WHY IMPLICIT ATTITUDES PREDICT VOTING AMONG UNDECIDED VOTERS: A TEST OF THE INTROSPECTIVE NEGLECT HYPOTHESIS

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ABSTRACT

Kristjen B. Lundberg: Why Implicit Attitudes Predict Voting Among Undecided Voters: A Test of the Introspective Neglect Hypothesis
(Under the direction of B. Keith Payne)

Forecasting the votes of undecided voters—a small but powerful proportion of the electorate—is an important challenge for both social scientists and political pollsters. Past research has suggested that implicit attitudes may be uniquely capable of predicting undecided voters' future choices. The studies reported in this research evaluated a possible mechanism for these findings: the *introspective neglect hypothesis*. This hypothesis asserts that implicit attitudes are equally predictive of voting behavior for decided and undecided voters, in part, because when voters are asked to introspect about their decidedness, they are more likely to focus on their explicit attitudes and neglect their implicit attitudes. As a result of this neglect, the strength of implicit attitudes may not influence judgments of decidedness, but may still exert an influence on voting behavior. This hypothesis was evaluated in two studies using two-wave panel designs. In Study 1, participants were randomly assigned to focus on their implicit (versus explicit) attitudes toward hypothetical candidates while making judgments of decidedness. In Study 2, participants were randomly assigned to consider their implicit attitudes a valid (versus invalid) basis for subsequent decision-making. It was expected that, when implicit attitudes were focal or considered valid, they would be more strongly correlated with judgments of decidedness and more predictive of voting behavior for decided than undecided voters. However, neither study provided support for the hypothesized mechanisms. In both samples, explicit attitudes were

uniquely predictive of voting behavior, while implicit attitudes were not. These results were not moderated by judgments of decidedness or by random assignment to condition. Theoretical and methodological explanations for these inconclusive findings are considered, and recommendations are made for future research that may offer an improved test of the introspective neglect hypothesis.

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CHAPTER 1: INTRODUCTION

In the weeks and months before an election, undecided voters often take the spotlight. They are the targets of political advertising campaigns, a source of confusion for those who made up their minds months before, and fodder for journalists, pundits, and even late-night comedians (Bialik, 2014; Cillizza, 2012; *Saturday Night Live*, "Undecided Voter," 2012). According to one exit poll conducted during the 2012 U.S. presidential election, 21% of voters decided for whom they would vote within one month of the election, with 9% reporting that they had only decided within the last few days (Cable News Network, 2012). Just two weeks ahead of the 2014 referendum for Scottish independence, an estimated 6% of voters reported being undecided (YouGov/Sunday Times, 2014). And, just one month before the 2014 U.S. midterm elections, a good number of voters were still unsure about hotly contested Senate races across the country, including 6% in Colorado, 9% in Kentucky, and 6% in North Carolina (CBS News/New York Times/YouGov, 2014). A review of Gallup polling data from major elections occurring between 1944 and 2004 found that the number of swing voters (including those who were completely undecided and those with slight, though noncommittal preferences) comprised 5-10% of the vote in the week before Election Day (Jones, 2008). Though these percentages represent a minority of voters, they still wield considerable power given the small margins that determine many election outcomes (Mayer, 2008).

It is not unreasonable to expect that, despite these reports of indecision, political pollsters would still be able to forecast with reasonable accuracy how these undecided voters might ultimately vote. After all, we know quite a lot about those who are usually undecided: They are

more likely to be moderate in their views, to be non-partisan, and to be less knowledgeable about and engaged in politics. And, though they are generally a diverse group, we are likely to have substantial information about their demographic characteristics in any one election (Bartels & Vavreck, 2012; Mayer 2008; Schill & Kirk, 2014). Further, pollsters are motivated to use all available information to make accurate predictions (e.g., favorable news coverage on the Sunday before the election; Silver, 2009). And yet, election forecasts are often wrong or, at least, off the mark (Silver, 2014). For example, in the September 2014 Scottish referendum, the "No" vote (against Scottish independence from the United Kingdom) went on to win by a 10.6-point margin, yet many polls suggested that the split would be much narrower, averaging around four points (Nardelli, 2014). Some even accused the pollsters' inaccurate predictions of causing panic among investors (Dominiczak, 2014). Given these issues, evaluating new means to predict the ultimate behavior of these undecided voters is an important challenge for both social scientists and political pollsters.

Psychological researchers have proposed that implicit attitudes may be the key to forecasting the votes of those who claim to be undecided (Arcuri, Castelli, Galdi, Zogmaister, & Amadori, 2008; Galdi, Arcuri, & Gawronski, 2008). Implicit attitudes are evaluations that occur spontaneously when considering an issue or topic and that may have unintended influences on judgments and behaviors. In contrast, explicit attitudes are evaluations that are consciously endorsed and voluntarily reported. While explicit attitudes are often assessed directly using self-report questionnaires, implicit attitudes are best measured indirectly, by tasks that inhibit people's ability to control their responses and do not require deliberate processing, such as sequential priming tasks (e.g., the Affect Misattribution Procedure [AMP]; Payne, Cheng,

Govorun, & Stewart, 2005) and/or response interference paradigms (e.g., the Implicit Association Test [IAT]; Greenwald, McGhee, & Schwartz, 1998).

Consider a typical polling question: "Who do you think you will vote for in the election for President?" Such a question requires the respondent to consciously introspect and to overtly (and often publicly) offer a deliberate response. In other words, the self-report questionnaires favored by political pollsters are, by definition, explicit measures. And, though explicit and implicit measures are usually modestly correlated (Cameron, Brown-Iannuzzi, & Payne, 2012; Greenwald, Poehlman, Uhlmann, & Banaji, 2009; Hofmann, Gawronski, Gschwendner, Le, & Schmitt, 2005), or even highly correlated in the case of political attitudes ($r \approx 0.70$; see Nosek, Graham, & Hawkins, 2010), they are not interchangeable. In fact, implicit measures have often shown incremental validity in predicting voting intentions and behavior above and beyond explicit attitude measures (Di Conza, Gnisci, Perugini, & Senese, 2010; Friese, Bluemke, & Wänke, 2007; Greenwald, Smith, Sriram, Bar-Anan, & Nosek, 2009; Knowles, Lowery, & Schaumberg, 2010; Lundberg & Payne, 2014; Pasek et al., 2010; Payne et al., 2010; Roccato & Zogmaister, 2010). It is intuitively appealing, then, to believe that implicit measures may offer a means of predicting the votes of those who are not yet decided. It is an intriguing idea as well, as it suggests that it may be possible to predict people's future behavior before they have made a conscious decision.

In this dissertation, I review empirical evidence for the relationship between implicit attitudes and voting among undecided voters, as well as two different theoretical accounts for this relationship. I then outline the methodology and results of two original experiments designed to evaluate one of those accounts, the *introspective neglect hypothesis*. This hypothesis asserts that, although people are capable of introspecting on both their explicit attitudes and their

implicit attitudes, they tend to focus on explicit attitudes by default when reporting whether they have decided. As a result, being decided versus undecided is a marker of explicit attitude strength. In contrast, if people's attention is focused on implicit attitudes when they assess whether they have reached a decision, the introspective neglect hypothesis suggests that decidedness will track implicit attitude strength instead.

Do Implicit Attitudes Predict the Future Votes of Undecided Voters?

Arcuri and colleagues (2008) were the first to evaluate whether the predictive validity of implicit attitudes differed across decided and undecided voters. Examining implicit candidate preference in the 2001 Italian general election, they found that implicit attitudes predicted future voting intentions and behavior and that the association was not moderated by confidence. In other words, implicit attitudes were equally predictive for undecided and decided voters. However, these analyses did not simultaneously account for explicit attitudes. Though explicit and implicit attitudes are correlated, they are assumed to assess different psychological processes (Fazio & Olson, 2003; Strack & Deutsch, 2004). Thus, by including only implicit attitudes, Arcuri et al.'s analyses cannot speak to whether explicit and implicit attitudes are simultaneous, unique predictors of voting and whether they show distinctive predictive patterns among decided and undecided voters, making it difficult to draw firm conclusions about the meaning of these results

Galdi et al. (2008) extended the previous findings by evaluating the predictive validity of both explicit and implicit attitudes toward a politically polarizing issue in a sample of Italian residents. In multiple regression analyses that tested explicit and implicit attitudes simultaneously, they found that the association of implicit attitudes with future choices was moderated by confidence, though the association of explicit attitudes was not. These results

suggest that explicit attitudes are equally predictive across levels of decisiveness, but that implicit attitudes may actually be stronger predictors for undecided than decided voters.

Another set of studies (Friese, Smith, Plischke, Bluemke, & Nosek, 2012) examined votes in the 2008 U.S. presidential election and the 2009 Germany parliamentary election. They found that explicit preferences were more predictive for decided than undecided voters in two out of three critical analyses, while the final analysis found no moderation by confidence for the association between explicit preference and voting. In contrast, implicit preferences were equally predictive for decided and undecided voters in two out of three analyses, while the final analysis found no significant association between implicit preference and voting.

Taken together, these results are somewhat inconsistent. Explicit attitudes may be more predictive for decided than undecided voters or equally predictive. Implicit attitudes may be more predictive for undecided than decided voters, equally predictive, or not predictive at all. In an attempt to resolve these inconsistencies, Lundberg and Payne (2014) evaluated the relationships between explicit and implicit attitude measures and votes for Barack Obama versus John McCain in the 2008 U.S. presidential election, improving upon earlier methodology in several key ways. First, explicit and implicit attitude measures were included as simultaneous predictors of voting behavior. Second, while previous studies used convenience or opt-in samples, Lundberg and Payne utilized a large (N = 1,868) representative sample of the American electorate. Finally, the analyses used a more continuous measure of confidence, rather than the binary measure included in previous studies. A binary measure requires that participants categorize themselves as decided versus undecided. However, because two participants may have equivalent levels of confidence in their voting intentions, but different thresholds for what constitutes "decided," such a measure is likely more unreliable. A more continuous measure

avoids this threshold problem and allows valuable information regarding the range of decisiveness to be retained.

Overall, Lundberg and Payne (2014) found that the association between explicit candidate preference and votes in the 2008 U.S. presidential election was moderated by confidence, such that explicit attitudes were more predictive for decided than undecided voters. In contrast, implicit candidate preference was equally predictive across all levels of confidence. In other words, even for voters who claimed to be "not sure at all" of how they would vote, implicit measures were predictive of ultimate voting behavior. These findings suggest the conclusion that explicit attitude measures vary in their predictive power across the confidence range, becoming more predictive for voters who express greater confidence in their voting intention. In contrast, implicit attitude measures retain their predictive power, even at low levels of confidence.

Why Do Implicit Attitudes Predict the Future Votes of Undecided Voters?

The empirical evidence suggests that explicit and implicit attitude measures are differentially predictive of voting behavior across undecided and decided voters. Why might that be the case? In this section, I review two theoretical accounts for these findings: the biased processing hypothesis and the introspective neglect hypothesis.

Biased processing. Galdi and colleagues' (2008) work was the first to suggest a theoretical account for why explicit and implicit attitudes might show differing predictive patterns among decided and undecided voters. Specifically, they reasoned that implicit attitudes may influence voting only indirectly by biasing the processing of decision-relevant information. That biased set of information is then used to inform a consciously endorsed opinion of the candidate (explicit attitude), which in turn directly predicts eventual voting behavior.

Simultaneously, this accumulation of supporting information increases the level of decidedness experienced by the voter. By this account, implicit attitudes represent "embryonic preferences" (Arcuri et al., 2008, p. 370) or a distal source of information that may indirectly predict eventual decisions, even though the voter was undecided at the time the implicit attitude was measured (see also Gawronski, Galdi, & Arcuri, 2015). Consistent with this biased processing hypothesis, Galdi et al. found, in analyses evaluating decided and undecided participants separately, that implicit attitudes predicted changes in explicit attitudes for undecided but not decided participants. In other words, earlier automatic associations may have led undecided participants to search for confirmatory information, which in turn strengthened their consciously held beliefs. However, for decided participants, this process had presumably already occurred, making implicit measures a less useful predictor. A separate study (Galdi, Arcuri, Gawronski, & Friese, 2012) provided additional support for this account: Among undecided participants, implicit (but not explicit) attitudes were a significant predictor of selective exposure to newspaper headlines that confirmed their affective responses, while explicit (but not implicit) attitudes were a significant predictor among decided participants. Moreover, selective exposure mediated the relationship between implicit attitudes and changes in explicit attitudes among undecided participants.

The implication of these findings and of the logic underlying the biased processing hypothesis is that implicit attitudes will be more predictive of voting for undecided than decided voters, while explicit attitudes will be more predictive of voting for decided than undecided voters. And yet, those patterns are not consistently observed (Friese et al., 2012; Galdi et al., 2008; Lundberg & Payne, 2014). Moreover, there is additional reason to hypothesize that implicit attitudes may predict behavior for undecided voters, described next.

Introspective neglect. The introspective neglect hypothesis provides an alternative (though in many ways complementary) account to the biased processing hypothesis. It asserts that implicit attitudes are predictive of future voting behavior for undecided voters, in part, because when voters are asked to introspect about whether they have decided, they are more likely to focus on their explicit attitudes and to overlook their implicit attitudes. To the extent that these explicit attitudes are strong and clear, they should be more likely to result in claims of high confidence[1]. These stronger attitudes held with greater confidence should also be more predictive of behavior (for reviews, see Petty & Krosnick, 1995; Tormala & Rucker, 2007). In contrast, regardless of their strength, implicit attitudes should be weakly related or unrelated to these metacognitive judgments of decidedness, yet may still exert an unintended influence on voting behavior. For example, consistent with the predictions made by Fazio's (1990) MODE model, implicit attitudes may be automatically activated and affect how voting options are construed at the time of judgment.

Why, though, might implicit attitudes be neglected? Consider again the typical polling question: "Who do you think you will vote for in the election for President?" After responding, the participant is asked: "How sure are you of that?" This question requires a metacognitive judgment about the confidence associated with one's voting intention. Because of the question sequence, it is reasonable to expect that this metacognitive judgment of decidedness will be an evaluation of the already focal explicit attitude. In other words, the structure of political polling questions may prioritize explicit attitudes at the expense of implicit attitudes.

It is important to note that the introspective neglect hypothesis does not suggest that individuals are incapable of introspecting on their implicit attitudes, only that they do not

[1] Confidence, or certainty, is one metacognitive marker of attitude strength, along with others such as attitude extremity, attitude importance, and attitude accessibility (e.g., Krosnick, Boninger, Chuang, Berent, & Carnot, 1993; Visser, Bizer, & Krosnick, 2006).

spontaneously do so under normal polling methodology. Though early implicit attitudes research asserted that implicit attitudes are nonconscious and introspectively inaccessible (e.g., Greenwald & Banaji, 1995; Kihlstrom, 2004; Spalding & Hardin, 1999), this explanation is highly unlikely in light of later research. For example, individuals who are chronically inclined or experimentally induced to reflect on their feelings show increased correspondence between explicit and implicit scores (e.g., Gawronski & LeBel, 2008; Gschwendner, Hofmann & Schmitt, 2006; Ranganath, Smith, & Nosek, 2008; Smith & Nosek, 2011). Studies have also shown that participants are highly accurate in predicting their implicit attitude scores (Hahn, Judd, Hirsh, & Blair; 2014) and that they are capable of making metacognitive judgments about the validity, intentionality, and ownership of those attitudes (Cooley, Payne, & Phillips, 2014; Cooley, Payne, Loersch, & Lei, 2014; Gawronski, Peters, & Lebel, 2008). Taken together, these findings and the nature of political polling questions suggest that implicit attitudes may not influence metacognitive judgments of decidedness simply because they are not brought to mind at the time of judgment.

It is also possible that implicit attitudes are reflected upon during the introspective process, but that they are subsequently disregarded as an irrelevant or inappropriate source of information. This logic is consistent with predictions made by prominent dual process theories concerning when implicit attitudes may factor into deliberate judgments. According to the Associative-Propositional Evaluation Model (APE; Gawronski & Bodenhausen, 2006), affective responses to a stimulus occur spontaneously, regardless of whether they are perceived as valid or invalid (e.g., Hillary Clinton-good). If the implicit attitude is determined to be valid, then it will be incorporated into subsequent propositional reasoning (e.g., "I like Hillary Clinton"). A similar prediction is derived from the Meta-Cognitive Model of Attitudes (MCM; Petty, Briñol, &

DeMarree, 2007), which states that spontaneously activated associations may be tagged as valid or invalid. In support of these predictions, Jordan, Whitfield, and Ziegler-Hill (2007) found that those who dispositionally view or are induced to view their implicit attitudes as valid show greater correspondence between implicit and explicit measures of self-esteem.

It is important to note that the "validity" of the implicit attitudes referred to here may take different forms. Within the parameters of the introspective neglect hypothesis, implicit attitudes may not factor into metacognitive judgments of decidedness because the attitudes themselves are considered invalid (e.g., "I have a positive reaction to Hillary Clinton, but that's only because I thought her husband was a great president"). But, the hypothesis also allows that the attitudes may still be considered valid, but be disregarded for other reasons. For example, particularly in a domain such as voting behavior in which rationality may be highly valued, implicit attitudes experienced as gut feelings or intuitions may be perceived as true, but nevertheless seem inappropriate as a basis for subsequent decision-making (e.g., "I like Hillary Clinton, but I should think more carefully about why I might vote for her").

Regardless of whether implicit attitudes are neglected because of the priority that polling questions place on explicit attitudes or because implicit attitudes are perceived as a less valid basis for judgment, two central predictions are derived from the introspective neglect hypothesis: If implicit attitudes are neglected by the introspective process, while explicit attitudes are not, then (1) implicit attitudes will be equally predictive for decided and undecided voters, and (2) implicit attitudes will be more weakly correlated with metacognitive judgments of decidedness than explicit attitudes. While the majority of the existing empirical evidence suggests support for the first prediction (Arcuri et al., 2008; Friese et al., 2012, Study 2; Lundberg & Payne, 2014), there are also exceptions (Friese et al., 2012, Study 1; Galdi et al., 2008). In support of the

second prediction, however, Lundberg and Payne (2014; Analysis 3) found clear evidence that more extreme explicit attitudes were associated with confidence regarding one's voting intention to a greater extent than were more extreme implicit attitudes. While these results are suggestive, they were based on correlational evidence. Therefore, experimental control is needed to more fully evaluate the introspective neglect hypothesis.

Overview of Current Research

Across two original experiments, the current research evaluated the introspective neglect hypothesis by testing two potential reasons for implicit attitudes' neglect: (1) that they are not spontaneously considered during the introspective process; and (2) that they are considered an invalid basis for decision-making. In Study 1, participants were randomly assigned to introspect on their implicit (versus explicit) attitudes toward hypothetical candidates before making judgments of decidedness. In Study 2, participants were randomly assigned to consider their implicit attitudes a valid (versus invalid) basis for judgment. In both cases, it was expected that, when explicit attitudes were focal or implicit attitudes considered invalid, the results would replicate those found in Lundberg and Payne (2014): Explicit attitudes would be more strongly correlated with metacognitive judgments of decidedness and more predictive of voting for decided than undecided voters, while implicit attitudes would be weakly correlated with decidedness and equally predictive across all voters. However, when implicit attitudes were focal or considered valid, the exact opposite pattern of results was expected: Implicit attitudes would be more strongly correlated with metacognitive judgments of decidedness and more predictive of voting for decided than undecided voters.

To assess voting behavior, these studies used the premise of the 2016 U.S. presidential election. Participants were asked to think ahead to the 2016 election for President of the United

States and to imagine that former Secretary of State Hillary Clinton and former Governor of Florida Jeb Bush were on the ballot[2]. Both studies used a two-wave panel design. At Time 1, participants reviewed profiles of the candidates and completed a number of measures, including assessments of their explicit and implicit preferences for the candidates and level of decidedness. Approximately one week later, at Time 2, participants cast their vote.

[2] Respondents for Studies 1 and 2 were recruited in January and February 2015. At that time, the latest polling data (e.g., Real Clear Politics; http://www.realclearpoitics.com) suggested that Ms. Clinton and Mr. Bush represented the front-running candidates for both major political parties.

CHAPTER 2: STUDY 1: INTROSPECTING ON IMPLICIT ATTITUDES

If implicit attitudes are neglected—and therefore do not factor into metacognitive judgments of decidedness—because they are not spontaneously considered during the introspective process, then one means of eliminating this neglect would be to deliberately make implicit attitudes the focus of introspection. To evaluate this particular causal mechanism, participants in Study 1 were randomly assigned to consider their explicit or implicit attitudes before making metacognitive judgments of decidedness. It was expected that only those who were induced to focus on explicit attitudes would show signs of implicit introspective neglect. In contrast, for those who were induced to focus on implicit attitudes, it was expected that implicit attitudes would be more predictive of voting behavior at higher levels of confidence and more strongly associated with confidence in one's voting intention.

Method

Participants. An Internet sample was recruited for a two-part study on the 2016 U.S. presidential election using Amazon's Mechanical Turk. The final sample size was predetermined to be approximately 500 participants, based on both an *a priori* power analysis and consideration of resource limitations[3]. Given an expected attrition rate of 25% from the Time 1 survey to the Time 2 vote (see Christenson & Glick, 2013), the minimum Time 1 sample size was set at 675 participants, and Time 1 data collection was stopped on the day this *N* was obtained.

[3] Assuming a "medium" effect size (*odds ratio* = 1.86; Olivier & Bell, 2013), a sample of approximately 400 participants provides adequate power (1 - β > .80; as estimated using G*power 3 software [Faul, Erdfelder, Lang, & Buchner, 2007]), while a "small" effect size (*odds ratio* = 1.22) requires a prohibitively larger sample (~3,000 participants).

Participants who completed the Time 1 survey received invitations to complete the Time 2 survey approximately one week later, with a single additional reminder sent approximately 3-5 days later. In total, 679 participants completed the Time 1 survey and 533 participants completed the Time 2 survey (*attrition* = 21.5%). The average time between completion of the two surveys was 8.06 days (*SD* = 2.03, *minimum* = 6, *maximum* = 19). Participants received monetary compensation for their time spent completing the Time 1 survey, as well as a bonus for completion of the Time 2 survey.

Demographic information is presented in Table 1. The composition of the Time 1 and Time 2 samples was similar with the average respondent being 32 years old, White (non-Hispanic), holding a bachelor's degree, and living in a household with an annual income of at least $35,000. Perhaps not surprisingly given that participants were required to be at least 18 years of age and to reside in the United States, the vast majority was registered and eligible to vote. Nearly half of the sample identified as more closely affiliated with the Democratic Party.

Procedure. In the Time 1 survey, after giving informed consent, participants first completed an attention check designed to identify inattentive participants and improve data quality (see Oppenheimer, Meyvis, & Davidenko, 2009)[4]. Participants were then provided with information about two potential candidates for the 2016 U.S. presidential election, Hillary Clinton and Jeb Bush, including a biographical sketch and photograph (order of presentation counter-balanced across participants; see Appendix A). They were asked to review information about Ms. Clinton and Mr. Bush and to consider for whom they might vote. Subsequently,

[4] Forty-three of 533 participants (8.1%) failed this attention check. However, when these individuals were excluded from analyses, the patterns of results generally did not change. Most critically, the interpretations drawn regarding the introspective neglect hypothesis did not change. Therefore, all reported analyses included these participants, and the attention check is not discussed further.

participants' explicit and implicit preferences for the candidates were measured[5]. Importantly, for the purposes of the manipulation, the explicit measures were referred to simply as "questions," while the implicit measure was referred to as the "picture task" (see Measures sub-section below for more information). After completing these measures, participants were randomly assigned to introspect on either their explicit or their implicit attitudes. Specifically, they read the following instructions:

> ***Implicit introspection:*** When completing the picture task before, you may have had "gut feelings" toward the pictures of the candidates. Take a moment to think about those gut feelings. Research has shown that these feelings can predict how people vote. The questions on the next page ask you how confident you are in whom you plan to vote for.
>
> ***Explicit introspection:*** When answering the questions before, you were asked to consider your opinions of the candidates. Take a moment to think about those opinions. Research has shown that these opinions can predict how people vote. The questions on the next page ask you how confident you are in whom you plan to vote for.

Following this manipulation, all participants completed assessments of confidence regarding their voting intentions and provided demographic and political views and interest information[6]. Finally, participants were reminded that they would be re-contacted in one week.

One week later, participants received an e-mail invitation to complete the Time 2 survey. They were first reminded of the informed consent procedure and asked to indicate that they voluntarily agreed to continue participating. Subsequently, they were asked to imagine that the

[5] To ensure that the focal attitude was assessed directly prior to the introspection induction, the order of these attitude measures necessarily differed across conditions. For those in the *explicit introspection* condition, implicit attitudes were assessed first followed by explicit attitudes, while for those in the *implicit introspection* condition, the order was reversed. There is some evidence to suggest that such ordering could lead to greater correspondence between explicit and implicit attitudes in the *explicit introspection* condition if participants' observations of their automatic responses informed their subsequent deliberative responses (e.g., Cooley, Payne, & Phillips, 2014; see Petty et al., 2007). However, in the current study, the relationship between explicit and implicit attitudes was not moderated by condition ($p = 0.68$), therefore the potential influence of order effects is not discussed further.

[6] At the very end of the Time 1 survey, participants also completed a number of items related to subjective status (e.g., "I am admired by others") and beliefs about economic redistribution in the United States (e.g., "How do you feel about raising federal income taxes for people who make more than $200,000 per year?"). These measures were unrelated to the current hypotheses and are not discussed further.

2016 election for President of the United States was taking place today and to cast their vote. As an alternative behavioral measure of candidate preference, participants were also given the opportunity to read a set of ten facts about each candidate while reading time was recorded, before they were finally fully debriefed.

Measures. The primary measures of interest are detailed below. For a complete list of all measures used in the reported analyses, please see Appendix B.

