of the survey experiment (in which time is a costly factor) to the measurement of individual personality differences. Our measure of Need for Cognition comprises six items in order to eliminate as much random measurement error as possible. And more comprehensively, we included the full Big Five Inventory (BFI, John 1999) battery which incorporates forty-four items, or eight to ten measures for each of the five personality factors. (Other surveys, including previous work we conducted during this overall project, often rely on as few as ten items to measure all five personality components. Even ten items can represent a substantial portion of an interview.) While one must always trade off measurement error against the cost of the survey instrument (and the pa-

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[4] We employed Knowledge Networks to conduct this survey experiment. Their normal battery of participants is a volunteer panel whose members typically complete two or three (mostly commercial) surveys a month. We limit our attention to those with computer and internet access (rather than web TV) and thus our sample is not a representative sample of all Americans. But the range of participants is substantially greater than might be obtained in the laboratory.

tience of the participant), for this particular purpose we committed ourselves to two lengthy batteries in order to gain as much precision as possible.[5]

The experiment itself is simple. The participants connect to an internet server and we quickly show a news story and ask for their reactions. We first obtain emotional reactions via a non-verbal "slider" format[6] and then turn to more direct political consequences predicted by affective intelligence. Using multiple item batteries, we assess the participants' inclination to seek further information, their certainty about their own views, and finally their willingness to consider compromise solutions to particular issues. It is after the main experiment's treatment and assessment that we turn to measures of the individuals' personalities and other background components.[7]

In this case, the news story is a specially written story about terrorism. One version is good news about how the government had progressed in identifying potential terrorists and their actions, a second tells the tale of Osama bin-Laden and Al-Qaeda and their recent activities in the United States, and the third describes the increasing threat of sleeper cells of potential terrorists and their overseas training efforts. The three are designed to elicit the primary reactions of enthusiasm, aversion, and anxiety—in that order.[8]

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[5] Participants in laboratory experiments, or other convenience subjects, might be asked to fill out much longer batteries of more than a hundred items. We have not been able to go that far in time committed soley to measurement. That being noted, our going to 44 items represents a serious effort in a "time-is-money" survey format aimed at a national sample.

[6] We have found the not-so-very verbal slider format, designed for internet surveys, to provide a slightly better reading on emotional responses than measuring emotion with a Likert scale. (For more discussion on measurement, see Marcus, Neuman and MacKuen 2010).

[7] Though personality is somewhat sensitive to context in terms of how it is manifested in thought and action, most psychologists consider personality traits themselves to be very stable over time and across contexts. Thus, it should not be problematic to measure need for cognition or the Big Five after the treatment in the web experiment. If personality consists of durable traits, then respondent answers to the personality batteries should be similar whether those trait batteries come before or after exposure to the news story. Further, placing the personality items after the emotion questions is of little concern because of personality stability and the hypothesized relationships in this research, that is that personality should influence emotions and not the reverse.

[8] Over the past several years we have conducted similar "base" experiments with issues such as Terrorism, Immigration, Gay Marriage, the Economy, and Food Safety. We choose Terrorism for this concentration because we suspect that all participants have a similar stance toward terrorism: they are against it. Our previous work indicates that this issue works as well as the others in generating both emotional reactions and the affective intelligence response. The stories were crafted using material from real news stories and designed to appear similar in tone and format to those real news stories.

Personality and Emotion

The first task is an assessment of the significance of trait variables in the fundamental cognitive dynamics of Affective Intelligence Theory. We have seen strong evidence in recent reports that such linkages exist: different dimensions of personality are associated with political responses in ways that make sense (Carney et al 2008; Mondak and Halperin 2008; Mondak et al 2010; and Gerber et al 2010).

Here we begin by examining whether our personality measures are associated with the experimentally induced emotional response. That is, we look at the extent to which the experimental participants say that they are enthusiastic or angry or anxious after reading the experimental news story.[9]

The first look is at the theoretically-central Need for Cognition. We ask whether those more interested and competent at thinking about abstractions have different emotional reactions to the news. There is every reason to expect so.[10] And the evidence confirms those expectations. In Table 1 we see three regressions: each emotional reaction to the news stories regressed on the personality trait of Need for Cognition (as well as a dummy variable for the stories' content). In the first column, we see that Enthusiasm is not at all driven by personality (-.03, $p > .05$) but instead by the substantive content of the experimental stimuli (-.28 and -.29 for the aversive and anxiety stimuli respectively). However, the next two columns strongly confirm the expectation: both Aversion and Anxiety are strongly associated with Need for Cognition (-.12 and -.17). Those with greater ability to process the news, and presumably greater experience with the news, are less likely to react with anger or fear. Personality matters.

We then turn to a broader personality portrait where we can ask more general questions. For example: are Extraverts more sunny or Neurotics more gloomy or others more or less likely to express any emotional response during the experiment—without regard to the particular stimulus to which they were exposed?

Again, the short answer is yes. Table 2 shows regressions of each of the emotional responses on the participants' Big Five personality traits. Enthusiasm is positively associated with Extraversion (0.08) and negatively with Neuroticism (-0.07). Even with 1545 observations and eight item scales, however, these relationships are barely discernible.

The pattern is crisper for Aversion and Anxiety. Here most coefficients are statistically sharp. For these negative emotions, Neuroticism stands out as the dominant predictor, as we might expect from the theoretical definition and construction of the Neuroticism scale. One can make an argument—though nothing so very compelling—for the negative

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[9] Enthusiasm, Aversion (Anger), and Anxiety are scales made up of pre-tested emotional markers that fit a three-dimensional factor analytic structure.

[10] Emotionality, in particular, seems characteristic of people who are chronically more engaged with politics. (Miller 2011.)

impact of Openness to Experience and Conscientious and, perhaps, Agreeableness. Without prior theory, however, all we can confidently say is that personality is markedly associated with the experience of Aversion and Anxiety and, to some extent, Enthusiasm. Again, emotional responses are shaped by personality traits.

We can see more substantive implications by breaking down our tests to two experimental conditions: the positive Enthusiasm story and the two negative Aversion and Anxiety flavored stories. Tables 3 and 4 show parallel analyses. In each table, the first column shows that there is very little at work here in terms of an Enthusiastic response to the positive story. Personality is not even weakly evident. In contrast, the second and third columns reveal clear personality driven responses, for both Aversion and Anxiety, when the story is negative in tone. At the edge of statistical significance, we see that personality matters, and it matters most when the stimuli are appropriate. In a manner consistent with contemporary personality psychology, the effects of personality are contingent on the contemporary state.[11]

All considered, taking into account the lack of strong theory, it appears that personality does condition our individuals' emotional responses to the news. Individual differences, probably rooted at least in part in genetics, appear to be important.

