# ANXIETY, POLITICAL ATTITUDES, AND VOTING BEHAVIOR

by

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#### ABSTRACT

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How prevalent and influential is anxiety as a motivating factor for political activity within the American electorate? In the last two decades, anxiety has been linked to increased information seeking, participation, and altered means of vote choice by scholars. Despite providing an impressive array of effects tied to anxiety, research generally has examined only a very small set of stimuli objects and phases of election cycles. I seek to contribute to this growing knowledge regarding the role of anxiety in the electoral environment in three ways. First, I utilize data from the 2008-9 ANES Panel Study to examine whether the individual and contextual sources of citizen anxiety vary between primary and general elections. Second, I examine whether the experience of anxiety leads to any subsequent attitudinal change during an election cycle. Third, I examine whether the experience of anxiety towards candidates is confined to distinct pockets of the voting public, particularly during the early stages of the election process. My analyses show that candidate characteristics and economic evaluations play an important role in shaping individual emotional responses to presidential primary candidates. Anxiety, however, appears capable of leading to significant attitude change only on those issues that are relatively new to political discourse and strongly tied to the candidates in question. Lastly, I find that those for whom anxiety would seem least likely to have a meaningful effect – the strongly ideological, partisan, and politically interested - are exactly those who are most likely to experience anxiety throughout a campaign, and especially in its early phases. This dissertation expands the discussion of electoral anxiety into the broader electoral experience in a way that speaks to the meaningful role that emotion plays in citizen behavior and decision-making in politics while acknowledging important caveats on its potential effects. While anxiety may be capable of producing meaningful changes in behavior, its

expression in electoral politics appears to be a case of benefits flowing to those who are already more than capable of engaging with the political world.

To Emily, my rock.

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### **Chapter 1**

## THE EMOTIONALITY OF POLITICS

The political world brims with emotional interaction and confrontation. From the 2009 town hall clashes over health care reform to the hopeful masses hailing the victory of Barack Obama at Grant Park in Chicago on Election Night after the 2008 presidential election, emotion forms an important component of the political experiences of millions of citizens. Political life in the United States provides a seemingly endless stream of targets towards which the public can react with emotion: politicians, parties, economic conditions, campaign advertisements, legislation, and more.

In the words of the 19th century political observer Alexis de Tocqueville, "[P]olitical passions become irresistible not only because the object that they pursue is immense, but also because millions of men feel them in the same manner and at the same moment" (Tocqueville 1835/2000). From this perspective, emotions are an unavoidable fact of political life, not only because of the high stakes of politics, but because of the fact that they are a shared mass experience for a non-trivial subset of the body politic. Even modern scholars of politics accord emotions or passions a central, if at times vague, place in their analysis of political life. Green, Palmquist, and Schickler (2004) present their conception of individual identification with political parties in terms of passions, conceptualizing the connection as a social identity or a partisan rooting interest.

This attention to the emotional state of the mass public is also frequently seized upon the media in its attempts to lend perspective to the political environment. While most usage of this terminology focuses on the simple (i.e. "the angry right" or "anxious Democratic members of Congress"), occasionally commentators provide a more nuanced portrait of the emotions of the public. A few recent instances of how the media presents and analyzes the emotional state of the public serve to present a somewhat fuller understanding of how contemporary observers conceive of the scope, origins, and potential impacts of all this emotion.

In an article written prior to the 2010 midterm elections, Klein describes his experiences on a road trip in the Midwest with a voting public that is "more anxious than angry" with the state of the country and electoral choices they face (Klein 2010). In his discussion, Klein focuses on the increased levels of political awareness and introspection evidenced in people with whom he met, questioning their basic assumptions and beliefs about the political system.<sup>1</sup> Additionally, he contrasts the anger that is foremost in the public's perception of the Tea Party with the lack of passion shown by President Obama.

Steinhauer (2010) also focuses on the rise of the Tea Party, focusing instead on how Democrats planned to use the bloc's rhetoric and positions to political advantage in the upcoming midterm elections. While the consultants interviewed agreed in their conception of the Tea Party as a threat or danger to the political system, there is more attention to how Democrats portrayed their opponents and its politcal implications. In the words of a Democratic pollster, "Voters get very taken aback with anger in politics . . . Women in this country are not angry. They are anxious" (Steinhauer 2010). In another piece from that same fall, Thee-Brenan and Elder (2010) terms 2010 the "year of the angry man". This anger is particularly important, they argue, because polling suggested that this anger may be motivating men to voting in the midterm elections. This contrasted with women, who expressed hopelessness on economic issues in particular and were not as attentive to the campaign as men.

Lastly, in a very recent piece in *New York* magazine, Heilemann (2012) analyzes the emotional mood of the public and the campaign strategy of President Obama as he faces reelection. Similar to the discussions of the 2010 electorate, Heilemann characterizes the public as possessing a "still-pervasive sense of anxiety bordering on pessimism" (Heilemann 2012). In the face of this anxious populace, Heilemann contrasts the situation today to that of 2008 and argues that the once iconic candidate of "hope" may be driven to become the candidate of "fear" in 2012.

<sup>&</sup>lt;sup>1</sup>Klein's depiction of voters' attention level and emotional state unknowingly aligns with the tenets of Affective Intelligence Theory, which is discussed later in this dissertation (Marcus, Neuman, and MacKuen 2000).

In light of these discussions of emotions and politics in the last two years, what lessons and insights can we draw? First and most clearly, we can see that contemporary accounts focus on different citizens experiencing different emotions and that these differences can occur at the same time. While a few of the stories discussed above refer to the emotional state of the public in broad strokes as in the Heilemann piece, we also see contrasts between the emotions of men and women in 2010 and between Tea Party members and more moderate voters. Thus emotion is not a blanket condition of the mass public at any given time; these authors imply that there appears to be meaningful variations that exist and these differences may in turn be related to salient characteristics of individuals.

Tied to this first conclusion, we can also see that the experience of certain emotions may be related to behavioral impacts. This can be seen in two of the four articles. Klein's portrayal of an anxious electorate refers to the heightened political awareness and introspection of the public, and Thee-Bernan and Elder use polling data to infer that anger is motivating attention and voting impact among males. If true more broadly than in these specific accounts, this idea greatly increases the importance of studying emotion from a political behavior perspective. Given that political science is primarily interested in understanding the associations between relevant phenomena and their implications for politics, the fact that emotions may be tied to a number of theoretically and normatively interesting behaviors indicates that their study may well be a worthwhile enterprise.

Third, as one might expect in media accounts, we see that the pieces focus on what is termed in psychology as state (or temporary) emotions as opposed to trait emotion, which is an enduring characteristic of people. The emotions discussed in each of these pieces are based on short- to medium-term phenomena (an economic downturn, an upcoming election, the rise of a new political bloc) rather than some enduring characteristic of the political system or individuals. These observers imply that emotional responses to politics vary over time and that this variation is meaningful. As connected to the previous point, we might conclude that this variation is important because of the meaningful behavioral impacts that might be due to the experience of some political emotions. Lastly, and perhaps somewhat less importantly for the study of mass behavior, the Steinhauer and Heilemann pieces demonstrate the idea that political actors may attempt to elicit certain, specific emotions out of voting citizens. Both articles present Democrats in the midst of an internal debate over which emotions are most worth invoking in the public, and at what costs. This implies that emotions are something that political actors believe can be systematically manipulated in a strategic manner.

## 1.1 Emotion, Activism, and the Political Environment

Given the variety of potential conclusions one can derive from only a few articles in the media that relate to this topic, one might be surprised to learn that for much of the history of political science emotion was treated as a peripheral at best topic in the study of mass behavior. This lack of attention to emotion is surprising because of one seemingly clear connection between emotion and one prominent aspect of citizenship - popular activism. Every major movement in politics is associated with some emotional impulse held by a large segment of the population, often anger over some specific injustice or anxiety in response to a threatening, albeit diffuse, change in society at the time.<sup>2</sup>

The recent stories of the rise of the Tea Party and Occupy Wall Street movements sound like instances of movements arising out of anxiety at first glance, reactions of disparate sources of unease with the current state of affairs with a lack of a clear attribution as to the origins of the concerns of members. Yet the actions of supporters of these movements and those sympathetic to their claims would hardly be argued to align with that expected from anxiety. As will be discussed in the next chapter, anxious citizens who are uncertain about the nature of the threat they face have to found to act in a manner that includes increased information search and openness to new viewpoints (MacKuen et al. 2010). Any observer of these movements would hardly characterize

<sup>&</sup>lt;sup>2</sup>This conception of anxiety as arising as a result of unfamiliar circumstances and aversion as the result of repeated conflict with familiar opponents is based on recent research in political science about differences in the experience of these two emotions (MacKuen et al. 2010).

their behavior as aligning with this description. Furthermore, it is difficult to imagine a sustained activist movement without a reasonably clear target of protest.<sup>3</sup> Instead, their behavior hues more closely to that of anger, which leads to behavior based on a closing-off of openness to new ideas and a dogged attachment to one's preexisting ideas.

That anger might be the source of these two major modern protest movements may serve to explain the stories of their development as well. The slow-developing origins of the Tea Party and Occupy Wall Street makes sense in light of the fact that anger only arises when attribution is possible. In particular, the path of the rise of Occupy Wall Street fits this line of reasoning well. In the aftermath of the 2008 economic collapse, many observers expected that some mass expression of citizen outrage would occur in response to the massive upheaval and downturn in fortunes. Yet in the two years that followed the downturn, the only major movement that arose was the Tea Party, whose impulses can hardly be described as deriving solely in response to economic stimuli. Instead, it took until late 2011, nearly three years after the crisis began, for Occupy Wall Street to make its appearance in Zuccotti Park in New York City. Despite its muddy messaging and long lists of proposed aims, Occupy Wall Street was fundamentally a protest against those elements in the social order and government that protesters deemed responsible for creating the economic downturn and an increasingly unbalanced distribution of wealth in society. Given the complexity surrounding the origins of the downturn even for educated observers, perhaps it is not surprising that it took a number of years for the public to arrive at the ability to attribute blame for the economic situation they faced.

If anxiety about the collapse of the U.S. economy helped to open the door for a relatively unknown African American candidate to take the White House by a substantial margin, anger has shaped the environment within which much of his time in office has existed. The irony is that the two major phenomena that have shifted the discourse of American politics in the last four years have been the result of angry citizens who have prominently belonged to one of the two major

<sup>&</sup>lt;sup>3</sup>Signs along with the line of "Stop the unknown entities that are killing our economy" hardly seem likely to inspire strong emotional responses and empathy from observers.

political parties. If political parties and an individual's identification to one of these parties is one of the core political identities of an individual as a political animal, then why do emotions such as anxiety and anger seem to have such an outsized role in the dynamics of politics? As we will discuss shortly, failing to account for the place of emotions in politics produces a conception of political life that fails to align with the world we see around us.

These two different perspectives discussing in the preceding pages, modern small-bore journalistic accounts and high-level, general discussion of major activist movements in recent politics, both cast emotion as a major motivating factor in citizen life. Beyond a simple characterization of the mood of the electorate or some subset thereof at any given time, we can connect emotions and emotional behavior to predictable patterns of origin and ensuing behavior such as increased attention to politics, activism, or intention to vote. If such connections can be demonstrated on a large scale, it is very well the case that similar associations might be made at the individual level as well. Furthermore, although not discussed here, we can conceive of emotion as an experience that is experienced differentially by the two major political subgroups within each term, although their experiences are similar across terms. Adherents of the two parties respond differentially to the same information depending on its partisan source; hence, it is relatively easy to conceive of emotion as an experience that is intimately tied to the experience of being a partisan.

In light of these general insights, let us once more return to the observation that emotion has been accorded an often minor role<sup>4</sup> in scholarly accounts of political behavior.<sup>5</sup> Without going into too much depth, we can identify a few potential reasons for what we might judge a gap in knowledge. First, at a normative level, the idea of emotions leading to what appear to be irrational impulses (i.e. the angry mob) demonstrates a long-feared pathology of a democratic citizen (Marcus 2002). That is, if citizens can be easily duped into walk away from their 'true' interests, do

<sup>&</sup>lt;sup>4</sup>Political science has traditionally focused some attention on the role of affect, but this has primarily focused on the use of feeling thermometers, a valence-based conception of emotion that fails to align with current thinking about the structure of emotions (see Marcus, Neuman, and MacKuen 2000, Appendix B). We will take up this topic in the next chapter.

<sup>&</sup>lt;sup>5</sup>See Marcus, Neuman, and MacKuen (2000) and Marcus (2002) for good discussions of the often checkered relationship between emotion and the study of politics.

we want a broadly participatory system? This line of thinking helped to lead attention to those areas of study that serve to facilitate a functioning, successful system such as partisanship and rationality, concepts that now serve as core components of our understanding of political behavior. Additionally, as we will discuss in the next chapter, the measurement of emotions is a tricky at best enterprise. If one does not conceive of emotion as a central motivator of political behavior, this alone may serve to keep emotions at the margins.

In recent years, however, the discipline has begun to reconsider the role emotion plays in political reasoning and judgment. Drawing upon the findings of other disciplines that emotion is a crucial underpinning of the reasoning process, scholars have rehabilitated emotion as a source of information in political decision-making, even going so far as to talk in terms of "affective intelligence" (Marcus, Neuman, and MacKuen 2000)<sup>6</sup>. In this recent resurgence of inquiry, one particular emotion – anxiety – has been given a privileged position. As discussed earlier, anxiety occurs when an individual faces a novel or uncertain stimuli that is threatening and leads to behaviors such as an increased and more balanced information search about the current threat. These behaviors and many others that have been tied to the experience of anxiety tend to align with those we would expect of a 'good' democratic citizen. Thus, at long last, researchers may have resuscitated the idea of experiencing emotion as something that might have positive implications for citizens. Before proceeding into further discussion of anxiety and how this project serves to advance our knowledge of its operation, let us take a moment to address two important and related questions: What are the practical implications of emotions in political life? and What does the study of emotions with respect to politics provide us in terms of our understanding of political behavior that we did not have before?

<sup>&</sup>lt;sup>6</sup>However, it is worth noting that other lines of research lay out a different causal sequence between affect and attitudes. In psychology, self-perception theory states that attitudes and feelings are post-hoc justifications of external behavior (Bem 1967, 1972).

## **1.2** Emotions and the Study of Political Behavior and Choice

As the preceding discussion has hopefully demonstrated, failing to account for the place of emotions in politics produces a conception of political life that fails to align with the world we see around us. Without emotion as a potential explanation for political behavior, we are left with theories that view citizens as either cool, calculating rational actors (Downs 1957), partisans engaging in largely stable 'normal' behavior based on their political identity that vary only infrequently (Campbell et al. 1960; Converse 1966), or cognitively-limited individuals who seek out the efficiency of heuristics and demonstrate cognitive biases in their thinking (Fiske and Taylor 1991). Each of these theories imbue citizens with a set of constant characteristics that describe the nature of their political behavior and sources of their attitudes.

Yet as the past few pages have shown, the reality of politics is one of significant heterogeneity in behavior, attitudes, and political choice (Brader, Marcus, and Miller 2011). The sheer co-existence of these three schools of thought within the field of study demonstrates that the observed evidence fails to wholly support one over the others. Given this fact, what might serve to explain why individuals differ across these archetypes and even act in line with differing perspectives depending on the situation? Emotion appears to provide just such an explanation. Emotions can provide motivational effects that are capable of altering the calculus leading to the method of decision-making (Lau 2003). As we will discuss in the coming chapters, a prominent theory of emotions and political behavior, Affective Intelligence theory (Marcus, Neuman, and MacKuen 2000), argues that anxiety is an emotion that can provide enough added motivation to push an individual into more rational decision-making processes than might otherwise have been the case.

Emotions also serve to explain variation in the usage of mechanisms proposed by another theory. Social cognition theory focuses on how individuals work to create organized patterns of information about the world called schemas that simplify views of the world in light of limited cognitive capacity (Fiske and Taylor 1991). The most well-known of these schema with relation to politics are partisan and ideological schema that organize the thinking of most Americans with regard to politics (Lau 2003). While social cognition focuses on the need for heuristics like these

schema due to cognitive limitations, emotion provides a mechanism for when these shortcuts can be safely utilized, thus freeing the brain to address other, more pressing matters. Emotions can also serve as nodes in cognitive schema that make up how we think about the political world. Members of the Tea Party for instance can't think about President Obama without also calling to mind negative emotions about his performance, coloring their ensuing behavior. More broadly, it is increasingly apparent that affective evaluations are inseparable from cognitive processes, as we will see in the next chapter (Damasio 1994).

Emotion also provides an explanation as to how political attitudes become political actions. There is nothing about holding a positive view of President Obama that necessarily leads an individual to take the effort and go out and vote for him in an election, much less other, more costly forms of participation. Put slightly differently, emotion serves as a motivator of action (Brader, Marcus, and Miller 2011) in cases when rational calculation would say we shouldn't act (Downs 1957). The classic cost-benefit analysis that rational choice theory says underlies the decision to undertake some action is incomplete without the motivating role of emotion. This emotion is most often expressed in terms of group identity, particularly via partisanship (Groenendyk 2011). As we will see in the coming pages, an individual's partisan identity is strongly associated with the nature and ultimate effects of one's emotional experience. Additionally, the study of emotion allows us to examine how different emotional responses to elements of the political world provide their own unique motivational impulses. Instead of merely disapproving of President Obama, the study of emotion allows us to consider the distinct implications of being anxious about the president as compared to angry about him.

Given these important contributions that emotion can make to our understanding to political behavior and participation, the resurgence of study into emotion broadly speaking and specific emotions like anxiety is serving to enrich our understanding of the means by which individual decision making and behavior varies across time and individuals. While increasing research has been conducted into the role that emotion plays in electoral decision making (e.g. Marcus, Neuman, and MacKuen 2000; Neuman et al. 2007*b*; Redlawsk 2006), these studies have focused primarily

on the effects of certain types of emotional responses and less on the sources of emotion and the conditions that facilitate candidate-related emotions, a particularly notable class of emotion given the prominence and visibility of these political actors.

This dissertation will examine the role that emotion plays in presidential elections, with particular interest in primary elections as the first contact many voters have with candidates. Primary elections provide a unique environment within which to examine the factors that promote or inhibit affective reactions to candidates, along with their ensuing impacts throughout a campaign season. My attention will focus on one specific emotion, anxiety, that has received a great deal of attention in the literature on emotions. Anxiety occurs in response to perceived threats to an individual's well-being and research has found associations between anxiety and increased attention to the danger, more effortful thinking, openness to new ideas, and potentially increased participation (Brader 2012).<sup>7</sup>

In sum, while we have a great deal of knowledge about anxiety as a political relevant emotion for political citizens, much of that knowledge talks about one potential time period – the general election period of presidential elections – to the extent that it is not based on experimental studies. This knowledge also predominantly focuses on the potential for openness as a result of experiencing anxiety and how anxiety can potentially change how individuals engage with the political world. The goal of this dissertation is to speak to what anxiety looks like outside of just the lab and the general election, when individuals aren't bombarded with messages. What kinds of people experience anxiety then? Do all candidates elicit responses equally? Can anxiety then, or at any time, really lead to meaningful changes in attitudes? And, in the real world, just how many people, and what types of people, really stand to benefit from the alleged benefits of anxiety? This dissertation shows that anxiety, like many other political phenomena, is concentrated amongst the partisan, ideological, and the highly informed and concerned, and that any potential attitudinal effects may be limited to newer, less entrenched issues.

<sup>&</sup>lt;sup>7</sup>Brader (2012), however, finds in his own analysis of survey data from during the 2008 presidential election that anxiety regarding the "way things are going in the country" is associated with decreased levels of participation across a number of acts.

## **1.3** Plan of the Dissertation

In order to answer the still open questions of who experiences and what sparks anxiety outside of general elections, whether anxiety can lead to regular attitude change, and the individual correlates and extent of the experience of anxiety, the dissertation proceeds as follows. The current chapter has established a base of knowledge regarding the prevalence of emotion in political behavior and contemporary accounts of political events, traditional views of emotion in the social science, and the unique contributions that emotions can provide to discipline of political science. From this base, the second chapter provides a wide-ranging analysis of literature from political science, psychology, and the neurosciences regarding the origins, role, and implications of political emotion as it concerns political judgment, attitudes, and behavior.

Tying into the arguments of the current chapter, this discussion begins with an outline of the two traditional theoretical schools of thought regarding political behavior – the rational choice school of political choice and the Michigan school of political psychology. While these perspectives have contributed admirably to our knowledge of political behavior, I discuss the relatively small position accorded to affect in these traditions. Moving from this starting point, I begin to trace the arc of modern study in political science with regard to emotion, moving from early work that established its power as an independent predictor of citizen behavior to scholars who begin to identify emotions as something of interest in their own right.

In order to ground the discussion of these topics in hard science, we will take a brief detour in research from neuroscience regarding the physical regions of the brain where emotions arise and the implications of the associated systems as they relate to their potential implications for behavior. We additionally will dive a bit into the long-running, ongoing debate in psychology regarding the structure of emotions, presenting and contrasting the valence, discrete emotions, and two- (or even three-) dimensional theories of emotion. I focus particularly on the discrete model, which posits uniquely identifiable and separable emotions, and dimensional theory, which argues the existence of a number of distinct factors reflecting key attributes or origins of emotion underlying the experience of a wide variety of different expressed emotions. Both of these perspectives have

made important contributions to the understanding of emotion in political science. Additionally, this discussion will also touch upon the measurement of emotions both observationally and in the laboratory setting, along with the methodological opportunities and pitfalls of experimental and observational research regarding emotion in politics.

With this knowledge in hand, I proceed to present and critique the foremost theory regarding the origins and impacts of emotions in politics, the Affective Intelligence theory of Marcus, Neuman, and MacKuen (2000). This theory ties together the neuroscience findings discussed previously and the dimensional theory of emotion to argue the presence of two emotional systems, disposition and surveillance, whose alternating operation produce distinct impacts in terms of emotions experienced as well as interest and engagement in and learning about politics, along with the means of political judgment. This theory primarily focuses on the surveillance system and the associated experience of anxiety, an emotion that they argue spurs conscious awareness of the threatening situation occurring along with increased vigilance and learning.