Implicit candidate preference. Implicit attitudes toward the candidates were measured using the Affect Misattribution Procedure (AMP; Payne et al., 2005). Participants completed a total of 80 randomly-ordered trials (plus four initial practice trials) in which they were first presented with a fixation point, followed by a photograph of either Hillary Clinton or Jeb Bush (presented for 250 ms), followed by an ambiguous fractal image (for 250 ms), and finally with a visual "noise" mask. Five photographs of each candidate (presented eight times each) and 80 fractal images (presented one time each) constituted the stimuli set. (For candidate photographs and sample fractal images, please see Appendix C.) Participants were randomly assigned to one of two sets of 80 random pairings between the candidate photographs and fractal images. On each trial, participants were asked to judge whether each fractal was pleasant or unpleasant while avoiding any influence from the preceding photograph. Consequently, the observed effect of the primes on judgments of the fractals can be used as a measure of the participants' uncontrolled and unintended (implicit) attitudes toward the candidates (Payne et al., 2005; Payne et al., 2013). The AMP has previously shown strong incremental validity in predicting voting behavior even when controlling for explicit attitudes (Lundberg & Payne, 2014; Pasek et al., 2010; Payne et al., 2010; see also Cameron et al., 2012), and meta-analytic evidence suggests that it is a highly reliable measure (Payne & Lundberg, 2014). To examine the reliability of the current data, a set

of 40 difference scores was created, and each score was used as an individual item in calculating Cronbach's alpha. The result (α = 0.90) suggested a highly reliable measure. Therefore, implicit candidate preference was calculated by subtracting the proportion of pleasant judgments following photographs of Mr. Bush from the proportion of pleasant judgments following photographs of Ms. Clinton, with higher scores indicating greater implicit preference for Ms. Clinton.

Explicit candidate preference. Explicit attitudes toward the candidates were measured using five items regarding each candidate. The wording of these items was informed by those used in previous research, including the 2008-2009 Panel Study conducted by the American National Election Studies (ANES; see DeBell, Krosnick, & Lupia, 2010) and that of Payne and colleagues (2005). Participants were asked to indicate how much they liked each candidate ("To what extent do you like or dislike [Hillary Clinton/Jeb Bush]?"; 1 = *Dislike a great deal*, 2 = *Dislike a moderate amount*, 3 = *Dislike a little*, 4 = *Neither like nor dislike*, 5 = *Like a little*, 6 = *Like a moderate amount*, 7 = *Like a great deal*); to complete a feeling thermometer regarding each candidate ("Do you feel warm or cold toward [Hillary Clinton/Jeb Bush]?"; 1 = *Extremely warm*, 2 = *Moderately warm*, 3 = *A little warm*, 4 = *Neither warm nor cold*, 5 = *A little cold*, 6 = *Moderately cold*, 7 = *Extremely cold*; reverse-scored); and to rate their leadership qualities of competence, morality, and trustworthiness (e.g., "To what extent do you think [Hillary Clinton/Jeb Bush] is a competent leader?"; 1 = *Completely incompetent*, 2 = *Incompetent*, 3 = *Slightly incompetent*, 4 = *Neither incompetent nor competent*, 5 = *Slightly competent*, 6 = *Competent*, 7 = *Completely competent*). These five scores were averaged together to form a single composite for each candidate (Ms. Clinton: α = 0.96; Mr. Bush: α = 0.94; r(531) = -0.18, p

< .0001), and then a difference score was calculated such that higher numbers indicated greater explicit preference for Ms. Clinton.

Confidence regarding one's vote intention. Participants' metacognitive judgments of confidence regarding their intended vote were assessed using three continuous items and one binary item. The wording of the three continuous measures was informed by those used in previous research, including the ANES 2008-2009 Panel Study. Participants were asked to indicate their level of decision (from "completely undecided" to "completely decided"), how sure they were (from "extremely sure" to "not sure at all"; reverse-scored), and their level of confidence (from "not at all confident" to "extremely confident") on 11-point scales ranging from 0% to 100%. These three items were averaged together to form a single composite score with higher numbers indicating greater confidence (α = 0.98). For the binary measure of confidence, participants were asked to indicate whether they would classify themselves as "decided" or "undecided." I have previously argued that a continuous measure of confidence is superior to a binary measure in that it avoids the "threshold problem," in which two individuals with identical levels of confidence classify themselves differently because they maintain different thresholds for these classifications (Lundberg & Payne, 2014). However, the majority of research previously conducted on this topic used a binary measure of confidence (Arcuri et al., 2008; Friese et al., 2012; Galdi et al., 2008). It was expected that collecting both types of confidence measures would allow for more direct comparisons to both types of previous analyses.

Political views and interest. In order to validate the candidate preference measures and to evaluate the political diversity of the sample, participants were assessed on a number of political dimensions. Political ideology was measured using two items for which participants were asked

to indicate their political identity on social (e.g., abortion, gun rights, gay rights) and economic (e.g., taxation, government spending) issues on a 7-point scale ranging from "strongly liberal" to "strongly conservative." These two items were averaged together to form a single composite (Spearman-Brown coefficient = 0.65, $p < .0001$) with higher numbers indicating greater conservatism. Political party affiliation was assessed with a single 7-item scale ranging from "strong Democrat" to "Independent" to "strong Republican." Three items measured interest in, attention to, and knowledge about government and politics on 5-point scales (e.g., from "not interested at all" to "extremely interested"), which were averaged to form a single composite (α = 0.89) with higher numbers indicating greater interest.

Voting behavior. Votes were assessed with the following item: "Thinking ahead to the 2016 election for President of the United States, if the election was held today and the following individuals were on the ballot, who would you vote for?" Response options included: "Jeb Bush" "Hillary Clinton," and "I wouldn't vote for either candidate." These three response options were used to create three dichotomous contrasts of particular interest: (1) a vote for Ms. Clinton versus Mr. Bush; (2) a vote for Ms. Clinton versus Mr. Bush or abstaining; and (3) a vote for Mr. Bush versus Ms. Clinton or abstaining. Though previous research on implicit attitudes and undecided voters has assessed voting intentions and behavior as a choice between two primary options (e.g., Barack Obama or John McCain; Lundberg & Payne, 2014), other research on voting behavior more generally has found that explicit and implicit attitudes may predict different patterns of results (Pasek et al., 2010; Payne et al., 2010). For example, a weak preference for Ms. Clinton may result in votes for her or in the decision to abstain from voting. Allowing participants to choose a non-voting response option permitted comparisons across these different conceptualizations of voting behavior.

Alternative behavioral measure of candidate preference. An additional behavioral measure of candidate preference was included for exploratory purposes. Specifically, after casting their vote, participants were invited to spend time reading additional information provided about each candidate before proceeding to the end of the survey. They were then presented with a set of ten facts about each candidate, each set on a separate page with the order counter-balanced across participants. Facts were excerpted from existing sources (e.g., news articles, Wikipedia) and were matched in tone, favorability, and length. (Please see Appendix D for complete wording.) The time (in seconds) that the participant spent on each page before advancing to the next one was recorded. Time values for both candidates were highly positively skewed (Ms. Clinton: M = 90.98 seconds, SD = 83.30, *median* = 76.63, *skewness* = 3.35; Mr. Bush: M = 84.83 seconds, SD = 105.90, *median* = 67.37, *skewness* = 11.20). After eliminating outlying values (greater than three standard deviations from the mean), as well as values less than five seconds (a reasonable approximation of the minimum time that could be considered attention to the facts presented), complete information for 471 participants remained. Time spent on facts regarding Mr. Bush was subtracted from time spent on facts regarding Ms. Clinton ($r(469) = 0.60$, $p < .0001$) to create a difference score representing greater relative preference for Ms. Clinton.

Results

Preliminary analyses. Descriptive information regarding the variables used in Study 1 can be found in Tables 2 and 3. Values are provided, as appropriate, for both the initial Time 1 sample and the Time 2 completer sample, though the discussion here is limited to the Time 2 sample. Participants who pressed the same key on every AMP trial (n = 9; indicative of an

inattentive participant; see Payne & Lundberg, 2014) were identified and removed, leaving a maximum total of 524 participants for all analyses involving implicit candidate preference.

The primary goals of these preliminary analyses were (1) to further describe the political characteristics of the sample and (2) to ascertain the validity of the measures used. Descriptively, the sample overall tended to favor Ms. Clinton relative to Mr. Bush: The mean explicit (M = 0.82, SD = 2.46) and implicit (M = 0.07, SD = 0.31) candidate preference scores were greater than zero, indicating relatively more positive evaluations for Ms. Clinton. Participants also spent more time (M = 5.46 s, SD = 52.25) reading facts about her relative to Mr. Bush. Moreover, 58.16% (n = 310) ultimately cast votes for Ms. Clinton, while 20.83% (n = 111) voted for Mr. Bush and the remaining 21.02% (n = 112) abstained. Those preferences for Ms. Clinton are perhaps not surprising given that the sample also identified as slightly more liberal overall (M = 3.41, SD = 1.71) and more identified with the Democratic Party (M = 3.43, SD = 1.62). On the whole, the sample also tended to be more confident than not (M = 6.81, SD = 3.46), more decided than not (55.00% v. 45.00%), and moderately to very interested in politics (M = 3.45, SD = 0.96). Yet, it is important to note that the sample still remained politically diverse in that scores covered the full ranges available (e.g., from "strongly liberal" to "strongly conservative"; from "never" to "always" paying attention to government and politics) and that a visual examination of the distributions did not show drastic departures from normality.

Explicit and implicit candidate preference were moderately correlated (r = 0.46, $p < .0001$), consistent with previous research showing strong correlations between explicit and implicit political attitudes (e.g., Lundberg & Payne, 2014; see Nosek et al., 2010). They also showed the expected relationships with conservatism and party affiliation, such that those who were more liberal and more strongly affiliated with the Democratic Party also had weaker

explicit (*r*s = -0.68 and -0.70, *p*s < .0001) and implicit (*r*s = -0.32 and -0.35, *p*s < .0001) preferences for Ms. Clinton. Critically, explicit (|*r*s| > 0.65, *p*s < .0001) and implicit (|*r*s| > 0.30, *p*s < .0001) attitudes were also significant predictors of voting behavior, with those expressing greater relative preference for Ms. Clinton also more likely to vote for her. Importantly, this observed pattern of relationships suggests that these explicit and implicit scores were valid measures of candidate preferences.

The more continuous measure of confidence and the binary measure of decidedness were highly correlated with each other ($r = 0.81$, $p < .0001$). Consistent with previous research (see Schill & Kirk, 2014), they also showed slight associations with interest in politics (*r*s > 0.08, *p*s < 0.08), such that those who were more sure about their vote were also more engaged with politics. It was also the case that those who were more confident and decided were also more likely to explicitly (*r*s = 0.24 and 0.25, *p*s < .0001) and implicitly (*r*s = 0.12 and 0.11, *p*s < .02) prefer Ms. Clinton to Mr. Bush, to be more liberal (*r*s = -0.16 and -0.17, *p*s = .0001), and to more strongly affiliate with the Democratic Party (*r*s = -0.24 and -0.25, *p*s < .0001). These significant relationships may, in this case, have reflected the fact that Ms. Clinton was a more clearly identified front-runner for the Democratic Party nomination than Mr. Bush was for the Republican Party at the time of data collection.

Finally, the validity of the alternative behavioral measure of candidate preference was supported in these data in that it was significantly correlated with explicit ($r = 0.21$, $p < .0001$) and implicit candidate preference ($r = 0.10$, $p = 0.04$) and with voting behavior (|*r*s| > 0.10, *p*s < .03).

Did the relationships between candidate attitudes and voting behavior differ as a function of confidence or condition? The central research aims for Study 1 were to evaluate the

relationships between explicit and implicit candidate preferences and metacognitions about decidedness in predicting voting behavior and to determine if these relationships differed as a function of condition. In order to do so, eighteen total binary logistic regression models were estimated. Specifically, with three dichotomous contrasts involving voting behavior (e.g., Ms. Clinton versus Mr. Bush) and two measures of confidence (i.e., more continuous or binary), there were six voting behavior-confidence measure pairings of interest. Further, for each of those pairings, three models were estimated (6 pairings * 3 models = 18 models total). Specifically, in the first model (consistently referred to as Model 1 in each of the voting behavior-confidence measure pairings), vote was regressed on *explicit* candidate preference, confidence, condition, and all possible interactions. In the second model (consistently referred to as Model 2), vote was regressed on *implicit* candidate preference, confidence, condition, and all possible interactions. Finally, in the third model (consistently referred to as Model 3), vote was regressed on both explicit and implicit candidate preferences, confidence, condition, and all previously considered interactions. Because it is of interest to observe the unique effects of explicit and implicit attitudes, Model 3 was always used to test the main hypotheses, while Models 1 and 2 served as benchmarks to test the incremental validity gained by adding explicit or implicit attitudes to the model[7]. For clarity and because the interpretations with respect to the introspective neglect hypothesis were not substantially different across the six voting behavior-confidence measure pairings, only results for the model predicting votes for Ms. Clinton versus Mr. Bush and using the more continuous measure of confidence are discussed here and presented in Table 4 (N =

[7] In order to facilitate these model comparison tests, across all versions of this same basic model-building procedure, Models 1 and 2 were restricted to only participants who had no missing data across all variables included in Model 3.

416)[8]. Results for each of the other fifteen models can be found in Appendix E[9]. All continuous variables were standardized as *z*-scores prior to analysis.

Before interpreting the model-implied estimates, I first evaluated whether explicit and implicit candidate attitudes were uniquely related to voting behavior. Two likelihood ratio tests comparing Models 1 and 2, respectively, to Model 3 indicated that, though the fit of Model 3 was superior to Model 2 ($\Delta\text{-}2LL \sim \chi^2 = 2.22$, $\Delta df = 4$, $p < .0001$), it was not superior to Model 1 ($\Delta\text{-}2LL \sim \chi^2 = 289.40$, $\Delta df = 4$, $p = 0.70$). In other words, the inclusion of implicit candidate preference and its associated interaction terms did not explain significantly more variance in voting behavior than solely including explicit candidate preference and its associated interaction terms. This lack of support for the incremental validity of the implicit measure was also reflected in the lack of change in both indicators of model fit—the percentage of correctly classified cases and Nagelkerke's pseudo-R^2—from Model 1 to Model 3.

Not surprisingly then, while those with greater explicit preference for Ms. Clinton were more likely to vote for her even when controlling for implicit candidate preference ($B = 6.86$, *SE*

[8] Statistical and graphical methods were used to investigate the presence of potential outliers that may have been unduly influencing the results of this model. Following the recommendations of Hosmer and Lemeshow (2000) for conducting logistic regression diagnostics, measures of leverage, distance, and influence were obtained and examined. A number of potential outliers emerged. Of those, four—those with the largest residuals (both Pearson and deviance residual values) and whose deletion would result in the largest improvements in model fit and largest overall changes in the regression estimates—were identified as most problematic and deleted from the sample. The model was then re-estimated ($N = 412$; correctly classified cases = 95.4%; Nagelkerke's pseudo-$R^2 = 0.91$). There was no appreciable change in the results. I, therefore, concluded that the presence of these outliers was not disproportionately biasing the interpretation of the results and retained all data points for the analyses presented here.

[9] Multinominal logistic regression models were also used to predict voting behavior, which precluded the need to collapse across voting categories. These models were estimated using either (a) the more continuous measure of confidence or (b) the binary measure of decidedness and using either (a) the difference score variables indicating explicit and implicit candidate preference or (b) separate scores for each candidate (i.e., explicit and implicit attitudes toward Ms. Clinton and explicit and implicit attitudes toward Mr. Bush). Abstention was set as the reference category, and the two model-implied estimates for each predictor variable were then interpreted as reflecting (1) the increased likelihood of voting for Ms. Clinton versus abstention and (2) the increased likelihood of voting for Mr. Bush versus abstention. In all cases, explicit attitudes and confidence/decidedness emerged as significant overall predictors of votes for Ms. Clinton and Mr. Bush relative to abstention (Wald χ^2 values > 8.41, $df = 2$, ps < 0.02). However, the results offered no support for the introspective neglect hypothesis. Therefore, for clarity of presentation, they are not discussed further.

= 1.68, $p < .001$), implicit candidate preference was not uniquely associated with voting behavior ($B = 0.82$, $SE = 0.93$, $p = 0.38$). Moreover, no significant interactions emerged. Though it was expected that the predictive power of explicit candidate preference would be amplified at higher levels of confidence, the two-way interaction between explicit candidate preference and confidence was not significant ($B = -0.35$, $SE = 1.68$, $p = 0.33$), nor was it attenuated by a three-way interaction with condition ($B = 0.54$, $SE = 2.04$, $p = 0.79$). In other words, these results suggest that explicit candidate attitudes were equally predictive of future voting behavior whether the respondents were extremely confident or not at all confident about how they would vote. This finding fails to replicate much past research on both voting and other behaviors, which has consistently found that attitudes are more predictive of behavior as the confidence or certainty with which they are held increases (Friese et al., 2012; Lundberg & Payne, 2014; see Tormala & Rucker, 2007).

Finally, in the tests most integral to the evaluation of the introspective neglect hypothesis, the two-way interaction between implicit candidate preference and confidence was not significant ($B = 0.78$, $SE = 0.81$, $p = 0.33$), nor was it moderated by condition ($B = -1.10$, $SE = 1.12$, $p = 0.32$). In other words, these results are inconsistent with the hypothesized results: Though explicit (but not implicit) attitudes were uniquely associated with voting behavior, the relationships between candidate attitudes and voting behavior did not differ as a function of confidence, nor did the interactions between attitudes and confidence differ as a function of condition.

Did the relationships between candidate attitudes and reading time differ as a function of confidence or condition? The hypotheses concerning the relationships between explicit and implicit candidate preferences, metacognitions about decidedness, and condition

were re-evaluated in a series of analyses predicting the relative amount of time spent reading facts about Ms. Clinton versus Mr. Bush. The model-building procedures very closely followed those employed for predicting voting behavior except that linear regression was used and, because there was only one outcome measure of interest, only six total models needed to be estimated. As before, for clarity and because the pattern of results and interpretations was not substantially different across the more continuous measure of confidence and the binary measure of decidedness, only results for the three models using the more continuous measure of confidence are discussed here and presented in Table 5 (N = 463). Results for the models using the binary measure of decidedness can be found in Appendix F. And again, all continuous variables were standardized as z-scores prior to analysis.

Just as with voting behavior, the inclusion of implicit candidate preference and its associated interaction terms did not explain significantly more variance in reading time than the inclusion of explicit candidate preference and its associated interaction terms alone (ΔR^2 = 0.01, $F(4,451) = 1.06$, p = 0.37), while the inclusion of explicit candidate preference and its associated interaction terms resulted in significantly improved model fit above and beyond the implicit-only model (ΔR^2 = 0.03, $F(4,451) = 3.91$, p = 0.004). Similarly, only the main effect of explicit candidate preference emerged as a significant predictor, with greater relative explicit preference for Ms. Clinton predictive of more time spent reading facts about her (B = 9.15, SE = 3.77, p = 0.02). Implicit candidate preference was not uniquely predictive of reading time (B = -0.86, SE = 4.32, p = 0.84), nor did these main effects differ as a function of confidence, condition, or their interaction (ps > 0.31).

Did the relationships between candidate attitudes and confidence differ as a function of condition? Despite these largely non-significant results in predicting behavioral

measures of candidate preference, it could still have been the case that the strength of the associations between explicit and implicit attitudes and confidence differed as a function of condition. Specifically, the introspective neglect hypothesis would predict that, when implicit attitudes are focal, they should be more strongly associated with confidence than when they are non-focal (or neglected). Given the scoring of the candidate attitude measures as relative preference for one candidate versus the other, a strong relationship between the attitude and confidence would appear statistically as a curvilinear one. Thus, to evaluate these associations, the continuous measure of confidence was regressed on explicit and implicit candidate preference and their quadratic terms, as well as condition and the interactions between condition and the linear and quadratic terms (N = 524)[10].

A graphical representation of these results can be found in Figure 1 (R^2 = 0.21, F(9,514) = 14.99, p < .0001). As expected, the quadratic term for explicit candidate preference was significant, such that more extreme explicit attitudes were associated with greater confidence (B = 0.31, SE = 0.05, p < .0001, 95% CI: [0.22, 0.40]). However, this relationship was not qualified by a significant interaction with condition (B = -0.01, SE = 0.07, p = 0.91, 95% CI: [-0.14, 0.13]). Further, the quadratic term for implicit candidate preference was not significant (B = 0.01, SE = 0.03, p = 0.61, 95% CI: [-0.04, 0.06]) and was not qualified by a significant interaction with condition (B = 0.003, SE = 0.04, p = 0.92, 95% CI: [-0.07, 0.07]). This general pattern of results—the significant association between confidence and more extreme explicit (but not implicit) attitudes—replicates that found by Lundberg and Payne (2014). However, they provide no evidence to suggest that the manipulation of introspective contents (i.e., asking

[10] If the same set of analyses was repeated using all available Time 1 data (N = 667), the same pattern of results was observed.

participants to reflect on their explicit versus implicit attitudes) had any impact on subsequent judgments of confidence regarding one's voting intention.

Exploratory analyses: Filtering out inattentive participants. Given the lack of support for the initial hypotheses, I investigated whether the hypotheses were supported only among those participants who were most attentive to the introspection manipulation. The time (in seconds) that participants spent on the introspection manipulation before moving on to the metacognitive judgments of confidence had been recorded (M = 9.32, SD = 8.93, *median* = 7.86, *skewness* = 5.99). Having these data available provided the opportunity to investigate whether the effects of condition had been limited to only those participants who spent a reasonable amount of time attending to the manipulation and to their thoughts and feelings. Those participants in the bottom quartile for time spent on the manipulation (those who moved on to the metacognitive judgments in less than 5.241 seconds) were filtered out, and all analyses (predicting voting behavior, time spent reading, and confidence judgments) were repeated. When doing so, there was no change in the pattern of results or the conclusions that could be drawn from them. Thus, it seems that the null findings regarding the effects of condition cannot be attributed to inattention to the manipulation.

Discussion

In only one respect were the results of Study 1 consistent with the predictions of the introspective neglect hypothesis: More extreme explicit attitudes were associated with greater confidence in one's voting intention, while the strength of implicit attitudes was unrelated to confidence. This pattern of results approximates that found in earlier research in which implicit attitudes were more weakly related to confidence than explicit attitudes (Lundberg & Payne, 2014). And, it is consistent with the predictions of the introspective neglect hypothesis in that, if

implicit attitudes are neglected when making metacognitive judgments of confidence, they should be weakly or not at all related to those judgments.

However, Study 1 was designed to extend previous findings regarding the concept of introspective neglect by testing a particular mechanism for that neglect, namely that implicit attitudes are not spontaneously considered during the introspection process. And, in this regard, Study 1 provided no support for the hypothesized mechanism. When participants were asked to focus on their "gut feelings" (versus "opinions") before making metacognitive judgments of confidence about their voting intentions, it was expected that the strength of the relationship between implicit attitudes and confidence would be magnified and that implicit attitudes would interact with confidence such that those held with greater confidence were more strongly associated with voting behavior. In fact, the (non-significant) relationship between implicit attitudes and confidence was not altered, and implicit attitudes were equally unassociated with voting behavior across all levels of confidence. These null findings could not be attributed to inattentive participants or influential outlying observations.

It is worth emphasizing that the null findings in these analyses included the main effect of implicit attitudes. In other words, in these data, implicit attitudes were not uniquely predictive of voting behavior after controlling for explicit attitudes. While such a result is not unheard of in studies predicting voting behavior (e.g., Friese et al., 2012; Karpinski, Steinman, & Hilton, 2005), it is less common and did make it less likely that the full set of hypotheses could reasonably be supported. There was also no significant two-way interaction between explicit attitudes and confidence in predicting voting behavior. Past research on voting behavior (Friese et al., 2012; Lundberg & Payne, 2014), as well as more general research on attitude certainty (Berger & Mitchell, 1989; Bizer, Tormala, Rucker, & Petty, 2006; Fazio & Zanna, 1978; Rucker

& Petty, 2004; Tormala & Petty, 2002; see Tormala & Rucker, 2007), has consistently found that explicit attitudes held with greater confidence are more predictive of behavior. Therefore, it is unclear why, in these data, explicit candidate preferences held with greater confidence were no more predictive of voting behavior than those held with lesser confidence.

Given this set of null findings (for both established findings and new predictions), one might reasonably speculate that the sample size was not large enough to detect the expected effects. Though the study was as well-powered as resources allowed, it may have been insufficient to detect small effects, particularly the hypothesized interactions. However, setting aside the lack of significance and simply examining the patterns of the findings shows that the direction of the estimates was often the opposite of what was hypothesized. For example, in the model predicting votes for Ms. Clinton versus Mr. Bush and using the more continuous measure of confidence (see Table 4, Model 3), implicit attitudes held with the highest confidence were inversely related to voting behavior for those who were asked to focus on their "gut feelings." Said differently, when implicit attitudes were focal, highly confident respondents with the strongest implicit preference for Mr. Bush were more likely to vote for Ms. Clinton than less confident respondents. Again, none of these interpretations is strictly valid given the lack of significance. But, they do speak to the unlikelihood that a somewhat larger sample size would have revealed the expected effects.

What else might explain the failure to find any effects of condition in this study? Several possibilities exist. One is that the introspection manipulation was unsuccessful in making implicit attitudes more or less focal. For example, though participants were directed to focus on the "gut feelings" experienced during the picture task versus the "opinions" they had expressed in the questionnaires, they had completed both the explicit and the implicit measure prior to the

introspection task. Perhaps these circumstances made it too easy to conflate their automatic and controlled evaluative responses, rather than narrowing the introspective focus as was intended. A second possibility is that the introspection manipulation was successful in making implicit attitudes more or less focal, but that implicit attitudes, even when considered a valid source of information, do not uniquely and directly influence voting intentions and behavior. In other words, the introspective neglect hypothesis itself may be incorrect. This second possibility is addressed at greater length in the General Discussion section. Finally, a third possibility is that the introspection manipulation was successful in making implicit attitudes more or less focal, but that implicit attitudes were nevertheless disregarded because they were considered, on the whole, to be an invalid basis for judgment. It is this third possibility that Study 2 was designed to address.