Personality and Citizenship

Affective Intelligence Theory suggests two implications for how political judgment operates in emotional terms. The first is now well known. The theory predicts that those experiencing aversion to the news will be less likely to seek more information while those whose anxiety emotions start ringing will stop and search for more information. The second, less widely tested, implication of an emotional response is that the type of citizenship that people choose is shaped by their emotional state. People struck by aversion are likely to opt for a more "partisan" citizenship that focuses on maintaining its focus and defending itself from alternative arguments. In contrast, people whose anxiety system is activated will become more "deliberative." They will be open to new ideas and seek cooperative solutions to political conflict. Our measurement scales here are indicated as Attention, Steadfastness, and Cooperation respectively.

Again, the first examination is the simple unconditional one. The model is that individuals' personality traits will lead to a given inclination to seek information, to exhibit steadfastness, or an openness to cooperation (or the reverse). Table 5 provides the story for Need for Cognition. Each column regresses Attention, Steadfastness, and Cooperation (respectively) on Need for Cognition. In each case, we see a statistically robust impact of personality on citizenship. People with higher cognitive skills are much more likely be

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[11] Understanding the importance of situations for personality traits is a major line of contemporary research. (For an early discussion, see Mischel and Shoda 1995.)

attentive (as one might expect), somewhat less likely to resist others views, and more likely to entertain a cooperative solution to the issue. All this makes easy sense.

When we turn to the broader Big Five personality analysis, in Table 6 we see further evidence that personality matters for citizenship. For Attention—the inclination to seek further information—the only personality trait that stands out is Openness to Experience. As with Neuroticism and negative emotions, finding that Openness to Experience leads to information search confirms the definition and construction of the personality variable. (The original formulations of the trait were typically termed "intellect" or "curiosity" a half-century ago. And Openness to Experience is strongly correlated with Need for Cognition. In one sense, getting this almost tautological result does very nicely to confirm the plausibility of our tests.) In addition, though small in magnitude and of marginal statistical power, we see hints of Extraversion and Neuroticism operating here.

The next two columns reveal different patterns. Steadfastness (in column 2) is clearly positively associated with Conscientiousness and negatively with Openness to Experience. Both make easy psychological sense. Finally, Cooperation (column 3) is even more clearly influenced by personality. Here Agreeableness (almost by psychological definition), Neuroticism and Openness to Experience are all positively associated with a willingness to take others views into account in seeking solutions to terrorism.

Thus we can confirm that personality matters for the types of citizenship that people practice. By their very nature, some individuals more than others are inclined toward information searching, toward steadfastness, and toward cooperation. And the particular ways that the specific personality traits operate here seem fully in accord with standard psychological expectations—nothing here will surprise a personality psychologist. All seems in accord with a theoretical understanding that political behavior is, at least in part, trait-determined.

Personality and Affective Intelligence

We now know that the "spuriousness" possibility exists. What we must do is test whether the transient emotional state, generated by the political information, affects attention and citizenship even after we control for individual personality traits.

The basic tests, shown in Tables 7, 8, and 9, demonstrate that the affective intelligence effect remains strong under stringent controls for trait characteristics. The three columns in Table 7 represent our three predicted consequences of emotional state—the now standard consequences of Affective Intelligence Theory. Column 1 demonstrates that anxiety leads to an increased information search while aversion does not. In column 2, which shows the effect of affective intelligence on steadfastness, we see that aversion has a strong positive push toward keeping to one's own views while anxiety marginally pushes against such a move. And finally, in terms of cooperation we see that anxiety encourages,

and aversion discourages cooperative solution seeking. All this is in accord with the current theory's expectations.[12]

Next, we want to see if the pattern of Table 7 replicates once we control for our participants' personalities. We have seen that *both* the emotional responses *and* the citizenship variables are consistently and reasonably shaped by personality traits. The question is whether what is left over of the emotional response and the citizenship style—after controlling for the prior effects of personality—can be attributed to the transient states of affective intelligence.

Start with Need for Cognition and Table 8. In the first column, we see the effects of the emotional response variables controlling for personality. The immediate question is whether anxiety leads to information search while aversion does not. The answer is in accord with our expectations. The coefficient for anxiety (0.14) is clearly positive and in these terms statistically significant and substantively important. (Note that aversion is positively associated with information search and on the cusp of statistical significance.)

For steadfastness, the second column of Table 8 leaves us with the same theoretical inference. As in the simple model, we see that aversion leads to a strong commitment to one's own views. And, again, anxiety has a modest negative impact on steadfastness.

Finally, in terms of cooperation, the theoretical story is the same. In column 3 we see that the personality traits work much as before but that they have no dramatic effect on the operation of affective intelligence's emotional signals. Aversion leads toward a rejection of cooperation while anxiety leads toward its acceptance.

Turning to the broader Big Five personality array in Table 9, we obtain the same theoretical inference. Even after controlling for the full Big Five battery, we see that affective intelligence operates at full force. (In this case, we can be reasonably certain that the traits precede the emotional responses and that the coefficients reflect the prior "control" of personality before emotion makes its presence felt.) We may conclude that taking into account individual personality traits does not eliminate the impact of affective intelligence. In fact, the magnitude of its operation is more-or-less independent of our statistical controls.

We conclude first, personality traits are important for politics in ways that are more pervasive that many may realize. Emotional responses to the news and orientations toward information search, steadfastness, and political cooperation are all associated with individuals' personalities. And, second, and equally important, the spuriousness hypothesis fails—state effects stand unaltered by differences in individuals' personalities.

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[12] Note that enthusiasm has a positive impact across the board. It enhances information search, steadfastness, and willingness to cooperate. At the moment, affective intelligence is insufficiently developed on the positive side, making only vague predictions about how an enthusiastic response will affect citizenship.

Personality and the Conditional Operation of Affective Intelligence

We now turn to a more subtle matter. We have just learned that the affective intelligence "state" system is not a mere shadow of powerful personality forces. Instead, we now know that affective intelligence actively shapes the way people approach political information. We next wish to understand how the operation of affective intelligence might be governed by those same personality forces. The theoretical development at the moment is silent about how personality might matter. We want to know if, for example, affective intelligence works well for neurotics and not at all for those who are especially open to new experiences...or vice versa.