Affective Intelligence theory, however, is not the only possible explanation for how emotions impact behavior and tie in to the psychology of emotions. I discuss two alternatives to Affective Intelligence's findings regarding the behavioral impacts of anxiety, Affect Transfer and Endogenous Affect, along with the ongoing debate regarding the relative merits of these theories as compared to Affective Intelligence. I also present cognitive appraisal theory as a psychological alternative to Affective Intelligence that argues that emotions are the result of conscious responses to appraisals of an individual's environment. Both Affective Intelligence and cognitive appraisal have informed many recent studies regarding the sources and effects of emotion on political behavior.

Scholars have identified a number of factors that can lead to political emotion, ranging from broad factors like political candidates, advertisements, and economic conditions to individual-level factors such as partisanship, ideology, and political sophistication. I discuss the evidence for these and a number of other findings in this vein. This discussion also delves into the distinction between the conditions that give rise to anxiety and another important negative emotion, anger. I discuss how anxiety tends to occur in the face of novel stimuli while anger occurs in response to familiar stimuli, particularly when an individual can attribute blame for conditions to the stimuli (most often a presidential candidate in these studies). I devote much more attention, however, to the many effects that have been found to be associated with the experience of anxiety. In particular, anxiety has been connected to differences in attitudes as compared to the non-anxious, changes in the weights given to different factors in the formation of attitudes and vote choices, along with increased attention to politics, learning, and participation. The chapter concludes with a discussion of the contribution of this project to filling a number of gaps in knowledge regarding the operation of anxiety in the democratic citizen.

With a grasp of the theoretical terrain upon which the debate over the role of political emotions is contested along with the findings to date regarding the role of anxiety as an especially influential emotion, I proceed to examine the first of my three theoretical questions regarding anxiety – what factors are associated with the real-world experience of anxiety outside of the environs of the presidential general election? Given that, as discussed above, anxiety affects the cognitive and affective elements that people bring to bear on the political world, understanding the conditions that lead to the development of anxiety in response to primary candidates is an important, yet unstudied, question.

Put slightly differently, this chapter asks the question: under what circumstances does voter anxiety towards candidates appear as a salient component of individual experience during the primary phase of a presidential election? I argue that a number of key factors that distinguish primary from general elections - variance in candidate visibility and ideology within parties, and differential attention levels from voters - are associated with the probability that a voter will experience anxiety when considering a given candidate early in a campaign. An empirical analysis of data from the February 2008 wave of the 2008-9 ANES Panel Study provides strong evidence that the interplay between these factors and the relative partisanship of voter and candidate impact the like-lihood of an anxiety response. These results reinforce previous findings that found that candidates, issue distance, and individual differences are all associated with the experience of anxiety, but this analysis extends these findings into a new timeframe where voters are much more differentiated in their interest and engagement with the campaign process.

Armed with the knowledge that both candidate and individual characteristics can impact whether an individual experiences anxiety during the early phases of a presidential campaign, I turn next to the question of what, if any, impact the experience of anxiety when considering a presidential candidate has on political attitudes during a campaign season. While existing research finds that anxiety is tied to increased learning and openness to opposing viewpoints, the impact of this learning on previously held attitudes has not been fully established. Research to date has compared the average behavior of those experiencing anxiety to those who were not but not on actual changes in previously held attitudes. The question of whether anxiety can lead to attitude change has important implications for the study in the preceding chapter. The analysis there finds, among other things, that ideological distance is a significant predictor of anxiety towards primary candidates. This finding is similar to other work that finds that perceived issue distance between a candidate and one's self is a significant predictor of anxiety regarding general election presidential candidates. Thus, if anxiety leads to attitude change, it may change an individual's probability to experiencing subsequent emotional responses.

In order to examine this question, I utilize issue attitudes and candidate anxiety from early in the campaign season as a baseline to compare with attitudes from the October 2008 panel wave of the 2008-9 ANES Panel Study. I then conduct regression analyses of the change in an individual's attitudes regarding four issues – taxes for the wealthy, government involvement in health care, gas taxes, and a path to citizenship for illegal immigrants. I find weak evidence that anxiety regarding that candidate can lead to a shift in issue attitudes on issues that are new to the political discourse and strongly identified with the candidates. This result provides an important limitation to the prevailing perspective that anxiety opens the mind of those who experience it, leading to a balanced re-evaluation of one's previously held attitudes and habits.

If anxiety is experienced to differing extents by citizens depending on characteristics of candidates, individual characteristics, and the nature of the world around them at the time, and this anxiety does not frequently lead to attitude change, how many citizens at least are capable of experiencing the more limited other beneficial effects of anxiety that have been established? The differential impacts of the negative emotions anxiety and anger have been put forward as a potential mechanism by which citizens regulate the nature of their civic engagement beyond any potential role in terms of attitude change. Connected to the ideas of Affective Intelligence theory, this line of reasoning argues that anxiety and the associated surveillance system reflect a pattern of ensuing behavior that is more in line with one's expectations of a rational citizen – openness to new information and willingness to seek it out. This contrasts with the related negative emotion of anger, which is associated with the operation of the disposition system and leads to behavior that aligns with the traditional conception of an obstinate partisan, relying on previously held attitudes and identifications.

This argument, however, is valid only to the extent that the experience of these emotions is, or can be, widespread within the mass public and thus capable of producing the theorized effect. Thus, this third analysis chapter works to uncover the factors underlying the depth (or extent) and breadth (or width of experience) of self-reported anxiety towards presidential candidates at numerous points during an election campaign. I argue that individual factors such as partisanship, ideology, and political interest along with more general concerns such as the state of the economy and perceptions regarding the future impact the amount of anxiety experienced over these two alternative conceptions of how anxiety might be experienced. An analysis of data from February and November 2008 from the 2008-9 ANES Panel Study broadly confirms these expectations and also finds that the impact of optimism about the future varies depending on the subject under consideration. Thus even the more circumscribed potential benefits deriving from the experience of anxiety are concentrated among individuals with a very specific set of characteristics, especially as one moves away from the general election environment.

The sixth, concluding chapter of the dissertation ties these findings together and examines the results of the preceding empirical chapters. As the preceding discussion makes clear, the experience of anxiety, whether viewed in response to a variety of specific candidates, or in terms of general breadth and depth, is not broadly experienced in any meaningful sense. Instead, the findings of this project indicate that anxiety is concentrated amongst those individuals who are partisan, ideological, and deeply engaged with and concerned about the political world around them. This is especially true as one moves beyond the information-rich world of a presidential general election. The broader, normative benefits of anxiety are similarly concentrated as well. Furthermore, any potential attitudinal effects may be limited to newer, less entrenched issues. Thus, as with many other elements and cognitive components of the political world, anxiety may serve to benefit those who already are more than equipped to engage in the hurly-burly of politics and not those for whom it might be of greatest use.

The final chapter also suggests potential avenues for future research and theory building regarding the topic of anxiety, and emotion more broadly. After discussing the findings of the dissertation, I argue that the overall results of the study present a picture of anxiety as an emotion that is concentrated among the partisan, ideological, and politically interested and serves to reinforce these distinctions in the public. After noting some caveats to the claim, I proceed to discuss a number of important open questions regarding emotion that exist today in the literature, and conclude with a discussion of how the results of this study may apply to the future of U.S. politics. In sum, this project reaches beyond the well-trodden environments of research about anxiety to date – the general election and the laboratory – both in terms of its physical data and mindset into the new, wild realm of primary politics and finds that much of the promise of anxiety may be quite limited in its potential effects for the democratic polity.

With a view of how non-scholarly observers conceive of and evaluate citizen political emotion, along with a grasp of traditional views of emotion in the social science, and the unique contributions that emotions can provide to discipline of political science, let us turn next to a discussion of the current state of knowledge regarding the structure, impacts, and processes underlying the experience and role of emotion in everyday life and political life in particular.

### Chapter 2

### THE EVOLVING PLACE OF EMOTION IN THE POLITICAL CITIZEN

For all of their prominence in historical, philosophical, and contemporary journalistic accounts of politics, emotions, and negative emotions in particular, have long been a subject of significant unease. Emotions are often considered to have the power to uplift and motivate an often disinterested electorate, but also to demoralize and distract the public from the more pressing, important matters of the political world. As discussed in the previous chapter though, the typical evaluation of emotion with regard to man as a political animal leans heavily towards the latter perspective.

This observation is best demonstrated by way of a contrast with respect to how different types of emotions are regarded by political observers. Consider first the popular response when positive emotions are experienced or when candidates attempt to elicit them. Such emotions, ranging from enthusiasm to pride to hope, are consistently looked upon favorably by observers. Whether occurring due to the passage of a significant piece of legislation, the receipt of a desirable message about the political world around them, or the election of the first black president, popular emotional responses in these times are greeted with positive reports and optimism about the political system in stark contrast to the pessimism that seems to be endemic within modern U.S. politics. In such times, a particularly pessimistic or partisan observer may claim that a politician or party is 'pandering' to the voting public, but such claims are few and far between.

Consider now the more common occasion of the mass experience of a negative emotion, anxiety for instance. If the public experiences anxiety due to the nature of politics and society at the time, media reports and popular discussion focuses on the dire consequences for any responsible policies, parties, or politicians. Voter anxiety over a struggling economy immediately prompts discussion of its consequences for President Obama. If the anxiety in question is due instead to the rhetoric of a political actor, the media and public tend to bemoan the fact that politicians are once more 'going negative' or attempting to manipulate voters. In some cases, such attempts at inducing emotion are viewed as a desperate act reserved for those politicians unable to succeed on the merits of their arguments. Such views have long roots in the Western philosophical tradition, and they have had indisputable impacts on the direction and nature of theory in political science. In particular, these perspectives have had important impacts with regard to conceptions of the 'proper' behavior of a democratic citizenry and how, or in some cases even whether, emotion has any role to play in this discussion.

Yet to blindly accept this conventional wisdom would be to ignore an important and growing interdisciplinary wave of scholarship concerning how the brain processes information and generates emotion, and how that emotion impacts the attitudes and behavior of individuals. Rather than aligning with the negative view of emotions such as anxiety discussed above, research increasingly demonstrates that such emotions serve a beneficial role in political life (e.g. Marcus, Neuman, and MacKuen 2000; Brader 2006) and may even be capable of changing the nature of a citizen's engagement with politics entirely (MacKuen et al. 2010). In short, this emotional "revolution" is increasingly a call to reevaluate many of the core assumptions that underlie political science's view of the mass public and how emotion relates to the electorate's interaction with the political world around them.

My central focus in this project regards how the experience and effects of anxiety in a campaign environment are distributed amongst the body politic and impact its issue attitudes. In particular, I seek to provide a clearer sense of scope and timeline to how one particular emotion, anxiety, operates in an election to differentially engage classes of citizens during the campaign struggle. I focus primarily on anxiety in my analysis as it is an emotion that is commonly associated in popular discourse with important negative political consequences. However, anxiety and other, similar emotions have also received particular scholarly attention in recent years due to the normatively positive benefits found to be associated with their experience. This gulf between traditional conception and empirical reevaluation typifies the rapidly evolving wisdom emanating from the study of emotion in politics. This chapter navigates the journey from a world in which emotions like anxiety are viewed as signs of a less informed and engaged citizen to one in which an anxious citizen represents a potential model of a open-minded, deliberative member of the political system. I begin by considering the traditional wisdom within political science regarding how citizens behave politically, with particular focus on the minimal role for affect in decision-making. From that baseline, I demonstrate how forms of emotion and affect began to be considered in a prominent manner within the discipline.

A more formal consideration of emotion, however, is not complete without taking into account insights from neuroscience and psychology about how emotion relates to cognition and is indeed inseparable from it. The measurement and structure of emotions also have important implications for our modern understanding of their place in social life. These insights provide a tie-in to a key recent theory of how emotion relates to politics – the Affective Intelligence Theory of Marcus, Neuman, and MacKuen (2000). After discussing the theory's arguments, supporting findings and potential weaknesses, I present a variety of findings based on Affective Intelligence Theory and other theories of emotion regarding how emotion impacts citizen participation and behavior, with a particular focus on how anxiety and its effects differ from other politically important emotions. The chapter concludes with a discussion of my theoretical orientation to the place of anxiety in political life and the contribution of this project to filling a number of gaps in knowledge regarding the operation of anxiety in the democratic citizen.

## 2.1 Emotion, Politics, and the 'Good' Citizen

As discussed in the introduction, emotion has traditionally been accorded an important place in accounts of specific political events, but the study of political choice in political science has traditionally focused on citizen learning and rationality in the evaluation of candidates and issues (Marcus 2008, 321). This line of research minimizes the role of emotion in human activity and decision-making, a tendency amongst political thinkers dating back to the roots of the Western philosophical tradition (Izard 1971). Traditional views hold emotion to be the enemy of reason

and distinct from it, but while many thinkers of the Enlightenment sought to reject this dichotomy, the older viewpoint is still held by many today (Hirschman 1977). Furthermore, the Enlightment story is one of progress, the advance of reason and progress over tradition and passion, leaving little room for emotion in an enlightened, scientific examination of politics (Marcus 2008).

The modern study of political behavior is instead organized around the Michigan school of political psychology (Campbell et al. 1960) and the rational choice school of political choice (Downs 1957). The rational choice school conceives of voters as calculating actors, weighing information to maximize their potential benefit. While an effective conceptualization of political elites, findings regarding citizen knowledge (Delli Carpini and Keeter 1996) and sophistication (Campbell et al. 1960; Converse 1964; Luskin 2002) undermine the contention that most voters are rational actors. More recent scholars (e.g. Popkin 1994; Lupia and McCubbins 1998) have modified this paradigm in light of these findings and theoretical critiques (i.e. Green and Shapiro 1994) to emphasize the role of information shortcuts in voter evaluations. The newer theories of low-information or bounded rationality still theorize a single pathway of voter decision-making, however. Even these newer attempts to construct paths to limited voter rationality have been found wanting, as research has demonstrated that heuristics are not typically beneficial to unsophisticated voters (Lau and Redlawsk 2006). The continued irrationality of voters when viewed from the lens of rational choice theory, typified by the critique of Converse (1964), is also evident in more recent research (Caplan 2007).

Alternatively, the Michigan school focuses on the central role of party identification as a driver of individual perceptions and vote choices. It conceives of party identification as a standing predisposition towards one of the two major parties, where emotion serves as a means of binding an individual to their preferred party (Campbell et al. 1960). Emotional responses are also presented as a way of replacing issue attitudes in the short-term determination of one's vote choice (Converse 1966). While affect is given a place in this discussion as a component of individual attitudes, it is not considered in any systematic manner. While scholars have debated the extent to which partisanship is the central organizing force of political life (Nie, Verba, and Petrocik 1976; Fiorina 1981; Bartels 2000; Fiorina 2002), the idea that partisanship is a means for citizens to engage politics without in-depth calculation remains (Green, Palmquist, and Schickler 2004).

A glaring omission from most of the research in this area has been the role of affect. The pursuit of theoretical parsimony by practitioners of rational choice theory along with legitimate measurement issues left emotion as an unmeasured endogenous variable. To the extent that emotions have been integrated into study, their consideration has dwelled on their perceived harms. For instance, scholars have termed the potency of appealing to negative emotions in campaign advertisements as a "distraction" from the real issues and one of the "psychological quirks that characterize humans" (Jamieson 1992). Recently, however, emotions have returned to discussions of political cognition and behavior, reflecting a rediscovery of the long-held, but seldom-integrated fact that "emotions are the stuff of political life" (Kinder 1994, 277).

In one ongoing line of research, affect in a valence conception has been identified as being a crucial component of the on-line processing theory of political judgment (Lodge, McGraw, and Stroh 1989; Lodge, Steenbergen, and Brau 1995; Lodge and Taber 2000, 2005). Emotion has also been identified as an important component of political evaluations (Abelson et al. 1982; Conover and Feldman 1986; Marcus 1988; Rahn et al. 1990; Sullivan and Masters 1988). While these early studies differed in their perspectives of the structure and nature of emotions, each viewed emotion as important predictors of public opinion independent of factors such as party identification, issue attitudes, and judgments of character.

Generally speaking, to the extent that emotion was considered in the political choice tradition before the last two decades, it was considered as an additional explanatory factor whose direct effects on political evaluations should be taken into account. Yet as Kinder (1994) demonstrates, scholars were beginning to consider the possibility that the emotions experienced by individuals were worth studying in their own right. Kinder (1994) looks at emotions elicited by politicians, issues, and political events via emotional responses to the 1980 presidential candidates, the desirability of affirmative action, and the first Gulf War. Presaging future research, Kinder finds different patterns of emotions for incumbents and challengers (here, presidential candidates Jimmy Carter and Ronald Reagan) and that these emotions have distinct impacts on candidate evaluation even after controlling for traditional explanations. Kinder also demonstrates that emotional strength with regard to an issue reflects an individual's conviction on an issue and may serve to identify 'nonattitudes'. Furthermore, in line with the precepts of appraisal theory (to be discussed below), he finds that emotional responses to the Gulf War were prevalent and predictable from knowing an individual's background, attitudes, and engagement. In sum, this research provides an early glimpse into the varied ways in which emotion is capable of arising from, and impacting upon, individual political behavior.

Yet this revival in interest regarding the place of emotion was not an isolated occurrence within the field of political science; important new insights from other fields have transformed how social scientists consider the place and roles of emotion in human activity, of which politics is a small, but unique, subset. Before following the ideas of Kinder and the other scholars discussed above too far in their evolution, let us first consider how these other fields informed political science's 'rediscovery' of emotion.

# 2.2 The Neuroscience and Psychology of Emotion

The revival of emotion as an important factor in political behavior and participation is due in no small part to important advances in the fields of psychology and neuroscience regarding the physical structure and systems in the brain that underlie the experience of affect and emotion. Therefore, before considering the new theories that give emotion a central place in the political experience, it is worth taking a brief detour to understand how these findings inform our scholarly understanding of how, when, and in what ways humans experience emotion.

To date, I have been somewhat loose with my language regarding emotion and affect; however, there are important distinctions between these terms and how they relate to mental processing. Unfortunately research in this area is frequently imprecise and inconsistent in the discussion of these terms, making confusion common (Ekman and Davidson 1994). Some scholars treat the terms

emotion and affect as distinctive (see e.g. Brader 2006, 60) and others treat them as synonymous (Neuman et al. 2007*a*). For the purposes of this dissertation, I will consider affect, emotion, and two other terms, mood and feeling, as conceptually distinct terms referring to differential components and levels of affective processing.

As the lowest level, let us first consider the term affect. While often considered as merely the 'scientific' term for emotion (Marcus 2003, 188), affect will be used here as an umbrella term for a wide set of phenomena including emotions, moods, feelings, and any emotional appraisals that occur outside of conscious awareness (Fiske and Taylor 1991; Brader 2006, 51). We can next distinguish moods and emotions with respect to their connection to specific stimuli and length of duration. While emotions are typically viewed as discrete reactions to specific stimuli that last for short periods of time, moods are defined as falling into the opposite categories. Furthermore, emotions are typically experienced in conscious awareness, whether via their physiological or mental effects. The term feelings is used to denote those emotional responses which are subjectively experienced and for which we typically apply the verbal labels of which we are so accustomed (Damasio 2000).

A reader of the preceding discussion may be left wondering: How can emotional responses occur without cognitive awareness? While the traditional and common view is that cognition is prior to and in control of affective response, psychologists have demonstrated over the past three decades that affect precedes cognition with respect to information processing. While this claim was once controversial within the field of psychology (see Zajonc 1984; Lazarus 1982, 1984), increasing evidence appears to support the argument that affective reactions can occur without conscious, cognitive awareness (Zajonc 1980, 1984; Murphy and Zajonc 1993; Lodge and Taber 2005). This claim relies on one's conception of what defines cognition, and depends on whether sensory information processing is considered cognition (LeDoux 1995, 1996; Marcus, Neuman, and MacKuen 2000) or if cognition is passed on to conscious awareness (Marcus, Neuman, and MacKuen 2000, 41), as the conscious systems of the brain cannot possibly handle the vast quanti-

ties of sensory information the brain receives (Damasio 1994; Zimmermann 1989). These findings allow a place for emotion to play a critical role in structuring cognition and behavior.

The emotional processing of information occurs in a separate neurological system than that utilized by information proceeding directly to conscious utilization. Much emotional processing occurs in the limbic region, deep in the brain, in areas such as the amygdala and hippocampus. Indeed, sensory information does not flow directly to processing centers, but instead to the thalamus, where the emotional systems get a first pass at the information before it proceeds to the sensory cortexes for processing (Mishkin and Appenzeller 1987). Since this pathway processes information faster than it appears in conscious awareness, affect, and thus emotion, can occur before cognition in its traditional sense occurs.

The neurological research of Jeffrey Gray (1981, 1985*a*,*b*, 1987*a*,*b*, 1990) proves a functional theory of the role of emotion in human behavior, detailing how the emotional systems of the brain provide adaptive benefits to humans (Marcus 2000). The evolutionary-early place of emotion in the brain reflects its important role in structuring human thought and behavior. At the most basic level, the well-known "fight or flight" reflex is one manifestation of this relationship, conditioning individual reactions in light of emotional (here, stress) responses to stimuli (LeDoux 1995). In its more evolved form via natural selection, negative emotions more broadly act to signal the need for change in one's current mental and behavioral patterns. Due to the survival implications of threats (one cannot come back from a fatal mistake), humans have developed a greater sensitivity to negative stimuli than positive ones (see e.g. Cacioppo and Berntson 1994). This phenomenon, what psychologists term a negativity bias, is seen across many evaluative domains, including voting behavior (Klein 1991, 1996). Conversely, positive emotions act to reinforce existing behavior and as a cue to explore one's broader surroundings. Research finds that humans possess a "positivity offset" - a tendency to view otherwise neutral stimuli in a slightly positive manner (Cacioppo and Gardner 1999). Strong evolutionary incentives underlie the existence of a positivity offset, as more adventurous organisms have the opportunity to benefit from new environments that might otherwise be overlooked.

The other two systems discussed by Gray – the Behavioral Approach System and the Behavioral Inhibition System – are more important to the study of politics, as they relate to how individuals utilize previously learned routines or decide to seek out new information and learn. In this perspective, emotions provide assessments of how one's behaviors relate to the world around us in cases when this connection is not necessarily clear, as with the Fight/Flight System. The Behavioral Approach System relates to the positive experience of reward or the negative experience of depression when the behaviors we have learned are successful or not. Note that these behaviors are not innate, they are learned, and the experience of the emotions associated with this system help to either build or weaken the connection between stimuli and behaviors. On the other hand, the Behavioral Inhibition System relates to the recognition of novelty or threat, generating calm when nothing is out of sorts, but anxiety when some aspect of the stimuli is not expected. When anxiety is experienced, existing activity stops and attention is shifted to the threatening stimuli, opening up the opportunity for learning and the development of new routines.