CHAPTER 3: STUDY 2: MANIPULATING THE PERCEIVED VALIDITY OF IMPLICIT ATTITUDES

The introspective neglect hypothesis asserts that implicit attitudes may be overlooked during the introspective process for a number of reasons. Study 1 tested whether this neglect results from increased attention to explicit attitudes by attempting to manipulate whether explicit or implicit attitudes were focal at the time of introspection. Study 2 evaluated an alternative cause of the neglect, namely that people disregard their implicit attitudes because they are considered a less valid or trustworthy source of information. In this second study, participants were randomly assigned to consider their implicit attitudes a valid versus invalid basis for subsequent decision-making before making judgments of decidedness.

Method

Participants. As in Study 1, an Internet sample was recruited for a two-part study on the 2016 U.S. presidential election using Amazon's Mechanical Turk. As before, the sample size was predetermined to be approximately 500 participants, therefore the minimum Time 1 sample size was set at 675 participants, and Time 1 data collection was stopped on the day this *N* was obtained. The recruitment procedures and compensation plan were identical to those in Study 1. In total, 679 participants completed the Time 1 survey and 528 participants completed the Time 2 survey (*attrition* = 22.2%). The average time between completion of the two surveys was 8.02 days (*SD* = 1.90, *minimum* = 7, *maximum* = 17).

Demographic information is presented in Table 1. The composition of the Time 1 and Time 2 samples was similar with the average respondent being 33-34 years old, White (non-

Hispanic), holding a bachelor's degree, and living in a household with an annual income of at least $35,000. As in Study 1, the vast majority was registered and eligible to vote and identified as more closely affiliated with the Democratic Party or as independent.

Procedure and measures. The procedure and measures for Study 2 were largely identical to those of Study 1 (see Appendix B). The only differences were (1) a change to the manipulation of introspection; and (2) the addition of two items to verify the manipulation. As in Study 1, after giving informed consent and completing the attention check[11], participants were asked to review information about the two candidates and to complete the implicit and explicit measures of candidate preference. For the implicit measure, the proportion of pleasant judgments following photographs of Mr. Bush was subtracted from the proportion of pleasant judgments following photographs of Ms. Clinton, with higher scores indicating greater implicit preference for Ms. Clinton (α = 0.89). Responses to the explicit items were averaged together to form a single composite for each candidate (Ms. Clinton: α = 0.96; Mr. Bush: α = 0.94; $r(526) = -0.10$, $p = 0.03$), and then a difference score was calculated such that higher numbers indicated greater explicit preference for Ms. Clinton.

Participants were then randomly assigned to one of two introspection conditions. Specifically, they were induced to value (or devalue) implicit attitudes by generating reasons why those attitudes may (or may not) be a valid basis for decision-making. This manipulation is based on the confirmation bias, which asserts that those who are asked to search for evidence to support a hypothesis (e.g., gut feelings are a valid basis for making decisions) are more likely to

[11] Sixty-two of 528 participants (11.7%) failed this attention check. However, when these individuals were excluded from analyses, the patterns of results generally did not change. Most critically, the interpretations drawn regarding the introspective neglect hypothesis did not change. Therefore, all reported analyses included these participants, and the attention check is not discussed further.

endorse the hypothesis as true (Nickerson, 1998). Specifically, participants read a version of the following set of instructions:

> ***Valid [Invalid] Basis:*** When completing the picture task before, you may have had "gut feelings" toward the pictures of the political candidates. Research has found that these gut feelings are [**NOT**] a valid basis for making decisions about how to vote. In other words, if you had positive or negative feelings toward pictures of one of the candidates, research suggests that you should [**NOT**] use those feelings to decide how to vote. We are interested in how people generate reasons for their feelings. People can often generate reasons why their feelings toward the pictures either are or are not a valid basis for making decisions. For the purposes of this study, we would like you to write two to three (2-3) reasons why the feelings you felt during the picture task are [**NOT**] a valid basis for making decisions.

Subsequently, all participants completed a manipulation check, in which they were asked to rate their agreement with the following two items: "The gut feelings that I experienced during the picture task are a valid basis for judgment;" and "The gut feelings that I experienced during the picture task should be used when making decisions" (1 = S*trongly disagree*, 2 = *Disagree*, 3 = *Somewhat disagree*, 4 = *Neither agree nor disagree*, 5 = *Somewhat agree*, 6 = *Agree*, 7 = *Strongly agree*). Responses to these two items were averaged together (Spearman-Brown coefficient = 0.86, $p < .0001$) to form a single composite score with higher numbers indicating greater valuation of implicit attitudes.

Finally, participants completed the same three more continuous measures of confidence ($\alpha = 0.97$); the same binary measure of decidedness; and the same demographic and political items (political ideology: Spearman-Brown coefficient = 0.62, $p < .0001$; interest in and knowledge about politics: $\alpha = 0.89$). Approximately one week later, participants returned to cast their vote in the Time 2 survey and to complete the alternative behavioral measure of candidate preference (reading time) before being fully debriefed. As in Study 1, the values for reading time (in seconds) were highly positively skewed (Ms. Clinton: $M = 98.14$ seconds, $SD = 142.01$, *median* = 79.79, *skewness* = 9.69; Mr. Bush: $M = 89.53$ seconds, $SD = 100.08$, *median* = 72.12,

skewness = 4.62). After eliminating outlying values (greater than three standard deviations from the mean), as well as values less than five seconds, complete information for 469 participants remained. Time spent on facts regarding Mr. Bush was subtracted from time spent on facts regarding Ms. Clinton ($r(467) = 0.58$, $p < .0001$) to create a difference score representing greater relative preference for Ms. Clinton.

Results

Preliminary analyses. Descriptive information regarding the variables used in Study 2 can be found in Tables 6 and 7. Values are provided, as appropriate, for both the initial Time 1 sample and the Time 2 completer sample, though the discussion here will be limited to the Time 2 sample. Participants who pressed the same key on every AMP trial ($n = 8$) were identified and removed, leaving a total of 520 participants for all analyses involving implicit candidate preference.

As in Study 1, the primary goals of these preliminary analyses were (1) to further describe the political characteristics of the sample and (2) to ascertain the validity of the measures used. Descriptively, this sample was very similar to that obtained in Study 1. There was an overall tendency to favor Ms. Clinton relative to Mr. Bush with mean explicit ($M = 0.62$, $SD = 2.34$) and implicit ($M = 0.08$, $SD = 0.30$) candidate preference scores greater than zero, indicating relatively more positive evaluations for Ms. Clinton; more time spent reading facts about her relative to Mr. Bush ($M = 9.99$ s, $SD = 55.37$); and more votes ultimately cast for her (52.65%; $n = 278$) than for Mr. Bush (22.16%; $n = 117$) or for neither candidate (25.19%; $n = 133$). This sample was also slightly more liberal than conservative ($M = 3.58$, $SD = 1.66$) and more identified with the Democratic Party ($M = 3.52$, $SD = 1.51$). In contrast to Study 1, the average voter in this sample was neither confident nor unconfident ($M = 5.99$, $SD = 3.53$) and

was slightly more likely to be undecided than decided (57.01% v. 42.99%), though there was still an overall tendency to be moderately to very interested in politics (M = 3.46, SD = 1.05). As before, it is important to note that the sample remained politically diverse in that scores covered the full ranges available and that a visual examination of the distributions did not show drastic departures from normality.

Correlational evidence again suggested that explicit and implicit candidate preferences were valid measures. They were moderately correlated with each other (r = 0.50, p < .0001) and showed the expected relationships with conservatism and party affiliation, such that those who were more liberal and more strongly affiliated with the Democratic Party also had stronger explicit (rs = -0.65 and -0.63, ps < .0001) and implicit (rs = -0.26 and -0.28, ps < .0001) preferences for Ms. Clinton. They were also significant predictors of voting behavior, with those expressing greater explicit (|rs| > 0.63, ps < .0001) and implicit (|rs| > 0.29, ps < .0001) preference for Ms. Clinton also more likely to vote for her.

As in Study 1, the more continuous measure of confidence and the binary measure of decidedness were highly correlated with each other (r = 0.81, p < .0001) and with interest in politics (rs > 0.14, ps < .002), such that those who were more sure about their vote were also more engaged with politics. These results also replicated those from Study 1 in that those who were more confident and decided were also more likely to explicitly (rs = 0.25 and 0.26, ps < .0001) and implicitly (rs = 0.15 and 0.12, ps < .005) prefer Ms. Clinton to Mr. Bush, to be more liberal (rs = -0.18 and -0.20, ps < .0001), and to more strongly affiliate with the Democratic Party (rs = -0.27 and -0.27, ps < .0001).

Finally, in contrast to Study 1, the alternative behavioral measure (reading time spent on facts regarding Ms. Clinton versus Mr. Bush) was not significantly correlated with explicit or

implicit candidate preference or with voting behavior (*p*s > 0.77) in this sample, suggesting that it may not be considered a valid measure of candidate preference.

Did beliefs about the validity of gut feelings as a basis for judgment differ between conditions? Before proceeding to the central analyses, responses to the manipulation check were analyzed. Specifically, an independent samples *t*-test was conducted to assess whether those who were randomly assigned to generate reasons why their gut feelings were a valid basis for decision-making (*valid basis* condition: $n = 266$; $M = 3.94$, $SD = 1.74$, 95% CI: [3.73, 4.15]) subsequently reported greater belief in the validity of their gut feelings than those who were randomly assigned to devalue their implicit attitudes (*invalid basis* condition: $n = 262$; $M = 2.78$, $SD = 1.50$, 95% CI: [2.60, 2.96]). As expected, those in the *invalid basis* condition were significantly less likely to endorse their "gut feelings" as a valid basis for judgment than those randomly assigned to the *valid basis* condition (difference = -1.16, 95% CI: [-1.43, -0.88], $t(526) = -8.17$, $p < .0001$; Cohen's $d = -0.71$). The average score in the *valid basis* condition corresponded to a response of "neither agree nor disagree," while the average score in the *invalid basis* condition corresponded to a response of "somewhat disagree." Therefore, it seems that, in general, participants tended to devalue implicit attitudes as a basis for judgment, though the relative difference between the conditions was a moderately large effect size.

Did the relationships between candidate attitudes and voting behavior differ as a function of confidence or condition? The central research aims for Study 2 were to evaluate the relationships between explicit and implicit candidate preferences and metacognitions about decidedness in predicting voting behavior and to determine if these relationships differed as a function of condition. In order to do so, model-building procedures identical to those used in Study 1 were followed. And again, for clarity and because the interpretations with respect to the

introspective neglect hypothesis were not substantially different across the six voting behavior-confidence measure pairings, only results for the models predicting votes for Ms. Clinton versus Mr. Bush and using the more continuous measure of confidence are discussed here. Results for each of the other fifteen models can be found in Appendix G[12]. All continuous variables were standardized as *z*-scores prior to analysis.

Information about the fit of this model predicting votes for Ms. Clinton versus Mr. Bush (N = 390), as well as the model-implied estimates can be found in Table 8. In brief, the results showed a significant main effect of explicit attitudes, qualified by a significant two-way interaction with confidence, which was further qualified by a significant three-way interaction with condition, alongside a significant three-way interaction between implicit attitudes, confidence, and condition (ps < .01). Though the predictions associated with the introspective neglect hypothesis required a significant three-way interaction between implicit attitudes, confidence, and condition, and allowed for a significant three-way interaction between explicit attitudes, confidence, and condition, it should be noted that the patterns observed in these models were not the predicted patterns, nor are they consistent with existing research. Broadly, these results indicate that, when implicit attitudes were considered invalid, explicit attitudes were *less* predictive of voting behavior among highly confident respondents. While at the same time, when

[12] As in Study 1, multinominal logistic regression models were also used to predict voting behavior, which allowed for all data to be retained without the need to collapse across voting categories. These models were estimated using either (a) the more continuous measure of confidence or (b) the binary measure of decidedness and using either (a) the difference score variables indicating explicit and implicit candidate preference or (b) separate scores for each candidate (i.e., explicit and implicit attitudes toward Ms. Clinton and explicit and implicit attitudes toward Mr. Bush). Abstention was set as the reference category, and the two model-implied estimates for each predictor variable were then interpreted as reflecting (1) the increased likelihood of voting for Ms. Clinton versus abstention and (2) the increased likelihood of voting for Mr. Bush versus abstention. In all cases, explicit attitudes and confidence/decidedness emerged as significant overall predictors of votes for Ms. Clinton and Mr. Bush relative to abstention (Wald χ^2 values > 10.39, df = 2, ps < 0.006). Higher-order interactions were sometimes significant as well, but in similarly unexpected ways as the results of the binary logistic regression models. Most critically, these results offered no support for the introspective neglect hypothesis. Therefore, for clarity of presentation, they are not discussed further.

implicit attitudes were regarded as valid, they were actually inversely related to voting behavior among confident respondents.

However, beyond their seeming incoherence, there is additional reason to not belabor the interpretations of these model results here: Diagnostic tests suggested that they may have been unduly influenced by outlying data points. Therefore, I offer an extended discussion of the original model results (including the calculation of simple effects to better understand the nature of the interactions) and their interpretations in Appendix H and use the remainder of this section to outline the results of the diagnostic tests and the re-estimation of the model with the outliers removed.

To conduct the diagnostic tests, measures of leverage, distance, and influence were obtained and examined as recommended by Hosmer and Lemeshow (2000) for the model (Model 3) predicting votes for Ms. Clinton (versus Mr. Bush) and using the more continuous measure of confidence. In doing so, a number of extreme outliers emerged. Of those, six—those with the largest residuals (both Pearson and deviance residual values) and whose deletion would result in the largest improvements in model fit and largest overall changes in the regression estimates—were identified as most problematic and deleted from the sample. The model was then re-estimated ($N = 384$; correctly classified cases = 95.3%; Nagelkerke's pseudo-$R^2 = 0.94$). In this case, only explicit candidate preference emerged as a marginally significant predictor of voting behavior ($B = 19.12$, $SE = 10.41$, $p = 0.07$, 95% CI for the odds ratio estimate: [0.28, >999]; all other ps > 0.52). This substantial change in the model-implied estimates and the pattern of significance from the original to the re-estimated model indicates that the original results were highly sensitive to the influence of a very small number of data points and should be interpreted with caution. Though these re-estimated results offer no additional support for the

predictions made by the introspective neglect hypothesis, they are still more parsimonious than the original results and, therefore, preferred.

Did the relationships between candidate attitudes and reading time differ as a function of confidence or condition? Though the lack of significant associations in this sample between the relative amount of time spent reading facts about Ms. Clinton versus Mr. Bush and candidate preferences or voting behavior suggested that the results of any analyses would be difficult to interpret, those analyses were nevertheless pursued. Identical model-building procedures to those used in Study 1 for this outcome variable were used, and as before, only results for the three models using the more continuous measure of confidence are discussed here and presented in Table 9 (N = 461). Results for the models using the binary measure of decidedness can be found in Appendix I. In brief, no parameter estimates for explicit or implicit candidate preferences or their interaction terms were significant (ps > 0.12).

Did the relationships between candidate attitudes and confidence differ as a function of condition? I next examined whether the strength of the association between attitudes and confidence differed as a function of condition. As in the parallel analyses in Study 2, the more continuous measure of confidence was regressed on explicit and implicit candidate preference and their quadratic terms, as well as condition and the interactions between condition and the linear and quadratic terms (N = 520)[13]. A graphical representation of these results can be found in Figure 2 (R^2 = 0.20, F(9,510) = 14.48, p < .0001). As expected, the quadratic term for explicit candidate preference was significant, such that more extreme explicit attitudes were associated with greater confidence (B = 0.24, SE = 0.05, p < .0001, 95% CI: [0.15, 0.33]). However, this relationship was not qualified by a significant interaction with condition (B = 0.05,

[13] If the same set of analyses was repeated using all available Time 1 data (N = 665), the same pattern of results was observed.

SE = 0.07, *p* = 0.48, 95% CI: [-0.08, 0.18]). Further, the quadratic term for implicit candidate preference was not significant (*B* = 0.01, *SE* = 0.02, *p* = 0.65, 95% CI: [-0.04, 0.06]) and was not qualified by a significant interaction with condition (*B* = 0.04, *SE* = 0.03, *p* = 0.21, 95% CI: [-0.02, 0.11]). In short, though these results again replicated a pattern found in previous research (Lundberg & Payne, 2014), they provided no evidence to suggest that manipulating the perceived valuation of implicit attitudes had any impact on subsequent judgments of confidence regarding one's voting intention.

Exploratory analyses: Using beliefs in the validity of "gut feelings" as a predictor. Given the lack of support for an effect of condition on the relationship between attitudes and confidence, I investigated whether the hypotheses were supported when scores on the manipulation check variable (i.e., endorsement of "gut feelings" as a valid basis for judgment) were substituted for condition as a predictor variable in the analyses. Though the results of the manipulation check revealed that, on average, those in the *valid basis* condition did endorse their "gut feelings" as a more appropriate source of information for decision-making, perhaps those condition-level average differences were not sufficiently large enough to reveal the hypothesized results. It was hoped that, in substituting scores on the manipulation check for condition as a predictor variable in the analyses, more fine-grained distinctions would be possible.

However, when the model predicting votes for Ms. Clinton versus Mr. Bush and using the more continuous measure of confidence was re-estimated (Model 3; *N* = 390; correctly classified cases = 94.1%; Nagelkerke's pseudo-R^2 = 0.87), only the main effect of explicit attitudes (*B* = 7.39, *SE* = 1.21, *p* < .0001, 95% CI for the odds ratio estimate: [149.59, >999]) and the two-way interaction between explicit attitudes and confidence (*B* = -2.02, *SE* = 1.09, *p* = 0.06, 95% CI for the odds ratio estimate: [0.02, 1.12]) were (marginally) significant. These

estimates indicate that those with a greater explicit preference for Ms. Clinton were more likely to vote for her, but less so as confidence levels increased. No estimates for terms involving implicit attitudes or the manipulation check scores were significant (*p*s > 0.26). In other words, the results of this analysis do not fully correspond with those involving the condition variable as a predictor, and they do not align with the predictions of the introspective neglect hypothesis.

Additionally, when the quadratic analyses predicting confidence in one's voting intention from candidate preferences was re-estimated using scores on the manipulation check variable (N = 520, R^2 = 0.19, $F(9,510)$ = 13.66, $p < .0001$), no further clarity or support for the hypotheses was gained: The quadratic term for explicit candidate preference was still statistically significant (B = 0.25, SE = 0.03, $p < .0001$, 95% CI: [0.19, 0.32], as was the quadratic term for implicit candidate preference (B = 0.03, SE = 0.02, p = 0.049, 95% CI: [0.0001, 0.07]. Neither effect was qualified by a significant interaction with scores on the manipulation check (*p*s > 0.73). These results indicate that perceptions about the value of implicit attitudes were unrelated to the relationship between those attitudes and metacognitive judgments of confidence.

Discussion

As in Study 1, the results of Study 2 were consistent with the predictions of the introspective neglect hypothesis and with previous findings (Lundberg & Payne, 2014) in only one way: More extreme explicit attitudes were associated with greater confidence in one's voting intention, while the extremity of implicit attitudes was only weakly related to confidence. However, Study 2 was designed to extend previous findings regarding the concept of introspective neglect by testing a particular mechanism for that neglect, specifically that implicit attitudes are neglected during the introspective process because they are considered a less valid source of information for subsequent decision-making. And, in this regard, Study 2 provided no

support for the hypothesized mechanism. Whether participants were randomly assigned to value or devalue their implicit attitudes, those attitudes were unrelated to metacognitive judgments of confidence about one's vote and to voting behavior.

Considering all the evidence available (i.e., original analyses for the six voting behavior-confidence measure pairings, as well as the re-estimated model with outliers removed and the exploratory analyses), it seems clear that explicit candidate preference is (unsurprisingly) a reliable predictor of voting behavior: Those with a greater explicit preference for Ms. Clinton were more likely to vote for her. It also seems reasonable to conclude that, in these data, implicit attitudes were not uniquely predictive of voting behavior after controlling for explicit attitudes, and that explicit attitudes were either equally predictive across all levels of confidence or even more predictive at *lower* levels of confidence. These latter findings regarding implicit attitudes and the interaction between explicit attitudes and confidence replicate the results of Study 1 in that they do *not* replicate much of the previous research on this topic. Further, these unexpected and null findings are not likely the result of an under-powered study given that the direction of the results (e.g., the interaction between explicit attitudes and confidence) often ran counter to expectations.

What specifically might explain the failure to find any effects of condition in this study? One possibility is that Study 2 did not successfully manipulate perceived beliefs about the validity of implicit candidate attitudes as a basis for judgment. Though the intended manipulation check showed the expected results (i.e., the relative difference between the two conditions in valuation of implicit attitudes), the estimated mean for those in the *valid basis* condition only indicated neutrality on the issue. In other words, in neither condition did the average respondent indicate positive support for the validity of implicit attitudes as a basis for judgment. Further, the

quadratic analyses predicting confidence in one's voting intention could also be considered a type of manipulation check. And, in those analyses, those who purportedly placed relatively greater faith in their implicit attitudes as a basis for judgment (i.e., those in the *valid basis* condition) showed no evidence of doing so (i.e., no significant relationship between the extremity of their implicit attitudes and metacognitive judgments of confidence).

If the manipulation was unsuccessful, why might that have been the case? As I suggested previously regarding the Study 1 manipulation, perhaps respondents were unable to clearly distinguish their "gut feelings" as their automatic evaluative responses given that they had completed both explicit and implicit measures of candidate attitudes prior to the manipulation. If so, that might generate a great deal of random error that could mask the expected results. Alternatively, though the instructions asked participants to focus on feelings that they may have had toward the photographs of the candidates, it is certainly feasible that hurried participants may have overlooked the nuances of the instructions and thought about more global feelings experienced during the picture task, rather than specific feelings toward the photographs of the candidates. The manipulation check questions also do not specifically ask about "feelings that I experienced during the picture task *toward the candidates' photographs*," but rather "feelings that I experienced during the picture task." And, an inspection of the comments that people generated for why their feelings may or may not have been valid revealed some that appeared relevant to the candidates and the task at hand (e.g., "personal appearance has little to do with how effective a leader is," "This is a valid reason for making decisions because the feelings are already based in the knowledge I have of the candidates"), but many others that appeared unrelated (e.g., "Smoother shapes and rounded edges seemed to be more appealing," "I like fractals").

However, setting aside the possibility of a failed manipulation, there is a second possible reason for the failure to find any effects of condition in this study: The introspective neglect hypothesis is incorrect. In other words, even when considered a more valid source of information, implicit attitudes do not uniquely and directly influence voting intentions and behavior. This explanation will be addressed at greater length in the subsequent section.

CHAPTER 4: GENERAL DISCUSSION

Across two studies, I evaluated the introspective neglect hypothesis as a theoretical explanation for why explicit and implicit attitude measures are differentially predictive across undecided and decided voters. Past research (Arcuri et al., 2008; Friese et al., 2012; Galdi et al., 2008; Lundberg & Payne, 2014) has generally found that explicit attitudes are more predictive of voting behavior for decided than undecided voters, while implicit attitudes are equally predictive among decided and undecided voters. The introspective neglect hypothesis reasons that these divergent patterns may occur because, though implicit attitudes are neglected in the introspective process during which metacognitive judgments of decidedness are made, they nevertheless influence voting behavior. Such neglect may result from simple inattention to the contents of implicit attitudes or from beliefs that implicit attitudes are an inappropriate basis for judgment. Therefore, Study 1 evaluated this hypothesis by randomly assigning participants to introspect on their explicit versus implicit attitudes as they were making metacognitive judgments of decidedness. And, Study 2 did so by randomly assigning participants to value or devalue their implicit attitudes as a basis for judgment.

Study 1 found that explicit candidate attitudes were uniquely predictive of voting behavior, while implicit candidate attitudes were not. These results were not qualified by the confidence that respondents had in their voting intentions or by whether explicit or implicit attitudes had been more focal during the introspective process. Study 2 found that explicit candidate attitudes were uniquely predictive of voting behavior, while implicit candidate attitudes generally were not. When evaluating all available data, these results were qualified by

interactions with confidence in one's voting intention and by beliefs in the validity of gut feelings as a basis for judgment. However, the pattern of significance hinged on a few highly influential outliers in the sample, which calls into question the veracity of the findings. Therefore, the only thing that can be conservatively concluded from Study 2 is that those with a greater explicit preference for Ms. Clinton (versus Mr. Bush) were more likely to vote for her.

Most critically, in neither study did the results regarding voting behavior provide support for the introspective neglect hypothesis. However, in both cases, the results regarding confidence in one's voting intention did show that implicit attitudes were unrelated to these judgments of confidence, replicating the pattern found in previous research (Lundberg & Payne, 2014). It is in only this one regard that these studies provided any support for the introspective neglect hypothesis, though this support is very weak in that it rests on a *lack* of evidence—a null finding—and the assumption that the manipulation in both studies (of the contents of introspection or of the valuation of implicit attitudes, respectively) failed.

Generally, there are two classes of explanations for this failure to find confirmatory evidence for the introspective neglect hypothesis. The first is that, from a theoretical standpoint, the hypothesis is false. In other words, neglect of implicit attitudes during the introspective process is not the reason why explicit and implicit attitudes have shown different predictive patterns for voting behavior across decided versus undecided voters in previous research. Perhaps it is the case that implicit attitudes, regardless of their perceived validity, do not uniquely and directly influence voting intentions and behavior. This is the argument advanced by the biased processing hypothesis (Galdi et al., 2008; Gawronski et al., 2015), which asserts that implicit political attitudes influence individuals' interpretation of decision-relevant information, which in turn informs both their explicit attitudes and their confidence. According to this

account, it is these explicit attitudes (shaped by implicit attitudes) that are the most proximate cause of voting behavior, while implicit attitudes influence voting behavior only indirectly. This hypothesis offers a strong alternative to the introspective neglect hypothesis in that it can account for most of the patterns observed in previous research (Arcuri et al., 2008; Friese et al., 2012; Galdi et al., 2008; Lundberg & Payne, 2014) and also has been tested directly (Galdi et al., 2012).

However, though it is important to allow that the introspective neglect hypothesis may be false, it is virtually impossible to prove with the existence of null findings. Further, there are reasons to suspect that the current studies may not have provided the best test of the hypothesis. Therefore, the remainder of this section is devoted to such issues and how they may be addressed with future research.