We ask the question: does personality condition the way that affective intelligence functions. That is, does affective intelligence work differently for some personality types than for others. Or, instead, does it appear to operate more-or-less equally for everyone? This conditional action of affective intelligence is depicted in Figure 2. Here the layout is much the same except we see that the connection between emotions and citizenship orientations can be either strengthened or weakened by personality. (The augmentation is drawn in a bolder line to focus attention on the new potential functionality.) This can happen either of two ways. First, different personality dispositions may enhance, or inhibit, the propensity to respond emotionally to some stimuli rather than others. For example, those high on neuroticism might be more inclined to express anxiety in a novel political circumstance than those who are emotionally imperturbable. This possibility is depicted in an interaction at the lower left portion of the figure. Second, personality traits may regulate the connection between emotional states and the political response. Again, for example, the neurotics might be especially inclined to translate anxiety into information search.

We proceed cautiously. In this paper we focus on personality's second, regulatory, mechanism.[13] We want to know if the affective intelligence system operates differently for different types of people. Accordingly, we model the citizen orientations (attention, steadfastness, and cooperation) as a function of both emotions and personality—just as in the equations that underlie Tables 8 and 9. The difference is that we augment the model with explicit interactions between the personality factors and the emotional responses.

To begin with a simple case, we examine the conditioning effect of Need for Cognition. Column 1 of Table 10 presents the full statistical model, including the interaction terms, for Attention. The pattern shows that the linear effects remain in place while the interaction terms (-.01, .01, -.04) are small and insignificant. We can test the hypothesis that the conditional effects, the interaction terms, are zero with a joint F-test (shown in the last row). Here we see that the estimated probability that all interactions are zero is .98. In

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[13] Our exploration of the first component—personality traits' enhancing or depressing emotional responsiveness to particular stimuli—suggests smaller scale effects than one might imagine. From our example, neuroticism does not appear to affect how the stimuli translate into particular emotions. But the data give hints of possible action here—and more research lies on our agenda.

other words, there is practically no evidence for personality shaping the way that anxiety affects attention.

The results are similar, but not identical, for Steadfastness and Cooperation. Again, the full pattern does not compel a view that affective intelligence is conditioned on personality. The probabilities for a rejection of such a hypothesis are .19 and .08. However, one must take care making inferences from such collinear data—as we shall see, it is possible to make both false negative and false positive inferences in these cases.

To take another look at the conditional effects, we concentrate on more narrowly specified statistical models. Rather than expect that personality affects all emotions in all instances, we construct an elementary theoretical argument for more specific effects.

Start with how anxiety drives attention. We might normally expect that anxiety would be important for everyone but that it would be especially important for those with strong cognitive capabilities, those for whom attention might be most likely to yield useful information. (For this style of argument, see Rudolph, Gangl, and Stevens 2000.) We produce that the specification in Table 11, column 1. In this case, we include only the theoretically-mandated interaction between Anxiety and Need for Cognition. (When we specify a model more narrowly, including only the main terms, we reduce the deleterious effects of collinearity and yield crisper estimates of our coefficients. We are less likely to make a false negative inference.) Looking at the critical interaction term (-.03, not significant), we can more confidently confirm that anxiety operates on attention independent of personality, in this case Need for Cognition.

However, the case for personality changes when we posit the more specific models in columns 2 and 3. In each case, we focus on the main operant emotion. For Steadfastness, we examine the interaction between personality and aversion and find a statistically identifiable and relatively potent term estimated at .16. Working out the equation's estimates, we see a powerful interaction. The effect of aversion on those of limited cognitive capacity is the predicted 0.12 points on the unit scale. However, for those with strong capacity, the difference made by experiencing aversion is (0.12 + 0.16 =) 0.28 points. In fact, the aversive stimulus moves the cognitively oriented from a position of modest open-mindedness (-0.13) across the neutral point to one of modest steadfastness (0.15).

In a similar way, we see that personality affects how anxiety changes an individual's openness to cooperation. Here, though, the impact is less obvious. The negative term for the interaction (-.20) means that the strong cognition types are *less* likely to respond to anxiety. That is to say, given their already stronger willingness to compromise, the cognitively sophisticated are not additionally affected by anxiety. In a sense, anxiety serves as a compensatory mechanism for moving the unsophisticated toward compromise.

Each of these latter interactions makes sense and encourages further development. However, we remain cautious about making strong inferences until that theoretical work stands in place. Instead, we take these data analyses as specific demonstrations of the

more general hypothesis. It appears that personality may shape the way that affective intelligence works.

To further test the idea, we now turn to the more inclusive Big Five personality portrait. The complete estimation equation, for each of the three citizenship orientations, incorporates five personality traits, three emotional states, and fifteen interactions between the traits and states. The resulting parameters are difficult to deal with. With these collinear data, the 23 coefficient estimators co-vary in complicated ways—with the result that we have no confidence in the precision of any single coefficient estimate or, for that matter, handful of estimates. However, we may examine groups of parameters to test a proposition that they are *all* zero. For example, we can take the complicated estimation equation for attention and see whether all the interaction terms associated with extraversion are possibly zero. (Here we use a standard joint *F*-test of the parameter blocks.) If the *p*-value for the joint *F*-test is greater than .05, then we suspect that extraversion does not affect how emotion translates into attention; if the *p*-value is less than .05, then we accept the possibility that the dynamics of affective intelligence might be conditioned by personality traits.

We summarize these tests in Table 12. Start with the first term in the first column. When we test the conditioning impact of extraversion on affective intelligence, we estimate a .37 probability that there is no impact at all. (Note here that we have both a large N and well-measured personality items. Obtaining a null result is not so much a matter of poor statistical power.) So, at least tentatively, we infer that extraversion does not play a part in determining how people made angry or anxious go about their information searches.

The rest of column 1 indicates that no personality trait seems to have a consistent presence in the model. In fact, skipping down a row we see that there is a good probability that *all* interactions could be zero: *p*=.74.) While this sort of shotgun test is no substitute for theory, the indicators suggest that as far as attention to the news is concerned, affective intelligence works equally well for all sorts of people.

The evidence is more intriguing for the styles of citizenship. On the steadfastness side—the psychological commitment to one's own views—we see no clear indication that any single personality component is important. However, the full test (*p*=.02) indicates that something may be going on here. And for cooperation, the case looks even better. Extraversion, agreeableness, and conscientiousness all appear as plausible candidates and the full test yields a *p*=.00. On the basis of the block *F*-tests, then, we would conclude that personality might well matter for how people translate their emotions into styles of citizenship.[14] [15]

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[14] To be sure, the *F*-tests would not be conclusive. Given the collinearity here, and the essential flukiness of such a forest of coefficients, we should not infer that something theoretically important is necessarily going on here. The statistical evidence shows only that such a possibility exists. Even were the overall evidence stronger than it is, we would need theory before we could make any serious judgment here.