Gray's view is not the only theory of emotion advanced to explain the place of emotion in human life, but it is particularly specific in its connections to the actual structure of the brain and the nature of its predictions for behavior. Other theories such as appraisal theory, which states that emotions are extracted from evaluations of events and will be discussed in more depth later, are less connected in this regard.

# 2.3 Distinguishing Fear and Anxiety: Disciplinary Differences

While this dissertation focuses on the factors associated with the differential experience of anxiety across a variety of time periods along with anxiety's implications for attitude change, anxiety is often confused for another very similar negative emotion, fear. The treatment of the distinction between fear and anxiety within political science varies considerably<sup>1</sup>, ranging from treating the

<sup>&</sup>lt;sup>1</sup>It should be noted that the conception of anxiety discussed here and throughout the dissertation is that a mild state-based emotion, as opposed to a psychiatric disorder or the strong form of fear that one might associate with totalitarian regimes. Classic works in political science, such as those

two as completely synonymous (Brader 2006)<sup>2</sup>, arguing the two are essentially the same (Marcus 2002), using only one term to refer potentially to both (Marcus, Neuman, and MacKuen 2000), and alternatively using both without a clear conception of whether the terms mean the same thing or not (Redlawsk 2006). A rare exception to this widespread murkiness is Nardulli and Kuklinski (2007), which briefly discusses fear and anxiety as distinct emotions and whether substituting one for the other would lead to similar expectations regarding their implications for citizen behavior.

The field of psychology, however, has begun to focus on differences between these two emotions(see Epstein 1972; Gray and McNaughton 2000; Perkins, Kemp, and Corr 2007; Öhman 2008; Sylvers, Lilienfeld, and LaPrairie 2011). In particular, Gray and McNaughton (2000) have modified their theory of personality to indicate that fear is mediated by the fight-flight-freeze system, whereas anxiety is mediated by the Behavioral Approach System, which leads to increased vigilance to stimuli. Sylvers, Lilienfeld, and LaPrairie (2011) differentiate fear and anxiety in terms of temporal focus, duration of arousal, defensive direction, and the specificity of threat. More specifically, fear is marked by a brief, present-focused response to specific threat that leads to avoidance or escape, while anxious is marked by a sustained, future-focused response to a diffuse threat that leads to approach (Sylvers, Lilienfeld, and LaPrairie 2011, 126).

While both emotions are mediated by the amygdala in the brain, the hippocampus also plays a role in anxiety (Gray and McNaughton 2000), and the two have different primary circuitry in the brain (Sylvers, Lilienfeld, and LaPrairie 2011). This different circuitry helps to explain the differing motivational impacts on subsequent behaviors found in neurobiological studies. Given the nature of politics, it seems most likely that anxiety, which occurs in the face of ambiguous and uncertain threat, is the predominant emotion experienced by individuals when engaging in the political realm.<sup>3</sup> This is particularly important given that "[t]he behavioral characteristics of state of Robert Lane (Lane 1959, 1962), have examined broader forms of fear than those considered here such as the fear of equality.

<sup>&</sup>lt;sup>2</sup>Without ever explicitly stating his relative treatment of the two terms, Brader's use of nomenclature becomes abundantly clear in his index, which includes the entry "anxiety. *See* fear."

<sup>&</sup>lt;sup>3</sup>That said, studies of emotional responses to threats of terrorism, for example, may very well provoke legitimate fear responses in individuals.

anxiety include sustained hypervigilance and hyperarousal, which persist even after the potential for threat is removed" (Sylvers, Lilienfeld, and LaPrairie 2011, 133), leaving open the possibility for long-lasting effects due to the experience of anxiety.

Throughout this dissertation, I predominantly utilize the term anxiety, but it is important to note that this term is used to refer to a class of emotions including fear and being afraid in line with the dimensional theories of emotion discussed below. In the political context, research has found that these emotions load on the same factor when examining the structure of emotional response towards candidates (Marcus, Neuman, and MacKuen 2000, Appendix B). Given that the relevant focus here is on the impact of the class of emotions rather than the specific effect of any one emotion, I use the terms "anxiety", "fear", and "afraid" as referent terms for the activation of the Behavioral Approach System (later the surveillance system in Affective Intelligence theory) in order to maintain consistency with other research in the field.

## 2.4 The Structure and Measurement of Emotions

At this point, I would be remiss if I did not spend at least a brief moment discussing the structure and measurement of emotions. The human emotional experience has spawned hundreds of descriptive words (Storm and Storm 1987), but it is not necessarily the case that each reflects a discrete, mutually exclusive state (Marcus 2003). The study of emotional structure is in many ways a data problem – attempting to reduce a multitude of potentially different reported emotions down into one or more fundamental sets or dimensions of emotional experience. With respect to this task, the valence, discrete, and dimensional theories of emotion all provide different responses, and each has had important impacts on the conception, measurement, and study of emotion.<sup>4</sup>

A one-dimensional view of the structure of emotion is provided by valence theories of emotion, which posit that emotions array along a single, bipolar dimension of positive to negative evalua-

<sup>&</sup>lt;sup>4</sup>Marcus, Neuman, and MacKuen (2000, App. A and B) and Marcus (2003) provide an excellent treatment of these theories and their historical origins, from which much of the following discussion is drawn.
tions of objects. Such a conception has definite intuitive appeal – we often think of the world in terms of positive or negative, good or evil. If such a model holds, a very small number of emotions should suffice to describe one's emotional state, as all positive mood terms should be highly correlated and all negative terms as well, with a strong (ideally -1.0) negative correlation between the two groups. One could also apply a single dichotomy to describe the dimension, such as happy vs. sad. When emotional changes occur, valence theory would predict that an increase in positive feeling would be associated with a decrease in negative feeling as one's feelings would shift along the dimension. In practical application in political science, however, this is not the case. Marcus, Neuman, and MacKuen (2000) demonstrate using the 1980 ANES panel study that changes in en-thusiasm regarding candidates Carter and Reagan are almost wholly unassociated with changes in anxiety, contradicting the expectations of valence theory.

Valence theory has had a long-running impact on the measurement of emotion. A stalwart of political science, the feeling thermometer, implicitly contains a unidimensional, bipolar view of affect, as do other measures that assess favorability versus unfavorability. The effects of this assumption are multiplied by the fact that people willingly accept a unidimensional conception of the world in terms of semantic differentials (Marcus, Neuman, and MacKuen 2000, 150), even when it does not align with experienced feelings (Cacioppo and Berntson 1994; Cacioppo, Gardner, and Berntson 1997). Hence the use of such measures can lead to inappropriate, but seemingly correct conclusions about the structure of emotions (Marcus, Neuman, and MacKuen 2000; Marcus et al. 2006).<sup>5</sup>

Another theory with a strong impact on the consideration of emotion in political science is the discrete model, which posits a set of separable and uniquely identifiable emotional responses to stimuli (Neuman et al. 2007a). This approach, which follows an intuitive understanding of the structure of emotion, argues that each emotion is based on the application of a number of concurrent cognitive evaluations. The structural model of Roseman has been particularly influential in

<sup>&</sup>lt;sup>5</sup>This is not to say that unidimensional, bipolar measures such as the feeling thermometer are completely useless; they are extremely helpful in capturing a summary judgment of a political candidate and in potentially capturing the affective component of attitudes.

this area, tying specific emotions to different combinations of interpretations of events (Roseman 1984, 1991). In this tradition, emotions are mutually exclusive. This tradition is seen best in political science via the research of Donald Kinder and Robert Abelson, who utilized discrete emotional terms such as hope, pride, anger, and fear based on the work of Roseman in their early research on emotional reactions to presidential candidates (Kinder, Abelson, and Fiske 1979; Kinder 1994; Abelson et al. 1982). Emotional self-reports based on these discrete emotions have become part of the standard American National Election Studies battery and are still used to this day.

Lastly, a long tradition of research has argued the emotion is best described using a set of two dimensions. Within this line of work, scholars have debated the structure and orientation of these dimensions, arguing alternately that a two-dimensional circumplex with orthogonal dimensions (e.g. Russell 1980; Gray 1987*a*), two axes separated by a 45-degree rotation (Cacioppo, Gardner, and Berntson 1997, 1999), or a dynamically correlated two-axis alternative (Abelson et al. 1982; Marcus, Neuman, and MacKuen 2000) best captures the structure of emotion. Such structures provide some evidence for the existence of multiple systems that lead to emotions, in line with Gray's work. However, even within the set of negative emotions, scholars in political science have demonstrated differences between anger and anxiety (Conover and Feldman 1986; Marcus, Neuman, and MacKuen 2000; Marcus 2003; Huddy, Feldman, and Cassese 2007), leading to the existence of a third dimension of emotional response under certain circumstances.

These findings point to the need for a political science-specific understanding of emotion, one that takes into account the uniquely recurring and often frustrating stimuli that are key aspects of the political system. At bare minimum, it is clear that for political stimuli, the dimensions of emotional responses are not static, nor are they orthogonal. When stimuli, typically political candidates, are new to the scene, it is quite likely that they can elicit multiple emotions (for example, enthusiasm and anxiety) at the same time, leading to no correlation between dimensions. As candidates become more familiar, the structure can shift to a more unidimensional, bipolar structure, even potentially leading to the development of an additional dimension reflecting aversion

for well-known figures such as incumbent presidents (Marcus, Neuman, and MacKuen 2000, App. A).

Beyond the structure of emotions, the method by which emotions are measured can also play an important role in what insights they can provide. One standard measure of affect, the feeling thermometer, has been discussed above and found wanting with respect to the tendency of individuals to lapse into a bipolar conception of the world. This positive-negative bipolar view however also misses the intensity of these emotions along with the fact that both positive and negative emotions can occur at the same time in response to a given stimuli.

The standard method of measuring emotions in observational research from either the discrete or dimensional tradition is through the self-report of emotions. The standard NES question wording for emotional reactions to a political figure asks, "Has [CANDIDATE] - because of the kind of person [he/she] is, or because of something [he/she] has done – ever made you feel [angry, anxious, proud, enthusiastic]?" followed a question asking the frequency of the emotional response, ranging from very often to rarely. Following the ANES tradition, self-reports are usually done using single measures of emotion areas (e.g. Brader 2006), but multiple items for each type of emotion are used by some when possible for greater reliability when estimating the relevant dimensions (e.g. MacKuen et al. 2010). However, emotions can occur without conscious awareness, making it hard to obtain an accurate self-report (Damasio 2000; Brader 2005). Additionally, self-reports are often undesirable because making an individual focus on an emotional state can impact their subsequent evaluations (Schwarz and Clore 1983).

The induction of emotion is a common technique when examining emotion in the laboratory section. This can be done in two ways: via the use of a stimuli to induce emotion or through a recall task designed to elicit the desired emotion in a subject. The first method is desirable when the focus is on whether the stimuli in question is capable of creating the desired emotion(s), as in the cases of campaign advertising and issue challenges (Brader 2005, 2006; MacKuen et al. 2010, et al.). It is problematic though in that whether individuals have a specific emotional response depends on individual factors and the stimuli in question (MacKuen et al. 2010, fn. 21). The second method

is thus preferable to avoid the fact that different people appraise stimuli differently, depending on their own situation (Lerner and Keltner 2001). In the recall task, commonly used in psychology (Bower 1981; Lerner and Keltner 2001; Isbell and Ottati 2002), individuals are commonly asked to recall a specific instance in which they experienced a specific emotion and then to write about the experience. While the method is not perfect in the emotions it generates (at times, the writing induces other, unintended emotions), it is usually effective in its task.

The two preceding methods tend to be the most common in political science, but they are not the only possible means of measuring emotional response. Other methods such as measuring skin galvanics or the use of functional MRI, while capable of identifying affective responses that occur outside of conscious awareness, don't lend themselves to use in everyday political science due to their inherent lack of realism (Larsen and Frederickson 1999; Schreiber 2007). As with the debate over the structure of emotions, some scholars have argued for the development of specific measurement techniques for political emotions as opposed to those for universal emotions in psychology (Marcus et al. 2006). Such methods emphasize the use of unipolar questions that include a clear focus, time frame for evaluation and a clear reference to emotional term in question (Marcus, Neuman, and MacKuen 2000; Marcus et al. 2006). Marcus et al. also emphasize the use of specific terms to measure emotion, but note that there appears to be no difference in the results elicited by asking about the frequency or the intensity of an emotion (Watson 1988). In light of these findings about the neural and psychological origins of emotion, along with its structure and means of measurement, let us proceed to consider how political science has integrated these insights into its recent work on the impacts of emotion on citizen attitudes and behavior.

# 2.5 Affective Intelligence Theory

While political science has utilized emotion in many varied ways over the past few decades, the most comprehensive attempt to apply the neuropsychological insights regarding emotions discussed above is the Affective Intelligence theory (hereafter AIT or AI theory) of Marcus, Neuman, and MacKuen (2000). This theory serves to connect the dual affective subsystem ideas of

neuroscience (Gray 1987*a*) and affective primacy (Zajonc 1980, 1984) with political participation, attitudes, and behavior. Affective Intelligence theory (Marcus, Neuman, and MacKuen 2000) posits that a dual-channel preconscious appraisal process composed of disposition and surveillance subsystems allows voters to operate efficiently according to the circumstances they perceive around them (MacKuen et al. 2007).

The dispositional system acts as a form of autopilot in the absence of novel stimuli, determining when an individual can rely upon preexisting habits without an expenditure of time and cognitive resources.<sup>6</sup> When such behavior produces positive, expected outcomes, enthusiasm is experienced; recurrent, expected, negative outcomes lead to aversion, or anger, at the opposite end of this continuum. Alternatively, when novelty does occur, the surveillance system is activated, leading to the experience of anxiety. This emotional experience spurs conscious attention to the situation at hand and leads to increased learning. Given the key role given to initial, preconscious information processing in the emotional centers of the brain, Affective Intelligence theory argues that all behavior and cognition is governed by these affective processing systems.

Connecting these systems to the political world, Marcus, Neuman, and MacKuen (2000) derive a number of expectations regarding the impact of emotions produced by these systems on political behavior and judgment. They argue that the operation of the disposition system reflects the usage of voters' standing, long-term predispositions contained in one's partisanship and ideology that generally operate outside of conscious engagement with politics.<sup>7</sup> A political world governed solely by the disposition system would look akin to the 'normal' vote of Converse (1966). The activation of the surveillance system, they claim, shifts the weighting of the components that determine one's vote choices away from heuristics like partisanship and towards factors such as issue attitudes and candidate personality that rely upon greater conscious attention to one's contemporary political surroundings.

<sup>&</sup>lt;sup>6</sup>In Affective Intelligence theory, the dispositional system is equivalent to Gray's Behavioral Approach System, and the surveillance system is equivalent to the Behavioral Inhibition System.

<sup>&</sup>lt;sup>7</sup>It should be noted though that partisanship also contains an important affective component related to emotional reactions to the parties themselves and their candidates and officeholders (Marcus, Neuman, and MacKuen 2000, 109).

They claim, therefore, that the neurological mechanisms that produce the dichotomy between 'mindless', automatic behavior and reasoned, conscious consideration take emotion and cognition away from having contradictory roles to possessing complimentary ones (Marcus, Neuman, and MacKuen 2000; Marcus 2002). Specifically, Affective Intelligence allows for two pathways to conscious awareness: when one's usual, habitual responses result in unexpected effects, or when new, discrepant stimuli is received (Neuman et al. 2007*a*). The theory thus allows for rationality to vary across citizens in a theoretically meaningful manner, taking the literature away from a dependence on a single causal mechanism as in theories of rational choice. It also produces a potential answer to the open questions regarding the perceived lack of rationality in the mass public. In light of the fact that pure rationality seems implausible in many, if not most, practical situations of everyday politics, Affective Intelligence holds a clear intuitive appeal with regards to its ability to optimistically explain the presence of widespread disinterest in politics.

Affective Intelligence is not the only explanation that can be applied to understanding the connection between anxiety and vote choice, however. AIT argues that anxiety impacts the decisionmaking process indirectly, by increasing information search, which in turn leads to a decreased dependence on heuristics in favor of candidate-specific information such as issue positions and personality. Brader (2006) discusses two other potential explanations for the impact of anxiety on vote choice. The first is what Brader terms Affect Transfer, which can be thought of as the direct transfer of an emotional stimulus into affect in candidate evaluation (Brader 2006; Ladd and Lenz 2008). The second is Endogenous Affect, where preexisting evaluations induce emotional reactions in what can be conceived of as a rationalization effect. These perspectives do not appear to explain the deeper neuro-cognitive origins of affect as laid out in Affective Intelligence theory.

Further investigating these alternatives, Ladd and Lenz (2008) rightly note the fact that Marcus, Neuman, and MacKuen (2000) discuss anxiety in a general sense such as "when the electorate is anxious" (p. 61), but they measure anxiety based on reactions to specific presidential candidates. Therefore, while they claim that anxiety should not have a direct effect on candidate evaluations, it seems likely that anxiety experienced towards only one (or one party's) candidate would impact the ensuing re-evaluation that results. In particular, Ladd and Lenz (2008) note that looking only at inparty anxiety in effect tells a story of disaffected partisans, making Marcus, Neuman, and MacKuen (2000)'s results unsurprising. Utilizing the same data as Marcus, Neuman, and MacKuen (2000), Ladd and Lenz (2008) provide evidence using cross-sectional and panel data that Affect Transfer and more strongly Endogenous Affect more accurately describe the affective-evaluative process leading up to vote choice, rather than Affective Intelligence.

In response, Brader (2011) argues that Ladd and Lenz (2008) are overhasty to throw out the whole AI theory, given its many predictions about other phenomena such as learning, motivation, and the origins of emotions. He notes that his own tests of AI theory against Affect Transfer (Brader 2006, pp. 69, 112-8) find consistent support for AI theory and not Affect Transfer and that his experimental method rules out the potential for endogenous affect causing the observed relationships. Additionally, Brader (2011) states that emotions from any source (including possibly irrelevant anxiety) should cause the effects hypothesized by AI theory, and indeed studies have found emotion from other sources can lead to changes in candidate judgments (Kinder and D'Ambrosio 2000) or political choice (Brader 2006; Druckman and McDermott 2008; Way and Masters 1996). Further, he also notes the large (and growing) body of evidence supporting an indirect, causal role of emotion, which will be discussed in greater depth below.

Marcus, MacKuen, and Neuman (2011) respond to Ladd and Lenz (2008) by claiming that their model is incorrectly specified and therefore not an appropriate test of AI theory. They note that Ladd and Lenz (2008) use a comparative feeling thermometer as opposed to vote intention as the dependent variable in their model, which Marcus, MacKuen, and Neuman (2011) claim masks the effect of enthusiasm and anxiety on the vote choice (Marcus 1988, p.756). Marcus, MacKuen, and Neuman (2011) demonstrate that vote intention is substantively different from a comparative feeling thermometer and that the former is associated with the expected interactions between anxiety and partisanship and comparative policy preferences even after controlling for the latter. Beyond these specification concerns, they also note that Ladd and Lenz (2008) are implicitly arguing that

claim, Marcus, MacKuen, and Neuman (2011) demonstrate that appraisal is not one-dimensional by comparing the indirect effects of "disappointment" (or the lack of enthusiasm) with anxiety, finding that the two do not behave similarly with regards to their impact on the determinants of vote choice.

In response to these rebuttals, Ladd and Lenz (2011) reassert that very few studies have really tested the vote choice claims of (Marcus, Neuman, and MacKuen 2000), and they find that Affect Transfer and Endogenous Transfer remain plausible alternative explanations of the observational evidence.<sup>8</sup> They argue that Marcus, MacKuen, and Neuman (2011) use an inappropriate comparative measure of enthusiasm in their models, and that a more appropriate choice produces similar effects to anxiety, thus undermining their claims. Ladd and Lenz (2011) do note, however, that Brader's experimental study (2006, Ch. 5) demonstrates an indirect effect for anxiety on the effect of issue and trait evaluations on vote choice while also finding a direct effect of anxiety on vote choice. They respond, however, by noting the potential effect of posttreatment bias on the issue and trait evaluations used by Brader. Ladd and Lenz (2011) argue that their panel model from the 1980 ANES is the only study to date that is not vulnerable to alternative explanations, and that this model finds no evidence for Affective Intelligence.

This debate demonstrates the still fluid nature of theory with regard to emotion and politics. No theory speaks as comprehensively as Affective Intelligence with regard to the sources of emotion and its impacts on political judgments and behavior, yet it is clear that some of its claims presently lack strong support, in particular with regard to vote choice. While AIT is primarily focused on the indirect effects of anxiety with regard to vote choice, Ladd and Lenz (2008, 2011) point out the fact that all emotional measures are strongly correlated with vote choice and feeling thermometer scores. This finding conflicts with early versions of AI Theory (Marcus and MacKuen 1993) but not later explications of the theory (Marcus, MacKuen, and Neuman 2011).

<sup>&</sup>lt;sup>8</sup>It is indeed correct that the tests noted by Brader (2011) do not explicitly test the vote choice model challenged by Ladd and Lenz (2008). Brader (2006, pp.112-8) looks at changes in feeling thermometers and comparative candidate affect, but not changes in the effects of party identification and policy preferences on vote preferences, which is where the key claims of AI Theory lie with regards to the indirect effects of anxiety.

Ladd and Lenz (2011) claim that expanding the place of anxiety to be potentially associated with vote choice both directly and indirectly opens up the possibility of alternative explanations (Ladd and Lenz 2011, p.350), and is a key means by which they attempt to cast doubt on AI's claims with regard to improved decision-making under anxiety. In light of the present evidence, it seems likely that emotion has both direct and indirect effects on judgment, as noted by Brader (2011, p. 339) and seen by Way and Masters (1996), but this fact does not imply a rejection of Affective Intelligence. The extent to which indirect or direct effects have a greater impact on judgment may depend on the source of the anxiety experienced, although this claim remains untested. Either way, Affective Intelligence remains the present accepted wisdom with regard to how emotion operates in political life.