A major point of concern regarding these studies is that they failed to replicate basic findings from previous research. First, implicit attitudes were not uniquely predictive of voting behavior. A central assumption of the introspective neglect hypothesis is that implicit attitudes may influence voting behavior directly. If they do not do so, then whether they are considered and/or valued during the introspective process is an irrelevant factor. So, one implication of these studies may be that the introspective neglect hypothesis rests on a faulty assumption. However, these studies' failures to find evidence for the incremental validity of implicit attitudes are exceptions when considered in the context of the existing research. One recent review of implicit political attitudes found only one case out of nine in which implicit political attitudes did not show incremental validity in predicting future political judgments and voting behavior above and beyond explicit political attitudes (see Gawronski et al., 2015). And, it is not likely that all of these previously published findings were false positives based on Type I errors, as they often

studied large and diverse sample sizes (e.g., nationally representative samples, as well as opt-in Internet samples and university student samples), collectively predicted a range of political outcomes (e.g., Italian, German, British, and U.S. voters; local and national elections; policy preferences), and used well-validated measures (e.g., the AMP [Payne et al., 2005]; the IAT [Greenwald et al., 1998]).

A second basic finding that these studies failed to replicate concerns the interaction between explicit attitudes and confidence in predicting voting behavior. In general, the results showed that explicit attitudes were equally predictive at high and low levels of confidence, though there was some evidence to suggest that they may have actually been more predictive at lower levels of confidence (e.g., the exploratory analyses in Study 2). Either way, these results are at odds with not only research predicting voting behavior, but also a much larger, more general body of research, which has repeatedly shown that, as confidence or certainty increases, attitudes become more predictive of behavior (Berger & Mitchell, 1989; Bizer et al., 2006; Fazio & Zanna, 1978; Rucker & Petty, 2004; Tormala & Petty, 2002; see Tormala & Rucker, 2007).

These null findings suggest that the potential methodological limitations of the current studies should be examined, as well as how they differed from previous studies. Doing so may indicate potential reasons for the failed replications, as well as improved means of assessing the introspective neglect hypothesis in the future. One potential methodological limitation—the inability to determine the true success of the Study 1 and Study 2 manipulations—has already been discussed at length. Future research on introspective neglect could be improved by strengthening either or both of these manipulations. Instructions could be clarified to facilitate a participant's ability to distinguish between automatic and deliberative evaluative responses. Additional manipulation checks could be added to assess participants' understanding of and

attention to the randomly assigned task. Potential moderating variables could be measured as well, which could clarify those for whom the manipulations might be more impactful. As one example, if the manipulations hinged on participants' ability to first identify those "gut feelings" experienced when completing the AMP, perhaps those with greater interoceptive awareness would be relatively more affected by the manipulation. Including measures to assess such awareness (e.g., the Private Body Consciousness subscale of the Body Consciousness Questionnaire [Miller, Murphy, & Buss, 1981], which includes items such as "I am sensitive to internal bodily tensions" and "I'm very aware of changes in my body temperature") may offer a better understanding of how and for whom the manipulations work. Additionally, future research may also make use of the current data by coding the "confirmation bias" statements made in Study 2 to eliminate those who seemed to misunderstand or otherwise not follow the directions.

Beyond this attention devoted to considering how and why the manipulations in these two studies may have been unsuccessful, there are three large categories of differences between these studies and previous studies that must be considered: the measures used, the samples recruited, and the political context in which these studies occurred.

First, it is possible that the measures used to assess explicit and implicit candidate attitudes and metacognitive judgments of decidedness were inappropriate in some way. However, the explicit attitudes and confidence measures were highly similar to those used in previous research (see Measures sub-sections within the study methods). Only one previous study assessed implicit attitudes using the AMP (Lundberg & Payne, 2014), and its parameters were slightly different than those used here (i.e., Chinese ideographs instead of fractal images, 48 rather than 80 trials, etc). Yet, it is unlikely that these differences were very impactful. The fractal images used as targets were drawn from a pool of images that had been previously tested

and rated as high on primeability (i.e., most likely to be influenced by the primes; Payne, Brown-Iannuzzi, & Panter, 2014), and the AMP used in the current studies did have acceptably high reliability and validity in both samples. It could be reasoned that perhaps implicit attitudes might be less useful or informative when assessing voting behavior related to these two particular candidates. For example, contrast the Clinton-Bush pairing with the political match-up of Barack Obama and John McCain in the 2008 U.S. presidential election, in which implicit attitudes may have captured racial- and age-related biases that individuals were motivated to correct in their deliberative explicit responses. Perhaps gender-related and other potential biases that could be manifest in implicit measurements toward Ms. Clinton and Mr. Bush are relatively smaller in magnitude. However, again, previous research on this topic has generally found implicit attitude measures to be useful, even when self-presentational concerns over socially sensitive topics are less relevant (see Gawronski et al., 2015).

Second, it is possible that the samples recruited for these studies differed systematically from those used in related research, and it is these differences that are responsible for the failed replications. While previous studies on this topic have used convenience and opt-in samples on the Internet (e.g., Friese et al., 2012), this study is the only one to have employed an Amazon Mechanical Turk sample. One might reason that these participants were less motivated and/or less attentive than those in previous samples, causing the subtle manipulations to fail. In fact, one study found that MTurk samples, in particular, were less likely to pay attention to experimental materials than community and student samples (Goodman, Cryder, & Cheema, 2012). However, others have generally found that the quality of the data in samples of MTurk participants tends to be as reliable as that collected via more traditional methods (Berinsky, Huber, & Lenz, 2012; Buhrmester, Kwang, & Gosling, 2011). And, at least one similar manipulation (of the

metacognitions associated with implicit attitudes; Cooley, Payne, & Phillips, 2014) has previously been successful when applied to an MTurk sample.

Finally and perhaps most critically, all previous studies have been conducted just prior to an election (Arcuri et al., 2008; Friese et al., 2012; Lundberg & Payne, 2014) or in the midst of heated public debate (Galdi et al., 2008). In other words, across most previous studies, there were likely to be two strongly polarized choices. At the time of the current studies, neither Ms. Clinton nor Mr. Bush had formally announced their candidacies (though both were widely known to be exploring that option), nor been as prominently featured in news coverage as they would have been in the months immediately preceding an election. As a result, the respondents in our sample were likely to be relatively less exposed to these candidates both in general and as opponents. They may have experienced their evaluations of these candidates and the need to choose between them as less personally relevant and engaging than respondents in previous studies. Under these circumstances, the candidate attitudes that were being assessed, as well as the confidence or certainty associated with those attitudes, may have been based on lesser amounts of thinking or elaboration, as predicted by well-known attitude change theories such as the Elaboration Likelihood Model (Petty & Cacioppo, 1986). If so, it would be expected that this metacognitive "tag" (i.e., confident/not confident) would be less likely to influence subsequent deliberate judgments and behaviors (see Petty et al., 2007). Such reasoning would account for the non-significant interactions between explicit attitudes and confidence and would suggest two potentially promising avenues for future research: First, within the existing data, there are variables (e.g., interest in and knowledge about politics, political party affiliation) that could serve as indices of those most likely to have engaged in greater elaboration regarding the candidates, their attitudes toward them, and the metacognitions associated with those attitudes.

These variables could be used as moderators in exploratory analyses predicting voting behavior to see if the hypothesized results are observed only among those who are highly motivated to elaborate. Second, it may be appropriate to re-conduct these studies in a different context (e.g., during a heated election cycle), which would potentially create circumstances of higher elaboration for the respondents, as well as allow for a more direct comparison to previous research.

CHAPTER 5: CONCLUSION

Forecasting the votes of undecided voters—a small but powerful proportion of the electorate—is an important challenge for both social scientists and political pollsters. Past research has suggested that implicit attitudes may be uniquely capable of predicting undecided voters' future choices. The studies reported in this research evaluated a possible mechanism for these findings: the *introspective neglect hypothesis*, which asserts that implicit attitudes are equally predictive of voting behavior for decided and undecided voters, in part, because when voters are asked to introspect about their decidedness, they are more likely to focus on their explicit attitudes and neglect their implicit attitudes. As a result of this neglect, the strength of implicit attitudes may not influence judgments of decidedness, but may still exert an influence on voting behavior. This account was evaluated in two studies using two-wave panel designs. In Study 1, participants were randomly assigned to focus on their implicit (versus explicit) attitudes toward hypothetical candidates while making judgments of decidedness. In Study 2, participants were randomly assigned to consider their implicit attitudes a valid (versus invalid) basis for subsequent decision-making. It was expected that, when implicit attitudes were focal or considered valid, they would be more strongly correlated with judgments of decidedness and more predictive of voting behavior for decided than undecided voters. However, neither study provided support for the hypothesized mechanisms. In both samples, explicit attitudes were uniquely predictive of voting behavior, while implicit attitudes were not. These results were not moderated by judgments of decidedness or by random assignment to condition.

In addition to their failure to extend support for the introspective neglect hypothesis, these studies also failed to replicate previously established findings in two key ways. First, implicit candidate attitudes were not uniquely predictive of voting behavior when controlling for explicit candidate attitudes. Second, explicit attitudes held with greater confidence were no more predictive of voting behavior than those held with lesser confidence. These null findings suggest that the current studies may not have provided the best testing ground for the introspective neglect hypothesis. In other words, while it is certainly possible that the introspective neglect hypothesis is false, whether it is should remain an empirical question to be better evaluated by additional research. The most promising avenues for future research appear to be those that would test these hypotheses in regards to a proximate election and those that would seek ways to strengthen the design of the current studies, particularly the manipulations of introspection.

TABLES

Table 1

Participant Demographics

	Study1		Study 2	
Participant characteristic	***Time 1***	***Time 2***	***Time 1***	***Time 2***
N	679	533	679	528
Age (years)[a]	32	32	33	34
% male	49.19	47.47	47.72	46.21
% White, non-Hispanic	81.74	81.99	80.97[d]	81.40[f]
Education level[a]	Bachelor's degree	Bachelor's degree	Bachelor's degree[d]	Bachelor's degree
Household income[a]	$35,000-$49,999	$35,000-$49,999	$35,000-$49,999[e]	$35,000-$49,999[g]
% registered to vote[b]	--	90.93	--	89.69
% eligible to vote in 2016[b]	--	99.24	--	99.05
Party affiliation[c]				
% Democrat	49.19	49.16	42.56	43.56
% Independent	29.75	30.02	38.14	37.69
% Republican	21.06	20.82	19.30	18.75
% randomly assigned to "implicit introspection" condition	51.10	50.84	--	--
% randomly assigned to the "valid basis" condition	--	--	49.78	50.38

[a] Value reported is median.
[b] For both Study 1 and Study 2, voter registration and eligibility were not measured until Time 2, and in both cases, four participants declined to provide this information (*n*s = 529 and 524, respectively).
[c] See Appendix B for more information about this item. The values reported for the *Democrat* and *Republican* categories reflect those who identified as having a strong, moderate, or leaning affiliation.
[d] $N = 678$.
[e] $N = 676$.
[f] $N = 527$.
[g] $N = 526$.

Table 2

Study 1 Descriptive Statistics

Means (standard deviations) for the primary measures of interest								
		Explicit pref.	***Implicit pref.***	***Confidence***	***Decided*** [a]	***Conservatism***	***Party affiliation***	***Interest in politics***
	At Time 1	0.73 (2.46)	0.06[a] (0.33)	6.77 (3.41)	$n_{undecided}$ = 310 $n_{decided}$ = 369	3.43 (1.70)	3.42 (1.62)	3.45 (0.97)
	At Time 2	0.82 (2.46)	0.07[b] (0.31)	6.81 (3.46)	$n_{undecided}$ = 240 $n_{decided}$ = 293	3.41 (1.71)	3.43 (1.62)	3.45 (0.96)

Correlations between the primary measures of interest								
	Condition	***Explicit pref.***	***Implicit pref.***	***Confidence***	***Decided***	***Conservatism***	***Party affiliation***	***Interest in politics***
Condition	1.00	-0.02 *ns*	0.06 *ns*	-0.01 *ns*	0.02 *ns*	0.03 *ns*	0.03 *ns*	-0.03 *ns*
Explicit preference	-0.03 *ns*	1.00	0.46[c]***	0.24***	0.25***	-0.68***	-0.70***	-0.10*
Implicit preference	0.03[b] *ns*	0.45[b]***	1.00	0.12[c]*	0.11[c]*	-0.32[c]***	-0.35[c]***	-0.09[c]*
Confidence	0.00 *ns*	0.24***	0.11[a]*	1.00	0.81***	-0.16***	-0.24***	0.15**
Decided	0.02 *ns*	0.24***	0.10[b]*	0.80***	1.00	-0.17***	-0.25***	0.08Ł
Conservatism	0.03 *ns*	-0.67***	-0.33[b]***	-0.15***	-0.17***	1.00	0.79***	-0.03 *ns*
Party affiliation	0.04 *ns*	-0.69***	-0.34[b]***	-0.24***	-0.26***	0.77***	1.00	0.04 *ns*
Interest in politics	-0.02 *ns*	-0.08*	-0.05[b] *ns*	0.14**	0.07Ł	-0.04 *ns*	0.05 *ns*	1.00

Values reported here are based on calculations involving the raw (unstandardized) data. For each variable respectively, higher numbers indicate the implicit introspection condition (versus the explicit introspection condition); greater relative explicit preference

for Ms. Clinton; greater relative implicit preference for Ms. Clinton; greater confidence in one's voting intention; identifying as decided (v. undecided); more conservative ideology; stronger affiliation with the Republican Party; and greater interest in politics. Values in the lower left triangle of the correlation matrix are based on all available (Time 1) data (N = 679). Values in the upper right triangle of the correlation matrix are based on the Time 2 data (N = 533). *** $p \leq .0001$, ** $p < .001$, * $p < .05$, ł $p < .10$

[a] Values reported are frequencies.

[b] N = 667.

[c] N = 524.

Table 3

Study 1 Candidate Preference Behaviors

Distributional information				
	Vote for Ms. Clinton (v. Mr. Bush)[a]	***Vote for Ms. Clinton (v. other behaviors)***[b]	***Vote for Mr. Bush (v. other behaviors)***[c]	***Greater time reading Clinton (v. Bush) facts***
Total *N*	421	533	533	471
Frequencies	$n_{\text{Clinton}} = 308$ $n_{\text{Bush}} = 108$	$n_{\text{Clinton}} = 308$ $n_{\text{Other}} = 216$	$n_{\text{Bush}} = 108$ $n_{\text{Other}} = 416$	--
Mean (SD)	--	--	--	5.46 (52.25)

Correlations				
	Vote for Ms. Clinton (v. Mr. Bush)[a]	***Vote for Ms. Clinton (v. other behaviors)***[b]	***Vote for Mr. Bush (v. other behaviors)***[c]	***Greater time reading Clinton (v. Bush) facts***
Condition	0.06 *ns*	0.03 *ns*	-0.06 *ns*	-0.03 *ns*
Explicit preference	0.79***	0.69***	-0.65***	0.21***
Implicit preference	0.37[d]***	0.36[f]***	-0.30[f]***	0.10[h]*
Confidence	0.16**	0.37***	-0.01 *ns*	0.08Ł
Decided	0.20***	0.36***	-0.07Ł	0.07 *ns*
Conservatism	-0.70***	-0.58***	0.57***	-0.10*
Party affiliation	-0.69***	-0.65***	0.57***	-0.13*
Interest in politics	-0.08	-0.08Ł	0.05 *ns*	-0.03 *ns*
Greater time reading Clinton (v. Bush) facts	0.15[e]*	0.16[g]**	-0.10[g]*	--

Values reported here are based on calculations involving the raw (unstandardized) Time 2 data. For variables in the furthermost left column, respectively, higher numbers indicate the implicit introspection condition (v. the explicit introspection condition); greater relative explicit

preference for Ms. Clinton; greater relative implicit preference for Ms. Clinton; greater confidence in one's voting intention; identifying as decided (v. undecided); more conservative ideology; stronger affiliation with the Republican Party; greater interest in politics; and relatively more time spent reading facts regarding Ms. Clinton. *** $p < .0001$, ** $p < .001$, * $p < .05$, ł $p < .10$

[a] 1 = vote for Ms. Clinton; 0 = vote for Mr. Bush.
[b] 1 = vote for Ms. Clinton; 0 = vote for Mr. Bush or abstention.
[c] 1 = vote for Mr. Bush; 0 = vote for Ms. Clinton or abstention.
[d] $N = 416$.
[e] $N = 372$.
[f] $N = 524$.
[g] $N = 470$.
[h] $N = 464$.

Table 4

Study 1 Models Predicting Votes for Ms. Clinton versus Mr. Bush

	Model 1: Explicit Candidate Preference				**Model 2: Implicit Candidate Preference**				**Model 3: Explicit and Implicit Candidate Preferences**			
	% CCC = 94.5; pseudo-R^2 = 0.87				% CCC = 76.9; pseudo-R^2 = 0.27				% CCC = 94.5; pseudo-R^2 = 0.87			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Constant	3.38 (0.78)	18.88	<.001		1.12 (0.19)	34.02	<.001		3.46 (0.80)	18.71	<.001	
Explicit	6.95 (1.54)	20.34	<.001	>999 [50.91, >999]	--	--	--	--	6.86 (1.68)	16.66	<.001	957.00 [35.45, >999]
Implicit	--	--	--	--	1.64 (0.40)	16.94	<.001	5.13 [2.36, 11.18]	0.82 (0.93)	0.78	0.38	2.28 [0.37, 14.15]
Confidence	0.53 (0.76)	0.48	0.49	1.69 [0.38, 7.51]	0.44 (0.20)	4.90	0.03	1.55 [1.05, 2.29]	0.62 (0.76)	0.68	0.41	1.87 [0.42, 8.23]
Condition	-0.40 (0.95)	0.17	0.68	0.67 [0.10, 4.34]	0.20 (0.27)	0.54	0.46	1.22 [0.72, 2.08]	-0.45 (0.97)	0.21	0.64	0.64 [0.09, 4.30]
Confidence* Condition	0.13 (0.95)	0.02	0.89	1.14 [0.18, 7.27]	-0.05 (0.29)	0.03	0.86	0.95 [0.54, 1.68]	0.04 (0.95)	0.00	0.96	1.05 [0.16, 6.66]
Explicit* Confidence	-0.49 (1.62)	0.09	0.76	0.61 [0.03, 14.63]	--	--	--	--	-0.35 (1.68)	0.04	0.84	0.71 [0.03, 18.96]
Implicit* Confidence	--	--	--	--	0.01 (0.44)	0.00	0.98	1.01 [0.43, 2.40]	0.78 (0.81)	0.95	0.33	2.19 [0.45, 10.63]
Explicit* Condition	-1.77 (1.80)	0.96	0.33	0.17 [0.01, 5.84]	--	--	--	--	-1.49 (2.01)	0.55	0.46	0.23 [0.00, 11.45]
Implicit* Condition	--	--	--	--	-0.40 (0.51)	0.62	0.43	0.67 [0.26, 1.82]	-1.06 (1.15)	0.86	0.35	0.35 [0.03, 3.27]
Explicit* Confidence* Condition	0.56 (1.95)	0.08	0.78	1.73 [0.04, 79.59]	--	--	--	--	0.54 (2.04)	0.07	0.79	1.72 [0.03, 93.82]

	Model 1: Explicit Candidate Preference % CCC = 94.5; pseudo-R^2 = 0.87				Model 2: Implicit Candidate Preference % CCC = 76.9; pseudo-R^2 = 0.27				Model 3: Explicit and Implicit Candidate Preferences % CCC = 94.5; pseudo-R^2 = 0.87			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Implicit* Confidence* Condition	--	--	--	--	0.01 (0.57)	0.00	0.99	1.01 [0.33, 3.09]	-1.10 (1.12)	0.97	0.32	0.33 [0.03, 2.97]

Results of logistic regression analyses predicting votes for Ms. Clinton (1) versus Mr. Bush (0) from explicit and implicit preference for Ms. Clinton, confidence in one's voting intention, and condition (0 = *explicit introspection*, 1 = *implicit introspection*). Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. *CCC*: correctly classified cases; pseudo-R^2: Nagelkerke's pseudo-R^2; *B*: regression weight *B* (log odds); *SE*: standard error of the regression weight *B*; Wald: Wald test statistic; OR: odds ratio. Relative amount by which the odds increase (OR > 1.0) or decrease (OR < 1.0) when the value of the predictor is increased by 1 unit.

Table 5

Study 1 Models Predicting the Alternative Behavioral Measure of Candidate Preference (Reading Time)

	Model 1: Explicit Candidate Preference $R^2 = 0.05$, $F(7,455) = 3.55$, $p = 0.001$				**Model 2: Implicit Candidate Preference** $R^2 = 0.03$, $F(7,455) = 1.88$, $p = 0.07$				**Model 3: Explicit and Implicit Candidate Preferences** $R^2 = 0.06$, $F(11, 451) = 2.65$, $p = 0.003$			
	***B* (SE)**	***t***	***p***	**[95% CI]**	***B* (SE)**	***t***	***p***	**[95% CI]**	***B* (SE)**	***t***	***p***	**[95% CI]**
Constant	6.75 (3.47)	1.94	0.05	[-0.07, 13.58]	6.45 (3.49)	1.85	0.07	[-0.41, 13.30]	6.40 (3.51)	1.82	0.07	[-0.49, 13.29]
Explicit	8.83 (3.50)	2.52	0.01	[1.95, 15.72]	--	--	--	--	9.15 (3.77)	2.43	0.02	[1.74, 16.56]
Implicit	--	--	--	--	3.09 (4.07)	0.76	0.45	[-4.90, 11.09]	-0.86 (4.32)	-0.20	0.84	[-9.36, 7.64]
Confidence	-1.43 (3.53)	-0.40	0.69	[-8.37, 5.51]	0.77 (3.54)	0.22	0.83	[-6.20, 7.73]	-0.93 (3.57)	-0.26	0.79	[-7.96, 6.09]
Condition	-1.49 (4.96)	-0.30	0.76	[-11.23, 8.26]	-3.05 (4.89)	-0.62	0.53	[-12.66, 6.55]	-1.09 (4.99)	-0.22	0.83	[-10.89, 8.71]
Confidence* Condition	5.62 (5.04)	1.11	0.27	[-4.29, 15.52]	5.92 (4.96)	1.19	0.23	[-3.83, 15.67]	4.69 (5.08)	0.92	0.36	[-5.29, 14.66]
Explicit* Confidence	0.77 (3.54)	0.22	0.83	[-6.18, 7.72]	--	--	--	--	-0.61 (3.79)	-0.16	0.87	[-8.06, 6.83]
Implicit* Confidence	--	--	--	--	4.53 (4.16)	1.09	0.28	[-3.64, 12.69]	4.51 (4.40)	1.02	0.31	[-4.14, 13.15]
Explicit* Condition	5.10 (5.70)	0.89	0.37	[-6.10, 16.30]	--	--	--	--	5.45 (6.16)	0.88	0.38	[-6.66, 17.55]
Implicit* Condition	--	--	--	--	-1.42 (5.64)	-0.25	0.80	[-12.50, 9.65]	-2.40 (6.02)	-0.40	0.69	[-14.23, 9.43]
Explicit* Confidence* Condition	-2.38 (5.73)	-0.42	0.68	[-13.64, 8.88]	--	--	--	--	-3.98 (6.14)	-0.65	0.52	[-16.05, 8.08]

	Model 1: Explicit Candidate Preference				Model 2: Implicit Candidate Preference				Model 3: Explicit and Implicit Candidate Preferences			
Implicit* Confidence* Condition	--	--	--	--	2.41 (5.63)	0.43	0.67	[-8.65, 13.46]	2.67 (5.95)	0.45	0.65	[-9.07, 14.37]

Results of linear regression analyses predicting greater time spent reading facts regarding Ms. Clinton (relative to Mr. Bush) from explicit and implicit preference for Ms. Clinton, confidence in one's voting intention, and condition (0 = *explicit introspection*, 1 = *implicit introspection*). Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. *B*: regression weight *B*; *SE*: standard error of the regression weight *B*; *t*: *t* test statistic; 95% CI: 95% confidence interval for regression weight *B*.