Such an inference seems reasonable. However, compare the overall fit parameters for Tables 9 and 12. We see that adding the full set of interactions for steadfastness and co-operation may be statistically significant but that the increase in fit is not discernible to the eye. The essentially unmoved Adjusted R^2 and Root Mean Squared Error indicate that the theoretical power of any trait-state interactions are like to be subtle.

Conclusion

We may take away three things from this analysis. First, we now understand that personality traits, as expressed in terms of cognitive capability and the five factor model, shape both political emotion and also individuals' attention to politics and their choices about citizenship orientations. These personality traits are largely exogenous to politics and, indeed, have strong biological roots. We begin to know more about political life when we begin to understand more about how individuals' personalities shape the ways that they act as citizens.

And second, we are now more confident that citizens' emotional states serve as guides to their attention to politics, their commitment to their own ideas, and their inclination to cooperative solutions for political problems. The likelihood that such relationships might be spurious, due to the background operation of personality, now appears to be discon-firmed. Our special-built survey experiment, with its large N and elaborate measurement batteries, gives us some confidence that this null finding holds water.

Finally, we see suggestive evidence that personality and affective intelligence are not merely two complementary explanations for how citizens orient themselves toward polit-ical information. It appears that personality traits regulate, enhance or inhibit, the sorts of connections on which affective intelligence depends. This marriage of personality and emotion promises much.

At the end of the day, we find that both transitory emotional states and permanent perso-nality traits shape political life. In particular, we see that individuals' and the polity's in-clination to either seek common ground or to polarize into warring armies depends on the personalities of those involved and the emotions stirred by contemporary events. As we build more elaborate theoretical models of citizenship and politics, we shall want to be keenly sensitive to such combinations of trait and state.

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[15] Given the large number of parameters, we might attempt to isolate a few that have special theo-retical significance in a manner similar to our exercise with Need for Cognition. Going through the steps to examine the possibility of neuroticism having a special influence on the standard affective intelligence anx-iety-attention effect yields a clear inference: neurotics are *not* especially sensitive to anxiety as a signal for information search. Working through the richer nuances of how personality matters for emotions and poli-tics is a more ambitious theoretical project—one that lies just ahead.

Appendix

Measurement

Need for Cognition

A six item randomized-order additive scale comprised of the following:

- I would prefer complex to simple problems.
- Thinking is not my idea of fun.
- I find satisfaction in deliberating hard and for long hours.
- I only think as hard as I have to.
- Learning new ways to think doesn't excite me very much.
- The notion of thinking abstractly is appealing to me.

In each case, the participant answers:
Very much like me
Somewhat like me
Uncertain
Somewhat unlike me
Very much unlike me

The Big Five Inventory

The survey experiment randomized the order of these items. The reverse-polarity items are included and appropriately transformed. Standard factor analyses support the familiar five dimensional solution.

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are some-one who *likes to spend time with others*? Please write a number next to each statement to indicate the extent to which **you agree or disagree with that statement.**

I am someone who…

1. _____ Is talkative
2. _____ Tends to find fault with others
3. _____ Does a thorough job
4. _____ Is depressed, blue
5. _____ Is original, comes up with new ideas
6. _____ Is reserved
7. _____ Is helpful and unselfish with others
8. _____ Can be somewhat careless
9. _____ Is relaxed, handles stress well.
10. _____ Is curious about many different things
11. _____ Is full of energy
12. _____ Starts quarrels with others
13. _____ Is a reliable worker
14. _____ Can be tense
15. _____ Is ingenious, a deep thinker
16. _____ Generates a lot of enthusiasm
17. _____ Has a forgiving nature
18. _____ Tends to be disorganized
19. _____ Worries a lot
20. _____ Has an active imagination
21. _____ Tends to be quiet
22. _____ Is generally trusting
23. _____ Tends to be lazy
24. _____ Is emotionally stable, not easily upset
25. _____ Is inventive
26. _____ Has an assertive personality
27. _____ Can be cold and aloof
28. _____ Perseveres until the task is finished
29. _____ Can be moody
30. _____ Values artistic, aesthetic experiences
31. _____ Is sometimes shy, inhibited
32. _____ Is considerate and kind to almost everyone
33. _____ Does things efficiently
34. _____ Remains calm in tense situations
35. _____ Prefers work that is routine
36. _____ Is outgoing, sociable
37. _____ Is sometimes rude to others
38. _____ Makes plans and follows through with them
39. _____ Gets nervous easily
40. _____ Likes to reflect, play with ideas
41. _____ Has few artistic interests
42. _____ Likes to cooperate with others
43. _____ Is easily distracted
44. _____ Is sophisticated in art, music, or litera

In each case, the participant answers:
Agree strongly
Agree a little
Neither agree nor disagree
Disagree a little
Disagree strongly

Citizenship Scales

The survey experiment randomizes the question order within the batteries. In each case, standard factor analytics indicate a covariance structure that supports the separate measurement scales.

Attention

- My making a mental note to keep track of these issues and events in the future is…
- My Googling these issues and events to find out more is…
- My looking for websites that present new and different views on these issues and events is…
- My looking for websites that might challenge my points of view on these issues and events is…
- My looking for websites with which I strongly disagree on these issues and events is…

In each case, the participant answers:
Not at all likely
Slightly likely
Moderately likely
Very likely
Extremely likely

Steadfastness

- "These issues and events provide no room for compromise."
- "I am certain that my point of view on these issues and events is the right one."
- "In dealing with these sorts of issues and events listening to everyone is going to get us entangled and produce endless debate."
- "We just can't afford to take each and every minority view on these issues and events into account."

In each case, the participant answers:
This statement is:
Extremely true
Very true
Moderately true
Slightly true
Not at all true

Cooperation

- "These sorts of issues and events have two sides and I want to look at both of them"
- "These sorts of issues and events should be resolved so that everybody's needs are met."
- "To solve these sorts of issues and events everyone's concerns should be heard."
- "These sorts of issues and events are best resolved by listening to everyone's concerns."

Responses are the same as for the steadfastness scale.

The question order within the batteries is randomized for the survey experiment.

The Stimuli.

Each participant was exposed to one of the following news stories.