Before moving to a consideration of studies that examine the impact of emotion across a variety of topics, we should also consider another theory of emotion from psychology that informs many of the studies to follow. While AI theory focuses on the automatic, neurological impacts of emotions, most if not all of the emotion studied in political science are the result of conscious response. Cognitive appraisal theory argues that people appraise situations along several dimensions, taking intentional actions to deal with emotions based on immediate reactions (Lazarus 1991). For the purposes of this study, four appraisals are particularly noteworthy. These appraisals – responsibility for the event, control potential, pleasantness of the event, and certainty about what happened - distinguish anxiety and aversion, the two most commonly studied negative emotions (Huddy, Feldman, and Cassese 2007; Smith and Ellsworth 1985). Both emotions are caused by unpleasant events outside of one's control, but anger occurs when there is clear responsibility for an event and action against those responsible is viewed as likely to succeed (Lazarus 1991). Conversely, anxiety occurs when reduced certainty occurs along a view that events are outside of one's control (Lerner and Keltner 2000, 2001). While the theory allows for clear differentiation between specific emotions, it does not provide clear expectations about the effects of emotion. With these theories in mind, let us proceed to consider the many ways political science has examined the sources and effects of emotion.

### 2.6 The Sources and Effects of Emotion

While Affective Intelligence has created an important framework for much of what has followed in the past decade in the study of emotion in politics, its findings only scratch the surface with regards to the impacts of emotion on political life. A number of scholars have sought to connect the experience of emotion to political experience, whether within the framework of AI Theory or not.<sup>9</sup>

One particularly important, if only intermittently studied, topic related to the effect of emotion is the matter of what factors lead to the experience of political emotion. Abelson et al. (1982) implicitly judged the ability of presidential candidates to elicit emotion, the first of many to do so in political science. Conover and Feldman (1986) similarly examined the ability of economic conditions to produce differential emotional reactions. Marcus, Neuman, and MacKuen (2000, 100) also find that candidate-targeted anxiety can arise due to the experience of anxiety about issues strongly tied to a candidate for office.

Some attention has been given to the related question of what contextual factors lead to the experience of emotion in elections, although the scope of these analyses has been limited. Marcus, Neuman, and MacKuen (2000) show that, on an aggregate level, the emotional dynamics of campaigns are related to changes in the information environment (See also Just, Crigler, and Belt 2007). Additionally, they find that national economic conditions impact the extent of anxiety towards incumbent presidential candidates. MacKuen et al. (2007) go further, demonstrating that macro-level political conditions such as economic conditions and legislative success impact the level of anxiety regarding an incumbent candidate, especially among members of the incumbent's party.

Scholars have also examined the role of campaign advertisements in eliciting anxiety (Brader 2005, 2006), finding that individuals who have higher levels of political knowledge and sophistica-

<sup>&</sup>lt;sup>9</sup>A number of excellent reviews of this research now exist (Glaser and Salovey 1998; Marcus, Neuman, and MacKuen 2000; Brader, Marcus, and Miller 2011; Groenendyk 2011) and go into far more depth on this topic than is possible in this space.

tion are more likely to experience fear in response to ads attempting to elicit that emotion. Media portrayals of political objects can also lead to anxiety among interested parties (Hutchings et al. 2006), and in particular the magnitude of the danger and the extent of coverage of the story are associated with the extent of response (Graber 2007).

In additional to these external causes of anxiety, individual differences also play an important role in determining the existence and extent of fear responses. The relationship of partisanship, ideology, and issue distance to a political candidate have been tied to the level of anxiety (Brader 2006; MacKuen et al. 2007; Miller 2011; Redlawsk, Civettini, and Lau 2007), as has political so-phistication (Brader 2006; Miller 2011). Miller finds that some level of comprehension of politics is necessary to develop emotional responses to it. Furthermore, emotions are more accessible for the sophisticated as opposed to political novices. Miller also finds that the effects of anxiety on vote choice are mediated by political sophistication – sophisticates are more likely to translate affective appraisals into the expected vote choice reaction.

Additionally, political disagreement in one's social network has been shown to increase anxiety towards an in-party candidate and decrease it for out-party candidates (Parsons 2010). This finding does not extend to independents; political disagreement appears to have no significant effect on the emotional intensity of this group. Factors such as personality (Wolak and Marcus 2007) and personal efficiacy (Lazarus 1991; Witte and Allen 2000) can impact the nature of fear responses. Brader and Valentino (2007), in line with AI theory, find that variations in material interests and current circumstances, along with prejudice, are associated with the experience of fear with regard to the issue of immigration.

The differential origins of political anxiety and anger<sup>10</sup> have been an important topic in this area. Conover and Feldman (1986) were the first to find a separate anger dimension, and Marcus, Neuman, and MacKuen (2000, App.B) merely acknowledged in their seminal work that under some circumstances a separate aversion dimension would exist. Marcus et al. hypothesize that this occurs when a deeply disliked object is a part of one's familiar political world, such as in

 $<sup>^{10}</sup>$ Note that I use aversion and anger interchangeably in the discussion to follow.

the case of an incumbent president, the issue of affirmative action, or the nation's economy. This contrasts with the other prominent negative emotion, anxiety, which occurs in response to novel stimuli (Marcus, Neuman, and MacKuen 2000; Marcus 2002; Marcus et al. 2006; MacKuen et al. 2010). In effect, the appraisal of familiarity is the mechanism by which AI Theory distinguishes when the effects of anger and anxiety diverge (Brader, Groenendyk, and Valentino 2010).

Later research has found that the ability to attribute blame for a threatening stimuli is a key discriminating factor between whether an individual will experience anxiety or aversion, tying the separation of anger and anxiety to the tenets of appraisal theory (Smith and Ellsworth 1985). Steenbergen and Ellis (2006) attempt to find specific causes of aversion in response to presidential candidates as opposed to the more typical occurrence of anxiety. They find that anger occurs in the face of an incumbent president when a personal threat can be tied to the poor performance of a president (Carter) or when the president's morality offends one's personal moral values (Clinton). Similarly, Huddy, Feldman, and Cassese (2007) find that aversion tends to be target-specific, focused on only specific blameworthy targets, whereas anxiety tends to be broadly targeted with respect to objects tied to the 2003 Iraq War. Brader, Groenendyk, and Valentino (2010) compare the predictions of AI theory to these studies, finding that familiarity does not impact whether a threat leads to anxiety or anger, while blame attributions do explain these differences. Additionally, an individual's level of internal efficacy increases the probability of experiencing anger in response to a threat (Valentino et al. 2009).

The vast majority of research on emotion, however, has focused on its effects. The first major topic in this area upon which scholars focused was its impact on attitudes. This work has focused both on the direct and indirect effects of emotion, with more recent focus on the latter (Brader, Marcus, and Miller 2011). Studies on the direct effects of emotion tend to find large effects beyond traditional explanatory factors such as partisanship and ideology. The most recent wave of research in this area looks at the direct impacts of specific emotions in a variety of areas, typically utilizing an appraisal theory approach. In particular, much of this work (Gross, Brewer, and Aday 2009;

Huddy, Feldman, and Cassese 2007; Lerner et al. 2003; Small, Lerner, and Fischhoff 2006) has focused on the effects of emotions in the aftermath of the September 11 attacks.

Huddy, Feldman, and Cassese (2007) find that angry respondents in an October 2002 survey expressed reduced perceptions that the war in Iraq involved significant risks, but saw a greater threat from Saddam Hussein and greater support for going to war. Conversely, anxious respondents had greater perceptions of the risks of going to war, saw Saddam as a greater threat (but less than angry respondents), and were more likely to oppose the war. While not tied to terrorism, Druckman and McDermott (2008) find similar results, demonstrating experimentally that distress (an emotion similar to anxiety) leads to more cautious behavior in response to risky policies. Additionally, MacKuen et al. (2010) find that anxiety is associated with an increased willingness to compromise.

Studies on the indirect effect of emotion on the other hand focus on how emotion can shift the weights given to various considerations in the formation of attitudes. This work utilizes the insights of Affective Intelligence theory to argue that the experience of anxiety allows citizens to shift from the use of habitual attachments to a more open-minded evaluation of issues and candidates in arriving at judgments. With regard to specific attitudes and attitude change, Brader notes that " [f]ear does not guarantee a change of mind, but does prompt 'second thoughts' about the decision" (Brader 2012, 203). Both Marcus, Neuman, and MacKuen (2000) in their observational study and Brader (2005, 2006) demonstrate that anxious individuals are more likely to act in line with their 'rational' impulses, turning away from heuristics such as party identification (Marcus, Neuman, and MacKuen 2000) and ideology (MacKuen et al. 2007). Similarly, scholars have shown that emotions tied to the disposition system increase reliance on habits (Brader 2006; MacKuen et al. 2010). Anxiety has also been shown to increase responsiveness to cues in the environment (Druckman and McDermott 2008; Marcus et al. 2005).

One increasingly important development in this area is the focus on the distinction between two distinct types of negative affect – anxiety and aversion – and their consequences for citizenship. This viewpoint argues that emotional responses "are not mere reflections of people's dispositions . . . emotions have consequences for the practice of citizenship – beyond that explained by

prior predispositions" (MacKuen et al. 2010, 452). In particular, MacKuen et al. (2010) claim that two different types of citizenship are available to individuals depending on one's appraisal of the circumstances (or the affective appraisals of the circumstances): obstinate partisanship or openminded deliberativeness. MacKuen et al. (2010) argue that these findings impel scholars to move beyond the usage of static behavior dichotomies such as sophisticated vs. unknowledgable, and strong partisan vs. weak affiliate. This line of reasoning extends the original arguments of AI Theory regarding the potential place of emotion, and anxiety in particular, as a means to shift scholars away from static conceptions of citizen behavior in areas like attentiveness and information search (Marcus, Neuman, and MacKuen 2000, 8). This scholarship to date though has used only experimentally induced emotion as a means of demonstrating the theorized effects, so it remains unclear whether similar effects occur broadly in the mass public, both in terms of the emotions and the effects.

The claims of Affective Intelligence theory has also led to a great deal of work with regard to how emotion impacts individual attention and learning with respect to politics. Early studies of what became Affective Intelligence theory found that anxious voters demonstrated increased knowledge through a political campaign but not increased campaign involvement, as measured by campaign interest (Marcus and MacKuen 1993), but Rudolph, Gangl, and Stevens (2000) find that internal efficacy moderates the influence of anxiety on involvement. They show anxiety increases involvement among the efficacious, while it has little impact on those who are not. Another critique of AI theory with respect to learning comes from Nadeau, Niemi, and Amato (1995), who posit that anxiety has only an indirect effect on learning via issue importance. In particular, they find that the experience of anxiety, in combination with a person's hope of success with respect to an issue increases the importance of an issue, which then leads to an increase in knowledge.

In their book-length exposition of AI theory, Marcus, Neuman, and MacKuen (2000) find that anxious respondents show higher levels of campaign interest and media attention, leading to higher levels of correctly perceived candidate policy positions. Brader (2005, 2006) finds experimentally that anxiety experienced as a result of fear-inducing ads has a number of impacts on attention and learning. He shows that subjects experiencing anxiety have improved recall of relevant news stories, desire to learn more about issues, and interest in the news. However, campaign interest grew only among the politically sophisticated, and many of the previous effects are concentrated among this group as well.

Among the latest wave of studies, researchers have found that anxiety promotes information seeking and learning (Hutchings et al. 2006; Valentino et al. 2008). Further, Valentino et al. (2008) finds that anxiety increases attention to politics and mediates the impact of threat on information seeking and learning, even though it does not increase total time seeking out information. Huddy, Feldman, and Cassese (2007) find that the experience of anxiety towards Saddam Hussein and terrorism increased the amount of time spent thinking and talking about a potential war with Iraq in late 2002. Redlawsk, Civettini, and Lau (2007) use the dynamic process-tracing method to show that anxiety leads to heightened information seeking but not recall as compared to other emotions (Civettini and Redlawsk 2009). Valentino et al. (2009) find that information utility moderates the impact of anxiety on selective exposure to information. That is, only anxious individuals who believe they will need to defend their views are more likely to perform balanced information seeking. MacKuen et al. (2010) find that the experience of anxiety in response to an article that challenges their existing attitudes leads to increased search behavior and motivation to search in the future, along with a more balanced information search and an increased desire to learn more about the opponents of their position. These effects can be compared to anger, another prominent negative emotion, which decreases thoughtfulness (Huddy, Feldman, and Cassese 2007), openmindedness (MacKuen et al. 2010), motivation, and time spent seeking out information (Redlawsk, Civettini, and Lau 2007; Valentino et al. 2008).

One understudied line of work considers the connection between emotional experience and political participation. Given that emotions serve to provide motivational impulses to individuals throughout our daily lives (Damasio 1994), emotions would seem to provide a natural tie between attitudes and behavior (Brader, Marcus, and Miller 2011). The first scholar to consider the motivational implications of emotions was Kinder (1994), who argued that emotions may serve to

distinguish the level of conviction associated with a held attitude, with strong emotions potentially leading an individual to act upon their beliefs.

Affective Intelligence theory, however, provided the first significant treatment of how emotion may impact participation. Beyond the ability to increase attentiveness and change the means by which individuals reach voting decisions, Marcus, Neuman, and MacKuen (2000) argue that the high arousal emotions associated with the two emotional systems – enthusiasm and anxiety – can also spur greater participation. They find that each of these emotions are associated with heightened participation beyond voting, with anxiety appearing to have a greater effect. From an experimental perspective, Brader's work on the impact of campaign advertisements (2005; 2006) finds slightly different effects for these emotions. While enthusiasm-inducing ads demonstrate the same broad, positive effects on participation as AI Theory expects, he finds that impact of fear is narrower and contingent upon the subject's level of sophistication. In particular, fear appeals only have a positive impact on participation for high sophistication respondents, whereas it actually has a negative effect in the case of low sophistication respondents.

Parsons (2010) also finds that the impact of anxiety is nuanced. Examining data from the 2008-9 ANES Panel Study, Parsons matches respondents demonstrating high and low levels of emotion towards candidates Obama and McCain and finds that negative emotions (here, anxiety and anger) towards an in-party candidate and positive emotions (hope and pride) towards an outparty candidate reduce participation, while positive emotions about an in-party candidate spur greater participation. He concludes that the effect of these emotions may depend on the specific target of emotion and whether disagreement exists in an individual's social network (Parsons 2010, 198).

Brader, Valentino, and Suhay (2008) find that anxiety induced by news stories about illegal immigration leads subjects to express a desire for more information about the issue and to send an e-mail message to their members of Congress expressing their opinion on the issue. Similarly, Crigler, Just, and Belt (2006) find that the inclusion of an anxiety-inducing economic story at the end of a video field experiment increased the probability that subjects would fill out a postcard

seeking more information about candidate positions. Valentino, Gregorowicz, and Groenendyk (2009) find that anger, but not fear, aids in the development of participatory habits, particularly among younger individuals. In particular, they show that internal efficacy facilitates anger in response to threats, increasing participation.

Valentino et al. (2011) have produced the most comprehensive study of this topic, looking both experimentally and observationally at the impacts of enthusiasm, anxiety, and anger on participation. Specifically, they examine the differing motivational forces of these emotions from the viewpoint of cognitive appraisal theory. They argue that while anxious individuals may initially experience automatic physiological responses of attention (Marcus, Neuman, and MacKuen 2000), they will in time back away from costly action due to feeling a lack of control and an inability to attribute blame (Lerner and Keltner 2000, 2001; Smith and Ellsworth 1985). After inducing emotion via a writing task, they find that anger produces a significant increase in participatory intent while fear and enthusiasm do not. They also demonstrate observationally that anger is associated with increased reported campaign participation after controlling for traditional resource, mobilization, and habitual explanations for participation, while fear is negatively associated with participation. Finally, examining ANES data from 1980-2004, they find that anger, fear, and to a lesser extent enthusiasm are all associated with increased "cheap" participation such as talking to others and displaying campaign materials. Only anger and enthusiasm are associated with increased "costly" participation like attending a rally, donating money, and working for a campaign though. They also find that anger and enthusiasm mobilize most when individuals possess the requisite resources, and have no impact in the absence of these resources. Overall, they find a mobilizing impact of anger and a inconsistent mobilizing impact of fear.

Emotion has also been tied to a number of other topics, including tolerance (Marcus et al. 2005) and group-based emotions (Brader and Valentino 2007), among several others. Despite the blossoming of interest in this area, significant area works remains to be done though. Many studies focus on narrow topics and fail to connect more broadly; Affective Intelligence and appraisal theory are still unreconciled; the cognitive and temporal components of emotions still remain largely

unaddressed (Brader, Marcus, and Miller 2011; Groenendyk 2011). Into this exciting, evolving milieu, this project seeks to make a contribution.

#### 2.7 Contributions of the Project

This dissertation focuses primarily on the operation of anxiety in the presidential campaign environment. As seen above, anxiety as an emotion has received particular attention in the literature to date and has been associated with increased information seeking, engagement, participation, and the use of alternate means of arriving at a final vote choice (e.g. Marcus, Neuman, and MacKuen 2000, among many others). The analyses in this dissertation will examine questions regarding the origins of candidate-related anxiety, its distribution, and impact on issue attitudes. By providing a clearer timeline for the operation of emotion in the electoral environment as well as the scope of its impact, this study advances the goal of producing a more unified theory of affect in the political realm.

This project provides several contributions to our increasing understanding of the origins and impact of anxiety in political life. First and foremost, this study examines whether changes in the time period under consideration fundamentally alters the capacity to and actual experience of anxiety within the voting public. The current wave of research has more than ably demonstrated that emotion matters, but the question of when and for whom is still relatively open.

Second, this study seeks to expand the field of objects of emotional response about which individuals can express emotion beyond the typical set of only major party presidential nominees. While some work focused on the emotion-inducing ability of political issues (e.g. Brader and Valentino 2007; MacKuen et al. 2010; Valentino et al. 2011), only rarely do studies venture outside the standard two-man general election phase of a presidential election where political figures are concerned (Redlawsk, Civettini, and Lau 2007). This study seeks to remedy this gap in knowledge by making differences between candidates a salient variable that can impact the likelihood of emotional response. Third, this study will provide a more concrete demonstration of the role that environmental factors like the state of the economy can play in determining emotional responses to political figures. While Conover and Feldman (1986) demonstrated that emotional responses to the economy are prevalent, they have only been tied to incumbent presidents to date (Marcus, Neuman, and MacKuen 2000; MacKuen et al. 2007). MacKuen et al. (2007) also examine the impact of the legislative record of the president's party, but these are the only clear macro-level examinations to date. Given that political figures do not exist in a vacuum, this hole in our knowledge is surprising, and something I hope to help remedy.

Fourth, this study will consider whether the experience of anxiety and its associated effects are capable of leading to attitude change. While much study to date under Affective Intelligence theory has emphasized that anxiety can lead to openness to opposing viewpoints, it still remains unclear what the practical implications are of these behaviors. As Brader quote earlier indicates, anxiety may "open the door", but what good is this opening if nothing comes of it? To this end, this study will focus on the effects of anxiety on specific issue attitudes. While this topic is similar to previous studies of the direct influence of emotion on attitudes, it will attempt to engage with the literature on the indirect effects of anxiety in a way that provides some much-needed clarity with regard to this question.

Lastly, this study provides an opportunity to step back from the experimental setting and attempt to judge some of the experimental findings discussed earlier in the real world. While it is useful to turn to experiments to clarify the specific causal relationships and effects associated with the experience of various emotions, these findings are only interesting to the discipline insofar as they actually occur in the real political world, where attentiveness and perceptual screens, among other difficulties, operate. As Marcus et al. themselves note: "[E]xperiments do not tell us much about the real world. After all, experimental subjects are forced to pay attention to the stimuli and are invited, by the experimental structure, to develop an appropriate response" (Marcus, Neuman, and MacKuen 2000, 68). The three analyses discussed above will each serve to expand our knowledge of when and how anxiety operates in real world citizens, and to what extent. These findings should serve to better expand our to date limited knowledge of the antecedents of anxiety (Brader, Marcus, and Miller 2011; Groenendyk 2011), and expand our understanding of its practical downstream effects on citizens. I turn next to examining these questions.

#### **Chapter 3**

#### PRIMARY ELECTIONS AND THE EXPERIENCE OF ELECTORAL ANXIETY

As the previous chapter amply demonstrates, there has been a significant increase in attention to the place of emotion in political cognition and behavior in the past two decades. Much of the focus during this timeframe has been on one emotion, anxiety, relating to its central role in Affective Intelligence theory, the most prominent theory in the field. For all the flowering of interest in this topic though, there has been less examination of an equally valid question regarding the place of anxiety in the study of voting behavior: just how prevalent and wide-ranging are anxiety reactions to candidates in elections, and what factors are associated with its experience?

To date, the majority of studies of anxiety in U.S. elections have focused on general election presidential candidates. Where other configurations of candidates and phases of the electoral process are studied, they have often been experimental creations designed to illuminate specific facets of the processes underlying the development of emotional responses to candidates (Redlawsk, Civettini, and Lau 2007; Redlawsk and Lau 2006), although Brader (2005, 2006) is a notable exception. This chapter seeks to fill this gap by examining under what circumstances anxiety responses towards candidates exist as a salient component of political experience early in a political campaign. Turning our focus from the relatively late phase of the general election, when more routine decision-making heuristics are in full effect, to primary elections provides not only the opportunity to examine voters before the full onslaught of the campaign has begun. It also expands the pool of candidates that voters face, allowing for theory that includes roles for both voters and candidates in the development of anxiety.

This chapter applies a number of basic, but as of yet not jointly tested, axioms regarding the factors related to voters' anxiety reactions to U.S. major party presidential candidates. More specifically, I argue that the political interest of the voter, the visibility of the candidate, the party affiliations of candidate and voter, and the ideological distance between the pair impact the probability of

a given voter experiencing anxiety toward a given candidate early in the electoral season. Analysis using data from the 2008-2009 ANES Panel Study demonstrates that indeed the interplay between these factors strongly influences the development of voter anxiety in response to a given candidate. This chapter serves as a contribution towards building a properly nuanced account of when and for which voters anxiety operates in the electoral environment.