Table 6

Study 2 Descriptive Statistics

Means (standard deviations) for the primary measures of interest									
		Manip check.	***Explicit pref.***	***Implicit pref.***	***Confidence***	***Decided***	***Conserv.***	***Party affiliation***	***Interest in politics***
	At Time 1	3.40 (1.73)	0.61 (2.39)	0.08[a] (0.32)	6.12 (3.58)	$n_{undecided}$ = 377 $n_{decided}$ = 302	3.59 (1.65)	3.53 (1.51)	3.44[b] (1.04)
	At Time 2	3.36 (1.72)	0.62 (2.34)	0.08[d] (0.30)	5.99 (3.53)	$n_{undecided}$ = 301 $n_{decided}$ = 227	3.58 (1.66)	3.52 (1.51)	3.46[e] (1.05)
Correlations between the primary measures of interest									
	Condition	***Manip. check***	***Explicit pref.***	***Implicit pref.***	***Confidence***	***Decided***	***Conserv.***	***Party affiliation***	***Interest in politics***
Condition	1.00	0.34***	-0.05 *ns*	0.00[d] *ns*	-0.02 *ns*	-0.01 *ns*	0.03 *ns*	0.06 *ns*	-0.01[e] *ns*
Manipulation check	0.35***	1.00	0.01 *ns*	0.07[d]Ŧ	0.06 *ns*	0.04 *ns*	0.11*	0.08Ŧ	-0.07[e]Ŧ
Explicit preference	-0.02 *ns*	0.03 *ns*	1.00	0.50[d]***	0.25***	0.26***	-0.65***	-0.63***	-0.06[e] *ns*
Implicit preference	-0.02[a] *ns*	0.08[a]*	0.50[a]***	1.00	0.15[d]**	0.12[d]*	-0.26[d]***	-0.28[d]***	-0.06[f] *ns*
Confidence	0.00 *ns*	0.12*	0.22***	0.14[a]**	1.00	0.81***	-0.18***	-0.27***	0.14[e]*
Decided	0.00 *ns*	0.10*	0.22***	0.11[a]*	0.82***	1.00	-0.20***	-0.27***	0.15[e]**
Conservatism	0.02 *ns*	0.09*	-0.64***	-0.28[a]***	-0.12*	-0.15**	1.00	0.71***	-0.01[e] *ns*
Party affiliation	0.05 *ns*	0.05 *ns*	-0.64***	-0.31[a]***	-0.24***	-0.25***	0.70***	1.00	0.02[e] *ns*
Interest in politics	0.00[b] *ns*	-0.06[b] *ns*	-0.03[b] *ns*	-0.02[c] *ns*	0.13[b]**	0.13[b]**	-0.02[b] *ns*	0.01[b] *ns*	1.00

For each variable respectively, higher numbers indicate greater valuation of implicit attitudes; the implicit introspection condition (v. the explicit introspection condition); greater relative explicit preference for Ms. Clinton; greater relative implicit preference for Ms. Clinton; greater confidence in one's voting intention; identifying as decided (v. undecided); more conservative ideology; stronger affiliation with the Republican Party; and greater interest in politics. Values in the lower left triangle of the correlation matrix are based on all available (Time 1) data. $N = 679$ except where [a] ($N = 665$) and [b] ($N = 678$) and [c] ($N = 664$). Values in the upper right triangle of the correlation matrix are based on the Time 2 data. $N = 528$ except where [d] ($N = 520$) and [e] ($N = 527$) and [f] ($N = 519$). *** $p < .0001$, ** $p < .001$, * $p < .05$, ŧ $p < .10$

Table 7

Study 2 Candidate Preference Behaviors

Distributional information				
	Vote for Ms. Clinton (v. Mr. Bush)[a]	***Vote for Ms. Clinton (v. other behaviors)***[b]	***Vote for Mr. Bush (v. other behaviors)***[c]	***Greater time reading Clinton (v. Bush) facts***
Total *N*	395	528	528	469
Frequencies	$n_{Clinton}$ = 278 n_{Bush} = 117	$n_{Clinton}$ = 278 n_{Other} = 250	n_{Bush} = 117 n_{Other} = 411	--
Mean (SD)	--	--	--	9.99 (55.37)

Correlations				
	Vote for Ms. Clinton (v. Mr. Bush)[a]	***Vote for Ms. Clinton (v. other behaviors)***[b]	***Vote for Mr. Bush (v. other behaviors)***[c]	***Greater time reading Clinton (v. Bush) facts***
Condition	-0.04 *ns*	-0.04 *ns*	0.03 *ns*	0.02 *ns*
Manipulation check	-0.01 *ns*	-0.01 *ns*	0.01 *ns*	-0.04 *ns*
Explicit preference	0.78***	0.69***	-0.63***	-0.01 *ns*
Implicit preference	0.38[d]***	0.37[g]***	-0.29[g]***	-0.01[i] *ns*
Confidence	0.21***	0.36***	-0.05 *ns*	0.03 *ns*
Decided	0.21***	0.33***	-0.08Ł	0.05 *ns*
Conservatism	-0.67***	-0.51***	0.53***	-0.04 *ns*
Party affiliation	-0.69***	-0.62***	0.56***	-0.05 *ns*
Interest in politics	-0.06[e] *ns*	-0.04[h] *ns*	0.05[h] *ns*	-0.03[j] *ns*
Greater time reading Clinton (v. Bush) facts	0.00[f] *ns*	-0.01 *ns*	-0.01 *ns*	--

Values reported here are based on calculations involving the raw (unstandardized) Time 2 data. For variables in the furthermost left column, respectively, higher numbers indicate the implicit introspection condition (v. the explicit introspection condition); greater valuation of implicit attitudes; greater relative explicit preference for Ms. Clinton; greater relative implicit preference for Ms. Clinton; greater confidence in one's voting intention; identifying as decided (v. undecided); more conservative ideology; stronger affiliation with the Republican Party; greater interest in politics; and relatively more time spent reading facts regarding Ms. Clinton. *** $p < .0001$, ** $p < .001$, * $p < .05$, ŧ $p < .10$

[a] 1 = vote for Ms. Clinton; 0 = vote for Mr. Bush.
[b] 1 = vote for Ms. Clinton; 0 = vote for Mr. Bush or abstention.
[c] 1 = vote for Mr. Bush; 0 = vote for Ms. Clinton or abstention.
[d] $N = 390$.
[e] $N = 394$.
[f] $N = 350$.
[g] $N = 520$.
[h] $N = 527$.
[i] $N = 461$.
[j] $N = 468$.

Table 8

Study 2 Models Predicting Votes for Ms. Clinton versus Mr. Bush

	Model 1: Explicit Candidate Preference				**Model 2: Implicit Candidate Preference**				**Model 3: Explicit and Implicit Candidate Preferences**			
	% CCC = 94.6; pseudo-R^2 = 0.87				% CCC = 74.6; pseudo-R^2 = 0.30				% CCC = 94.4; pseudo-R^2 = 0.89			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Constant	3.21 (0.70)	20.93	<.001		1.05 (0.19)	29.55	<.001		3.80 (0.91)	17.55	<.001	
Explicit	8.24 (1.83)	20.35	<.001	>999 [106, >999]	--	--	--	--	9.78 (2.36)	17.22	<.001	>999 [174, >999]
Implicit	--	--	--	--	1.18 (0.31)	14.61	<.001	3.24 [1.77, 5.92]	-0.48 (0.51)	0.88	0.35	0.62 [0.23, 1.68]
Confidence	-0.41 (0.65)	0.41	0.52	0.66 [0.19, 2.36]	0.82 (0.21)	15.53	<.001	2.27 [1.51, 3.40]	-0.91 (0.76)	1.44	0.23	0.40 [0.09, 1.77]
Condition	-0.88 (0.85)	1.08	0.30	0.41 [0.08, 2.19]	-0.06 (0.28)	0.05	0.82	0.94 [0.54, 1.62]	-0.61 (1.23)	0.25	0.62	0.54 [0.05, 6.07]
Confidence* Condition	0.46 (0.82)	0.31	0.58	1.58 [0.32, 7.90]	-0.60 (0.29)	4.23	0.04	0.55 [0.31, 0.97]	1.74 (1.06)	2.69	0.10	5.70 [0.71, 45.53]
Explicit* Confidence	-3.89 (1.42)	7.47	0.01	0.02 [0.00, 0.33]	--	--	--	--	-5.35 (1.79)	8.89	0.002	0.01 [<0.001, 0.16]
Implicit* Confidence	--	--	--	--	0.46 (0.30)	2.42	0.12	1.59 [0.89, 2.83]	0.92 (0.61)	2.28	0.13	2.52 [0.76, 8.37]
Explicit* Condition	-2.70 (2.11)	1.64	0.20	0.07 [0.00, 4.20]	--	--	--	--	-2.77 (2.86)	0.94	0.33	0.06 [<0.01, 16.89]
Implicit* Condition	--	--	--	--	0.53 (0.54)	0.97	0.33	1.70 [0.59, 4.93]	0.33 (1.01)	0.11	0.75	1.39 [0.19, 9.99]
Explicit* Confidence* Condition	3.32 (1.79)	3.43	0.06	27.60 [0.83, 921.86]	--	--	--	--	7.02 (2.34)	9.00	0.003	>999 [11.40, >999]

	Model 1: Explicit Candidate Preference % CCC = 94.6; pseudo-R^2 = 0.87				Model 2: Implicit Candidate Preference % CCC = 74.6; pseudo-R^2 = 0.30				Model 3: Explicit and Implicit Candidate Preferences % CCC = 94.4; pseudo-R^2 = 0.89			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Implicit* Confidence* Condition	--	--	--	--	-0.82 (0.53)	2.45	0.12	0.44 [0.16, 1.23]	-2.73 (1.00)	7.38	0.01	0.07 [0.01, 0.47]

Results of logistic regression analyses predicting votes for Ms. Clinton (1) versus Mr. Bush (0) from explicit and implicit preference for Ms. Clinton, confidence in one's voting intention, and condition (0 = *invalid basis*, 1 = *valid basis*). Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. *CCC*: correctly classified cases; pseudo-R^2: Nagelkerke's pseudo-R^2; *B*: regression weight *B* (log odds); *SE*: standard error of the regression weight *B*; Wald: Wald test statistic; OR: odds ratio. Relative amount by which the odds increase (OR > 1.0) or decrease (OR < 1.0) when the value of the predictor is increased by 1 unit.

Table 9

Study 2 Models Predicting the Alternative Behavioral Measure of Candidate Preference (Reading Time)

	Model 1: Explicit Candidate Preference $R^2 = 0.02$, $F(7,453) = 0.99$, $p = 0.43$				**Model 2: Implicit Candidate Preference** $R^2 = 0.02$, $F(7,453) = 1.45$, $p = 0.18$				**Model 3: Explicit and Implicit Candidate Preferences** $R^2 = 0.03$, $F(11,449) = 1.12$, $p = 0.35$			
	***B* (SE)**	***t***	***p***	**[95% CI]**	***B* (SE)**	***t***	***p***	**[95% CI]**	***B* (SE)**	***t***	***p***	**[95% CI]**
Constant	10.52 (3.80)	2.77	0.01	[3.06, 17.98]	9.51 (3.67)	2.59	0.01	[2.29, 16.72]	10.82 (3.80)	2.85	0.004	[3.36, 18.28]
Explicit	3.84 (4.18)	0.92	0.36	[-4.38, 12.06]	--	--	--	--	1.21 (4.58)	0.26	0.79	[-7.79, 10.22]
Implicit	--	--	--	--	5.54 (4.07)	1.36	0.17	[-2.47, 13.55]	5.50 (4.44)	1.24	0.22	[-3.23, 14.22]
Confidence	5.55 (3.99)	1.39	0.16	[-2.29, 13.39]	5.80 (3.84)	1.51	0.13	[-1.75, 13.36]	5.89 (4.00)	1.47	0.14	[-1.97, 13.76]
Condition	1.19 (5.33)	0.22	0.82	[-9.28, 11.67]	2.98 (5.21)	0.57	0.57	[-7.25, 13.21]	1.31 (5.35)	0.25	0.81	[-9.20, 11.82]
Confidence* Condition	-8.10 (5.38)	-1.51	0.13	[-18.67, 2.47]	-8.43 (5.27)	-1.60	0.11	[-18.78, 1.92]	-8.37 (5.41)	-1.55	0.12	[-19.01, 2.27]
Explicit* Confidence	-5.14 (4.08)	-1.26	0.21	[-13.16, 2.88]	--	--	--	--	-6.27 (4.53)	-1.38	0.17	[-15.18, 2.64]
Implicit* Confidence	--	--	--	--	-1.89 (4.19)	-0.45	0.65	[-10.13, 6.35]	0.89 (4.66)	0.19	0.85	[-8.28, 10.05]
Explicit* Condition	-7.21 (5.92)	-1.22	0.22	[-18.84, 4.41]	--	--	--	--	-2.77 (6.51)	-0.43	0.67	[-15.56, 10.02]
Implicit* Condition	--	--	--	--	-8.43 (6.10)	-1.38	0.17	[-20.41, 3.56]	-7.79 (6.69)	-1.16	0.24	[-20.94, 5.36]
Explicit* Confidence* Condition	3.26 (5.89)	0.55	0.58	[-8.32, 14.86]	--	--	--	--	8.49 (6.68)	1.27	0.20	[-4.64, 21.61]

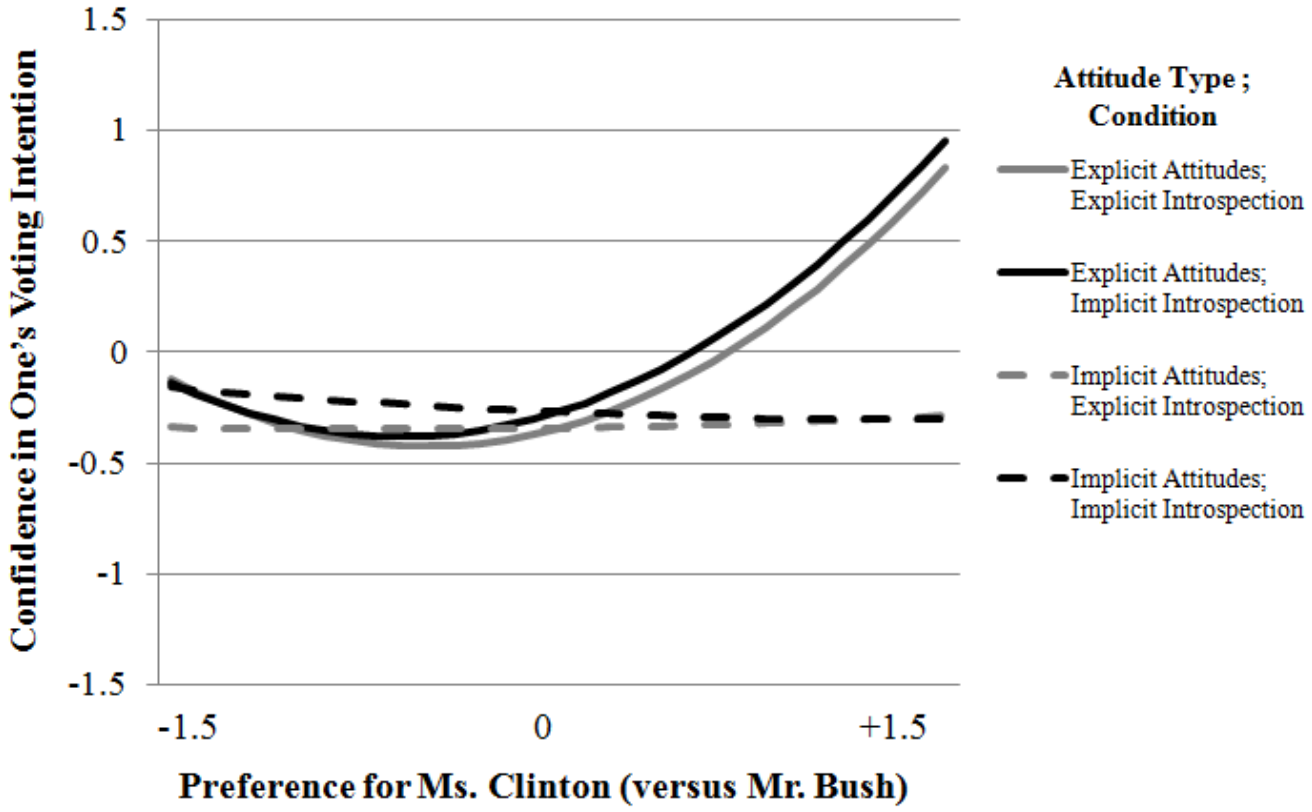
	Model 1: Explicit Candidate Preference				Model 2: Implicit Candidate Preference				Model 3: Explicit and Implicit Candidate Preferences			
Implicit* Confidence* Condition	--	--	--	--	-3.33 (5.87)	-0.57	0.57	[-14.86, 8.19]	-7.05 (6.60)	-1.07	0.29	[-20.02, 5.91]

Results of linear regression analyses predicting greater time spent reading facts regarding Ms. Clinton (relative to Mr. Bush) from explicit and implicit preference for Ms. Clinton, confidence in one's voting intention, and condition (0 = *invalid basis*, 1 = *valid basis*). Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. *B*: regression weight *B*; *SE*: standard error of the regression weight *B*; *t*: *t* test statistic; 95% CI: 95% confidence interval for regression weight *B*.

FIGURES

Figure 1

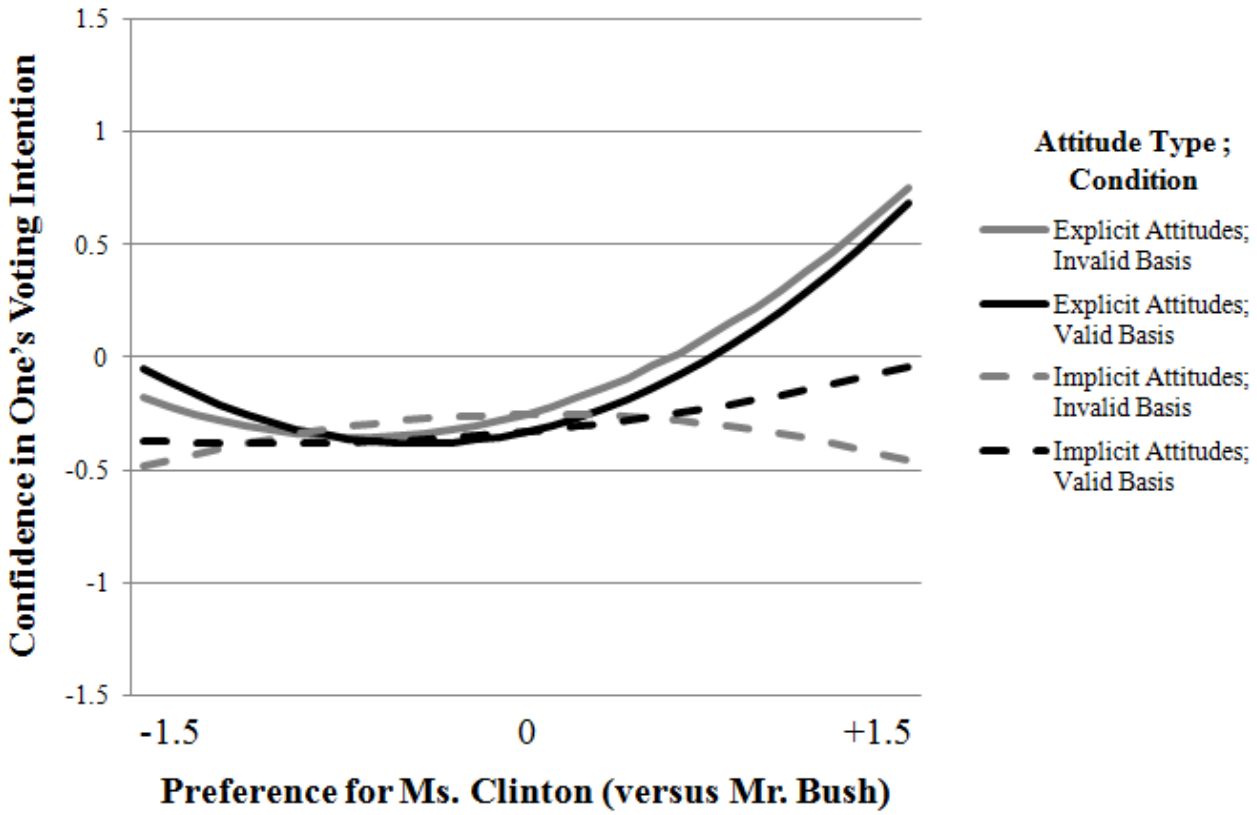
Study 1 Quadratic Relationships between Confidence in One's Vote and Candidate Attitudes



The quadratic relationship between explicit candidate preference and confidence was significant in both the *explicit introspection* and *implicit introspection* conditions, while the quadratic relationship between implicit candidate preference and confidence was not significant in either condition.

Figure 2

Study 2 Quadratic Relationships between Confidence in One's Vote and Candidate Attitudes



The quadratic relationship between explicit candidate preference and confidence was significant in both the *invalid basis* and *valid basis* conditions, while the quadratic relationship between implicit candidate preference and confidence was not significant in either condition.

APPENDIX A: CANDIDATE PROFILES

All participants in Studies 1 and 2 were provided with the following information regarding Hillary Clinton and Jeb Bush. Profiles were matched in tone, favorability, and length, and the order of presentation was counter-balanced across participants.

Hillary Clinton



Hillary Rodham Clinton (Democrat) is a well-known American politician who has served in many high-profile roles, including as first lady, U.S. senator, and secretary of state. Born on October 26, 1947, in Chicago, Illinois, Ms. Clinton completed her undergraduate career at Wellesley College and later attended Yale Law School to pursue interests in social justice, children and families, and politics. Raised by a Republican family, Ms. Clinton became a Democrat in 1968 after hearing a speech given by Dr. Martin Luther King, Jr. In 1975, she married Bill Clinton, who was elected president of the United States in 1992. They have one child, Chelsea Clinton. From 1993 to 2001, Ms. Clinton served as first lady, working alongside her husband to help solve domestic problems. From 2001 to 2009, Ms. Clinton served as a U.S. senator from New York. In 2007, she announced her plans to run for U.S. president as a Democratic candidate. She later conceded the primary race due to eventual nominee Barack Obama's strong hold on the majority of the Democratic delegate vote. In 2009, Ms. Clinton was sworn in as secretary of state under Mr. Obama's presidential administration. She served in that position until 2013, bringing women's issues and human rights to the forefront of U.S. initiatives. Ms. Clinton is a strong advocate for public service, education, health and welfare issues, and women's rights.

Jeb Bush



John Ellis "Jeb" Bush (Republican) is an American politician best known for serving two terms as governor of Florida. Born on February 11, 1953, in Midland, Texas, he is the son of George H.W. Bush and the brother of George W. Bush, the 41st and 43rd U.S. presidents, respectively. Mr. Bush showed an interest in public service at an early age, choosing to go to Mexico to teach English as a second language during a high school exchange program. While in Mexico, he met his future wife, Columba Garnico Gallo. They were married in 1974 and have three children: George Prescott Bush, Noelle Lucila Bush, and John Ellis Bush, Jr. In 1973, Mr. Bush graduated Phi Beta Kappa from the University of Texas at Austin with a degree in Latin American

Studies. He moved up the ranks in Florida politics in the 1980s and '90s, serving as chairman of the Dade County Republican Party and as Florida's secretary of commerce, before securing the state's governorship in 1998. Leaving the governorship in 2007 after eight years in office, Mr. Bush is best remembered for his work on the state's education system, his efforts to protect the environment, and his achievements in improving the state's economy. Since leaving office, Mr. Bush has remained an outspoken supporter of the Common Core Standards, a national educational initiative, and of immigration reform.

APPENDIX B: STUDY 1 AND 2 MEASURES

Attention Check

First, we are interested in whether you actually take the time to read directions. To show that you read the instructions, please ignore the statement below about how you are feeling and instead check only the "none of the above" option as your answer. Thank you very much.

Please check all words that describe how you are currently feeling.

- ☐ Interested
- ☐ Hostile
- ☐ Nervous
- ☐ Distressed
- ☐ Enthusiastic
- ☐ Determined
- ☐ Excited
- ☐ Proud
- ☐ Attentive
- ☐ Upset
- ☐ Irritable
- ☐ Jittery
- ☐ Strong
- ☐ Alert
- ☐ Active
- ☐ Guilty
- ☐ Ashamed
- ☐ Afraid
- ☐ Scared
- ☐ Inspired
- ☐ None of the above

Implicit Candidate Preference

Now we are going to show you some pictures and ask you about how much you like them. This task examines how people make simple judgments.

First, you will see a '+' symbol, which is a reminder to focus your attention because the task is about to begin. Then, you will see two pictures flashed on the screen, one after the other. The first is a real-life image of a politician's face, either Jeb Bush's or Hillary Clinton's. The second is an abstract image. After the flash of the face, the abstract image will appear for only a second, and then the screen will turn gray. Your job is to judge the visual pleasantness of the abstract image.

If the abstract image is less visually pleasing than average, press the Q key on the keyboard. If the abstract image is more visually pleasing than average, press the P key on the keyboard.

It is important to note that the real-life image of the politician can sometimes bias people's judgments of the abstract image. Because we are interested in how people can avoid being biased, please try your absolute best not to let the real-life images bias your judgment of the abstract images! Give us an honest assessment of the abstract images, regardless of the real-life images that precede them.

To get a feel for the task, we will begin with four practice trials. Again, your task is to judge whether the abstract image is less visually pleasing or more visually pleasing than average. On the next page, you will put your middle or index fingers on the Q and P keys of your keyboard and wait for the '+' symbol to appear.

Remember:
Q = Unpleasant
P = Pleasant

IMPORTANT: Please do not listen to music or perform other tasks while completing this task. Please minimize all distractions and move your mouse cursor to the side of the screen after moving on to the next page.

[AMP Practice Trials]

You are now done with the practice trials. The following trials are similar to the practice trials. Again, your task is to judge whether the abstract image is less visually pleasing or more visually pleasing than average.

This section will take approximately 5 minutes to complete. Please continue to the end. Your participation is very important to us.

Remember:
Q = Unpleasant
P = Pleasant

IMPORTANT: Please do not listen to music or perform other tasks while completing this task. Please minimize all distractions and move your mouse cursor to the side of the screen after moving on to the next page.

[AMP Trials]

Explicit Candidate Preference

To what extent do you like or dislike [Hillary Clinton/Jeb Bush]?

- ☐ Dislike a great deal
- ☐ Dislike a moderate amount
- ☐ Dislike a little
- ☐ Neither like nor dislike
- ☐ Like a little
- ☐ Like a moderate amount
- ☐ Like a great deal

Do you feel warm or cold toward [Hillary Clinton/Jeb Bush]? (reverse-scored)

- ☐ Extremely warm
- ☐ Moderately warm
- ☐ A little warm
- ☐ Neither warm nor cold
- ☐ A little cold
- ☐ Moderately cold
- ☐ Extremely cold

To what extent do you think [Hillary Clinton/Jeb Bush] is a competent leader?

- ☐ Completely incompetent
- ☐ Incompetent
- ☐ Slightly incompetent
- ☐ Neither incompetent nor competent
- ☐ Slightly competent
- ☐ Competent

☐ Completely competent

To what extent do you think [Hillary Clinton/Jeb Bush] is a moral leader?

☐ Completely immoral
☐ Immoral
☐ Slightly immoral
☐ Neither immoral nor moral
☐ Slightly moral
☐ Moral
☐ Completely moral

To what extent do you think [Hillary Clinton/Jeb Bush] is a trustworthy leader?

☐ Completely untrustworthy
☐ Untrustworthy
☐ Slightly untrustworthy
☐ Neither untrustworthy nor trustworthy
☐ Slightly trustworthy
☐ Trustworthy
☐ Completely trustworthy

Manipulation Check (Study 2 Only)

The gut feelings that I experienced during the picture task are a valid basis for judgment.