The Enthusiasm Story

The New York Times

Good News on Border Security

Dateline: Washington DC: Department of Homeland Security Senior Director Robert Mooney testifying before Congress reported that tests on new border security technologies provided evidence of dramatically improved capacity to detect potential terrorists at US ports of entry. "We have installed three new technical systems and each has already increased our capacity to catch the bad guys," he testified. "Advanced digital technology will be our first line of defense."

Mooney demonstrated a new data system that collects up-to-the-second data on lost and stolen passports from 188 countries around the world so that if a malevolent individual attempts to use someone else's passport to avoid detection silent alarms alert border officials immediately. "You can buy genuine recently stolen passports on the streets of Cairo for less than $20," Mooney reported,"But now it will serve as a passport directly to our detention facility."

There are 304 land, sea and air travel ports of entry in the United States each maintained by DHS's uniformed immigration and customs inspectors. Each will be fully operational with the new Triple-Safe system within six to eight weeks.

The second element of Triple-Safe helps legitimate travelers get through border control faster. "Our Terrorist Watch list included many common names that required many tourists and American citizens with identical or similar names to suspect individuals be designated as No-fly status, until a lengthy background review could be completed." "Our new system includes further information on birthdates and even biometrics to help us focus the search where it needs to be." The exact number of false alarms resulting from identical or similar names is classified, but one estimate reported in the Los Angeles Times was as many as 32,000 incorrect matches per year.

The third element of the Triple Safe Program is a high-

tech x-ray inspection of air, sea and land cargo. "We can't inspect every single package, truck and shipping container by hand, that would bring international trade and shipping to a standstill," Mooney reported. Typically only 2 percent of incoming cargo has been visually inspected. "But with a combination of x-ray, gamma ray and ultrasound technologies, we will be up to 100% inspection of incoming cargo by soon and it is more accurate and dependable," he reported. DHS had originally be planning to double the number of customs inspectors, but the remarkable progress in high resolution imaging technologies may make that costly and time-consuming recruitment effort unnecessary.

Senate Homeland Committee Chairman, Joseph Lieberman in concluding remarks commented: "All in all, this is bad news for the bad guys, and good news for Americans."

The New York Times

Osama bin Laden - Still Hard at Work

Osama bin Laden was born in Riyadh, Saudi Arabia 50 years ago the 17th of 55 children borne by the 10th of his father's 22 wives. Osama became intensely pious and anti-Western as a teenager and criticized his siblings for their interest in music and dancing. As a young man he migrated to Afghanistan to help the local tribesmen with their war against the Soviets. His support through his inherited wealth was welcomed but it is not clear that Osama contributed measurably to the military effort. After the Afghan war it appears he turned his anger and frustration against the West especially Americans in their support for Israel. He denounced the royal Saudi family which was the source of his wealth and his Saudi citizenship was revoked in 1995.

He founded al-Qaeda in 1988 declaring that it is the individual duty of Muslims to kill Americans, both civilians and military, in every country where such killing may be possible and to continue doing so until Israel is in Arab hands. He focused on America because it was seen as the center of Christian power and a threat to Islam. He later revised the edict to legitimate the killing of Muslims as well if they associated with, did business with, or were in the vicinity of Christians.

Al Qaeda helped to fund the World Trade Center bombing of 1993 in which 6 were killed and 1,042 were injured. The car bomb, however, failed to collapse the tower. In November 1995 al Qaeda was associated with a truck bombing at the US-operated Saudi National Guard training center in Riyadh killing five Americans and two Indian nationals. Bin Laden denied involvement but praised the attack.

In 1996 19 American servicemen died in the truck bombing of Khobar Towers military barracks Saudi Arabia. It is not clear if bin Laden was responsible, although he was seen being congratulated by colleagues the day of the attack.

In August of 1998 al Qaeda car bombs next to two American embassies in East Africa were detonated simultaneously. In Nairobi, Kenya the downtown embassy explosion killed 213 and injured 4000; in Dar es Salaam, Tanzania the more remote embassy attack resulted in 11 killed and 85 wounded. Although the attacks were intended to kill employees of the United States government, almost all of the victims were African civilians. In 1999 bin Laden is quoted as saying "If the instigation for jihad against the Jews and the Americans in order to liberate ...shrines in the Middle East is considered a crime, then let history be a witness that I am a criminal."

An al Qaeda attack on a munitions ship the USS Sullivans was un-successful, the overloaded suicide motorboat sank before detonating, but a similar attack against the U.S. Navy destroyer USS Cole visiting a Persian Gulf port in October 2000 was more successful killing 17 sailors and nearly sinking the warship.

The most well known and dramatic example of bin Laden's livid obsession with the United States, of course, has become known by the date 9/11 2001 when 19 terrorists under bin Laden's command hijacked four commercial passenger jet airliners crashing two into the World Trade Center towers in New York and a third into the Pentagon. In total 2,992 souls lost their lives that day as an immediate result of the attacks. The FBI later released a report that 11 of hijackers apparently had not been informed that they were on a suicide mission. Since then, bin Laden now working with new terrorist allies succeeded in recruiting Richard Reid, the convicted shoe bomber, Imar Farouk Abdulmutallab, the so-called underwear bomber and just weeks ago Faisal Shahzad, the so-called Times Square bomber.

Richard Reid   Umar Farouk Abdulmutallab   Faisal Shahzad

The Anxiety Story

The New York Times

How Many Terrorist Sleeper Cells Are There?

Dateline: Washington DC: In response to reports of an al Qaeda-linked sleeper cell of Yemeni and Lebanese terrorist recruits in Dearborn Michigan, Air Force General Victor "Gene" Renuart said in an interview here today that "To think that the Dearborn terrorists are the only sleeper cells out there is naÏve." He noted that a national intelligence report released last week concluded that al-Qaeda is using its growing strength in the Middle East to plot attacks on U.S. soil. "We just don't know how many cells there are and where they are. We lost track of some of these guys. The number of cells we have uncovered is worrisome."

Dr. Rabab Abdulhabi, Director of the Center for Arab American Studies in Dearborn expressed skepticism about the estimate of dozens of sleeper cells. "There are five and a half million Arab Americans in this country and the great majority of them are hardworking, taxpaying, patriotic and loyal citizens."

However, in one of the biggest antiterrorism operations in North America since the September 11 terrorist attacks, 17 Canadian residents were arrested by the Canadian Security Intelligence Service (CSIS) and charged with plotting a series of attacks against targets in Canada and the US. The suspects include immigrants of Somali, Egyptian, Jamaican, and Trinidadian origin. They planned to storm government offices and behead the Canadian prime minister if the government did not pull its 2,300 troops out of Afghanistan and release Muslim political prisoners.