### **3.1** Primaries and Individual Variation in Electoral Anxiety

While the literature has made considerable progress discerning the impacts of anxiety in the electoral environment on political behavior and judgment, it has been less specific on the scope and contingency of such responses. Given anxiety's importance with regard to political behavior and judgment, it is unsurprising that scholars have examined the sources of anxious responses. Factors ranging from economic conditions (Marcus, Neuman, and MacKuen 2000; MacKuen et al. 2007), campaign advertisements (Brader 2005, 2006), to partisanship, ideology, issue distance (Brader 2006; MacKuen et al. 2007; Miller 2011; Redlawsk, Civettini, and Lau 2007), and political sophistication (Brader 2006; Miller 2011) have all been associated with the probability of experiencing anxiety.

Relatively little of this research has specifically considered the factors underlying the experience of emotion in the primary environment though beyond Brader's (2006) experimental work that took place during the 1998 Massachusetts Senate primary. Redlawsk, Civettini, and Lau (2007) use a four-candidate primary using fictitious candidates to examine the impact of information congruency using their dynamic process tracing technique. In this study, they manipulate the extent of information congruency for the most- and least-liked candidates after an initial learning period. They find that issue distance between the subject and candidate is positively correlated with anxiety although they do not examine out-party candidates. Additionally, it appears that equal information was available regarding all candidates in the simulated primary. In conclusion, a number of potential factors associated with the experience of emotion have been identified, but these differing findings have not been considered as a whole in a real world, electoral setting. A fuller conception of just how common (or uncommon) feelings of anxiety are during elections, and what candidate-related and environmental factors are associated with these reactions, is needed to provide an accurate sense of the magnitude of anxiety's impact on elections and voting behavior.

A number of factors that define the general election of a U.S. presidential campaign do not hold in a broader consideration of campaigns. Primaries feature variant lengths depending on the time frames of candidates and election law from state to state rather than a typically two-candidate race with a predictable structure and length. Additionally, the voting public shifts from a broad electorate to a much narrower one with a very different composition as well. The nature of advertisements presented to the public shifts from a more balanced mix of fear and enthusiasm appeals to a much more enthusiasm-oriented set of appeals (Brader 2006). The number of candidates that voters face also increases as the focus moves from the general to the primary election. From wellknown frontrunners to also-rans, the primary environment can often overwhelm in its choices. As is readily apparent, all primary candidates are not equal. Asked to name all the candidates for office in a primary, most voters would struggle to name those beyond a few well-known frontrunners. Factors such as viability and electability have been shown to be key decision-making factors in presidential primary elections (Abramowitz 1989).

The visibility of a candidate is therefore a key concern in the construction of a theory of anxiety responses to candidates in a primary campaign. In all but the most extreme circumstances, lesser-known primary candidates can seem all but invisible.<sup>1</sup> Put bluntly, one cannot experience a emotional response towards a candidate of which one is unaware. Primary frontrunners also behave differently than those lagging in the polls, turning to more positive emotion appeals in their advertisements than challengers willing to risk the potential backlash associated with negative appeals (Brader 2006). As a result, higher visibility candidates are also more likely to be the target

<sup>&</sup>lt;sup>1</sup>Minor candidates do, at times, enter the public consciousness, but these often tend to be for ephemeral reasons. Consider for instance 2008 Democratic candidate Mike Gravel's viral web advertisement of the candidate throwing a rock in a lake and wandering off camera, leaving the camera to dwell on the ripples for several minutes.

of negative advertising and its associated fear cues.<sup>2</sup> For these reasons, increased visibility should therefore be associated with an increased probability of being the object of an emotional response.

A full theory of the experience of anxiety in campaigns must also examine the level of attention and interest held by voters at any given time. This differs from studies of anxiety during general elections. The general election occurs after months of build-up and maneuvering. Even minimally engaged voters have had sufficient time to be exposed to some extent to the candidates vying for office. Once one moves outside of this narrow section of the campaign though, variation in interest increases sharply. Engaged voters may follow a campaign from its earliest days, while those less engaged begin to tune in at some point later. Experimental recreations of primary elections do not recreate this important dynamic, as they presume that all voters are interested and engaged. Brader (2006) finds that more knowledgable respondents are more likely to respond to fear appeals in advertisements during a primary campaign than their less knowledgable counterparts. However, only half of registered voters, at best, will participate in a primary election and many voters have paid only minimal attention to the campaign at this stage.

Furthermore, the highly politically interested will behave differently in their evaluation of candidates from the two parties than those who are less interested in the campaign. Highly interested voters should be more likely to look favorably upon candidates in their own party and express more anxiety regarding candidates in the other party. These highly interested voters align with the party diehards that are popularly associated with the rise of polarization in modern politics. However, political interest is not a wholly exogenous measure with regards to emotion. Marcus, Neuman, and MacKuen (2000) and Brader (2006) find that the experience of anxiety leads to higher levels of campaign interest.

As noted above, partisanship also plays a key role in the rise of anxiety towards candidates in elections. An important heuristic that provides a wealth of information to voters, partisanship is often the first - and only - piece of information voters know about a candidate at early stages of

<sup>&</sup>lt;sup>2</sup>Rational choices regarding the related concept of candidate viability have also been argued to play a significant role in voters' choices in primary elections (Abramson et al. 1992).

campaigns. Given its obvious importance to political behavior and judgment, it is not unexpected that partisanship would have important ties to the formation of emotion. A key distinction regarding the impact of emotion appears to be between in- and out-party (opposite party) candidates. The Affective Intelligence theory of Marcus, Neuman, and MacKuen (2000) deals explicitly only with the effects of anxious reactions towards one's in-party candidates on political judgment, but find levels of political interest and learning are impacted by anxiety towards any candidate.

It seems plausible that the development of anxiety will vary across in- and out-party candidates. With confronted with a candidate of one's own party, the initial instinct is to like, or at least accept, the candidate. Powerful cognitive processes such as motivated reasoning predispose voters towards maintaining positive opinions of members of one's preferred party via partisan bias in perceptions (Bartels 2002; Kunda 1990). Additionally, most voters belong to homogenous social groups, which add an additional measure of difficulty in receiving negative information about candidates in one's party. In the case of out-party candidates, though, all incentives work towards the experience of unease regarding the candidate. As a result, I expect the alignment of a voter's and candidate's partisanship to be associated with a significantly lower probability of experiencing a negative emotional response, with the opposite expected to be the case for conflicting partisanships.

The difference between the issue stances or ideologies of the voter and the candidate in question should also impact the likelihood of experiencing anxiety. Even when a candidate is of the same party as a voter, their positions on the issues may differ. Indeed, the distance between one's own issue attitudes and those of the candidates in one's party is a key predictor of eventual vote choice in a primary (Redlawsk 2006). Affective Intelligence theory also predicts that issue distance should be related to the experience of anxiety (MacKuen et al. 2007). While other factors such as personal qualities could lead to the development of anxiety in response to a candidate that is "close" on the issues, a similar candidate where significant issue disagreement exists is even more likely to spur anxiety. Similarly, anxiety would seem to be even more likely in the case of an out-party candidate where great issue disagreement exists compared to a more moderate out-party candidate. Thus I expect an independent impact of relative ideology on top of that due to partisanship.

Lastly, the broader macro-environment should play a role with regards to generating fear in the voting public. External events such as wars, economic conditions, and scandals have been connected to the appraisal of political candidates, particularly incumbents (Marcus, Neuman, and MacKuen 2000; MacKuen et al. 2007; Steenbergen and Ellis 2006). While it is less clear that these phenomena would also impact non-incumbent candidates, their impact may also be felt on candidates of the incumbent party. We might expect that disapproval of one party's handling of the economy may lead to greater anxiety when considering it's candidates, even if they are not the responsible incumbent. We would have no such expectation for responses to candidates in the party out of power though. MacKuen et al. (2007) find that for challengers in general elections, macro-level events have no impact. One other potential expectation regarding the impact of these events is they may serve to increase or decrease the likelihood of anxiety for *all* candidates, regardless of party. From this perspective, voters may simply be more anxious in general during difficult economic times and the opposite in good times, for example.

### **3.2 Data and Measures**

The nature of the hypotheses regarding the individual, candidate-related, and environmental factors associated with the experience of anxiety requires a very specific design. In particular, this study requires both real-world voters and real-world candidates, which are obviously (and often unfortunately) messier than the sterile world of experiments. A real-world environment provides voters of varying interest levels and candidates of varying quality and visibility. I argue that these two characteristics, with the addition of other factors such as partisanship and the composition of the contemporary environment, are associated with the probability of experiencing anxiety towards a political candidate in a non-general election environment.

Surveys that include items regarding a number of primary candidates and, more specifically, measures capturing emotional responses to a variety of primary candidates are quite rare. Luckily,

the 2008 American National Election Study's (ANES) Panel Study fits the bill.<sup>3</sup> Composed of 10 political waves running from January 2008 to August 2009 amongst 21 total survey waves, the 2008 ANES Panel Study is a panel series of telephone-recruited, Internet-administered monthly surveys conducted by Knowledge Networks. This study will primarily use measures asked during the February 2008 wave, in the midst of the presidential primary season. Additional measures from the January 2008 wave are also used where suitable measures are not available in the February wave; I note these instances as they occur.<sup>4</sup> 1,406 respondents completed both the first and second waves of the study. The estimated response rate for the survey (AAPOR RR3) for the January 2008 wave is 29% and 26% for the February 2008 wave (DeBell, Krosnick, and Lupia 2010).

In its February wave, the survey asks respondents to think about a candidate and then asks, "When you think about [candidate name], how afraid does he[she] make you feel?" This prompt is given towards eight candidates - Democratic candidates Hillary Rodham Clinton, Barack Obama, and John Edwards, and Republican candidates Rudy Giuliani, Mitt Romney, Fred Thompson, Mike Huckabee, and John McCain. While other similar emotional reaction questions are asked, this is the only items that specifically taps the fear/anxiety dimension. These questions provide eight different candidates for whom emotional responses can be compared and a measure of variation among candidates within each party, particularly among the Republican candidates.

The dependent variable for this analysis measures whether a respondent becomes afraid when thinking about a specified candidate. As a result, the dataset is repeated eight times so that each of the responses provided by a respondent towards the eight candidates becomes its own unique observation. This raises the number of observations in the dataset upwards to 11,248 pre-weighted

<sup>&</sup>lt;sup>3</sup>The American National Election Studies (ANES; www.electionstudies.org). ANES 2008-2009 Panel Study [dataset]. Stanford University and the University of Michigan [producers and distributors]. These materials are based on work supported by the National Science Foundation under grants SES-0535332 and SES-0535334, Stanford University, and the University of Michigan. Any opinions, findings and conclusions or recommendations expressed in these materials are those of the author(s) and do not necessarily reflect the views of the funding organizations.

<sup>&</sup>lt;sup>4</sup>One measure, political interest, is drawn from the recruitment wave of the study, for reasons that will be discussed below. The estimated response rate for the recruitment wave (AAPOR RR3) was 42% (DeBell, Krosnick, and Lupia 2010).

respondent-candidate pairs prior to removing observations that are missing on other variables.<sup>5</sup> These observations, however, are nonindependent due to the repeated use of each respondent; to address this concern, I utilize Huber-White robust standard errors to account for any heterogeneity in the errors due to this data structure. Values for a respondent's emotional response towards the candidate range from zero, not afraid at all, to four, extremely afraid. All responses indicating some emotion (values 1 to 4) are grouped into a category of at least slight anxiety, contrasted against those who have not had such reactions. Nearly 37% of respondent-candidate pairs contain at least some level of an anxious reaction towards the specified candidate. Nearly half of these reactions fall in the lowest category of response, slightly afraid, but over 5% of responses fall into the very or extremely afraid categories. By candidate, this measure ranges from 53% of respondents with at least some anxiety in the case of Hillary Clinton down to 24% of respondents for Fred Thompson, with percentages for each candidate shown in 3.5.

Several independent variables relate to characteristics of the candidates themselves. I hypothesize that the most important of these will be candidate visibility. Voters should, all else equal, be more likely to experience anxiety regarding a candidate that is highly visible. Operationalizing visibility, however, is an inherently arbitrary exercise. While a number of potential manifestations could be used, for this chapter I use (100 - the percentage of respondents who state that they neither like nor dislike the specified candidate in the February wave) to measure candidate visibility. This percentage varies as one might expect given the contours of the 2008 election - 82.3% of respondents have non-neutral opinions of Hillary Rodham Clinton, the highest of the set. On the other end of the scale, only 37.2% of respondents have non-neutral opinions of latecomer Republican candidate Fred Thompson. In general, the Republican primary candidates used in this analysis have lower levels of visibility than the three higher-profile Democratic candidates. Values of this measure for each candidate are also given in 3.5.

<sup>&</sup>lt;sup>5</sup>In the following analysis, respondents are weighted using the wgtc02 variable included in the dataset for cumulative analysis up to wave 2 (DeBell, Krosnick, and Lupia 2010).

A second measure that ties candidate and voter is the presence or lack of partisan alignment between the two. Partisan alignment is conceptualized as dividing into three categories - opposing, aligned, and a third category for independent voters, using the respondent's party identification as measured during the January wave of the panel. Independents are contained in a separate category because they lack the instinct to dislike members of the opposing party that is believed to underlie the impact of this alignment. Following convention, independent leaners are considered partisans of the party towards which they lean.

The level of political interest held by voters should also be strongly associated with the probability of experiencing anxiety. At any early stage in the campaign season, many voters simply aren't "tuned in" to the election as of yet. Political interest is operationalized in this study via a five-point variable that measures the respondent's interest in politics. Higher values indicate greater levels of political interest, and by proxy, greater attention to the ongoing campaign. Political interest is measured by responses from the recruitment wave that preceded the other political waves used in this study in order to minimize the endogeneity between anxiety and political interest found by Marcus, Neuman, and MacKuen (2000) and Brader (2006). Using such an early measure should provide the best pre-emotion measure of voter interest possible given the long timeframe of the 2008 election. It is expected that higher values on this variable should be associated with a greater probability of having an anxious reaction towards a given candidate.

The ideological distance between voter and candidate should also be associated with the probability of experiencing anxiety when considering a candidate. All else equal, a candidate with whom one agrees more on the issues is less threatening than one where substantial disagreement exists. A measure of respondent ideology is obtained from respondents in the February 2008 wave using a seven-point branching question. Determining candidate ideology is more difficult, however. Respondents are not asked to estimate candidate ideologies until after the completion of the primary elections, and even then, not for all primary candidates. Issue positions for the candidates are also not asked until after the primary has concluded. Therefore, I employ an alternative means of estimating candidate ideologies. I utilize respondent's like-dislike scores on a seven-point scale from the January and February waves towards the eight candidates to create a measure of candidate ideology on the same metric as respondent ideology. To do so, I subtract the mean like-dislike score of each candidate among moderate or strong conservatives from the mean like-dislike score among moderate or strong liberals.. The calculated mean differences for the parties and candidates are linearly transformed such that the placement of the Democratic and Republican Party fall on the equivalent of liberal and conservative scores (-2 and 2, respectively) in the metric of the voter ideology measure. The resulting scores can be seen in 3.5.<sup>6</sup> The absolute value of the distance between the resulting placements of the candidate ideologies and the voter ideologies determines the relative ideological distance between voter and candidate. Increased distance should, all else equal, lead to a higher probability of experiencing anxiety towards a candidate.

Macro-level factors also intervene on the formation of fear responses to the objects of contemporary politics. Of these, the most studied and salient is the economy. Such evaluations have been shown to impact anxiety responses towards and evaluations of incumbent presidents (Marcus, Neuman, and MacKuen 2000; MacKuen et al. 2007), but their impact in an open-seat race is less clear. Respondents in the January panel wave provided evaluations of the economy's performance during the last year. The resulting measure is coded from -2 to 2 for this analysis, with -2 indicating an evaluation that the economy is much worse, 0 about the same, and 2 much better than a year before.

The vast majority of respondents viewed the economy as somewhat or much worse than a year prior, reflecting the economic downturn that would play an outsized role in the presidential

<sup>&</sup>lt;sup>6</sup>An alternate measure of candidate ideology can be obtained by conducting a replicated multidimensional scaling analysis of the January and February like-dislike scores for all twenty candidates and parties rated, using the square root of the sum of squared differences between the ratings as a measure of dissimilarity. The correlation between the resulting first dimension scores rescaled to the same metric and the mean difference scores is 0.974, showing an extremely strong linear relationship between these two measures and providing more confidence in the derived results from the mean difference measure. The results of this analysis are available upon request.

campaign to come. It is expected that evaluations of the economy should interact with party identification to impact the probability of emotional response. That is, the impact of economic evaluations should change as one moves across the range of party identification. Republicans should be more likely to experience anxiety regarding Democrats if they have positive economic evaluations, reflecting a fear of potentially moving away from a Republican president. Negative evaluations should trigger anxiety about fellow Republican candidates, as conditions threaten their habitual alignment with their party. The opposite should be true of Democrats - poor economic evaluations should lead to more anxiety about Republicans as they look towards a future with a Democrat in the White House. This level of anxiety regarding Republicans should abate as evaluations become more positive however and the perceived threat declines. As a result of this interaction, party identification is also a necessary element of the model. Party identification is measured in the January wave and runs from -3 to 3, with -3 indicating a strong Democrat and 3 a strong Republican.

Lastly, the model includes a number of demographic controls in order to account for any additional heterogeneity that may exist with regards to the development of anxiety in response to candidates. As a result, I include measures of age, education, income, gender, and race to account for these possibilities. Age is measured in years, education is conceptualized as a five-level measure of educational attainment, income is a nineteen-level measure of income category, gender measures whether a respondent is female (1) or male (0), and race is measured through a dummy variable that measures whether a respondent is African-American or not. I am agnostic as to any consistent expectations with regards to these variables.

## 3.3 Analysis and Discussion

In order to analyze these hypotheses regarding the potential factors associated with experiencing anxiety when considering presidential primary candidates, I utilize three logistic regressions, one for respondents falling into each of the three possible candidate-voter partisan alignments - in-party, out-party and independent voter. In addition to the indicators discussed earlier, the model also includes an interaction between retrospective economic evaluations and partisanship for the

in- and out-party models.<sup>7</sup> The fact that there are individual models for each of the alignments also allows the effect of ideological distance, candidate visibility, and political interest to vary across each of the three models. This acts as a de facto interaction, but allows the related coefficients to vary unconstrained across conditions. Each of these interactions follows directly from my theory of the in-/out-party dynamics underlying the development of emotional responses to candidates. The results of the models are shown below in Table 3.2. As discussed earlier, Huber-White robust standard errors are utilized to account for any heterogeneity in the errors due to the data structure and the existence of nonindependent observations in the dataset.

Although the comparison of effects across the three models is the key theoretical concern, some brief comments regarding the signs and significance of the demographic controls can be made before proceeding to the examination of the main theoretical expectations. One interesting finding regarding the impact of demographics involves African-American respondents in the study. Across the board, the model shows that African American respondents are less likely on average to experience anxiety towards a given candidate than non-African Americans, although this difference is only statistically significant in the model of independent voters. Additionally, removing observations that asked about anxiety regarding Obama does not change this finding - the negative and statistically significant coefficient for African Americans holds only in the independent voter model. While African Americans are significantly less likely to experience at least some anxiety when considering Barack Obama (t=8.70, p<0.0001), they also appear less likely to experience anxiety overall. It is unclear whether this finding holds solely for the 2008 election season or is reflective of a broader difference in tendencies toward anxiety. The presence of Barack Obama in the race may have altered the response calculus of African-American voters toward all candidates, but this cannot be determined from this analysis.

The model also finds that are no significant differences in the probability of experiencing anxiety across gender - male and females appear to be no different in their proclivity to be afraid of

<sup>&</sup>lt;sup>7</sup>The independent voter model contains, by definition, only those respondents for whom Party ID is zero, making an interaction redundant.

a primary candidate. The exclusion of observations considering Hillary Rodham Clinton does not change this result, although females are significantly less likely than males to experience anxiety when considering her (t=3.23, p=0.0012). Looking at the other demographic controls in the models, respondents with high incomes are associated with significantly higher probabilities of experiencing anxiety towards a candidate that is of the opposing party to themselves, but not for the other two conditions. Lastly, neither education nor age are significantly related to any differences in the experience of anxiety.

The interpretation of the model results for the other coefficients, however, becomes more troublesome. The model of emotional reactions towards candidates includes one explicit and three implicit interactions. The three implicit interactions in particular can only be examined by looking at the effects of the related variables across the three models. In order to facilitate these discussions of the theorized relationships, effect displays are employed (Fox 1987, 2003). Effect displays utilize a matrix of selected combinations of values of the independent variables to generate appropriate fitted values and standard errors without the use of simulation, as in other methods for visualizing the impact of variables in interactions. As a result, the relationship between the key measures in the models can be visualized with appropriate confidence intervals. All displays consider the impact of the specified variables for non-African American respondents with mean values on all other variables. The relationship between respondent-voter partisan alignment and ideological distance is displayed in Figure 3.1.

As the figure shows, the impact of ideological distance varies considerably across the combinations of respondent and candidate partisanship represented by the three models. For respondents considering candidates belonging to the same party as themselves, ideological distance appears to have no significant impact. This finding appears to contradict the expectations of Affective Intelligence. The confidence interval, denoted by the dotted lines, widens considerably as ideological distance increases, reflecting the fact that relatively few respondents in a given party experience very large ideological distance from candidates in their party. Moving next to independent voters, a positive, nearly significant relationship between ideological distance and the probability of an anxious response can be seen. Lastly, when the respondent and candidate belong to differing parties, the relationship between ideological distance and anxious responses is positive, significant, and stronger than in the case of independents, as might be expected.

Similar differences can be seen in Figure 3.2, which shows the change in the effect of the respondent's level of political interest across the combinations of respondent-candidate partisan alignment. Once again, the probability of experiencing anxiety about a candidate in one's own party is effectively constant with regard to the respondent's level of political interest. In the case of independent voters, a positive, significant, well-defined relationship between political information and the probability of experiencing anxiety exists. At low levels of interest, the probability of anxiety is no different than that considering candidates in one's own party, but this probability rises to that an opposing party judgment for high levels of interest. Lastly, a positive and significant, but possibly less steep, relationship exists as well in the case of respondents considering candidates from the other party. Despite the shallower slope, the baseline probability for this group is higher than for independents, indicating their generally higher proclivity for experiencing anxiety when considering out-party candidates. In the case of no political interest, the expected probability in the case of an opposing party judgment is nearly twice that of a same party judgment, showing the strong cognitive impact of partisanship. Overall, the tight confidence band around the fitted values indicates a wide distribution of respondents across the levels of political interest, reflective of an electorate with widely varying levels of interest at this early stage in the campaign.