☐ Strongly disagree
☐ Disagree
☐ Somewhat disagree
☐ Neither agree nor disagree
☐ Somewhat agree
☐ Agree
☐ Strongly agree

The gut feelings that I experienced during the picture task should be used when making decisions.

☐ Strongly disagree
☐ Disagree
☐ Somewhat disagree
☐ Neither agree nor disagree
☐ Somewhat agree
☐ Agree
☐ Strongly agree

Confidence Regarding One's Vote Intention

To what extent have you decided who you are going to vote for?

☐ 0% (Completely undecided)
☐ 10%
☐ 20%
☐ 30%
☐ 40%
☐ 50%
☐ 60%
☐ 70%
☐ 80%
☐ 90%
☐ 100% (Completely decided)

How sure are you about who you are going to vote for?

☐ 0% (Not sure at all)
☐ 10%
☐ 20%
☐ 30%
☐ 40%
☐ 50%
☐ 60%
☐ 70%
☐ 80%
☐ 90%
☐ 100% (Extremely sure)

How confident are you about who you are going to vote for?

- ☐ 0% (Not at all confident)
- ☐ 10%
- ☐ 20%
- ☐ 30%
- ☐ 40%
- ☐ 50%
- ☐ 60%
- ☐ 70%
- ☐ 80%
- ☐ 90%
- ☐ 100% (Extremely confident)

Overall, in thinking about who you are going to vote for, would you say that you are decided or undecided?

- ☐ Decided
- ☐ Undecided

Demographic and Political Interest Measures

What is your age (in years)? _____

Gender:

- ☐ Male
- ☐ Female

Race/Ethnicity:

- ☐ African-American, Black, African, Caribbean
- ☐ Asian-American, Asian, Pacific Islander
- ☐ European-American, Anglo, Caucasian
- ☐ Hispanic-American, Latino(a), Chicano(a)
- ☐ Native-American, American Indian
- ☐ Bi-racial, Multi-racial (please specify): _____

What is the highest level of education that you have completed?

- ☐ Less than a high school diploma
- ☐ High school diploma
- ☐ Some college or vocational training
- ☐ 2-year college degree (e.g., Associate's degree)
- ☐ 4-year college degree (e.g., B.S., B.A.)
- ☐ Post-college degree (e.g., M.A., M.S., J.D., Ph.D., M.D.)

What is your household income? If you do not know, please guess.

- ☐ Under $35,000
- ☐ $35,000-$49,999
- ☐ $50,000-$64,999
- ☐ $65,000-$79,999
- ☐ $80,000-$94,999
- ☐ $95,000-$109,999
- ☐ $110,000-$124,999
- ☐ Over $125,000

Please indicate your political identity on social issues (e.g., abortion, gun rights, gay rights).

I am _____ on social issues.

- ☐ Strongly liberal
- ☐ Moderately liberal
- ☐ Slightly liberal
- ☐ In the middle
- ☐ Slightly conservative
- ☐ Moderately conservative
- ☐ Strongly conservative

Please indicate your political identity on economic issues (e.g., taxation, government spending).
I am _____ on <u>economic</u> issues.

- ☐ Strongly liberal
- ☐ Moderately liberal
- ☐ Slightly liberal
- ☐ In the middle
- ☐ Slightly conservative
- ☐ Moderately conservative
- ☐ Strongly conservative

Please indicate your **<u>political party affiliation</u>**.

- ☐ Strong Democrat
- ☐ Moderate Democrat
- ☐ Leaning Democrat
- ☐ Independent
- ☐ Leaning Republican
- ☐ Moderate Republican
- ☐ Strong Republican

How interested are you in information about what's going on in government and politics?

- ☐ Extremely interested
- ☐ Very interested
- ☐ Moderately interested
- ☐ Slightly interested
- ☐ Not interested at all

How often do you pay attention to what's going on in government and politics?

- ☐ Always
- ☐ Most of the time
- ☐ About half the time
- ☐ Some of the time
- ☐ Never

Please indicate how strongly you agree or disagree with the following statement: "I think that I am better informed about politics and government than most people."

- ☐ Strongly agree
- ☐ Somewhat agree
- ☐ Neither agree nor disagree
- ☐ Somewhat agree
- ☐ Strongly disagree

Voting Behavior

Thinking ahead to the 2016 election for President of the United States, if the election was held today and the following individuals were on the ballot, who would you vote for?

- ☐ Jeb Bush
- ☐ Hillary Clinton
- ☐ I wouldn't vote for either candidate

Voter Registration and Eligibility

Are you currently registered to vote?

☐ Yes
☐ No

Regardless of whether or not you plan to vote or are registered to vote in the 2016 U.S. presidential election, will you be *eligible* to vote at that time (i.e., a U.S. citizen, at least 18 years old, etc.)?

☐ Yes
☐ No (Please specify why.): _____

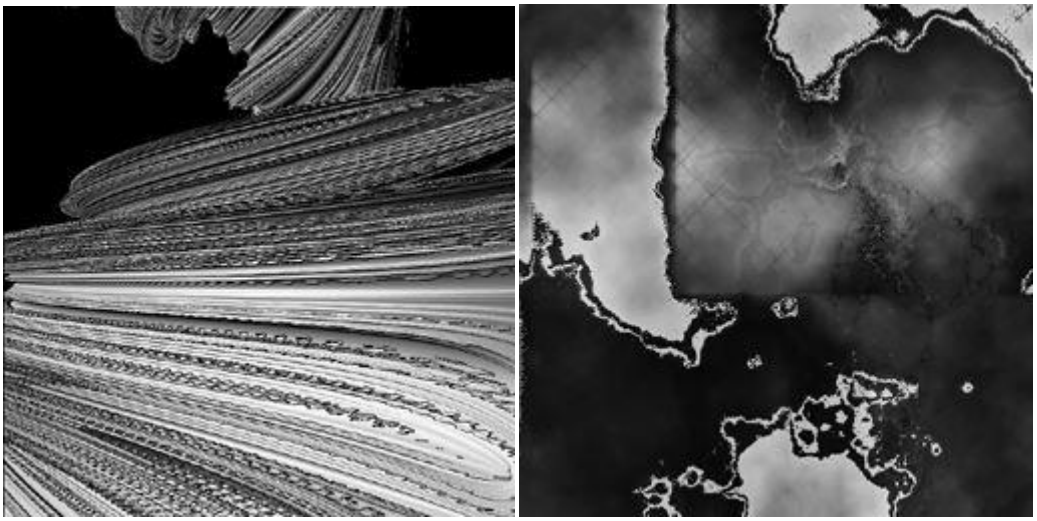
APPENDIX C: AMP PRIME AND SAMPLE STIMULUS IMAGES

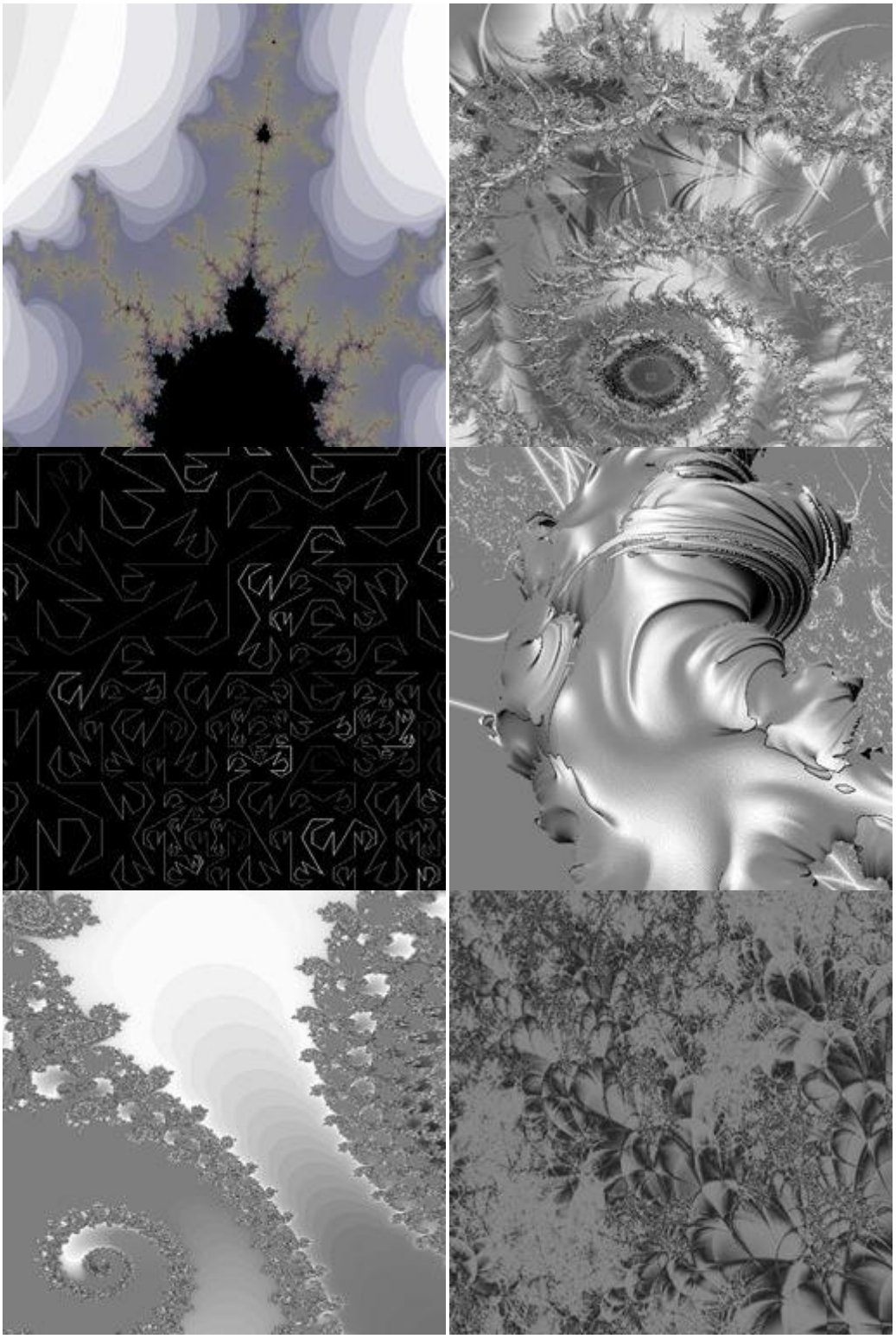
Candidate (Prime) Images:





Sample Fractal (Stimulus) Images:





APPENDIX D: CANDIDATE FACTS

10 Things to Know about Hillary Clinton

1. She was born Hillary Diane Rodham on October 26, 1947, in Chicago to Hugh E. Rodham, who owned a drapery making business, and Dorothy Howell Rodham, a full-time homemaker. Her parents were Republicans.
2. When she was 12 years old, she wrote to the National Aeronautics and Space Administration, asking how she could become an astronaut. She received a reply saying that NASA didn't accept women in the astronaut program. Her mother comforted her by saying that her eyesight was much too bad anyway.
3. At Wellesley College in Massachusetts, she became head of the local chapter of the Young Republicans. While there she slowly turned leftward in her politics, campaigning for Eugene McCarthy for president, organizing the school's first teach-ins on the Vietnam War, and writing her senior thesis on poverty and community development. She graduated with a degree in political science.
4. She appeared as a contestant on the television quiz show *College Bowl*.
5. In 1969, she appeared in *Life* magazine after giving the first commencement speech by a student at Wellesley. She received a standing ovation after shocking the audience by criticizing the first speaker, Sen. Edward W. Brooke.
6. In the summer of 1970, she heard Marian Wright Edelman speak, inspiring her to volunteer to work for Edelman's Washington Research Project, which later became the Children's Defense Fund. While there, she interviewed the families of migrant laborers and reported her findings to Walter Mondale's Senate subcommittee. This began a lifelong friendship and commitment to children's issues.
7. While at Yale Law School in Connecticut, she first met Bill Clinton in the law library after she approached him and said, "Look, if you're going to keep staring at me, and I'm going to keep staring back, I think we should at least know each other." They were wed on October 11, 1975.
8. In 1977, she joined the Rose Law Firm in Little Rock. After her husband's successful gubernatorial bid in 1978, she continued working at the firm, becoming Arkansas's first professional first lady. In 1980, she became the firm's first female partner.
9. When she was elected to the U.S. Senate from New York in 2001, she became the first woman to do so and the only American first lady to hold national office.
10. Shortly after winning the U.S. presidential election, Barack Obama nominated her as secretary of state. During her term from 2009 to 2013, she used her position to make women's rights and human rights a central talking point of U.S. initiatives. She became one of the most traveled secretaries of state in American history and promoted the use of social media to convey the country's positions. She also led U.S. diplomatic efforts in responding to the Arab Spring and military intervention in Libya.

10 Things to Know about Jeb Bush

1. He was born John Ellis Bush on February 11, 1953, in Midland, Texas to George H.W. and Barbara Bush. His nickname, Jeb, is a combination of his initials. He is the second son of

former President George H.W. Bush and the younger brother of former President George W. Bush.

2. He attended high school at the Massachusetts boarding school Phillips Academy. At the age of 17, he taught English as a second language in León, Guanajuato, Mexico, as part of Phillips Academy's student exchange program. While in Mexico, he met his future wife, Columba Garnica Gallo.
3. He majored in Latin American Studies at the University of Texas at Austin and is fluent in Spanish, speaking solely Spanish at home.
4. In 1980, he moved back to the United States from Caracas, Venezuela, where he had been a vice-president for Texas Commerce Bank, in order to support his father's failed 1980 run for the GOP presidential nomination and eventual campaign as Ronald Reagan's running mate. Following the 1980 election, he and his family moved to Miami-Dade County, Florida, where he became involved in several entrepreneurial pursuits, including a successful real estate development company.
5. Bush got his start in Florida politics as the chairman of the Dade County Republican Party and was subsequently appointed as Florida's secretary of commerce. He served in that role in 1987 and 1988 and promoted Florida's business climate worldwide, before resigning to work on his father's presidential campaign.
6. In 1989, he served as the campaign manager of Ileana Ros-Lehtinen, the first Cuban-American to serve in Congress.
7. Following an unsuccessful bid for the governorship of Florida in 1988, he pursued a variety of policy and charitable interests, including serving as chairman and founder of the Foundation for Florida's Future, a not-for-profit organization to influence public policy at the grassroots level. Through this foundation, he cofounded the state's first charter school – Liberty City Charter School – along with the Urban League of Greater Miami.
8. He was elected governor of Florida in 1998. His brother, George W. Bush, simultaneously won a re-election bid as governor of Texas, making the Bush brothers the first siblings to govern two states at the same time since Nelson and Winthrop Rockefeller in the late 1960's.
9. When he was re-elected Florida's governor in 2002, he became the first Republican to do so in the state's history. While in office, he helped cut taxes and shrink the state government. He sparked Medicaid reform and signed a law to restore the Everglades, leaving office in 2007 with favorable ratings.
10. Since leaving the governor's office, he has remained active on a number of political issues. He has been an outspoken supporter of the Common Core Standards, a national educational initiative, and of immigration reform.

APPENDIX E: ADDITIONAL STUDY 1 MODELS PREDICTING VOTING BEHAVIOR

Table E1: Predicting Votes for Ms. Clinton versus Mr. Bush or Abstention Using the More Continuous Measure of Confidence

	Model 1: Explicit Candidate Preference % CCC = 85.1; pseudo-R^2 = 0.71				**Model 2: Implicit Candidate Preference** % CCC = 71.8; pseudo-R^2 = 0.34				**Model 3: Explicit and Implicit Candidate Preferences** % CCC = 85.1; pseudo-R^2 = 0.71			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Constant	0.66 (0.22)	8.81	0.003		0.49 (0.15)	10.08	0.002		0.71 (0.23)	9.80	0.002	
Explicit	2.67 (0.35)	56.54	<.001	14.41 [7.19, 28.87]	--	--	--	--	2.51 (0.36)	49.76	<.001	12.33 [6.13, 24.77]
Implicit	--	--	--	--	1.38 (0.31)	19.35	<.001	3.99 [2.16, 7.40]	0.61 (0.39)	2.50	0.11	1.85 [0.86, 3.96]
Confidence	0.85 (0.21)	15.78	<.001	2.35 [1.54, 3.58]	0.71 (0.16)	19.72	<.001	2.04 [1.49, 2.80]	0.82 (0.22)	13.78	<.001	2.26 [1.47, 3.48]
Condition	0.78 (0.38)	4.32	0.04	2.19 [1.05, 4.57]	0.12 (0.22)	0.31	0.58	1.13 [0.74, 1.74]	0.75 (0.38)	3.85	0.05	2.13 [1.00, 4.51]
Confidence* Condition	0.55 (0.34)	2.58	0.11	1.74 [0.89, 3.40]	0.23 (0.23)	1.01	0.32	1.26 [0.81, 1.96]	0.61 (0.35)	3.03	0.08	1.84 [0.93, 3.66]
Explicit* Confidence	0.28 (0.37)	0.58	0.45	1.32 [0.65, 2.71]	--	--	--	--	0.29 (0.37)	0.64	0.42	1.34 [0.65, 2.74]
Implicit* Confidence	--	--	--	--	-0.13 (0.34)	0.14	0.71	0.88 [0.45, 1.72]	-0.23 (0.40)	0.34	0.56	0.79 [0.36, 1.75]
Explicit* Condition	1.06 (0.66)	2.57	0.11	2.88 [0.79, 10.51]	--	--	--	--	0.97 (0.68)	2.08	0.15	2.65 [0.70, 9.93]
Implicit* Condition	--	--	--	--	-0.26 (0.41)	0.42	0.52	0.77 [0.35, 1.70]	-0.03 (0.68)	0.00	0.96	0.97 [0.26, 3.63]
Explicit* Confidence* Condition	1.05 (0.58)	3.34	0.07	2.87 [0.93, 8.90]	--	--	--	--	0.90 (0.58)	2.44	0.12	2.47 [0.79, 7.69]

	Model 1: Explicit Candidate Preference				Model 2: Implicit Candidate Preference				Model 3: Explicit and Implicit Candidate Preferences			
	% CCC = 85.1; pseudo-R^2 = 0.71				% CCC = 71.8; pseudo-R^2 = 0.34				% CCC = 85.1; pseudo-R^2 = 0.71			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Implicit* Confidence* Condition	--	--	--	--	0.52 (0.42)	1.49	0.22	1.68 [0.73, 3.84]	0.50 (0.61)	0.67	0.41	1.65 [0.50, 5.43]

Results of logistic regression analyses predicting votes for Ms. Clinton (1) versus Mr. Bush or abstention (0) from explicit and implicit preference for Ms. Clinton, confidence in one's voting intention, and condition (0 = *explicit introspection*, 1 = *implicit introspection*). N = 524. Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. Model 3 showed significantly improved model fit relative to Model 2 (Δ-$2LL \sim \chi^2$ = 245.04, Δdf = 4, p < .0001), but not relative to Model 1 (Δ-$2LL \sim \chi^2$ = 4.99, Δdf = 4, p = 0.29). *CCC*: correctly classified cases; pseudo-R^2: Nagelkerke's pseudo-R^2; *B*: regression weight *B* (log odds); *SE*: standard error of the regression weight *B*; Wald: Wald test statistic; OR: odds ratio. Relative amount by which the odds increase (OR > 1.0) or decrease (OR < 1.0) when the value of the predictor is increased by 1 unit.

Table E2: Predicting Votes for Mr. Bush versus Ms. Clinton or Abstention Using the More Continuous Measure of Confidence

	Model 1: Explicit Candidate Preference				Model 2: Implicit Candidate Preference				Model 3: Explicit and Implicit Candidate Preferences			
	% CCC = 89.5; pseudo-R^2 = 0.64				% CCC = 80.3; pseudo-R^2 = 0.18				% CCC = 89.1; pseudo-R^2 = 0.65			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Constant	-2.51 (0.37)	46.32	<.001		-1.43 (0.18)	64.69	<.001		-2.63 (0.39)	44.58	<.001	
Explicit	-2.90 (0.41)	51.03	<.001	0.06 [0.03, 0.12]	--	--	--	--	-2.82 (0.41)	48.20	<.001	0.06 [0.03, 0.13]
Implicit	--	--	--	--	-1.20 (0.28)	18.07	<.001	0.30 [0.17, 0.52]	-0.61 (0.42)	2.09	0.15	0.55 [0.24, 1.24]

	Model 1: Explicit Candidate Preference % CCC = 89.5; pseudo-R^2 = 0.64				Model 2: Implicit Candidate Preference % CCC = 80.3; pseudo-R^2 = 0.18				Model 3: Explicit and Implicit Candidate Preferences % CCC = 89.1; pseudo-R^2 = 0.65			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Confidence	-0.14 (0.34)	0.16	0.69	0.87 [0.45, 1.71]	-0.12 (0.18)	0.45	0.50	0.89 [0.63, 1.26]	-0.23 (0.36)	0.42	0.51	0.79 [0.39, 1.60]
Condition	-0.26 (0.52)	0.25	0.62	0.77 [0.28, 2.14]	-0.25 (0.25)	0.96	0.33	0.78 [0.47, 1.28]	-0.15 (0.54)	0.08	0.78	0.86 [0.30, 2.48]
Confidence* Condition	0.11 (0.49)	0.05	0.82	0.89 [0.34, 2.34]	0.13 (0.26)	0.26	0.61	1.14 [0.69, 1.88]	-0.03 (0.50)	0.00	0.96	0.98 [0.37, 2.60]
Explicit* Confidence	-0.43 (0.38)	1.26	0.26	0.65 [0.31, 1.38]	--	--	--	--	-0.29 (0.39)	0.55	0.46	0.75 [0.35, 1.61]
Implicit* Confidence	--	--	--	--	-0.44 (0.27)	2.77	0.10	0.64 [0.38, 1.08]	-0.62 (0.39)	2.52	0.11	0.54 [0.25, 1.16]
Explicit* Condition	0.32 (0.56)	0.31	0.58	1.37 [0.45, 4.14]	--	--	--	--	0.13 (0.60)	0.05	0.83	1.14 [0.35, 3.72]
Implicit* Condition	--	--	--	--	0.41 (0.36)	1.32	0.25	1.51 [0.75, 3.03]	0.76 (0.53)	2.04	0.15	2.13 [0.76, 6.00]
Explicit* Confidence* Condition	-0.20 (0.55)	0.13	0.72	0.82 [0.28, 2.40]	--	--	--	--	-0.42 (0.58)	0.54	0.46	0.66 [0.21, 2.03]
Implicit* Confidence* Condition	--	--	--	--	0.21 (0.35)	0.34	0.56	1.23 [0.62, 2.44]	0.78 (0.51)	2.30	0.13	2.17 [0.80, 5.92]

Results of logistic regression analyses predicting votes for Mr. Bush (1) versus Ms. Clinton or abstention (0) from explicit and implicit preference for Ms. Clinton, confidence in one's voting intention, and condition (0 = *explicit introspection*, 1 = *implicit introspection*). N = 524. Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. Model 3 showed significantly improved model fit relative to Model 2 (Δ-$2LL \sim \chi^2$ = 217.39, Δdf = 4, $p < .0001$), but not relative to Model 1 (Δ-$2LL \sim \chi^2$ = 3.87, Δdf = 4, p = 0.42). *CCC*: correctly classified cases; pseudo-R^2: Nagelkerke's pseudo-R^2; *B*: regression weight *B* (log odds); *SE*: standard error of the regression weight *B*; Wald:

Wald test statistic; OR: odds ratio. Relative amount by which the odds increase (OR > 1.0) or decrease (OR < 1.0) when the value of the predictor is increased by 1 unit.

Table E3: Predicting Votes for Ms. Clinton versus Mr. Bush Using the Binary Measure of Decidedness

	Model 1: Explicit Candidate Preference % CCC = 94.5; pseudo-R^2 = 0.87				**Model 2: Implicit Candidate Preference** % CCC = 76.7; pseudo-R^2 = 0.28				**Model 3: Explicit and Implicit Candidate Preferences** % CCC = 93.8; pseudo-R^2 = 0.87			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Constant	2.87 (0.84)	11.74	<.001		0.58 (0.27)	4.56	0.03		2.91 (0.87)	11.21	<.001	
Explicit	6.58 (1.80)	13.39	<.001	718.78 [21.21, >999]	--	--	--	--	6.50 (1.82)	12.78	<.001	665.95 [18.85, >999]
Implicit	--	--	--	--	1.26 (0.55)	5.26	0.02	3.52 [1.20, 10.30]	0.44 (1.48)	0.09	0.77	1.55 [0.09, 28.16]
Decided	1.08 (1.62)	0.44	0.51	2.94 [0.12, 70.65]	1.02 (0.38)	7.01	0.01	2.77 [1.30, 5.88]	0.97 (1.64)	0.35	0.56	2.63 [0.11, 66.04]
Condition	-0.94 (0.97)	0.94	0.33	0.39 [0.06, 2.62]	0.25 (0.38)	0.43	0.51	1.29 [0.61, 2.73]	-0.94 (1.01)	0.87	0.35	0.39 [0.05, 2.83]
Decided* Condition	1.70 (2.21)	0.60	0.44	5.50 [0.07, 414.38]	-0.08 (0.55)	0.02	0.88	0.92 [0.32, 2.68]	1.90 (2.31)	0.68	0.41	6.70 [0.07, 613.97]
Explicit* Decided	0.54 (3.06)	0.03	0.86	1.71 [0.00, 688.84]	--	--	--	--	0.57 (3.44)	0.03	0.87	1.77 [0.00, >999]
Implicit* Decided	--	--	--	--	0.49 (0.72)	0.47	0.49	1.64 [0.40, 6.76]	0.84 (1.98)	0.18	0.67	2.31 [0.05, 111.97]
Explicit* Condition	-2.59 (2.10)	1.52	0.22	0.08 [0.00, 4.58]	--	--	--	--	-2.27 (2.19)	1.07	0.30	0.10 [0.00, 7.61]
Implicit* Condition	--	--	--	--	-0.32 (0.70)	0.21	0.65	0.72 [0.18, 2.86]	-0.78 (1.62)	0.23	0.63	0.46 [0.02, 10.94]

	Model 1: Explicit Candidate Preference				Model 2: Implicit Candidate Preference				Model 3: Explicit and Implicit Candidate Preferences			
	% CCC = 94.5; pseudo-R^2 = 0.87				% CCC = 76.7; pseudo-R^2 = 0.28				% CCC = 93.8; pseudo-R^2 = 0.87			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Explicit* Decided* Condition	2.85 (3.87)	0.54	0.46	17.35 [0.01, >999]	--	--	--	--	2.09 (4.27)	0.24	0.62	8.10 [0.00, >999]
Implicit* Decided* Condition	--	--	--	--	-0.04 (0.93)	0.00	0.97	0.96 [0.16, 6.00]	0.63 (3.01)	0.04	0.83	1.88 [0.01, 690.47]

Results of logistic regression analyses predicting votes for Ms. Clinton (1) versus Mr. Bush (0) from explicit and implicit preference for Ms. Clinton, decidedness (0 = *undecided*, 1 = *decided*), and condition (0 = *explicit introspection*, 1 = *implicit introspection*). *N* = 416. Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. Model 3 showed significantly improved model fit relative to Model 2 ($\Delta\text{-}2LL \sim \chi^2$ = 286.49, Δdf = 4, $p < .0001$), but not relative to Model 1 ($\Delta\text{-}2LL \sim \chi^2$ = 1.87, Δdf = 4, p = 0.76). *CCC*: correctly classified cases; pseudo-R^2: Nagelkerke's pseudo-R^2; *B*: regression weight *B* (log odds); *SE*: standard error of the regression weight *B*; Wald: Wald test statistic; OR: odds ratio. Relative amount by which the odds increase (OR > 1.0) or decrease (OR < 1.0) when the value of the predictor is increased by 1 unit.