Canadian Arrestees

Police and intelligence officials, who had been monitoring the group for some time, said they decided to carry out the raids after the group arranged a delivery of three tons of ammonium nitrate, a fertilizer that can be made into an explosive when combined with fuel oil. The suspects also operated training camps, according to authorities, although they would not disclose their locations. Just before the raids, two of the suspects, Mohammed Dirie, 22, and Yasin Abdi Mohamed, 24, were stopped by the Canada Border Security Agency attempting to enter the US after their rental car was pulled over and searched. Two loaded guns were found strapped to Dirie's thighs.

Of current concern is the revelation that a number of young Somali men in Minneapolis have gone missing in recent months, and authorities fear the youths are being recruited to return to their homeland to fight with terrorist groups. One of the men who disappeared is believed to have killed himself in an Oct. 29 suicide bombing according to a U.S. law enforcement official who spoke on condition of anonymity because the official was not authorized to speak publicly about the case. That official confirmed the FBI and Justice Department were investigating. It is one of the first instances in which a U.S. citizen has acted as a suicide bomber.

Al Qaeda Training Camp

Members of the Somali community in Minneapolis said small

groups of young men have been disappearing over the last year. Anywhere from 15 to 20 have left Minne-apolis in recent months, said Omar Jamal, executive director of the Somali Justice Advocacy Center. "We know for a fact this is happening, but we don't know who is doing it," he said. Osman Ahmed, a Somali activist, said his 17-year-old nephew is among a group of at least seven people who went missing Nov. 4. Ahmed said his nephew was a high school senior and had a normal routine of going to school, going home then going to the mosque. "He was a very nice guy," Ahmed said."He was very clever. Very shy. Very cool." On Nov. 4, he told his mother a friend would pick him up from school, but he never came home. It was later revealed that he had taken his passport and traveled to Kenya for what was alleged to be atten-dance at a terrorist training camp. His current whereabouts is unknown.

The FBI spokesperson acknowledged that the number of these jihadist recruits currently in the US is un-known. "How can you know if those guys in the rental house down the street have just returned from a training camp? She asked"

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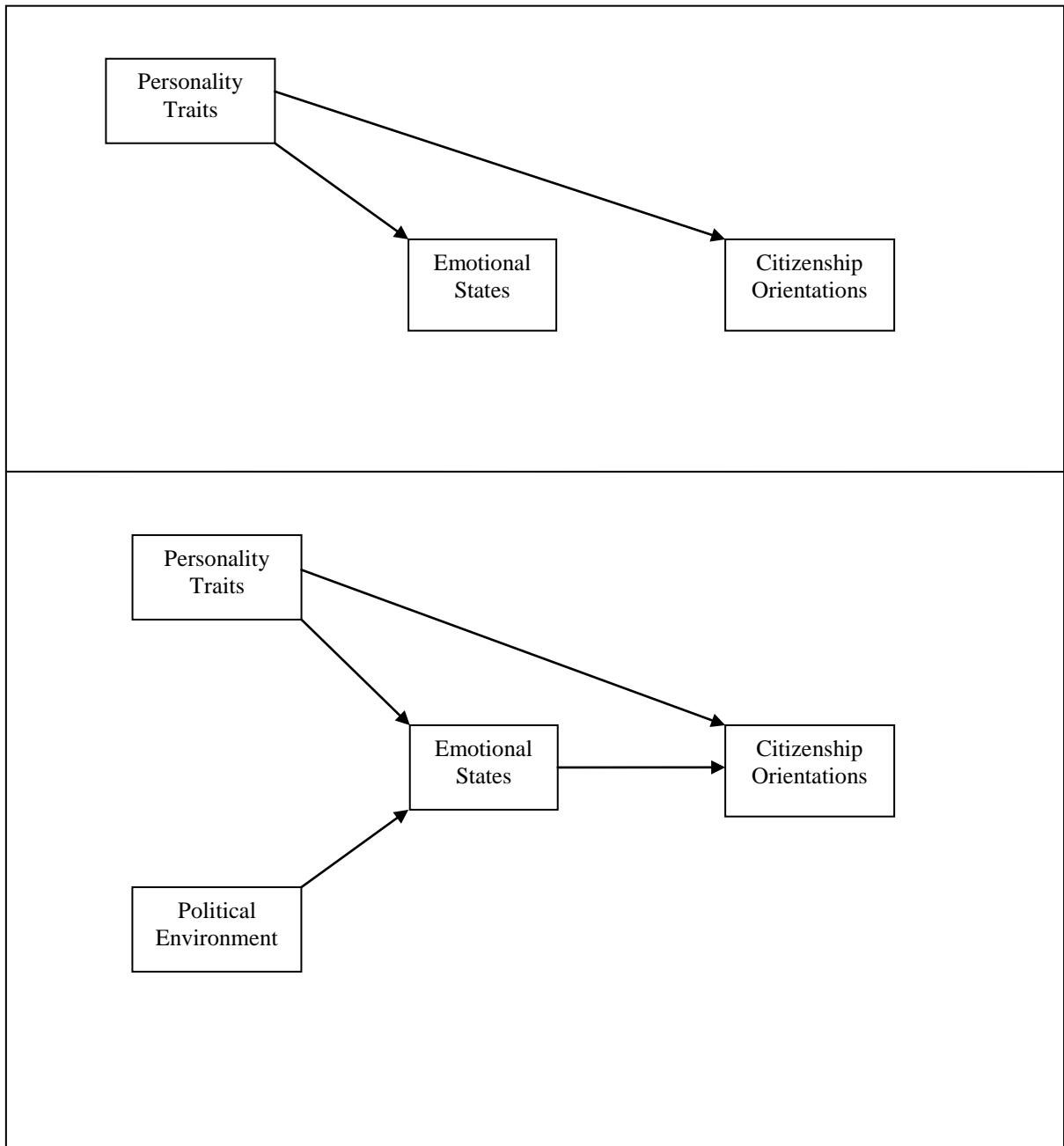
Figure 1
Affective Intelligence or Personality?
(The top panel depicts a Personality model and the bottom
panel shows the Personality and Affective Intelligence model)
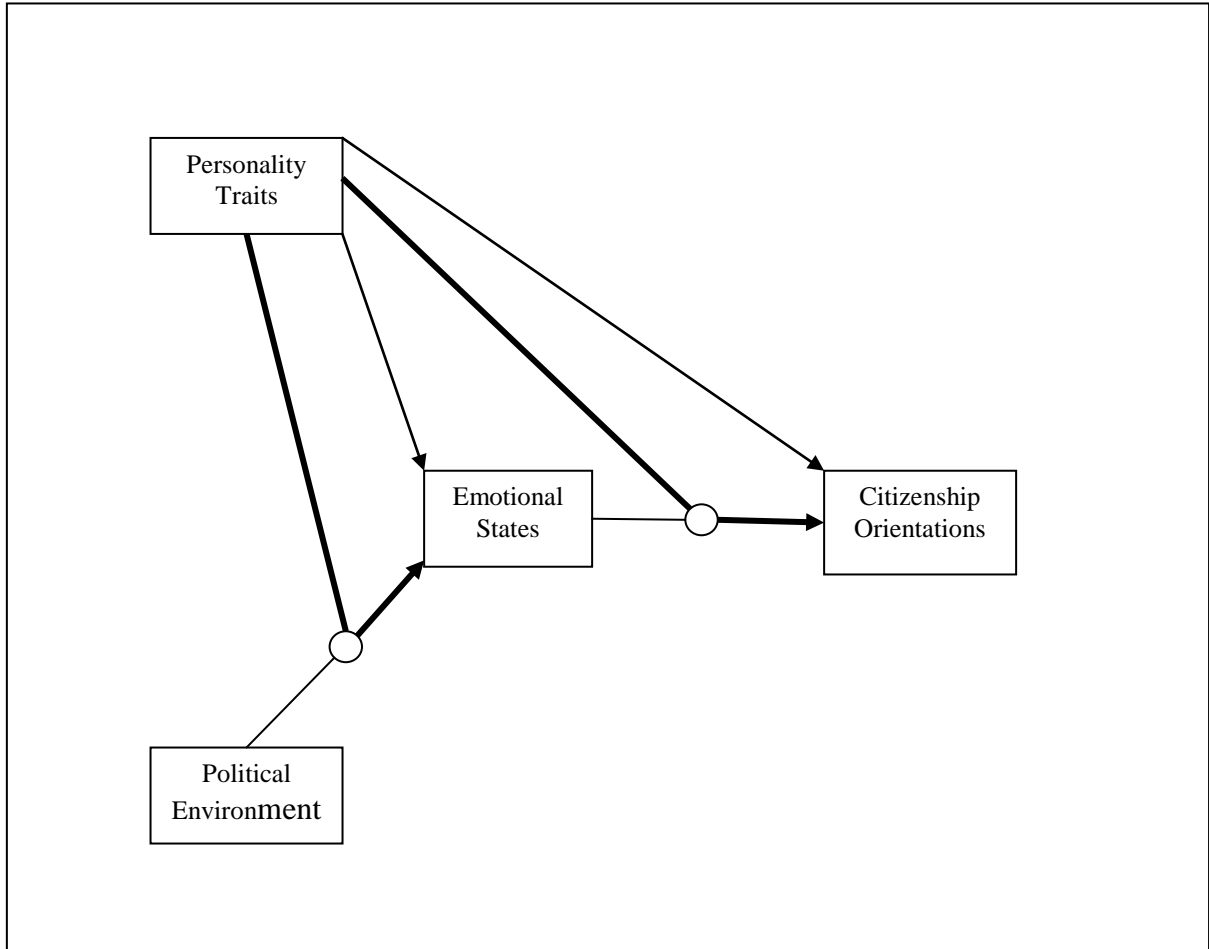
Figure 2
Personality Augments the Operation of Affective Intelligence