Moving next to the relationship between candidate visibility and respondent-candidate partisan alignment in Figure 3.3, for the first time a significant relationship exists involving respondents considering candidates from within their own party. In general, each panel of the effect display demonstrates a positive relationship. This indicates that regardless of the respective partisanship of candidate and voter, higher levels of candidate visibility are associated with higher probabilities of feeling anxiety when considering that candidate. The strength of this relationship grows as one moves from considering candidates in one's own party or being an independent observer to considering candidates from the opposing party. Contrary to findings of Bartels (1988) regarding the role of cumulative coverage in reducing voter uncertainty, the results appear to suggest that anxiety increases with heightened visibility. Each new piece of information a voter learns about a candidate is a new chance to develop anxiety.

Considering the interaction between retrospective evaluations of the economy and party identification requires two additional pieces of information. First, the vast majority of respondents rated the economy as somewhat or much worse than a year ago when queried in the January wave of the panel. The empirical relationship in Figure 3.4 reflects these factors. While the confidence bands are relatively narrow for poorer evaluations of the economy, they balloon for the few respondents who claim the economy improved, making it more difficult to discern a relationship in the data. Second, respondent party identification is utilized in the construction of the party alignment measure. As a result, the same and opposite party models contain only party identifiers, but do not include true independents, who are included in the independent voter model. As a result, predictions in Figure 3.4 at a party identification value of zero are meaningless.

As discussed earlier, consistent findings exist regarding the impact of economic evaluations on responses to an incumbent president, but there is no guidance for primary candidates. That being said, Figure 3.4 demonstrates some interesting results. For those considering candidates from the opposite party, the nature of their retrospective economic evaluation is very important. For those with poorer evaluations of the economy, Democrats are far more likely to report anxiety when considering Republican candidates than Republicans considering Democratic candidates. Conversely, for the few respondents with positive evaluations of the economy, the opposite difference appears to exist, with Republicans reporting more anxiety than Democrats. For the independent model, the negative and significant coefficient in Table 3.2 indicates that independents with more positive evaluations of the economy are significantly less likely to express anxiety about candidate of either party than those with negative evaluations. This provides some evidence of the global impact of macro-level factors on potential voters' anxiety responses.

The effects of economic evaluations on same party evaluations are far more muted but still interesting. Republicans appear to be slightly, but significantly, more anxious on average among

those with poor evaluations of the economy than Democrats, lending evidence that anxiety regarding the party in power may extend to open seat challengers from that party. On the other end of the spectrum, there is inconclusive evidence that the opposite may occur with positive evaluations of the economy.

The relationship between these two measures appears to relate to voter considerations regarding which party will be in control (real or not) of the economy. Democrats who hold poor evaluations of the economy's trend are most likely to experience anxiety when thinking about a Republican candidate, all else being equal. These voters appear to be looking towards the upcoming election as an opportunity to change the direction of the country and move away from the economic stewardship of George W. Bush. Democrats with better evaluations of the economy appear less likely to have similar feelings. On the other hand, for Republicans, positive evaluations of the economy lead to a greater probability of anxiety as they are worried about the likelihood of a Democratic takeover of the White House. Republicans who feel the economy has become much worse are much less likely to be anxious, perhaps because they believe any change in leadership is unlikely to make things worse. For voters considering candidates from their own party, a poor economy does not appear to have a large impact on considering of one's own slate of presidential hopeful. Even in the case of Republicans with very poor evaluations of the economy, the predicted probability of anxiety regarding a Republican candidate is not substantially higher than that of a similar Republican with very positive views of the economy. The clear incumbent effects of (Marcus, Neuman, and MacKuen 2000) do not appear to extend neatly to open seat races.

Taken as a whole, the expectations of my theory are confirmed, but what explains these findings and what do they mean for the consideration of different classes of voters? Overall, these results show generally strong evidence for the theory laid out earlier. Characteristics of primary voters, primary candidates, and the general environment of the time all appear to interact to impact the probability of developing anxiety when considering candidates for office. The story largely appears to be one of the differences between considering candidates inside one's party and not. If a given candidate belongs to your party, very little - save increased visibility for the candidate - appears
to increase the probability of experiencing anxiety. Being more interested in politics makes the respondent no more likely to be anxious about a candidate. Even added ideological distance has no impact on the probability of anxiety.

On the other hand, when considering an out-party candidate, increases in all connected factors – candidate visibility, political interest, ideological distance between the voter and candidate - are associated with significant increases in the probability of experiencing anxiety. In the end, for the 2008 primary election at least, the only out-party candidates that did not lead to substantial levels of anxiety were those about which one was unaware - either due to a personal lack of interest or the low profile of the candidate in question. Similarly, if an out-party candidate happened to not be too distant from a voter ideologically, the probability of anxiety also declined.

For true independents, we see findings that more closely align to an out-party judgment – all of the four key predictors of experiencing anxiety are statistically significant save ideological distance. In this case, though, these measures may serve to distinguish the much-lauded detached independent from the many unengaged independents in the American polity. Lastly, these findings demonstrate the perils inherent for certain classes of candidate. Front runners suffer due to their high visibility, which may be connected to the attendant attacks that such a position entails. Repeat candidates may also experience a similar fate due to their public visibility. From the perspective of these findings, the slightly unknown newcomer may benefit by being a relatively late arrival to the public's mind.

These findings demonstrate the strong effects of partisanship as the means by which voters face the primary election season. When information is scarce for many if not most voters, partisanship serves to provide candidates of one's own party an initial 'grace period,' during which they are less likely to be the source of emotions like anxiety. That said, factors like the economy can also shift the reactions of voters. The story is not strictly one of voters and candidates, but one that must include the broader political context of the time. Voters carry baggage with them as they confront presidential aspirants every four years, and this baggage appears to impact their reactions to the candidates. Try as they might to attempt to create fresh impressions, voters appear to apply elements of the broader contemporary context when they consider the field before them.

### 3.4 Conclusion

While political psychologists have spent much of the last two decades developing an understanding of the role of emotion, and anxiety in particular, in political cognition and behavior, only recently has research begun to examine individual differences in the frequency of emotional response and towards what kinds of candidates and stimuli. Primary elections represent a distinct area of consideration as opposed to general elections, one where unequal voters and unequal candidates are the norm rather than the exception. This work seeks to make an admitted first effort at examining this area, yet one that demonstrates the clear heterogeneity in responses demonstrated by voters in the face of presidential candidates early in a campaign.

This chapter clearly demonstrates the important interplay between several factors during the primary season. The connections between voter and candidate partisanship and ideology, voter interest, candidate visibility, and the nature of the broader environment of the time all draw attention for their implications on behavior, but are equally important for their secondary impacts on voter anxiety. Well before the bright lights truly shine on the race for president, anxiety appears to operate in a broadly predictable manner in the minds of at least some voters. In light of these findings and the potential for anxiety to open the minds of those who experience it, can this anxiety actually lead to meaningful changes in attitudes? Our increased scholarly understanding has shown that anxiety affects the cognitive and affective elements that people bring to bear on the political world, but this change would be less meaningful if its demonstrable effects during a campaign related only to vote choice and not attitudes as well. We consider this question next.

APPENDIX

# 3.5 Appendix: Tables and Figures

		Pct with at least		
Candidate Name	Party	Some Anxiety	Visibility	Est. Ideology
Hillary Rodham Clinton	D	53.1%	82.3	-2.06
Barack Obama	D	46.0%	74.8	-1.59
John Edwards	D	26.8%	56.8	-1.37
Rudolph Giuliani	R	34.3%	58.8	0.92
Mitt Romney	R	30.7%	47.5	1.00
Fred Thompson	R	23.9%	37.2	0.82
Mike Huckabee	R	34.9%	50.6	0.89
John McCain	R	43.2%	65.8	0.81

Table 3.1: Candidate-Related Measures and Values

	<b>Opp.</b> Party	Independent	Same Party
Variable	Coefficient	Coefficient	Coefficient
	(Robust SE)	(Robust SE)	(Robust SE)
Political Interest	0.2161*	0.3847*	0.0434
	(0.0429)	(0.0922)	(0.0506)
Candidate Visibility	0.0354*	0.0171*	0.0302*
	(0.0042)	(0.0070)	(0.0045)
Ideological Distance	0.2694*	0.1950	0.0414
	(0.0379)	(0.1076)	(0.0531)
Retrospective Economic Evaluation	0.1116	-0.2528*	0.0379
	(0.0585)	(0.1034)	(0.0614)
Party Identification	0.0570		0.0361
	(0.0365)		(0.0370)
Econ. Eval x Party ID	0.1129*		-0.0444
	(0.0231)		(0.0251)
African-American	-0.1553	-1.8473*	-0.4260
	(0.1579)	(0.2702)	(0.2210)
Female	0.0803	-0.1241	0.0779
	(0.0918)	(0.2034)	(0.0953)
Age	0.0049	-0.0063	-0.0001
	(0.0028)	(0.0060)	(0.0033)
Education	0.0530	-0.0080	0.0280
	(0.0436)	(0.0978)	(0.0469)
Income	0.0327*	0.0024	0.0164
	(0.0120)	(0.0282)	(0.0127)
Intercept	-4.1531*	-2.8684*	-3.3609*
	(0.3805)	(0.6332)	(0.4028)
Weighted N	4722	1243	4641

 Table 3.2: Logistic Regression of Probability of Anxiety Towards Candidate





For interpretation of the references to color in this and all other figures, the reader is referred to the electronic version of this thesis (or dissertation).

Figure 3.2: Effect of Political Interest on Probability of Anxiety by Partisan Alignment





Figure 3.3: Effect of Candidate Visibility on Probability of Anxiety by Partisan Alignment



**Opposite Party** 



Figure 3.4: Effect of Party Identification on Probability of Anxiety by Retrospective Economic Evaluation

#### **Chapter 4**

#### ELECTORAL ANXIETY AND VOTER ATTITUDE CHANGE

For all the focus on parties and politicians, voters and campaigns, politics is a battle waged primarily on the battlefield of issues. Political commentators and disillusioned observers decry the increased emphasis on ephemeral controversies and the increased role of combativeness and emotion in modern U.S. politics. If only there were less focus on strategy and the 'horse race' and more on the issues, goes the claim, politics would be more functional. Political appeals that attempt to play on the fears and anxieties of voters are particularly vilified as attempts to distract and dissuade voters from following their 'true', underlying beliefs.

Scholars have turned their attention to what they have found to be the twin, distinct negative emotions: anger and anxiety. Of those, anxiety has received particular attention. Studies to date have focused on anxiety's ensuing impacts on political participation and vote choice, but much less on the attitudinal implications of this emotion. While research has shown that anxiety impacts the relative weight of factors underlying vote choice (Marcus, Neuman, and MacKuen 2000) and leads to more balance in information search (MacKuen et al. 2010), evidence that anxiety can help to shift the issue attitudes held by voters would provide added strength to the developing account of the role of anxiety in the political sphere. Such findings would demonstrate that anxiety towards certain targets in politics is capable of changing the beliefs of citizens, of truly shifting voters away from their previously held beliefs.

This chapter seeks to ascertain the impact of candidate-based anxiety on ensuring issue attitudes during a presidential campaign. Utilizing the panel structure of the 2008-9 ANES Panel Study, I take issue attitudes and candidate anxiety from early in the campaign season as a baseline to compare with attitudes from the October 2008 panel wave. I then conduct regression analyses of changes in attitudes regarding taxes for the wealthy, government involvement in health care, gas taxes, and a path to citizenship for illegal immigrants. I find weak evidence that anxiety regarding that candidate can lead to a shift in issue attitudes on issues that are new to the political discourse and strongly identified with the candidates. These findings raise important questions about the downstream implications of the information seeking that is associated with the experience of anxiety.

# 4.1 Linking Anxiety and Attitude Change

Anxiety is a highly salient aspect of the campaign environment. As seen in Chapter 3, components of the environment, characteristics of political candidates, and individual differences are all associated with differences in the probability that an individual experiences anxiety. The experience of anxiety, as discussed in chapter 2, is connected to information seeking and learning (Hutchings et al. 2006; Huddy, Feldman, and Cassese 2007; Redlawsk, Civettini, and Lau 2007; Valentino et al. 2008, 2009). MacKuen et al. (2010) show that anxiety leads to increased search behavior, more balance in information search, and a greater desire to learn about the positions of one's opponents. Information that leads to an emotional response is more likely to be recalled by voters (Civettini and Redlawsk 2009); this finding applies to enthusiasm and anger in addition to solely anxiety. The experience of anxiety is also capable of boosting learning about candidate positions (Marcus, Neuman, and MacKuen 2000; Redlawsk, Civettini, and Lau 2007). Additionally, experienced emotion based on unrelated sources is capable of shaping preferences on policy choices (Small and Lerner 2008), a finding that aligns with more general research about the role of emotion in political persuasion (DeSteno et al. 2004).

Experimental work has found that emotional appeals are more likely to affect those for whom politics holds more importance (Brader 2006). Brader argues that these citizens are best equipped to translate emotion into appropriate action based on this response. Overall, he demonstrates experimentally that campaign fear appeals are capable of shifting comparative affect towards the candidate, increasing the probability of changing vote choice, reduce opposition to the messenger, and change the criteria by which voting decisions are made. Of these effects, though, shifts in comparative feeling thermometer scores, the probability of vote choice change, and increases in

the desire to follow political news are observed in those with higher sophistication, but not those with lower levels of sophistication.

In addition to showing more effects when they experience emotion, sophisticated citizens are also more likely to experience emotion at all (Brader 2006; Miller 2011). Miller finds that emotion is associated with holding certain positions regarding issues involving the Iraq war for sophisticates, but again not for novices. This model, however, does not consider changes in attitudes related to the expressed emotion, but only a single cross-sectional response.

These findings contradict the traditional belief that is the less sophisticated, less interested voter who is the unwitting pawn of emotional appeals foisted upon him by scheming politicians. Instead, it appears that emotion plays a more key role in the political behavior of the most interested and invested. While some manner of persuasion has been associated with anxiety appeals (Brader 2006), this research has focused only on vote choice. Whether the experience of anxiety is capable of shifting attitudes remains unsettled. Affective Intelligence theory does not directly engage with the concept of attitude change, but the impacts it associates with the experience of anxiety could plausibly provide a path to individuals changing their attitudes. If anxiety is associated with increased attention and learning about issues and candidate stands, it seems possible that this learning may lead to reevaluation and potentially changes in one's own attitudes. If such a connection exists, it seems likely that the path to such an impact lies through the increased learning associated with experienced anxiety.

Developing a theory regarding the potential role of anxiety in changing issue attitudes requires laying out a firm conception of how citizens link candidates or parties and issues to their own beliefs, along with how anxiety could modify this linkage. For the purposes of this discussion I will focus on candidates, although the same mechanisms could apply to other stimuli as well. The key link would appear to be that between the relevant candidate and the issue in question. This connection is not guaranteed to exist; citizens may not link a candidate and certain issues at all. One simple reason this linkage could fail to exist is a failure to know how the candidate stands on a given issue. It seems perfectly plausible that a respondent may be anxious about a given candidate, yet this reaction could cause no shift in the respondent's attitudes because of a lack of knowledge of the candidate's issue positions. Put another way, a person cannot react either positively or negatively in response to a candidate without some knowledge of where that candidate stands.

The placement of the candidate on an issue is therefore a key factor in the impact of anxiety on attitude change. Put more accurately, the individual's perception of a candidate's location on an issue is the relevant characteristic here with regard to the individual in question. How then might this perception impact the possibility of future attitude change? I argue that it is not the absolute location of the perceived position that matters, but rather it is distance from that of the respondent that is of concern with regard to its impact on future attitude placement. Cases in which the respondent and candidate hold the same position should operate far differently from those in which those positions are far apart on the relevant dimension regardless of their absolute location. Thus the absolute distance, without regard to direction, I argue, is the lens through which citizens judge their relationship to candidates on an issue.

It is important to distinguish between the two candidates in the election facing the public, but not in the traditional way we're accustomed. Rather than considering the choices facing the public as a Democrat and a Republican, I argue, as in the previous chapter, that the relevant distinction is instead that between the candidate who belongs to one's chosen party and the candidate(s) who belong to another party. Past work on the impact of anxiety on the factors underlying vote choice (Marcus, Neuman, and MacKuen 2000) find that it is only anxiety towards the candidate in one's own party that leads to a shift from one's standing predisposition, not total experienced anxiety. Given this finding, any theory that considered candidates according to their partisan affiliation would split the category of seeming interest – partisans considering their party's candidate – across the two political parties. Therefore, I argue that the impact of anxiety on attitude change may have two distinct roles, one in cases regarding assessment of the candidate in one's own party and another when the candidate in question belongs to another party. This conception fits nicely with the idea of issue direction discussed above; once more, absolute location is less of a concern that the relative placement of citizen and candidate. Now that our focus is placed on the two cases of in- and out-party candidates with regards to the perceived distance in placement on an issue, what then might the role of anxiety be in the dynamics of attitude change? To develop a clear set of expectations for this relationship, let us consider a few hypothetical individuals. Citizen A faces the election with little concern; she experiences no anxiety towards her party's candidate and believes that she and the candidate agree on the issues. In this instance, we would clearly not expect that the candidate will have much impact on her attitudes. To the extent that any change would occur, there may be a slight tendency to shift towards her party's candidate, but this change would not be large nor in any way related to anxiety. Consider, though, Citizen B, who experiences great anxiety towards his party's candidate and also largely agrees on the issues with the candidate. His usually preferred candidate does not align with his pre-existing dispositions - this is clearly a time in which previous research would argue that increased learning occurs. Here we would definitely expect some reconsideration of his issue positions. Thus for low issue distance, we would expect that increasing anxiety should be associated with a greater likelihood of attitude change.

Two more hypothetical citizens demonstrate the expected relationship for cases of large issue distance with regard to in-party candidates. Citizen C experiences no anxiety about the candidate of his party, but perceives large issue distances between himself and the candidate. In this instance, we might expect some movement perhaps towards the candidate, but nothing too major. On the other hand, Citizen D feels a great deal of anxiety about her party's candidate, with whom she perceives a great deal of issue disagreement. Here we would expect almost no movement as Citizen D has already moved herself far away from the disconcerting candidate. No other attitude-related action is possible besides potentially even more distancing. Overall, the shape of the relationship is clear, with a increasing impact for issue distance on subsequent attitude change as anxiety increases in cases with low issue distance. The relationship appears to be relatively flat in cases of high issue distance, with little movement across the board, although perhaps more in cases of low anxiety. Thinking the other way around though, a relationship becomes more clear: the impact of anxiety decreases as the perceived issue distance increases in cases of high anxiety. Respondents should

seek to move themselves from a disconcerting candidate when it is possible to do so, but not to move when distance is already achieved.

The shape of a similar relationship in the case of an out-party candidate is more difficult to deduce. Affective Intelligence theory argues that anxiety about out-party candidates has limited behavioral impacts, particularly with regard to reliance on issues (Marcus, Neuman, and MacKuen 2000). We can imagine that it may be the case that possessing low anxiety about the opposition candidate would not lead to great changes but that high anxiety would lead to instances of repulsion when issue distance is low. However, the literature traditionally argues that anxiety towards an out-party candidate does not prompt reconsideration of one's predispositions. Hence it is hard to conclusively argue a role for out-party anxiety in attitude change.

No discussion of the connection between voters and candidates with regard to perceptions of issue positions would be complete without a consideration of the role of rationalized perceptions. Whether due to assimilation and contrast effects (Granberg and Brent 1974), projection and persuasion effects deriving from the desire to achieve cognitive consistency (Brody and Page 1972), rationalization is a well-established finding with regard to perceptions of candidate issue positions. Studies have consistently found that respondents frequently shrink the distance between themselves and favored candidates and do the opposite for disliked candidates. While determining the specific mechanism at work is not the task of this chapter, it is necessary to take into account the fact that this phenomenon does exist. As a result, any theory of candidate-related attitude change must take into account the extent of like or dislike felt towards each candidate. Both strong like and dislike should be associated with greater attitude shifts.

It is also the case that not all issues are equal as well. A keen reader will have noticed that to date I have carefully avoided discussing the impact of anxiety on any one issue position. This is because it is unclear that this relationship will extend to all issues. Political issues differ in their prominence, connection with the candidates, and time in the popular discourse. Only prominent issues with clear connections to the candidates would seem likely to demonstrate the theorized relationship. While some aspect or issue position of the candidate may trigger anxiety, this may

not lead to a reassessment of all aspects of one's predispositions. It may be the case that only a few issues are subject to potential change when an individual experiences anxiety about a candidate.

For all of this consideration of how the interplay between citizens and candidates may lead to attitude change, there are also a few key limits to the extent of attitude change that also merit a role in this story. As is well known within the study of public opinion, individuals possess differing levels of attitude stability for a number of reasons. Most notably, political awareness is tied to increased attitudinal consistency. Similarly, those with extreme attitudes will possess fewer conflicting considerations regarding an issue and thus be less likely to vary in their expected opinions (Zaller 1992). Therefore, it appears likely those already holding extreme attitudes and those who are highly interested in politics are less likely to change their attitudes, regardless of the impact of all the factors above.

#### 4.2 Data and Measures

In order to examine the dynamics of issue attitudes, we require a longitudinal design that includes repeated issue questions for respondents and the same questions asked regarding candidates. A panel study is the natural target for such a data structure, especially when the desirability of certain covariates like political interest taken before the measurement of anxiety is taken into consideration. I argue that the effect of the distance between these two responses on subsequent attitudinal shifts changes according to the amount of anxiety associated with the candidate in question.

I turn again to the 2008 American National Election Study's (ANES) Panel Study in order to obtain data to test these hypotheses. The study includes 6 political waves during the period between January 2008 and November 2008 amongst its 21 overall waves. One particular benefit of this study is that it includes more specific issues than a standard ANES pre/post study, which should increase the likelihood of voters making linkages between candidates and salient issues. Despite possessing a highly favorable design for examining voter's changes in attitudes, however, the 2008-9 ANES Panel Study also is prey to several factors that distinguished the 2008 presidential campaign from other recent elections. Given the study's starting date in early 2008, most of the issue questions included in the election year waves are based on expectations regarding what issues would dominate the electoral environment in the coming year. Unfortunately, the deteriorating economy substantively shifted the field of debate during the election as the campaign played out. Issues such as taxes, health care, and immigration that had been high-profile topics of debate in the preceding years faded in importance next to all-consuming topic of the economy and the financial crisis. In this study, I focus on four issues that were at the time matters of substantial debate and importance to the candidates during the 2008 presidential election. The study asks a number of issue questions to respondents and also prompts for issue placements for the candidates on several of these issues.