Table E4: Predicting Votes for Ms. Clinton versus Mr. Bush or Abstention Using the Binary Measure of Decidedness

	Model 1: Explicit Candidate Preference				Model 2: Implicit Candidate Preference				Model 3: Explicit and Implicit Candidate Preferences			
	% CCC = 84.2; pseudo-R^2 = 0.69				% CCC = 71.0; pseudo-R^2 = 0.33				% CCC = 85.3; pseudo-R^2 = 0.70			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Constant	-0.21 (0.23)	0.90	0.34		-0.35 (0.21)	2.87	0.09		-0.18 (0.23)	0.59	0.44	

	Model 1: Explicit Candidate Preference % CCC = 84.2; pseudo-R^2 = 0.69				Model 2: Implicit Candidate Preference % CCC = 71.0; pseudo-R^2 = 0.33				Model 3: Explicit and Implicit Candidate Preferences % CCC = 85.3; pseudo-R^2 = 0.70			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Explicit	1.97 (0.41)	22.68	<.001	7.14 [3.18, 16.04]	--	--	--	--	1.82 (0.41)	19.42	<.001	6.17 [2.75, 13.87]
Implicit	--	--	--	--	1.01 (0.39)	6.55	0.01	2.74 [1.27, 5.93]	0.54 (0.42)	1.61	0.20	1.71 [0.75, 3.93]
Decided	1.81 (0.50)	13.23	<.001	6.09 [2.30, 16.13]	1.60 (0.31)	26.53	<.001	4.98 [2.70, 9.17]	1.86 (0.51)	13.54	<.001	6.45 [2.39, 17.41]
Condition	0.22 (0.32)	0.47	0.49	1.25 [0.67, 2.33]	0.04 (0.28)	0.02	0.88	1.04 [0.60, 1.81]	0.17 (0.32)	0.29	0.59	1.19 [0.63, 2.24]
Decided* Condition	0.31 (0.72)	0.19	0.67	1.36 [0.33, 5.57]	-0.01 (0.43)	0.00	0.99	1.00 [0.43, 2.32]	0.50 (0.79)	0.41	0.52	1.65 [0.35, 7.72]
Explicit* Decided	1.68 (0.83)	4.10	0.04	5.37 [1.06, 27.29]	--	--	--	--	1.60 (0.84)	3.62	0.06	4.94 [0.95, 25.59]
Implicit* Decided	--	--	--	--	0.58 (0.57)	1.03	0.31	1.78 [0.58, 5.44]	0.45 (0.88)	0.26	0.61	1.57 [0.28, 8.84]
Explicit* Condition	0.26 (0.63)	0.17	0.68	1.30 [0.37, 4.49]	--	--	--	--	0.35 (0.64)	0.30	0.59	1.42 [0.40, 5.00]
Implicit* Condition	--	--	--	--	-0.37 (0.49)	0.57	0.45	0.69 [0.26, 1.81]	-0.37 (0.54)	0.45	0.50	0.69 [0.24, 2.01]
Explicit* Decided* Condition	0.69 (1.31)	0.28	0.60	1.99 [0.15, 25.77]	--	--	--	--	0.31 (1.29)	0.06	0.81	1.37 [0.11, 17.26]
Implicit* Decided* Condition	--	--	--	--	0.30 (0.76)	0.16	0.69	1.36 [0.31, 5.96]	1.01 (1.38)	0.53	0.47	2.73 [0.18, 41.07]

Results of logistic regression analyses predicting votes for Ms. Clinton (1) versus Mr. Bush or abstention (0) from explicit and implicit preference for Ms. Clinton, decidedness (0 = *undecided*, 1 = *decided*), and condition (0 = *explicit introspection*, 1 = *implicit introspection*). N = 524. Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference

separately. Model 3 examines both attitude measures simultaneously. Model 3 showed significantly improved model fit relative to Model 2 (Δ-2LL~χ^2 = 240.97, Δdf = 4, p < .0001), but not relative to Model 1 (Δ-2LL~χ^2 = 7.20, Δdf = 4, p = 0.13). *CCC*: correctly classified cases; pseudo-R^2: Nagelkerke's pseudo-R^2; *B*: regression weight *B* (log odds); *SE*: standard error of the regression weight *B*; Wald: Wald test statistic; OR: odds ratio. Relative amount by which the odds increase (OR > 1.0) or decrease (OR < 1.0) when the value of the predictor is increased by 1 unit.

Table E5: Predicting Votes for Mr. Bush versus Ms. Clinton or Abstention Using the Binary Measure of Decidedness

	Model 1: Explicit Candidate Preference				**Model 2: Implicit Candidate Preference**				**Model 3: Explicit and Implicit Candidate Preferences**			
	% CCC = 89.5; pseudo-R^2 = 0.64				% CCC = 80.7; pseudo-R^2 = 0.17				% CCC = 89.1; pseudo-R^2 = 0.64			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Constant	-2.32 (0.41)	32.79	<.001		-1.25 (0.25)	25.23	<.001		-2.33 (0.41)	32.49	<.001	
Explicit	-2.56 (0.48)	28.28	<.001	0.08 [0.03, 0.20]	--	--	--	--	-2.52 (0.50)	25.73	<.001	0.08 [0.03, 0.21]
Implicit	--	--	--	--	-1.03 (0.43)	5.68	0.02	0.36 [0.15, 0.83]	-0.13 (0.46)	0.07	0.78	0.88 [0.36, 2.19]
Decided	-0.48 (0.75)	0.42	0.52	0.62 [0.14, 2.67]	-0.36 (0.35)	1.03	0.31	0.70 [0.35, 1.40]	-0.55 (0.77)	0.51	0.48	0.58 [0.13, 2.62]
Condition	-0.10 (0.57)	0.03	0.86	0.91 [0.30, 2.76]	-0.24 (0.35)	0.46	0.50	0.79 [0.40, 1.57]	-0.09 (0.57)	0.02	0.87	0.91 [0.30, 2.80]
Decided* Condition	-0.34 (1.05)	0.11	0.75	0.71 [0.09, 5.55]	-0.04 (0.51)	0.01	0.94	0.96 [0.36, 2.60]	-0.27 (1.06)	0.07	0.80	0.76 [0.10, 6.11]
Explicit* Decided	-0.63 (0.79)	0.63	0.43	0.53 [0.11, 2.51]	--	--	--	--	-0.54 (0.80)	0.46	0.50	0.58 [0.12, 2.81]
Implicit* Decided	--	--	--	--	-0.21 (0.56)	0.15	0.70	0.81 [0.27, 2.40]	-0.21 (0.64)	0.11	0.74	0.81 [0.23, 2.83]

	Model 1: Explicit Candidate Preference % CCC = 89.5; pseudo-R^2 = 0.64				Model 2: Implicit Candidate Preference % CCC = 80.7; pseudo-R^2 = 0.17				Model 3: Explicit and Implicit Candidate Preferences % CCC = 89.1; pseudo-R^2 = 0.64			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Explicit* Condition	0.50 (0.66)	0.57	0.45	1.64 [0.45, 5.94]	--	--	--	--	0.43 (0.69)	0.40	0.53	1.54 [0.40, 5.98]
Implicit* Condition	--	--	--	--	0.43 (0.54)	0.64	0.42	1.54 [0.54, 4.42]	0.17 (0.59)	0.09	0.77	1.19 [0.38, 3.75]
Explicit* Decided* Condition	-0.49 (1.11)	0.20	0.66	0.61 [0.07, 5.43]	--	--	--	--	-0.59 (1.18)	0.25	0.62	0.56 [0.06, 5.63]
Implicit* Decided* Condition	--	--	--	--	-0.22 (0.70)	0.10	0.76	0.80 [0.20, 3.17]	0.22 (0.91)	0.06	0.81	1.25 [0.21, 7.37]

Results of logistic regression analyses predicting votes for Mr. Bush (1) versus Ms. Clinton or abstention (0) from explicit and implicit preference for Ms. Clinton, decidedness (0 = *undecided*, 1 = *decided*), and condition (0 = *explicit introspection*, 1 = *implicit introspection*). N = 524. Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. Model 3 showed significantly improved model fit relative to Model 2 (Δ-$2LL \sim \chi^2$ = 213.61, Δdf = 4, $p < .0001$), but not relative to Model 1 (Δ-$2LL \sim \chi^2$ = 0.74, Δdf = 4, p = 0.95). *CCC*: correctly classified cases; pseudo-R^2: Nagelkerke's pseudo-R^2; *B*: regression weight *B* (log odds); *SE*: standard error of the regression weight *B*; Wald: Wald test statistic; OR: odds ratio. Relative amount by which the odds increase (OR > 1.0) or decrease (OR < 1.0) when the value of the predictor is increased by 1 unit.

APPENDIX F: ADDITIONAL STUDY 1 MODELS PREDICTING THE ALTERNATIVE BEHAVIORAL MEASURE OF CANDIDATE PREFERENCE (READING TIME)

Models using the binary measure of decidedness.

	Model 1: Explicit Candidate Preference $R^2 = 0.05$, $F(7,455) = 3.69$, $p = 0.001$				**Model 2: Implicit Candidate Preference** $R^2 = 0.03$, $F(7,455) = 1.90$, $p = 0.07$				**Model 3: Explicit and Implicit Candidate Preferences** $R^2 = 0.07$, $F(11,451) = 2.95$, $p = 0.001$			
	***B* (SE)**	***t***	***p***	**[95% CI]**	***B* (SE)**	***t***	***p***	**[95% CI]**	***B* (SE)**	***t***	***p***	**[95% CI]**
Constant	8.97 (5.17)	1.74	0.08	[-1.19, 19.14]	5.61 (5.11)	1.10	0.27	[-4.44, 15.65]	7.98 (5.21)	1.53	0.13	[-2.25, 18.22]
Explicit	7.90 (5.79)	1.36	0.17	[-3.48, 19.28]	--	--	--	--	10.98 (6.20)	1.77	0.08	[-1.21, 23.16]
Implicit	--	--	--	--	-5.18 (6.81)	-0.76	0.45	[-18.57, 8.21]	-9.81 (7.20)	-1.36	0.17	[-23.96, 4.33]
Decided	-4.35 (7.01)	-0.62	0.54	[-18.13, 9.44]	1.27 (6.95)	0.18	0.86	[-12.39, 14.93]	-3.00 (7.04)	-0.43	0.67	[-16.84, 10.83]
Condition	-6.75 (7.67)	-0.88	0.38	[-21.82, 8.32]	-9.28 (7.39)	-1.26	0.21	[-23.80, 5.24]	-5.33 (7.69)	-0.69	0.49	[-20.43, 9.78]
Decided* Condition	10.82 (10.03)	1.08	0.28	[-8.90, 30.54]	11.36 (9.83)	1.16	0.25	[-7.96, 30.69]	8.74 (10.05)	0.87	0.38	[-11.00, 28.49]
Explicit* Decided	2.10 (7.03)	0.30	0.77	[-11.71, 15.91]	--	--	--	--	-2.67 (7.55)	-0.35	0.72	[-17.51, 12.17]
Implicit* Decided	--	--	--	--	14.12 (8.31)	1.70	0.09	[-2.20, 30.45]	14.96 (8.81)	1.70	0.09	[-2.35, 32.27]
Explicit* Condition	12.12 (9.57)	1.27	0.21	[-6.68, 30.93]	--	--	--	--	13.34 (10.16)	1.31	0.19	[-6.63, 33.32]
Implicit* Condition	--	--	--	--	0.56 (10.04)	0.06	0.96	[-19.16, 20.29]	-2.53 (10.54)	-0.24	0.81	[-23.23, 18.18]
Explicit* Decided* Condition	-11.06 (11.23)	-0.98	0.33	[-33.13, 11.01]	--	--	--	--	-13.29 (12.16)	-1.09	0.28	[-37.18, 10.61]

	Model 1: Explicit Candidate Preference				Model 2: Implicit Candidate Preference				Model 3: Explicit and Implicit Candidate Preferences			
Implicit* Decided* Condition	--	--	--	--	-1.40 (11.71)	-0.12	0.91	[-24.42, 21.62]	1.70 (12.47)	0.14	0.89	[-22.81, 26.21]

Results of linear regression analyses predicting greater time spent reading facts regarding Ms. Clinton (relative to Mr. Bush) from explicit and implicit preference for Ms. Clinton, decidedness (0 = *undecided*, 1 = *decided*), and condition (0 = *explicit introspection*, 1 = *implicit introspection*). $N = 463$. Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. Model 3 showed significantly improved model fit relative to Model 2 ($\Delta R^2 = 0.04$, $F(4,451) = 4.67$, $p = 0.001$), but not relative to Model 1 ($\Delta R^2 = 0.01$, $F(4,451) = 1.61$, $p = 0.17$). *B*: regression weight *B*; *SE*: standard error of the regression weight *B*; *t*: *t* test statistic; 95% CI: 95% confidence interval for regression weight *B*.

APPENDIX G: ADDITIONAL STUDY 2 MODELS PREDICTING VOTING BEHAVIOR

Table G1: Predicting Votes for Ms. Clinton versus Mr. Bush or Abstention Using the More Continuous Measure of Confidence

	Model 1: Explicit Candidate Preference				**Model 2: Implicit Candidate Preference**				**Model 3: Explicit and Implicit Candidate Preferences**			
	% CCC = 85.2; pseudo-R^2 = 0.68				% CCC = 70.4; pseudo-R^2 = 0.34				% CCC = 86.0; pseudo-R^2 = 0.70			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Constant	0.47 (0.21)	4.76	0.03		0.31 (0.15)	4.04	0.04		0.48 (0.22)	4.89	0.03	
Explicit	2.92 (0.39)	56.62	<.001	18.45 [8.64, 39.43]	--	--	--	--	2.81 (0.41)	47.90	<.001	16.58 [7.48, 36.71]
Implicit	--	--	--	--	1.23 (0.27)	20.03	<.001	3.41 [1.99, 5.84]	0.29 (0.32)	0.78	0.38	1.33 [0.71, 2.50]
Confidence	0.89 (0.23)	14.68	0.001	2.45 [1.55, 3.86]	0.97 (0.17)	34.16	<.001	2.63 [1.90, 3.64]	0.90 (0.23)	14.64	<.001	2.45 [1.55, 3.87]
Condition	-0.18 (0.29)	0.39	0.53	0.83 [0.47, 1.48]	-0.12 (0.21)	0.31	0.58	0.89 [0.58, 1.35]	-0.02 (0.30)	0.01	0.94	0.98 [0.54, 1.77]
Confidence* Condition	-0.26 (0.30)	0.74	0.39	0.77 [0.42, 1.40]	-0.39 (0.22)	2.94	0.09	0.68 [0.44, 1.06]	-0.35 (0.32)	1.26	0.26	0.70 [0.38, 1.30]
Explicit* Confidence	-0.07 (0.41)	0.03	0.87	0.94 [0.42, 2.08]	--	--	--	--	-0.06 (0.43)	0.02	0.89	0.94 [0.41, 2.17]
Implicit* Confidence	--	--	--	--	0.35 (0.27)	1.69	0.19	1.42 [0.84, 2.42]	-0.08 (0.36)	0.04	0.83	0.93 [0.46, 1.89]
Explicit* Condition	-0.19 (0.53)	0.12	0.73	0.83 [0.29, 2.38]	--	--	--	--	0.13 (0.59)	0.05	0.83	1.13 [0.36, 3.60]
Implicit* Condition	--	--	--	--	0.12 (0.41)	0.08	0.77	1.13 [0.50, 2.52]	0.29 (0.52)	0.31	0.58	1.34 [0.48, 3.74]
Explicit* Confidence* Condition	0.39 (0.56)	0.50	0.48	1.48 [0.50, 4.42]	--	--	--	--	0.67 (0.60)	1.24	0.27	1.95 [0.60, 6.35]

	Model 1: Explicit Candidate Preference				Model 2: Implicit Candidate Preference				Model 3: Explicit and Implicit Candidate Preferences			
	% CCC = 85.2; pseudo-R^2 = 0.68				% CCC = 70.4; pseudo-R^2 = 0.34				% CCC = 86.0; pseudo-R^2 = 0.70			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Implicit* Confidence* Condition	--	--	--	--	-0.66 (0.40)	2.77	0.10	0.52 [0.24, 1.13]	-0.96 (0.51)	3.58	0.06	0.38 [0.14, 1.03]

Results of logistic regression analyses predicting votes for Ms. Clinton (1) versus Mr. Bush or abstention (0) from explicit and implicit preference for Ms. Clinton, confidence in one's voting intention, and condition (0 = *invalid basis*, 1 = *valid basis*). N = 520. Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. Model 3 showed significantly improved model fit relative to Model 1 (Δ-$2LL \sim \chi^2$ = 11.27, Δdf = 4, p = 0.02) and Model 2 (Δ-$2LL \sim \chi^2$ = 227.98, Δdf = 4, p < .0001). *CCC*: correctly classified cases; pseudo-R^2: Nagelkerke's pseudo-R^2; *B*: regression weight *B* (log odds); *SE*: standard error of the regression weight *B*; Wald: Wald test statistic; OR: odds ratio. Relative amount by which the odds increase (OR > 1.0) or decrease (OR < 1.0) when the value of the predictor is increased by 1 unit.

Table G2: Predicting Votes for Mr. Bush versus Ms. Clinton or Abstention Using the More Continuous Measure of Confidence

	Model 1: Explicit Candidate Preference				Model 2: Implicit Candidate Preference				Model 3: Explicit and Implicit Candidate Preferences			
	% CCC = 86.2; pseudo-R^2 = 0.61				% CCC = 80.0; pseudo-R^2 = 0.17				% CCC = 85.6; pseudo-R^2 = 0.62			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Constant	-2.62 (0.37)	50.49	<.001		-1.52 (0.18)	71.65	<.001		-2.64 (0.37)	51.03	<.001	
Explicit	-2.73 (0.39)	49.61	<.001	0.07 [0.03, 0.14]	--	--	--	--	-2.78 (0.42)	43.44	<.001	0.06 [0.03, 0.14]
Implicit	--	--	--	--	-0.85 (0.23)	13.58	<.001	0.43 [0.27, 0.67]	0.06 (0.27)	0.06	0.81	1.07 [0.63, 1.81]

	Model 1: Explicit Candidate Preference % CCC = 86.2; pseudo-R^2 = 0.61				Model 2: Implicit Candidate Preference % CCC = 80.0; pseudo-R^2 = 0.17				Model 3: Explicit and Implicit Candidate Preferences % CCC = 85.6; pseudo-R^2 = 0.62			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Confidence	-0.27 (0.36)	0.56	0.45	0.76 [0.38, 1.55]	-0.40 (0.18)	4.89	0.03	0.67 [0.48, 0.96]	-0.26 (0.36)	0.52	0.47	0.77 [0.38, 1.56]
Condition	0.13 (0.51)	0.06	0.81	1.13 [0.42, 3.09]	0.13 (0.25)	0.25	0.61	1.13 [0.70, 1.85]	-0.12 (0.56)	0.04	0.83	0.89 [0.30, 2.65]
Confidence* Condition	0.14 (0.50)	0.08	0.78	1.15 [0.44, 3.04]	0.48 (0.25)	3.71	0.05	1.62 [0.99, 2.64]	-0.09 (0.52)	0.03	0.87	0.92 [0.33, 2.55]
Explicit* Confidence	0.08 (0.39)	0.05	0.83	1.09 [0.51, 2.33]	--	--	--	--	0.30 (0.43)	0.48	0.49	1.35 [0.58, 3.12]
Implicit* Confidence	--	--	--	--	-0.46 (0.22)	4.32	0.04	0.63 [0.41, 0.97]	-0.31 (0.28)	1.22	0.27	0.74 [0.43, 1.27]
Explicit* Condition	-0.08 (0.55)	0.02	0.88	0.92 [0.32, 2.68]	--	--	--	--	-0.55 (0.69)	0.64	0.42	0.58 [0.15, 2.23]
Implicit* Condition	--	--	--	--	-0.25 (0.37)	0.48	0.49	0.78 [0.38, 1.59]	0.35 (0.44)	0.63	0.43	1.42 [0.60, 3.36]
Explicit* Confidence* Condition	-0.58 (0.56)	1.07	0.30	0.56 [0.19, 1.68]	--	--	--	--	-1.40 (0.69)	4.10	0.04	0.25 [0.06, 0.96]
Implicit* Confidence* Condition	--	--	--	--	0.35 (0.36)	0.94	0.33	1.41 [0.70, 2.85]	0.90 (0.43)	4.41	0.04	2.45 [1.06, 5.65]

Results of logistic regression analyses predicting votes for Mr. Bush (1) versus Ms. Clinton or abstention (0) from explicit and implicit preference for Ms. Clinton, confidence in one's voting intention, and condition (0 = *invalid basis*, 1 = *valid basis*). N = 520. Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. Model 3 showed significantly improved model fit relative to Model 2 (Δ-$2LL \sim \chi^2$ = 211.50, Δdf = 4, $p < .0001$), but not relative to Model 1 (Δ-$2LL \sim \chi^2$ = 6.23, Δdf = 4, p = 0.18). *CCC*: correctly classified cases; pseudo-R^2: Nagelkerke's pseudo-R^2; *B*: regression weight *B* (log odds); *SE*: standard error of the regression weight *B*; Wald: Wald test statistic; OR: odds ratio. Relative amount by which the odds increase (OR > 1.0) or decrease (OR < 1.0) when the value of the predictor is increased by 1 unit.

Table G3: Predicting Votes for Ms. Clinton versus Mr. Bush Using the Binary Measure of Decidedness

	Model 1: Explicit Candidate Preference % CCC = 94.6; pseudo-R^2 = 0.87				Model 2: Implicit Candidate Preference % CCC = 74.6; pseudo-R^2 = 0.30				Model 3: Explicit and Implicit Candidate Preferences % CCC = 94.1; pseudo-R^2 = 0.88			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Constant	3.27 (0.98)	11.14	<.001		0.42 (0.22)	3.53	0.06		3.56 (1.12)	10.15	0.001	
Explicit	10.55 (2.95)	12.78	<.001	>999 [118, >999]	--	--	--	--	11.33 (3.27)	12.00	0.001	>999 [137, >999]
Implicit	--	--	--	--	0.78 (0.30)	6.60	0.01	2.17 [1.20, 3.92]	-0.49 (0.54)	0.82	0.36	0.61 [0.21, 1.78]
Decided	-0.39 (1.33)	0.09	0.77	0.68 [0.05, 9.14]	1.70 (0.45)	14.52	<.001	5.46 [2.28, 13.07]	-0.68 (1.43)	0.23	0.63	0.51 [0.03, 8.39]
Condition	-1.11 (1.14)	0.95	0.33	0.33 [0.04, 3.05]	0.30 (0.34)	0.77	0.38	1.35 [0.69, 2.64]	-1.38 (1.26)	1.19	0.27	0.25 [0.02, 2.99]
Decided* Condition	0.68 (1.65)	0.17	0.68	1.97 [0.08, 50.22]	-1.16 (0.58)	3.98	0.046	0.31 [0.10, 0.98]	2.54 (2.36)	1.15	0.28	12.63 [0.12, >999]
Explicit* Decided	-6.60 (3.13)	4.44	0.04	0.00 [<0.01, 0.63]	--	--	--	--	-7.38 (3.49)	4.47	0.03	<0.01 [<0.01, 0.58]
Implicit* Decided	--	--	--	--	1.23 (0.81)	2.29	0.13	3.43 [0.69, 16.90]	0.50 (1.05)	0.23	0.63	1.65 [0.21, 12.85]
Explicit* Condition	-4.88 (3.28)	2.22	0.14	0.01 [<0.01, 4.67]	--	--	--	--	-5.71 (3.58)	2.55	0.11	0.00 [<0.01, 3.66]
Implicit* Condition	--	--	--	--	0.73 (0.61)	1.42	0.23	2.08 [0.63, 6.91]	0.74 (1.10)	0.45	0.50	2.10 [0.24, 18.25]
Explicit* Decided* Condition	6.15 (3.74)	2.71	0.10	469.21 [0.31, >999]	--	--	--	--	10.00 (4.90)	4.16	0.04	>999 [1.47, >999]

	Model 1: Explicit Candidate Preference % CCC = 94.6; pseudo-R^2 = 0.87				Model 2: Implicit Candidate Preference % CCC = 74.6; pseudo-R^2 = 0.30				Model 3: Explicit and Implicit Candidate Preferences % CCC = 94.1; pseudo-R^2 = 0.88			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Implicit* Decided* Condition	--	--	--	--	1.25 (1.09)	1.30	0.25	0.29 [0.03, 2.44]	-2.77 (1.83)	2.28	0.13	0.06 [0.00, 2.28]

Results of logistic regression analyses predicting votes for Ms. Clinton (1) versus Mr. Bush (0) from explicit and implicit preference for Ms. Clinton, decidedness (0 = *undecided*, 1 = *decided*), and condition (0 = *invalid basis*, 1 = *valid basis*). N = 390. Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. Model 3 showed significantly improved model fit relative to Model 2 (Δ-$2LL \sim \chi^2$ = 279.75, Δdf = 4, $p < .0001$), but not relative to Model 1 (Δ-$2LL \sim \chi^2$ = 5.30, Δdf = 4, p = 0.26). *CCC*: correctly classified cases; pseudo-R^2: Nagelkerke's pseudo-R^2; *B*: regression weight *B* (log odds); *SE*: standard error of the regression weight *B*; Wald: Wald test statistic; OR: odds ratio. Relative amount by which the odds increase (OR > 1.0) or decrease (OR < 1.0) when the value of the predictor is increased by 1 unit.