Table 1
Personality's Impact on Emotional Reaction to the News: Need for Cognition

| | Emotional Reaction to News Story | | |
	Enthusiasm	Aversion	Anxiety
Personality Trait			
Need for Cognition	-.03	-.12*	-.17*
Story Type			
Aversive Story	-.28*	.36*	22*
Anxiety Story	-.29*	.25*	.26*
Constant	.62*	.35*	.44*
N	1544	1544	1544
Adjusted R^2	.30	.32	.20
RMSE	.20	.22	.24

Notes. Each column represents an OLS regression. * *p*<.05
Story Types are dummy variables for aversive and anxiety stories.

Table 2
Personality's Impact on Emotional Reaction to the News: The Big Five

| | *Emotional Reaction to News Story* | | |
	Enthusiasm	Aversion	Anxiety
Personality Trait			
Extraversion	.08*	.08*	.02
Agreeableness	-.02	-.11*	.17*
Conscientiousness	-.06	.09*	.13*
Neuroticism	-.07	.16*	.31*
Openness to Experience	-.02	-.16*	-.13*
Story Type			
Aversive Story	-.27*	.35*	22*
Anxiety Story	-.29*	.25*	.26*
Constant	.48*	.28*	.07
N	1545	1545	1545
Adjusted R^2	.31	.34	.23
RMSE	.20	.22	.23

Notes. Each column represents an OLS regression. * $p<.05$
Story Types are dummy variables for aversive and anxiety stories.

Table 3
Personality's Impact on Emotional Reaction to the News: Need for Cognition
Conditioned on the Nature of the Story

| | Emotional Reaction to News Story | | |
	Enthusiasm (Positive Story)	Aversion (Negative Story)	Anxiety (Negative Story)
Personality Trait			
Need for Cognition	.04	-.14*	-.22*
Story Type			
Aversive Story		.11*	
Anxiety Story			.03*
Constant	.63*	.61*	.70*
N	510	1034	1034
Adjusted R^2	.00	.07	.04
RMSE	.20	.22	.24

Notes. Each column represents an OLS regression. * *p*<.05
Story Types are dummy variables for aversive and anxiety stories.

Table 4
Personality's Impact on Emotional Reaction to the News: Big Five
Conditioned on the Nature of the Story

| | *Emotional Reaction to News Story* | | |
	Enthusiasm (Positive Story)	Aversion (Negative Story)	Anxiety (Negative Story)
Personality *Trait*			
Extraversion	.05	.08*	.02
Agreeableness	.11	-.05	.31*
Conscientiousness	.07	.12*	.13*
Neuroticism	-.03	.19*	.36*
Openness to Experience	-.06	-.21*	-.21*
Story Type			
Aversive Story		.10*	
Anxiety Story			.04*
Constant	.49*	.49*	.21*
N	510	1035	1035
Adjusted R^2	.01	.10	.10
RMSE	.20	.22	.24

Notes. Each column represents an OLS regression. * *p*<.05
Story Types are dummy variables for aversive and anxiety stories.