Illegal immigration is an issue that appeared likely to be a major focus during the 2008 election. A high-profile, bipartisan attempt to pass immigration legislation stalled in the Senate during the summer of 2007. Both Obama and McCain supported the legislation, although McCain backed away from his co-authorship of the bill and said he would not vote for the bill again. During the campaign, McCain emphasized strengthening border control, while Obama focused on creating a path to citizenship. As the economy declined, immigration declined as a prominent issue to the point that it was barely mentioned during the three presidential debates in the fall (New York Times 2008a,b,c).

An issue that assumed high importance throughout the 2008 presidential campaign was the fate of the Bush tax cuts. While both candidates agreed on keeping the tax cuts for lower income earners, they diverged with regards to rates for higher income earners. Obama's pledge to let the tax cuts return to their Clinton-era levels for those making over \$250,000 formed a core plank of his campaign platform. The increased revenue obtained from this move would help to cover the costs of his health care plan, another important campaign issue discussed below. Taxes for higher-income earners received a unexpected emphasis after the well-known "Joe the plumber" incident at an Obama campaign stop in Ohio. McCain seized upon the incident to raise concerns regarding taxes on small business owners and heavily emphasized the issue during the third presidential debate and the campaign's final weeks (New York Times 2008*c*).

As stated above, health care also figured prominently in the campaign's issue dynamic. The issue received significant attention during the Democratic primaries and a sustained focus from Obama during the general election. While not going as far as his Democratic challengers, Obama advocated an expansion of access via a government-sponsored insurance plan and mandated coverage for children. The cost of the plan would be covered in part by ending Bush tax cuts for high earners. McCain alternatively advocated tax credits to help pay for health insurance and the sale of insurance policies across state lines. Most controversially, McCain's plan would have taxed private health benefits. The issue contrast between the two candidate received extensive coverage throughout the general election and during the presidential debates (New York Times 2008a,b,c).

One issue that arose during the primary season and remained visible in the later campaign was the issue of the federal excise tax on gasoline. Both Democratic presidential candidate Hillary Rodham Clinton and Republican nominee John McCain came out in favor of a summer gas tax holiday to help consumers. Democratic nominee Barack Obama opposed the move, however, arguing it would have little real impact on gas prices (Bosman 2008; Broder 2008). His position was supported by a wide array of academics and the Bush administration. Although the issue faded in the general election as prices fell with the weakening economy, national average prices for unleaded fuel topped four dollars a gallon through much of the summer and remained over \$3.50 a gallon well into September, keeping prices at the pump highly salient in the minds of voters (U.S. Energy Information Administration 2011). Both Obama and McCain were strongly tied to opposing sides of this issue as it developed, providing a relatively simple, clear contrast to voters.

The expressed attitudes of voters expressed regarding these four issues during the primary election and later during the general election form the basis of the dependent variables of this study. For three of the four issues, the initial attitudes are obtained in the January 2008 wave of the study; for the gas tax issue, this question is asked in February. A second response is received later during the October wave, in the midst of the general election. The distribution of early attitudes on later attitudes for each of the four issues is given in Figure 4.1. The positions of individual

respondents are jittered to reduce overplotting. A loess line is also included to demonstrate the aggregate relationship between early election and later election attitudes.

There is notable variation in the attitudes of respondents between the two waves of questioning. While substantial numbers of respondents held the same attitudes in both waves, many respondents did change their attitudes to some extent throughout the campaign. Examining the subfigures, we can see that the relationship between early and late attitudes is roughly linear with a slope of less than 1, which we would expect given the limited directionality of movement at the poles. The main exception to this pattern is attitudes regarding the gas tax, which dip in a more negative direction between replications, indicating increased opposition to raising the gas tax. We can also see a wide distribution of attitudes about health care and illegal immigration, with more respondents unsurprisingly favoring raising taxes on the wealthy and opposing an increase in the gas tax.

The dependent variables for this study measure the magnitude of the change in the attitudes of voters between their two responses. This is obtained by taking the absolute value of the difference between the October wave response and the earlier response during the primaries. The resulting variable ranges from 0 to 6, with most values unsurprisingly close to 0. Descriptive statistics for these measures are given in Table 4.1. The means for the four issue attitude change variables are all close to one. The average shift is lowest for the taxation issue, which is most established in the political discourse, and higher for the gas tax and immigration issues, where the dividing lines were less clearly established. The standard deviations of each variable are larger than the means, reflecting the impact of the relatively few large swings in attitudes over the course of the campaign.

A number of independent variables are expected to correlate with the extent (if any) of shifts in a respondent's issue attitudes over the course of the campaign season. The first variable, and most relevant to this study, is the anxiety reported when considering each of the two general election candidates. In its September wave, the survey asks respondents to think about a candidate and then asks, "When you think about [candidate name], how afraid does he make you feel?" While other similar emotional reaction questions are asked, this is the only question that specifically taps the fear/anxiety dimension. This prompt is given for both Democratic nominee Barack Obama and Republican nominee John McCain. Two independent variables are then created, one measuring anxiety towards the candidate of the same party as that which the respondent self-identifies during the October panel wave and a second measure for the candidate in the opposing party.<sup>1</sup> The salient theoretical characteristic here is the belonging to the same party as a candidate, not the specific party of the voter or candidate. Values for a respondent's emotional response towards the candidate range from zero, not afraid at all, to four, extremely afraid. If anxiety does play a role in changing attitudes, we should expect a positive coefficients with more anxiety leading to a greater shift in issue position.

A second set of measures captures the issue distance between the respondent and each of the two candidates on each of the four issues used as dependent variables in the models. I expect that the impact of this distance on subsequent attitude change will change according to the anxiety felt towards the candidate in question. In the case where there is no anxiety felt towards a candidate, I expect there may be a slight tendency for a large distance for an in-party candidate to lead to some attitude change and the same to occur for a short distance for an out-party distance. These shifts, to the extent they occur, would be due to projection/persuasion rather than my theory. Issue distance is calculated as the absolute value of the distance between the respondent's self-placement and candidate placement on an issue during the October wave of the panel. Once again, one variable is created for the case of the in-party candidate and a second for the out-party candidate. These variables range from zero to six, with a value of zero indicating both placements occur at the same point on the scale and six representing diametrically opposed positions.

Another set of variables captures the extent of like or dislike that the respondent feels towards each of the two candidates. Strong like or dislike towards a candidate may serve to motivate a shift in attitudes, particularly in the case where a candidate is strongly associated with an issue. As an example, we might expect that strong feelings towards former President George W. Bush may have led to changes in attitudes regarding national security issues. In order to operationalize this idea, I

<sup>&</sup>lt;sup>1</sup>Such a classification by necessity excludes true independents, for whom both candidates are members of the "other party." As a result, the analyses in this chapter are conducted only on respondents who express at least some partisan affiliation.

once again create two variables - one for the in-party and another for the out-party candidate. The content for the measures comes from the seven-point like-dislike scale asked during the October wave. The variable ranges from -3 to 3, with zero indicating neutral feelings towards the candidate.

The level of political interest held by voters should also be strongly associated with the magnitude of one's change in attitudes over the election season. More interested voters should have more crystallized attitudes due to their previous exposure to political information and thus be relatively unlikely to shift their attitudes in the midst of the deluge of campaign information. Political interest is operationalized in this study via a five-point variable that measures the respondent's interest in politics. Higher values indicate greater levels of political interest, and by proxy, greater attention to the ongoing campaign. Political interest is measured by responses from the recruitment wave that preceded the other political waves used in this study in order to minimize any endogeneity that may exist between anxiety and political interest (Marcus, Neuman, and MacKuen 2000; Brader 2006). Using such an early measure should provide a truer measure of general voter interest in politics both during and outside of elections. It is expected that higher values on this variable should be associated with a lower magnitude of shift in each of the attitudes.

Another measure captures the impact of the location of the respondent's previous attitude on the response scale with regards to the potential for future attitude change. If we consider the case of response whose original response lies at either extreme of the original scale, we can see that these respondents simply have less opportunity to shift their opinion. They can only moderate their opinion, as opposed to those in the middle that can move in either direction. Attitude extremity is measured by the absolute value of the attitude given in the January or February wave, creating a variable ranging from zero to three. Higher levels indicate greater extremity and should be associated with a lower level of attitude change in later responses.

Two final variables capture demographic measures that may be associated with the extent of attitude change on the four issues considered. First, education may serve to develop a more stable cognitive framework and enable respondents to be more consistent in their attitudes than those with lower levels of education attainment. For the purposes of this study, education is conceptualized

as a five-level measure of educational attainment. Second, I include a measure of age to account for any differences in attitude stability that may exist due to age. It may be the case that older voters are more crystallized in theirs opinions, particularly on issues that are long established in the political debate. The included measure of age is given in years based on the respondent's age on election day.

### 4.3 Analysis and Discussion

I utilize four ordinary least squares regressions - one for each of the four issues considered in order to analyze my hypotheses regarding the impact of anxiety on attitude change.<sup>2</sup> Multiple models are employed in order to examine whether specific issues are particularly prone to effects arising from candidate-focused anxiety. The diversity of the issues chosen should provide a good basis for assessing the extent of this relationship. Each of these models contain interaction terms between anxiety reported towards a candidate and the issue distance perceived between the respondent and that candidate. Therefore, there are two interaction terms - one for in-party candidates and another for the opposing party candidate. These terms provide an ability to test the expectation that the impact of issue distance on attitude change should vary depending on the anxiety felt regarding the relevant candidate. The results of the models are shown in Table 4.2.<sup>3</sup>

The consistent scale of the dependent variables allows comparison of the magnitude of the coefficients for each of the predictors. The general story of these results, however, is one of limited findings. Turning first to those measures that deal specifically with the respondent, we see that only three of the sixteen coefficients are statistically significant. None of the four coefficients for education are significant; it appears that educational attainment has no impact on the extent of attitudinal change on these four issues. The coefficients for age show only slightly more robust findings. While each of the four coefficients have negative signs as expected, only one of the

<sup>&</sup>lt;sup>2</sup>Preliminary models using an ordered logistic regression found that the cut points for the categories were unable to be uniquely identified.

<sup>&</sup>lt;sup>3</sup>In the following analysis, respondents are weighted using the wgtc10 variable included in the dataset for cumulative analysis up to wave 10 (DeBell, Krosnick, and Lupia 2010).

coefficients – in the case of immigration reform – attains statistical significance. This result may be due to the fact that immigration reform is a long-term issue that had made a relatively recent return to prominence on the national stage with the 2007 attempts to pass a comprehensive reform package.

Looking next at the coefficients for political interest, we see once more that only one of its four associated coefficients reaches statistically significance. My theoretical expectation was that higher levels of political interest should be associated with lower magnitudes of attitude change. Only in the government involvement in health care model, however, is the coefficient for political interest is negative and significant. For the other three terms, we see no effect. Early election political interest appears to have a weak at best impact on the magnitude of subsequent attitude change on salient issues during a presidential campaign.

Similar results are seen as well in the case of attitude extremity during the first measurement of the respondent's attitude. As stated earlier, we would expect that respondents who express more extreme attitudes would be less likely to shift their attitudes over time due to their limited ability to shift their attitudes on the response scale compared to those with more moderate previous attitudes. Additionally, those with more extreme attitudes would seem to be relatively unlikely to moderate those attitudes in the midst of a partisan, charged presidential campaign. Despite these expectations though, we once again see that the coefficient for this measure is negative and statistically significant only once – in the model of attitudes regarding taxation for those making over \$200,000 a year. Given the fact that this issue is a core concern to the Republican Party and was heavily emphasized by the Barack Obama during the campaign, it is not at all surprising that those with strong opinions prior to the general election did not moderate these opinions in light of the rhetoric that prevailed by each of the parties. It is somewhat surprising that this finding does not extend to the other issues, however. None of the other three issues have received the same level of consistent debate on the national stage as taxation over the past decade, and so it is not surprising to see weaker findings in these cases.

The rest of indicators in the models deal with perceptions of the two major party candidates in some manner. The simplest of these are the measure of the respondent like or dislike with regard to each of the two candidates. In the case of like-dislike assessments of the candidate in one's own party, we would expect that strongly liking the candidate would lead to large shifts in attitude than more moderate appraisals. This aligns with findings of projection/persuasion effects in previous studies. Additionally, the average rating of the in-party candidate in the data used in this analysis is 1.3 among partisans on a -3 to 3 scale. In the alternate case of out-party candidates, I would expect that a strong *dislike* of the candidate in question should lead to larger attitude changes. Once again, this aligns with prior findings and the fact that the mean out-party candidate rating is -0.7 among partisans in this dataset.

The results seen in Table 4.2 show a bit of conformity with these expectations, but only two of the eight related coefficients show statistical significance in the expected direction. In the case of assessments of one's own party's candidate, only the coefficient for the model of attitudes regarding taxes on the wealthy is positive and significant. Similarly, for assessments of the other party's candidates, only the coefficient in the model of attitudes regarding a path to citizenship is positive and significant. A hint as to why only these two coefficients reach significance can be obtained by looking at Figure 4.1. In the case of providing illegal immigrants a path to citizenship, we can see an S-shape to the loess curve tracking the conditional means of October attitudes for those whose initial January response. This shape indicates a tendency to moderate attitudes for those whose figure, it may be the case that much of this movement was among respondents who had positive feelings towards the other party's candidate. On the other hand, the plot for taxes on the wealthy yields few clues. Here the line is relatively straight in shape, providing no clear hints as to reasons for the observed result.

The interpretation of the remaining six coefficients in each model is more difficult, however. These terms compose two interactions that capture the expected varying impact of the perceived distance between the respondent and candidate based on the experienced anxiety when considering that candidate. While these coefficients can be directly interpreted, an examination of their expected effects provides a much richer demonstration of each variable's impact in these models. To achieve this aim, I utilize effect displays once more (Fox 1987, 2003).<sup>4</sup> The resulting displays are shown in Figures 4.2 and 4.3 for the interaction terms regarding the in-party candidate and Figures 4.4 and 4.5 for the interaction terms including the out-party candidate. Each of the displays is computed holding each of the other independent variables at their mean.

Considering first the interaction between anxiety and issue distance towards the candidate of the party with which one associates, we would expect a change in the slope of the line as we move from low anxiety on the left towards high anxiety on the right. For low anxiety levels, we would expect a positive slope, as respondents with no anxiety about their own party's candidate should be more likely, as else being equal, to change their attitudes to bring them in line with that of their party's candidate. Thus we would expect to see larger changes as we move to the right within this subpanel. This relationship should reverse in the case of high anxiety towards the candidate of one's party. Here close issue distances should be related to larger attitude shifts, as respondents seek to distance themselves from a candidate that causes cognitive unease.

The ability to assess these expectations in Figures 4.2 and 4.3 is limited by the unsurprising lack of variability in anxiety felt towards the in-party candidate. Fewer than 100 respondents fall into the right three categories, leaving very little ability to ascertain the shape of the relationship for these higher levels of anxiety. The extremely wide confidence intervals for these panels reflect this situation. For the first two panels, we see much narrower confidence intervals, although none of the relationships shown achieve statistical significance. In all cases, a horizontal line can be drawn through the confidence intervals. These visual findings align with the results in Table 4.2, where each of the interaction terms for the in-party candidates do not obtain statistical significance. The reported coefficients show that the distance to one's own candidate has a significant impact in the case of no reported anxiety for three of four issues. In the case of government involvement in

<sup>&</sup>lt;sup>4</sup>Please see chapter 3 for an extended discussion of the purpose, calculation and advantages of effect displays.

health care and the gas tax, this coefficient is positive, while for taxes on the wealthy, it is negative. This latter coefficient is counterintuitive to expectations, while the other two align.

The case of out-party candidates is more difficult to predict. In general, anxiety towards the candidate of the other party is a more common occurrence, and is not expected to be something that would cause great cognitive discomfort. This is seen most clearly in the fact that the confidence intervals for the panels for higher levels of anxiety in Figures 4.4 and 4.5 are much narrower than those in the previous figure. Given the expectation that anxiety towards the other party should not spark a need for reassessment (Marcus, Neuman, and MacKuen 2000, 117-8), it seems plausible that the shape of the lines may not vary across panels. Indeed, this is what we see in the case of three of the four issues – the interaction term fails to achieve statistical significance.

Most interesting, though, is the case of the raising the gas tax. This is the only interaction of the eight included in the models that is statistically significant. As we move from low anxiety on the left to high anxiety on the right, we see an increasingly steep, negative slope appear. That is, as issue distance increases, the magnitude of a respondent's attitude change decreases for those respondents who report higher anxiety about the candidate of the other party. This finding appears to provide evidence for a clear anxiety-repulsion effect, holding all other measures at their mean. The strength of the relationship is notable; for those who experience strong anxiety about the candidate and have the same issue position, we would expect on average a 3-point shift in their attitude. For a respondent with similar emotions but a 6-point issue distance, we would expect no change at all. Clearly, for this issue at least, out-party candidate anxiety and issue positions appear to be linked.

Why is this case only for this case though? A number of potential explanations regarding the nature of this issue seem plausible. First, the issue of the federal gas tax was a relatively new issue on the national stage during 2008. When gas prices are relatively low, the 18.4 cent federal gas tax is not a large concern, but when gas prices rise to the high levels seen in 2008, every small change matters greatly to the public. Second, the fact that the gas tax was a new issue may have meant that it was subject to far more volatility with regard to attitudes on the issue. Although there

were divisions within the parties on the merits of the gas tax holiday, there was a clear distinction between the candidates on the issue. Third, heavy coverage of the topic made the association of candidates and positions easier than for most new issues. All of these factors served to take a previously low-profile issue and turn into a top issue of debate for a period in the campaign. Given that most consumers would initially seem to support a decrease in the tax, attitude change on the issue was due to change in light of the arguments of candidate Obama and other experts with regard to the impact of the tax holiday. Despite the strong, visible effect seen here though, anxiety does not seem to change the role of perceived attitude change with regard to respondent attitude change.

Given these findings, what might explain the lack of any consistent attitudinal effects for anxiety? A potential alternative explanation lies in the characteristics of those respondents who report experiencing anxiety when considering the candidates. A first cut at this idea is presented in Table 4.3, which reports the results of two linear regressions measuring anxiety responses. The first uses the strongest anxiety response reported between Obama and McCain and the other uses the sum total of the strength of the anxiety responses reported. The independent variables are a simple set of measures associated with political engagement and capacity – political interest, the extremity of the respondent's party identification, the extremity of the respondent's ideology, and educational attainment.

The findings of the first model are generally not surprising. Increases in three of the four independent measures is associated with an increase in the level of the strongest anxiety reported towards one of the two general election candidates. Those with higher levels of political interest or more extreme party identification and ideology are those who tend to report stronger anxiety in response to either John McCain or Barack Obama. The only exception to the trend is education, where respondents with lower educational attainment are more likely to report stronger anxiety. The results of the second model, measuring the total anxiety experienced, are similar but weaker than the preceding model. Political interest remains strongly positively associated with reported anxiety and education retains its negative, significant coefficient, but the coefficients for extremity in party identification and ideology fail to obtain statistical significance.

All of these findings make intuitive sense in terms of the individual characteristics likely to produce either strong anxiety about a candidate or strong cumulative anxiety about the set of candidates. In both cases, high political interest is by far the strongest predictor of reported anxiety. This makes clear sense as those who are most likely to seek out, discuss, and consume political information should have the greatest probability of experiencing anxiety.<sup>5</sup> There are split findings regarding strong partisans and ideologues; each are significantly associated with strong anxiety about at least one candidate, but not associated with total anxiety. This second finding makes sense upon further consideration: strong partisans and ideologues are probably less likely to experience anxiety when considering their own party's candidate, thus lowering their total level of reported anxiety. Lastly, educational attainment is negatively associated with anxiety. Individuals with higher levels of education are often believed to have greater knowledge of political norms, and thus may be more likely to brush off potentially anxiety-inducing information.

In sum, it appears that factors that generally are associated with strongly-held, fixed issue attitudes – high political interest, strong partisanship, and strong ideology – are all associated with the experience of anxiety. These findings place the weak findings of the main study in context. Those citizens who are most likely to have attitudes capable of shifting in the face of candidate-related anxiety appear to be those who are *less* likely to experience such a response. This result prompts some rethinking as to the place of anxiety in political behavior. Anxiety may lead individuals to seek out more information, to more correctly identify the positions of candidates, and to place more weight on their own issue stances in making a vote choice, but it does not appear capable of altering the beliefs of citizens. Even if emotion really does serve to help people to be informed citizens, anxiety at least does not appear able to prompt them to adjust their beliefs in light of discomfiting facts. The beneficial implications of individually-experienced political emotion have limits, and they may lie with regard to individual issue attitudes.

<sup>&</sup>lt;sup>5</sup>An unreported logit model of reporting any anxiety towards a candidate using the same set of independent variables finds that political interest is indeed the strong predictor associated with an increased likelihood of experiencing anxiety.

### 4.4 Conclusion

Despite a great deal of focus on the implications of anxiety for political participation and political behavior, the role of anxiety with regard to public opinion is still a relatively open question. Research has found that the experience of anxiety increases the percentage of correct relative candidate positions on issues, but whether this learning in turn influences attitudes was unknown. This chapter finds weak evidence that anxiety can impact political attitudes through modifying the impact of perceived issue distance on attitude change. This effect, however, only seems to exist only new issues where positions are clearly connected to the candidates and only applies to reactions to the positions of other party's candidate. In no case did anxiety towards the candidate of one's party appear to impact the extent of attitude change on issues. Overall, this chapter shows that anxiety can impact attitude change, but only in limited cases. Anxiety may serve to make better citizens, but only to a small extent with regard to their attitudes.