Table G4: Predicting Votes for Ms. Clinton versus Mr. Bush or Abstention Using the Binary Measure of Decidedness

	Model 1: Explicit Candidate Preference % CCC = 84.8; pseudo-R^2 = 0.67				Model 2: Implicit Candidate Preference % CCC = 71.9; pseudo-R^2 = 0.33				Model 3: Explicit and Implicit Candidate Preferences % CCC = 84.4; pseudo-R^2 = 0.68			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Constant	-0.17 (0.23)	0.53	0.47		-0.44 (0.18)	6.04	0.01		-0.17 (0.23)	0.50	0.48	
Explicit	3.18 (0.57)	31.34	<.001	24.01 [7.89, 73.08]	--	--	--	--	3.06 (0.58)	28.33	<.001	21.37 [6.92, 66.00]
Implicit	--	--	--	--	0.92 (0.28)	10.46	0.001	2.51 [1.44, 4.38]	0.36 (0.35)	1.03	0.31	1.43 [0.72, 2.84]

	Model 1: Explicit Candidate Preference % CCC = 84.8; pseudo-R^2 = 0.67				Model 2: Implicit Candidate Preference % CCC = 71.9; pseudo-R^2 = 0.33				Model 3: Explicit and Implicit Candidate Preferences % CCC = 84.4; pseudo-R^2 = 0.68			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Decided	1.39 (0.44)	9.85	0.002	4.01 [1.68, 9.53]	1.90 (0.34)	31.12	<.001	6.68 [3.43, 13.03]	1.42 (0.45)	9.99	0.002	4.15 [1.72, 10.04]
Condition	-0.10 (0.31)	0.10	0.75	0.91 [0.49, 1.67]	0.11 (0.26)	0.18	0.67	1.12 [0.67, 1.85]	0.00 (0.32)	0.00	1.00	1.00 [0.53, 1.89]
Decided* Condition	-0.19 (0.61)	0.10	0.75	0.82 [0.25, 2.73]	-0.77 (0.45)	2.91	0.09	0.46 [0.19, 1.12]	-0.23 (0.64)	0.13	0.72	0.80 [0.23, 2.79]
Explicit* Decided	-0.56 (0.77)	0.53	0.47	0.57 [0.13, 2.58]	--	--	--	--	-0.61 (0.81)	0.57	0.45	0.54 [0.11, 2.65]
Implicit* Decided	--	--	--	--	0.94 (0.66)	2.03	0.15	2.55 [0.70, 9.24]	0.01 (0.74)	0.00	0.99	1.01 [0.23, 4.31]
Explicit* Condition	-0.71 (0.72)	0.98	0.32	0.49 [0.12, 2.01]	--	--	--	--	-0.72 (0.73)	0.98	0.32	0.49 [0.12, 2.03]
Implicit* Condition	--	--	--	--	0.39 (0.47)	0.67	0.41	1.47 [0.58, 3.71]	0.49 (0.61)	0.63	0.43	1.63 [0.49, 5.39]
Explicit* Decided* Condition	1.34 (1.11)	1.46	0.23	3.81 [0.44, 33.40]	--	--	--	--	1.87 (1.21)	2.38	0.12	6.50 [0.60, 70.04]
Implicit* Decided* Condition	--	--	--	--	-1.07 (0.84)	1.63	0.20	0.34 [0.07, 1.77]	-1.31 (0.99)	1.75	0.19	0.27 [0.04, 1.88]

Results of logistic regression analyses predicting votes for Ms. Clinton (1) versus Mr. Bush or abstention (0) from explicit and implicit preference for Ms. Clinton, decidedness (0 = *undecided*, 1 = *decided*), and condition (0 = *invalid basis*, 1 = *valid basis*). N = 520. Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. Model 3 showed significantly improved model fit relative to Model 2 (Δ-$2LL \sim \chi^2$ = 222.18, Δdf = 4, $p < .0001$), but not relative to Model 1 (Δ-$2LL \sim \chi^2$ = 5.99, Δdf = 4, p = 0.20). *CCC*: correctly classified cases; pseudo-R^2: Nagelkerke's pseudo-R^2; *B*: regression weight *B* (log odds); *SE*: standard error of the regression weight *B*; Wald: Wald test

statistic; OR: odds ratio. Relative amount by which the odds increase (OR > 1.0) or decrease (OR < 1.0) when the value of the predictor is increased by 1 unit.

Table G5: Predicting Votes for Mr. Bush versus Ms. Clinton or Abstention Using the Binary Measure of Decidedness

	Model 1: Explicit Candidate Preference				**Model 2: Implicit Candidate Preference**				**Model 3: Explicit and Implicit Candidate Preferences**			
	% CCC = 86.0; pseudo-R^2 = 0.62				% CCC = 79.6; pseudo-R^2 = 0.17				% CCC = 85.6; pseudo-R^2 = 0.62			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Constant	-2.30 (0.37)	38.10	<.001		-1.11 (0.20)	31.11	<.001		-2.30 (0.37)	38.03	<.001	
Explicit	-2.69 (0.49)	30.43	<.001	0.07 [0.03, 0.18]	--	--	--	--	-2.75 (0.52)	28.31	<.001	0.06 [0.02, 0.18]
Implicit	--	--	--	--	-0.52 (0.25)	4.34	0.04	0.60 [0.37, 0.97]	0.13 (0.32)	0.17	0.68	1.14 [0.61, 2.13]
Decided	-0.84 (0.85)	0.98	0.32	0.43 [0.08, 2.27]	-1.04 (0.40)	6.93	0.01	0.35 [0.16, 0.77]	-0.84 (0.85)	0.98	0.32	0.43 [0.08, 2.27]
Condition	-0.08 (0.52)	0.03	0.87	0.92 [0.33, 2.56]	-0.27 (0.30)	0.79	0.37	0.77 [0.43, 1.38]	-0.07 (0.52)	0.02	0.89	0.93 [0.33, 2.59]
Decided* Condition	0.49 (1.15)	0.18	0.67	1.62 [0.17, 15.33]	1.02 (0.53)	3.72	0.05	2.77 [0.98, 7.82]	0.09 (1.24)	0.01	0.94	1.10 [0.10, 12.50]
Explicit* Decided	-0.07 (0.80)	0.01	0.93	0.93 [0.19, 4.47]	--	--	--	--	0.03 (0.88)	0.00	0.97	1.03 [0.18, 5.81]
Implicit* Decided	--	--	--	--	-0.76 (0.46)	2.70	0.10	0.47 [0.19, 1.16]	-0.18 (0.54)	0.12	0.73	0.83 [0.29, 2.40]
Explicit* Condition	0.27 (0.65)	0.18	0.67	1.31 [0.37, 4.64]	--	--	--	--	0.25 (0.69)	0.13	0.72	1.29 [0.33, 5.01]
Implicit* Condition	--	--	--	--	-0.36 (0.43)	0.69	0.41	0.70 [0.30, 1.63]	0.07 (0.53)	0.02	0.89	1.08 [0.38, 3.06]

	Model 1: Explicit Candidate Preference % CCC = 86.0; pseudo-R^2 = 0.62				Model 2: Implicit Candidate Preference % CCC = 79.6; pseudo-R^2 = 0.17				Model 3: Explicit and Implicit Candidate Preferences % CCC = 85.6; pseudo-R^2 = 0.62			
	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**	***B* (SE)**	**Wald**	***p***	**OR [95% CI]**
Explicit* Decided* Condition	-1.03 (1.18)	0.76	0.38	0.36 [0.04, 3.60]	--	--	--	--	-1.90 (1.51)	1.58	0.21	0.15 [0.01, 2.88]
Implicit* Decided* Condition	--	--	--	--	0.20 (0.75)	0.07	0.79	1.22 [0.28, 5.32]	0.79 (0.88)	0.80	0.37	2.20 [0.39, 12.33]

Results of logistic regression analyses predicting votes for Mr. Bush (1) versus Ms. Clinton or abstention (0) from explicit and implicit preference for Ms. Clinton, decidedness (0 = *undecided*, 1 = *decided*), and condition (0 = *invalid basis*, 1 = *valid basis*). N = 520. Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. Model 3 showed significantly improved model fit relative to Model 2 ($\Delta\text{-}2LL \sim \chi^2$ = 207.10, Δdf = 4, $p < .0001$), but not relative to Model 1 ($\Delta\text{-}2LL \sim \chi^2$ = 2.41, Δdf = 4, p = 0.66). *CCC*: correctly classified cases; pseudo-R^2: Nagelkerke's pseudo-R^2; *B*: regression weight *B* (log odds); *SE*: standard error of the regression weight *B*; Wald: Wald test statistic; OR: odds ratio. Relative amount by which the odds increase (OR > 1.0) or decrease (OR < 1.0) when the value of the predictor is increased by 1 unit.

APPENDIX H: EXTENDED DISCUSSION OF THE TABLE 8 MODEL RESULTS

In Study 2, to evaluate whether the relationships between candidate attitudes and voting behavior differed as a function of condition, the model predicting votes for Ms. Clinton (versus Mr. Bush) was originally fit to the entire available sample of 390 respondents. However, diagnostic tests suggested that the results may have been unduly influenced by outlying data points, and so it was discarded in favor of a model with those outliers removed (see main manuscript for details). Information regarding model fit and the model-implied estimates for the original analysis can be found in Table 8, and this appendix offers an extended discussion of the results and their interpretation.

Two likelihood ratio tests comparing Models 1 and 2, respectively, to Model 3 indicated that the fit of Model 3 was superior to both Model 1 (Δ-$2LL \sim \chi^2$ = 11.82, Δdf = 4, p = 0.02) and Model 2 (Δ-$2LL \sim \chi^2$ = 288.94, Δdf = 4, p < .0001). In other words, the inclusion of explicit (or implicit) candidate preference and its associated interaction terms explained significantly more variance in voting behavior than the inclusion of implicit (or explicit) candidate preference and its associated interaction terms. Support for the incremental validity of the implicit measure was also reflected in the slight increase in Nagelkerke's pseudo-R^2 from Model 1 to Model 3, though not in the percentage of correctly classified cases, nor in the significance test for the main effect of implicit attitudes: While those with greater explicit preference for Ms. Clinton were more likely to vote for her even when controlling for implicit candidate preference (B = 9.78, SE = 2.36, p < .001), implicit candidate preference was not uniquely associated with voting behavior (B = -0.48, SE = 0.88, p = 0.35).

However, the interpretations of these main effects must be considered in the context of the number of significant interactions that did emerge. First, consider the findings regarding explicit attitudes: A significant two-way interaction between explicit candidate preference and confidence (B = -5.35, SE = 1.79, p = 0.002) was further qualified by a significant three-way interaction with condition (B = 7.02, SE = 2.34, p = 0.003). This three-way interaction indicates that the relationship between explicit attitudes and confidence in predicting voting behavior significantly differs between conditions. In order to better understand the nature of that difference, simple effects were estimated using MODPROBE, a computational tool for probing single degree-of-freedom interactions (Hayes & Matthes, 2009). A graphical representation of those estimates can be found in Figure 2.

In the *invalid basis* condition (see Figure H1, Panel A below), explicit attitudes were *less* predictive at higher levels of confidence (simple *explicit*-x-*confidence* estimate: b = -5.35, SE = 1.79, p = 0.003, 95% CI: [-8.87, -1.83]). In contrast, in the *valid basis* condition (Figure H1, Panel B), explicit attitudes were equally predictive across all levels of confidence (simple *explicit*-x-*confidence* estimate: b = 1.67, SE = 1.50, p = 0.27, 95% CI: [-1.27, 4.62]). To be clear, in both conditions and across all levels of confidence, those with relatively greater explicit preference for Ms. Clinton (versus Mr. Bush) were still significantly more likely to vote for her (i.e., the simple slope estimates for explicit attitudes were always significantly positive, ps < 0.02). These results simply indicate that, when participants were induced to believe that their implicit attitudes were an invalid (versus valid) basis for judgment, their explicit attitudes became less predictive of voting behavior as their confidence in their vote increased.

Now consider the findings regarding implicit attitudes: A non-significant two-way interaction between implicit candidate preference and confidence (B = 0.92, SE = 0.61, p = 0.13) was qualified by a significant three-way interaction with condition (B = -2.73, SE = 1.00, p =

0.01)[14]. This three-way interaction indicates that the relationship between implicit attitudes and confidence in predicting voting behavior significantly differs between conditions. As before, simple effects were estimated using MODPROBE, in order to better understand the nature of that difference, and a graphical representation of the estimates can be found in Figure 2.

In the *invalid basis* condition (Figure H1, Panel C), implicit attitudes were not predictive of voting behavior, and this non-significant relationship held across all levels of confidence (simple *implicit*-x-*confidence* estimate: $b = 0.92$, $SE = 0.61$, $p = 0.13$, 95% CI: [-0.28, 2.12])[15]. In contrast, in the *valid basis* condition (Figure H1, Panel D), the relationship between implicit attitudes and voting behavior was moderated by confidence (simple *implicit*-x-*confidence* estimate: $b = -1.80$, $SE = 0.80$, $p = 0.02$, 95% CI: [-3.36, -0.24]). Specifically, at lower levels of confidence, implicit attitudes estimates were positively but not significantly predictive of voting (e.g., simple *implicit* estimate at 1 *SD* below the mean of confidence: $b = 1.65$, $SE = 1.37$, $p = 0.23$, 95% CI: [-1.04, 4.34]). However, at higher levels of confidence, implicit attitudes were negatively and significantly predictive of voting (e.g., simple *implicit* estimate at 1 *SD* above the mean of confidence: $b = -1.95$, $SE = 0.95$, $p = 0.04$, 95% CI: [-3.81, -0.10]). Use of the Johnson-Neyman technique for estimating regions of significance showed that, within the *valid basis* condition, implicit attitudes were significantly negatively associated with voting at values of confidence greater than 0.91 *SD* above the mean (ps < .05). In other words, when participants were induced to believe that their implicit attitudes were a valid (versus invalid) basis for judgment, their implicit attitudes became significantly negatively predictive of voting behavior at the highest levels of confidence.

The interpretations afforded by these results are not consistent with previous research or the introspective neglect hypothesis. Consider first the *invalid basis* conditions: These were assumed to be approximating real-world conditions in which implicit attitudes are less likely to be perceived as a valid basis for judgment. If so, then it is not unreasonable that implicit attitudes would be unrelated to confidence regarding one's voting intention and to voting behavior. Why, though, would explicit attitudes under those conditions interact with confidence such that they are *less* predictive of voting behavior among highly confident respondents? Such results are in direct opposition to all previous research on this topic (Friese et al., 2012; Galdi et al., 2008; Lundberg & Payne, 2014) and to a much broader body of work on attitude certainty and the prediction of behavior (for a review see Tormala & Rucker, 2007), as their interpretation is that explicit attitudes held with less confidence are more likely to be acted on. One possibility is that beliefs that gut feelings (implicit attitudes) were less valid inflated the perceived validity of considered opinions (explicit attitudes). But, it is unclear why that would have differentially

[14] Similar, though not identical, results involving implicit attitudes and these higher-order interactions are observed across the other five voting behavior-confidence measure pairings. On the whole, the direction of the findings is the same, though the significance levels vary widely. See Appendix G.

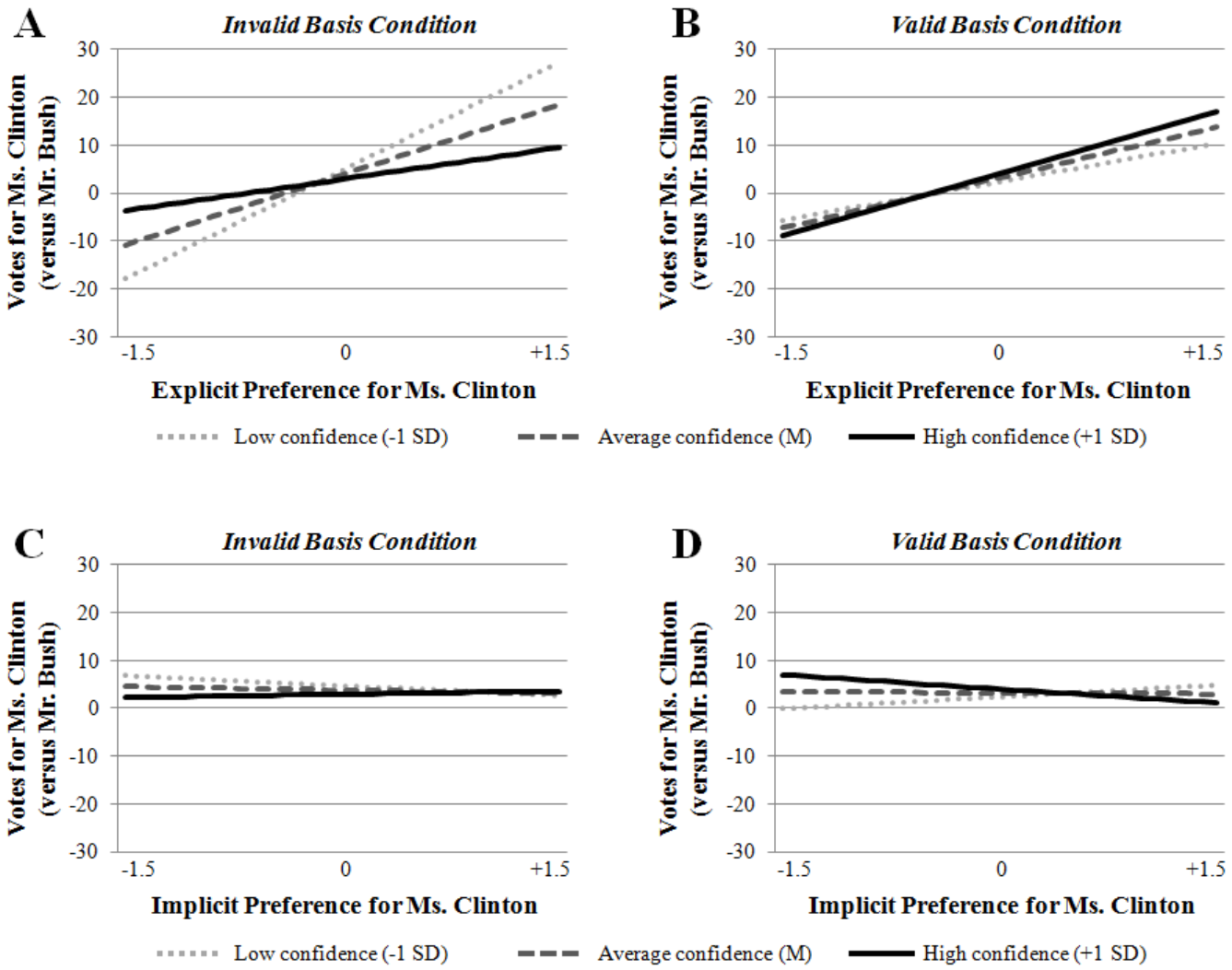
[15] Use of the Johnson-Neyman technique for estimating regions of significance within MODPROBE (see Hayes & Matthes, 2009) revealed that, within the invalid basis condition, implicit attitudes were marginally negatively predictive of voting behavior at the lowest levels of confidence (bs < -1.00, ps < 0.09 at values of confidence more than 0.56 standard deviations below the mean). In other words, for participants who were induced to believe that their implicit attitudes were an invalid basis for decision-making and who were the least confident in their vote, *greater* implicit preference for Ms. Clinton was associated with a *lower* likelihood of voting for her. One interpretation is that these participants were motivated to "correct" for their implicit attitudes by acting in opposition to them. However, given the lack of a significant two-way interaction between implicit attitudes and confidence within the *invalid basis* condition, such simple effects and their corresponding interpretations should be regarded with caution.

amplified the perceived validity of explicit attitudes among less confident respondents rather than manifesting itself as a main effect difference between explicit attitudes in the *invalid basis* versus *valid basis* conditions.

Further, such an interpretation is not straightforwardly reconciled with the results observed in the *valid basis* conditions. In those, implicit attitudes were actually inversely related to voting behavior among highly confident respondents. Perhaps learning that gut feelings were a valid basis for judgment induced reactance such that respondents "corrected for" and acted in opposition to their implicit attitudes. But again, it is unclear why that would be the case and why it would be so only for the most confident respondents rather than for the least confident.

Figure H1

Simple Slopes Relating Candidate Attitudes to Voting Across Condition and Levels of Confidence



Likelihood of voting for Ms. Clinton (1) versus Mr. Bush (0) as a function of explicit and implicit candidate attitudes, confidence, and condition. Panel A: The association between explicit candidate preference and voting in the *invalid basis* condition was moderated by confidence. Panel B: The association between explicit candidate preference and voting in the *valid* basis condition was not moderated by confidence. Panel C: The association between implicit candidate preference and voting in the *invalid basis* condition was not moderated by confidence. Panel D: The association between implicit candidate preference and voting in the *valid basis* condition was moderated by confidence.

APPENDIX I: ADDITIONAL STUDY 2 MODELS PREDICTING THE ALTERNATIVE BEHAVIORAL MEASURE OF CANDIDATE PREFERENCE (READING TIME)

Models using the binary measure of decidedness.

	Model 1: Explicit Candidate Preference $R^2 = 0.01$, $F(7,453) = 0.62$, $p = 0.74$				**Model 2: Implicit Candidate Preference** $R^2 = 0.02$, $F(7,453) = 1.13$, $p = 0.34$				**Model 3: Explicit and Implicit Candidate Preferences** $R^2 = 0.02$, $F(11,449) = 0.88$, $p = 0.56$			
	***B* (SE)**	***t***	***p***	**[95% CI]**	***B* (SE)**	***t***	***p***	**[95% CI]**	***B* (SE)**	***t***	***p***	**[95% CI]**
Constant	7.86 (5.04)	1.56	0.12	[-2.04, 17.77]	6.95 (4.89)	1.42	0.16	[-2.65, 16.56]	7.88 (5.03)	1.57	0.12	[-2.01, 17.77]
Explicit	6.84 (5.94)	1.15	0.25	[-4.83, 18.51]	--	--	--	--	5.03 (6.29)	0.80	0.42	[-7.34, 17.40]
Implicit	--	--	--	--	7.34 (6.13)	1.20	0.23	[-4.71, 19.39]	5.59 (6.52)	0.86	0.39	[-7.23, 18.41]
Decided	6.08 (7.77)	0.78	0.43	[-9.20, 21.35]	6.29 (7.42)	0.85	0.40	[-8.28, 20.87]	6.91 (7.80)	0.89	0.38	[-8.42, 22.23]
Condition	2.06 (7.00)	0.29	0.77	[-11.70, 15.82]	3.76 (6.84)	0.55	0.58	[-9.68, 17.20]	2.13 (7.01)	0.30	0.76	[-11.65, 15.91]
Decided* Condition	-2.50 (10.82)	-0.23	0.82	[-23.76, 18.76]	-2.71 (10.51)	-0.26	0.80	[-23.36, 17.93]	-2.71 (10.85)	-0.25	0.80	[-24.04, 18.61]
Explicit* Decided	-7.71 (7.87)	-0.98	0.33	[-23.18, 7.76]	--	--	--	--	-9.73 (8.88)	-1.10	0.27	[-27.19, 7.73]
Implicit* Decided	--	--	--	--	-3.79 (7.59)	-0.50	0.62	[-18.71, 11.12]	0.27 (8.50)	0.03	0.97	[-16.43, 16.97]
Explicit* Condition	-11.59 (8.38)	-1.38	0.17	[-28.05, 4.87]	--	--	--	--	-10.22 (9.10)	-1.12	0.26	[-28.11, 7.67]
Implicit* Condition	--	--	--	--	-8.80 (8.97)	-0.98	0.33	[-26.44, 8.83]	-4.50 (9.81)	-0.46	0.65	[-23.77, 14.77]
Explicit* Decided* Condition	7.05 (11.02)	0.64	0.52	[-14.60, 28.71]	--	--	--	--	15.69 (12.56)	1.25	0.21	[-8.99, 40.37]

	Model 1: Explicit Candidate Preference				Model 2: Implicit Candidate Preference				Model 3: Explicit and Implicit Candidate Preferences			
Implicit* Decided* Condition	--	--	--	--	-4.38 (10.98)	-0.40	0.69	[-25.95, 17.19]	-11.40 (12.45)	-0.92	0.36	[-35.86, 13.06]

Results of linear regression analyses predicting greater time spent reading facts regarding Ms. Clinton (relative to Mr. Bush) from explicit and implicit preference for Ms. Clinton, decidedness (0 = *undecided*, 1 = *decided*), and condition (0 = *invalid basis*, 1 = *valid basis*). $N = 461$. Model 1 examines explicit candidate preference separately. Model 2 examines implicit candidate preference separately. Model 3 examines both attitude measures simultaneously. Neither Model 1 ($\Delta R^2 = 0.01$, $F(4,449) = 1.34$, $p = 0.25$) nor Model 2 ($\Delta R^2 = 0.004$, $F(4,449) = 0.46$, $p = 0.77$) showed significant improvement in model fit relative to Model 3. *B*: regression weight *B*; *SE*: standard error of the regression weight *B*; *t*: *t* test statistic; 95% CI: 95% confidence interval for regression weight *B*.

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