Table 5
Personality's Impact on Citizenship: Need for Cognition
(Attention, Steadfastness, and Cooperation)

| | | *Citizenship Orientation* | |
	Attention	Steadfastness	Cooperation
Personality Trait			
Need for Cognition	.19*	-.07*	.11*
Story Type			
Aversive Story	.00	.04*	-.07*
Anxiety Story	.03*	.01	.00
Constant	.19*	.60*	.52*
N	1544	1544	1544
Adjusted R^2	.04	.02	.04
RMSE	.19	.17	.17

Notes. Each column represents an OLS regression. * *p*<.05
Story Types are dummy variables for aversive and anxiety stories.

Table 6
Personality's Impact on Citizenship
(Attention, Steadfastness, and Cooperation)

| | *Citizenship Orientation* | | |
	Attention	Steadfastness	Cooperation
Personality Trait			
Extraversion	.05*	.05*	.01
Agreeableness	.03	-.09*	.17*
Conscientiousness	.03	.12*	.03
Neuroticism	.05*	.01	.13*
Openness to Experience	.19*	-.11*	.18*
Story Type			
Aversive Story	.00	.04*	-.06*
Anxiety Story	.03*	.01	.00
Constant	.19*	.57*	.27*
N	1545	1544	1544
Adjusted R^2	.04	.03	.08
RMSE	.19	.17	.17

Notes. Each column represents an OLS regression. * $p<.05$
Story Types are dummy variables for aversive and anxiety stories.

Table 7
Simple Affective Intelligence Model
Emotional State's Impact on Citizenship
(Attention, Steadfastness, and Cooperation)

| | *Citizenship Orientation* | | |
	Attention	Steadfastness	Cooperation
Emotional State			
Enthusiasm	.13*	.10*	.07*
Aversion	.03	.22*	-.13*
Anxiety	.12*	-.04*	.13*
Constant	.28*	.45*	.53*
N	1545	1545	1545
Adjusted R^2	.04	.08	.05
RMSE	.18	.16	.17

Notes. Each column represents an OLS regression. * *p*<.05

Table 8
Affective Intelligence Model Spuriousness Test
Emotional State's Impact on Citizenship (Attention, Steadfastness, and Cooperation)
Controlling for Personality: Need for Cognition

| | *Citizenship Orientation* | | |
	Attention	Steadfastness	Cooperation
Emotional State			
Enthusiasm	.15*	.09*	.08*
Aversion	.04	.22*	-.13*
Anxiety	.14*	-.05*	.14*
Personality Trait			
Need for Cognition	.23*	-.05*	.12*
Constant	.13*	.48*	.45*
N	1544	1544	1544
Adjusted R^2	.09	.08	.05
RMSE	.18	.16	.17

Notes. Each column represents an OLS regression. * *p*<.05

Table 9
Affective Intelligence Model Spuriousness Test
Emotional State's Impact on Citizenship (Attention, Steadfastness, and Cooperation)
Controlling for Personality: The Big Five

| | *Citizenship Orientation* | | |
	Attention	Steadfastness	Cooperation
Emotional State			
Enthusiasm	.13*	.09*	.07*
Aversion	.05	.21*	-.11*
Anxiety	.12*	-.04*	.11*
Personality Trait			
Extraversion	.04	.02	.01
Agreeableness	.02	-.06*	.14*
Conscientiousness	.02	.11*	.03
Neuroticism	.02	.00	.12*
Openness to Experience	.21*	-.08*	.17*
Constant	.28*	.45*	.24*
N	1545	1544	1544
Adjusted R^2	.08	.09	.08
RMSE	.18	.16	.17

Notes. Each column represents an OLS regression. * *p<.05*

Table 10
Affective Intelligence Conditioned on Personality
Emotional State's Impact on Citizenship as a Function of Personality Traits
(Need for Cognition and Attention, Steadfastness, and Cooperation)

	Citizenship Orientation		
	Attention	Steadfastness	Cooperation
Emotional State			
Enthusiasm	.15*	.11	.11
Aversion	.03	.11	-.07
Anxiety	.17*	-.01	.24*
Personality Trait			
Need for Cognition	.25*	.51*	.26*
Interaction of Trait and State (Need for Cognition * Emotional State)			
NC*Enthusiasm	-.01	-.04	-.05
NC*Aversion	.01	.18	-.09
NC*Anxiety	-.04	-.06	-.16
Constant	.12*	.51*	.36*
N	1544	1544	1544
Adjusted R^2	.09	.09	.05
RMSE	.18	.16	.17
Probability that Interactions are Zero			
Joint *F*-Test	.98	.19	.08

Notes. Each column represents an OLS regression. * *p*<.05

Table 11
Affective Intelligence Conditioned on Personality
Emotional State's Impact on Citizenship as a Function of Personality Traits
(Need for Cognition and Attention, Steadfastness, and Cooperation)
Specific Theoretical Tests

| | *Citizenship Orientation* | | |
	Attention	Steadfastness	Cooperation
Emotional State			
Enthusiasm	.15*	.09*	.08*
Aversion	.04	.12*	-.12*
Anxiety	.16*	-.05*	.26*
Personality Trait			
Need for Cognition	.24*	-.13*	.22*
*Interaction of Trait and State (Need for Cognition * Emotional State)*			
NC*Enthusiasm			
NC*Aversion		.16*	
NC*Anxiety	-.03		-.20*
Constant	.12*	.53*	.39*
N	1544	1544	1544
Adjusted R^2	.09	.09	.05
RMSE	.18	.16	.17
Probability that Interactions are Zero			
t-Test	.69	.04	.01

Notes. Each column represents an OLS regression. * *p*<.05

Table 12
Affective Intelligence Conditioned on Personality
Emotional State's Impact on Citizenship as a Function of Personality Traits
(Big Five and Attention, Steadfastness, and Cooperation)
Probabilities of Null Effects

| | | *Citizenship Orientation* | |
	Attention	Steadfastness	Cooperation
Personality			
Trait			
Extraversion	.37	.12	.00
Agreeableness	.47	.29	.00
Conscientiousness	.65	.05	.04
Neuroticism	.39	.28	.57
Openness to Experience	.59	.49	.13
All Personality Traits Combined	.74	.02	.00
N	1545	1544	1544
Adjusted R^2	.07	.09	.08
RMSE	.18	.16	.17

Notes. Each column represents an OLS regression. Each entry is the *p*-value for a joint *F*-test of the associated interactions.