In chapter three we saw that the distribution of election-related anxiety outside of the general election is associated with environmental, candidate-related, and individual differences, with anxiety occurring most often among the politically interested, along with partisans and ideologues responding to the opposing party. Here in this chapter we have seen that it is very similar individuals who experienced anxiety early in a general election, measured slightly differently as the interested and extreme partisans and ideologues. Yet these individuals are precisely those for whom one would expect to see limited attitude change, as we have seen in the preceding results. One of the normatively best potential effects – attitude change as a result of emotionally-motivation reevaluation – appears to be possible only in limited, special cases. Given these findings, might the other beneficial effects of anxiety be concentrated as well? Recent work (MacKuen et al. 2010) has made a potentially sweeping claim about the role that anxiety can play in a democratic citizenry: that it is of altering the actual means of behavior by citizens across situations, allowing them to variously be partisan or rational as the need arises. Might this dynamic occur more broadly, or is its occurrence similarly concentrated as well? I take up this question next.

APPENDIX

# 4.5 Appendix: Tables and Figures

Variable	Mean	Std. Dev.
Citizenship for Illegal Immigrants	1.256	1.579
Raise Taxes on Those Over \$200K	0.994	1.325
Gov. Payment of Health Care	1.123	1.457
Raise Gas Tax	1.211	1.642

Table 4.1: Descriptive Statistics for Issue Movement Measures

	Taxes	Health		Immigration
	\$200K+	Care	Gas Tax	Reform
Variable	Coefficient	Coefficient	Coefficient	Coefficient
	(Std. Err.)	(Std. Err.)	(Std. Err.)	(Std. Err.)
Dist. to Own Candidate	-0.1046*	0.1365*	0.1317*	0.0401
	(0.0474)	(0.0590)	(0.0613)	(0.0540)
Dist. to Other Candidate	-0.0468	-0.0370	-0.0599	-0.0286
	(0.0376)	(0.0464)	(0.0658)	(0.0562)
Anxiety Own Candidate	0.0366	0.1047	0.1589	0.0555
	(0.1106)	(0.1543)	(0.1556)	(0.1613)
Anxiety Other Candidate	-0.0290	0.1271	0.3594*	0.0986
	(0.0928)	(0.1119)	(0.1042)	(0.0913)
Distance x Anxiety Own	-0.0072	-0.0246	-0.0671	-0.0641
	(0.0440)	(0.0647)	(0.0564)	(0.0473)
Distance x Anxiety Other	-0.0118	-0.0243	-0.1062*	-0.0014
	(0.0203)	(0.0244)	(0.0285)	(0.0248)
Like Own Candidate	0.1475*	-0.0694	0.1229	0.0026
	(0.0561)	(0.0678)	(0.0649)	(0.0660)
Like Other Candidate	-0.0331	-0.0406	-0.0003	0.1468*
	(0.0456)	(0.0540)	(0.0584)	(0.0526)
Previous Att. Extremity	-0.1595*	-0.0416	-0.1017	0.0614
	(0.0512)	(0.0549)	(0.0687)	(0.0595)
Political Interest	-0.0251	-0.1665*	0.0418	-0.0412
	(0.0578)	(0.0670)	(0.0736)	(0.0681)
Education	0.0233	-0.0553	-0.0150	-0.0095
	(0.0537)	(0.0610)	(0.0700)	(0.0618)
Age	-0.0029	-0.0011	-0.0049	-0.0095*
	(0.0034)	(0.0040)	(0.0047)	(0.0040)
Intercept	1.5894*	1.7571*	1.5282*	1.6475*
	(0.2428)	(0.2915)	(0.3408)	(0.2841)
Weighted N	527	525	530	523
$R^2$	0.0614	0.0595	0.1161	0.0343

Table 4.2: Regression of Magnitude of Attitude Shift on Issue

\* indicates statistical significance at the p < .05 level

Variable	Max. Anxiety Coefficient (Robust SE)	Total Anxiety Coefficient (Robust SE)
Sept. Political Interest	0.3210*	0.2900*
	(0.0392)	(0.0480)
Sept. Party ID Extremity	0.1286*	0.0662
	(0.0403)	(0.0494)
June Ideological Extremity	0.0892*	0.0652
	(0.0405)	(0.0496)
Education	-0.0957*	-0.1265*
	(0.0365)	(0.0448)
Intercept	0.9341*	1.5848*
	(0.1409)	(0.1726)
Weighted N	1078	1078

 Table 4.3: Regression of September Anxiety Levels Towards Candidates



Figure 4.1: Distribution of Issue Attitudes Across Waves

(a) Citizenship for Illegal Immigrants

(b) Raise Taxes on Those Over \$200K



Figure 4.2: Effect of Issue Distance for Own Party Candidate on Magnitude of Attitude Shift by Anxiety Towards that Candidate



## Raise Taxes on \$200K+

# **Government Payment of Health Care**



Figure 4.3: Effect of Issue Distance for Own Party Candidate on Magnitude of Attitude Shift by Anxiety Towards that Candidate cont.




Figure 4.4: Effect of Issue Distance for Other Party Candidate on Magnitude of Attitude Shift by Anxiety Towards that Candidate



# Raise Taxes on \$200K+

# **Government Payment of Health Care**



Figure 4.5: Effect of Issue Distance for Other Party Candidate on Magnitude of Attitude Shift by Anxiety Towards that Candidate cont.



**Raise Gas Tax** 

#### Chapter 5

### THE BREADTH AND DEPTH OF ELECTORAL ANXIETY

Scholars of public opinion have long been concerned with the contrast between the deliberative, rational citizen and the partisan, loyal citizen. The first archetype, attentive, dispassionate, and open to weighing all sides of an argument, is viewed as a model for an enlightened public, while the second is often viewed as obstinate, passionate, and a roadblock to the effective functioning of a democracy. The relative passions of these individuals distinguish the first category from the second and reflect a centuries-old tendency to connect passion (or emotion as it is more commonly called today) with unenlightened, suboptimal behavior.

Recently scholars have shaped a new role for emotion, that of a psychological mechanism by which humans engage with and react to the world around them. Of particular relevance to politics is the finding that emotions structure the subsequent actions of those who experience them. Recent work in political science has argued that the differing effects of two emotions – anxiety and anger – may act as a way for individuals to alter their manner of citizenship between the two archetypes discussed above (MacKuen et al. 2010). Anxious citizens are more open to different ideas and more willing to seek them out than angry citizens, who retreat into the comfortable, predictable environs of partisans and previous held attitudes (Huddy et al. 2005; Mackie, Devos, and Smith 2000). This finding has important implications for understanding how citizens navigate the constantly changing political world that confronts them and may serve to explain why political scientists has consistently observed fewer 'rational', deliberative citizens than expected. These arguments rest upon an important caveat though – that all (or at least a significant majority) of citizens are capable of experiencing these emotions and thus regulating their means of political engagement.

This chapter seeks to address this potential concern by evaluating the distribution of the experience of anxiety – the emotion in MacKuen et al. (2010)'s dynamic tied to the positive characteristics of citizenship – within the mass public along with any potential correlates for this distribution. I theorize a number of potential factors may systematically impact the distribution of experienced electoral anxiety in the voting public, including political interest, one's partisanship and ideology, along judgments of the contemporary environment. These expectations are tested in a number of models that cover multiple time points during the election campaign along with different conceptualizations of what aspects of emotional experience are relevant to its impact on voters. I find that personal identities and attitudes, environmental factors, and individual judgments regarding the future all are associated with anxiety appraisals of candidates. I conclude that while the results of this chapter appear positive, the atypical nature of the time period considered undermine somewhat the potentially comforting nature of these findings.

# 5.1 Emotion, Civic Engagement, and Individual Variation

The last two decades has seen the renaissance of study of the role of emotion in political cognition and behavior. Much of the focus regarding the place of emotion in political behavior has focused on the capacity of emotion to benefit, and not harm, those who experience it (see e.g. Marcus 2002). Political thinkers for centuries viewed emotion as antithetical to rational, enlightened behavior, a deflection from 'higher' levels of thinking. In the most pessimistic expression of this perspective, emotion is viewed as a means by which strategic actors (particularly campaigns) deceive less sophisticated participants in politics, distracting them from their 'true' preferences.

As discussed in chapter 2, recent research has changed our understanding of how emotion play a role in the evaluation of stimuli. Affective Intelligence theory has played a key role in advancing this understanding in a manner that resuscitates emotion from its previously maligned state. MacKuen et al. (2010) tie AIT and more specifically the negative emotions of anger and anxiety to the nature of civic behavior individuals undertake. They distinguish these emotions by the nature of the situation which provokes each of the respective emotions. Anxiety, they argue, occurs in conditions of uncertainty whereas aversion occurs when an individual is faced with a familiar threat. When the threat is familiar, past emotional responses exist in procedural memory that are capable of addressing the current situation. On the other hand, in the case of uncertainty, no past responses are available to utilize. As a result, people turn to new information that may be capable of diminishing the uncertainty and developing an adequate response. These differing responses manifest themselves in the behavior that as well. MacKuen et al. (2010) demonstrate that anxious people showed a greater desire to learn more, more balance in their information search, and a greater willingness to compromise than those who experience aversion.

These findings point to the ability of citizens to change their behavior pattern depending on the circumstances. Citizens are not bound to forever be an obstinate partisan or an open-minded deliberator; rather, it appears to be possible that they can switch back and forth between these two types of behavior depending on the nature of the environment confronted. This has important implications for understanding how citizens navigate the constantly changing political world that confronts them and may serve to explain why political scientists has consistently observed fewer 'rational' citizens than expected. In most cases, the political environment is fought along largely constant lines with familiar arguments employed by both parties. The U.S. political battlefield is fought on lines largely unchanged since the 1930s. Thus habit may be the logical and default reaction of most citizens to politics.

In addition, the choice of engagement method may also be dependent on the intensity of prior attitudes. In line with findings regarding motivated reasoning (Kunda 1990; Taber and Lodge 2006), MacKuen et al. (2010) also find that those with more extreme views are more likely to experience aversion and thus behave in a partisan manner. Overall, these results show emotional appraisals acting as a sort of cue to those experience them regarding the nature of the surrounding environment that enables the variation of in the method of citizenship undertaken by citizens.

The line of argument advanced by MacKuen et al. (2010) however is not quite the same as the traditional view of emotion as a low information heuristic used by those individuals who are either unwilling to or incapable of thinking deeply about politics (e.g. Abelson et al. 1982; Caplan 2007). In this case, emotion acts as a crutch that substitutes for hard information that might be used to instead to make voting decisions or attitudes about issues or candidates. Regardless of their implications, both of these viewpoints place emotion in the role of an enabler of citizens, whether

merely to function at all in the political world in the latter case or to function more efficiently and effectively in the former. Each also makes an important, largely implicit assumption that citizens are both capable of and do make the appraisals necessary to experience these emotions and thus utilize them to engage with the political world around them. In particular, experimental studies such as (Brader 2006; MacKuen et al. 2010) intentionally expose their subjects to emotioninducing stimuli by necessity. If not all citizens can make the required connections, their potential benefits to the populace at large may be significantly weakened.

It turns out that this assumption does not hold equally throughout the mass public. While the neurological systems underlying emotion may be universal, other important cognitive features relevant to the application of these systems to the political world are not consistent across individuals. AIT posits that subconscious appraisals of incoming sensory information compares the features of this information against stored memories. We would not expect the extent of these stored memories to be consistent across individuals with regard to political matters, and indeed they are not. Individuals with greater experience with, grasp of, or exposure to political information and discourse should be more make appraisals of the information they face and thus translate this stimuli into an affective response (Miller 2011). The three conditions above all are associated with more politically sophisticated citizens, a group that has been associated with the greater experience of emotions including anxiety. (Brader 2006; Miller 2011). Applied to the discussion above regarding the potential role of emotions as a heuristic for lower-information citizens, these findings appear to indicate that this potential role for emotion is unlikely to manifest itself in that segment of the public. This aligns with previous findings that other political heuristics are best used by those who are politically sophisticated (Lau and Redlawsk 2006).

It is not simply the fact that sophisticates are more likely to experience emotions such as anxiety that makes these findings so potentially unsettling. Rather, it is the findings that emotion also has greater impacts on the behavior of high sophisticates that points out the implications of the connection between sophistication and emotion. Brader (2006) shows that fear appeals in campaign advertisements have greater influences on the voting and participation of sophisticated respondents. Miller (2011) confirms this finding, demonstrating that the experience of a emotion has greater effect on the vote choice and issue attitudes of sophisticates than novices. In light of these results, it stands to reason that other characteristics, individual or otherwise, may also systematically impact the appraisal process as well. I turn to this topic next after an initial consideration of how broadly anxiety is experienced in the mass public.

## 5.2 Factors Underlying the Breadth and Depth of Electoral Anxiety

A first attempt to understand whether a particular subset of the population is particularly prone to anxiety responses towards presidential candidates is shown in Figure 5.1. In this histogram we can see the proportion of respondents who report being at least slightly anxious towards the eight presidential candidates presented in the February 2008 wave of the 2008-9 ANES Panel Study. It is clear that there is non-trivial variation in the number of candidates that elicit anxiety out of potential voters. While more respondents report lower numbers of anxious respondents, significant percentages of individuals report anxiety towards all or almost all of the candidates. 3.8% of respondents reported at least some anxiety towards all eight of the candidates, and 16.6% towards six or more of the candidates.

Although these may seem like relatively small proportions of the overall populace, they account for rather large slices of the total amount of reported feelings of anxiety given. The 3.8% of respondents contained in the farthest category to the right account for over 10% of the total anxiety reports. Even more notable is the one-sixth of respondents in the three highest categories account for nearly 40% of the reports of anxiety. Over half of the reports fall in the four highest categories, which contain just over a quarter of respondents. Thus it appears that the experience of anxiety is concentrated in a relatively small set of potential voters in the study.

This fact is not, in itself, particularly troublesome. If the individuals who experience these reactions are randomly distributed throughout the population, then the positive benefits of anxiety with regard to behavior do not accrue solely to any one group. If these individuals are associated with some substantively interesting characteristic of citizens, however, then the impact of experiencing anxiety acts disproportionately within the populace. From the perspective of MacKuen et al. (2010), this has the practical implication of meaning that some subset of the mass public is able to more effectively orient their civic engagement to their surroundings. Additionally, their findings demonstrate that the extent, or depth, of the experienced anxiety also plays an important role in the magnitude of the willingness to compromise. Thus while the previous figure demonstrates the presence of at least mild amounts of anxiety for large swaths of the public, it may not be the case that this emotion has a significant substantive effect. It seems plausible that widely experienced mild anxiety is qualitatively different in nature than strong anxiety felt about a few limited political objects.

Understanding the sources of these differences is an important exercise given this variation in the experience of anxiety and the potential implications of its experience. The most obvious class of factors that one might expect to contribute to imbalances in the development of emotional appraisals are individual predispositions. Clearly individual factors shape the affective appraisal process - individuals are not a blank canvas upon which the world around them acts. They carry their own perspectives, viewpoints, and attitudes. Of these, the most relevant are an individual's partisanship, ideology, and issue attitudes. Partisanship is an individual's most important political identity and reflects their alignment (or lack thereof) with the parties that form the basis of the political system. Individuals will react quite differently to a member of their own party than one who belongs to the opposition.

Similarly, ideology should also lead to systematic differences in how individuals address the political world and process information about it. Ideology is typically viewed as an individual's perspective as to the ideal society and the means to achieve it (Hinich and Munger 1994). Liberals and conservatives differ greatly in their views of what constitutes a desirable world, and these differences often lead to emotion. As a result, as with party identification, individuals should be more likely to experience anxiety when considering political objects that are not representative of or associated with their ideology. Thirdly, issue attitudes should also operate similarly to ideology. In this case, however, one's absolute attitudes is not the relevant concern - rather one's issue distance

from the object in question is the key measure. Where one's own attitudes and incoming information do not align, anxiety would be expected (Redlawsk, Civettini, and Lau 2007). In sum, all three of these concepts reflect how individuals connect with aspects of the political environment.

Personal characteristics may also differentiate individuals and the probability they experience anxious responses to political stimuli. Political interest and knowledge both reflect an individual's engagement with and comprehension of the political world around them, and thus are highly likely to influence the extent of experienced anxiety. First, political interest increases the exposure to information that might prompt anxiety in response to a candidate, issue, or institution. It is quite likely that a political junkie has more cause to be anxious towards some object than a political neophyte who rarely engages with politics. Second, political knowledge allows a citizen to make sense of the political world around them. One can conceive of a citizen who hungrily absorbs all manner of political information but is unable to make sense of what they absorb. Both of these concepts are included in the scaled measure of political sophistication that has been found to be associated with the probability of experiencing anxiety towards a political candidate (Brader 2006; Miller 2011). Additionally, age may be associated with differences in emotional experience. Political candidates, circumstances, and arguments may be more novel for younger individuals than older respondents, making younger people more likely to report anxiety about a political object.

The broader contemporary context at the time of emotional appraisal should also play a role in the development of anxiety. The emotional context of an appraisal can color any ensuing appraisals (Lerner and Keltner 2000), so it stands to reason that other systematic sources of emotion could impact the amount of anxiety reported by respondents. Perception of two aspects of society seem particularly likely to produce these types of effects - judgments regarding the performance of the economy and the prospects for one's own future and that of the nation.

Marcus, Neuman, and MacKuen (2000) and MacKuen et al. (2007) show that judgments regarding economic performance can impact the probability of experiencing anxiety when considering an incumbent president. Emotions about the economy's performance and one's own personal economic state can also impact evaluations of relevant political figures and institutions (Conover and Feldman 1986). Negativity regarding the economy can have different effects depending on which party the object under consideration belongs. A poor economy would be expected to increase anxiety about the party in power, but may reduce anxiety about the party out of power.

Lastly, perceptions regarding the future may also impact the emotional appraisals of individuals. First, optimism and pessimism regarding the nation's future should systemically impact emotional appraisals of political figures.<sup>1</sup> While sometimes related to the performance of the economy, perceptions regarding the future of the country encompass many other factors including the potential existence of wars or other threats, the performance of government, and any other societal pessimism or optimism that may exist. Pessimism on the part of the respondent should systemically increase the amount of anxiety experienced, while optimism should decrease the quantity of anxiety. Pessimism or optimism regarding one's own future may also produce a similar dynamic. The effect of these perceptions is a truer test of the role of seemingly 'irrelevant' emotions, or at least those that do not clearly connect to the topic or person in question. Whether political, personal, or environmental, all of these factors could conceivably lead to an uneven distribution of emotional experience, a proposition I test below.

# 5.3 Data and Model

In order to judge the breadth and depth of anxiety towards presidential candidates, I examine the factors underlying variation in reported anxiety at two time points during a presidential campaign, once during the primary season and also in the general election. This combination of multiple time points and two different perspectives on the experience of anxiety leads to four different dependent variables that I will consider in the pages to come.

The 2008 American National Election Study's (ANES) Panel Study once again provides a useful means to test these hypotheses. The chief benefit of this survey is its repeated inclusion

<sup>&</sup>lt;sup>1</sup>This dynamic is not dissimilar to the media's much-loved right track-wrong track measure used to gauge the mood of the public.

of emotional self-report questions throughout the study. This chapter will use emotion measures from the February 2008 and November 2008 waves to capture anxiety in the midst of the primary season and at the end of the general election campaign.<sup>2</sup> For each of the eight candidates in question, respondents are given five response options - not afraid at all, slightly afraid, moderately afraid, very afraid, or extremely afraid.

The first dependent variable for the February models is a count of the number of candidates in a given party about which a respondents reports at least some anxiety. This count is split into two parties due to previous findings that responses to candidates are heavily shaped by the partisan alignment (or lack thereof) between the respondent and candidate (Marcus, Neuman, and MacKuen 2000; Miller 2011). The Democratic candidates included are Barack Obama, Hillary Rodham Clinton, and John Edwards, while the Republican slate contains John McCain, Mitt Romney, Mike Huckabee, Rudy Giuliani, and Fred Thompson. The resulting variable is the sum of the number of candidates about which the individual reported at least slight anxiety. This variable ranges from zero to three for the Democratic candidates, and zero to five for the Republican candidates. This imbalance in range is problematic, but is addressed using a modeling technique called an exposure variable that is discussed below. In this analysis, each respondent is the basis for two observations, one containing their reported anxiety towards candidates from each of the parties.

The second dependent variable is a measure of the depth of the total anxiety reported towards each party's slate of candidates. This measure takes into account the fact the experience of "some anxiety" towards a candidate is qualitatively different than "extreme anxiety". The five response options are given values running from zero to four, with higher values indicating greater levels of anxiety, and the self-reported responses to the candidates in each party are then summed. The resulting variable has a theoretical maximum of twelve for the Democratic-targeted observations and twenty for the Republican set. The mean summed anxiety for the Democratic candidates is 2.82

<sup>&</sup>lt;sup>2</sup>Emotion measures are also asked for the candidates during the September 2008 wave, but using the later wave instead allows the inclusion of the optimism-pessimism and issue distance measures discussed below. Self-reported anxiety towards Obama is also measured after the election into 2009, which would provide an even stronger test of whether the determinants of anxiety vary throughout the political cycle, but these reports are not utilized here.

and 3.06 for the Republican candidates. A dummy variable flagging the Democratic candidates is included in the models to represent any systematic, unmeasured differences between the slates of candidates.

The dependent variables for the November models are much clearer. The count measure is simply a binary measure that indicates whether a respondent experience at least slight anxiety toward John McCain or Barack Obama as distinct candidates. Once again each respondent has two observations, one for each candidate. 42.4% of respondents report at least some anxiety about Republican nominee John McCain and 51.1% of respondents report the same about the Democrat Barack Obama. The extent measure is simply the uncollapsed version of the self-report measure with values running from zero to four, with higher values indicating greater levels of anxiety. The mean value for responses to Obama is 1.08, just above the level of slightly afraid, and 0.80 for McCain.

As discussed previously, the dependent variables for the February wave contains a different number of candidates for each party. Simply combining the numbers of reported reactions to each of these two sets would wrongly lead to the impression that a larger number of responses towards Republicans indicates a greater response to this slate, but it may instead be a result of the larger number of stimuli towards which one can respond. A way to adjust for the differing numbers of candidates in each of the two sets of stimuli is through the use of an exposure variable.<sup>3</sup> An exposure variable to quantify the exposure each observation has with regard to the phenomena of interest, allowing the dependent variable to act as an event rate instead of as a strict count. The natural logarithm of the exposure variable is included as an additional term on the right-hand side of the regression equation with a coefficient constrained to be one (Greene 2007). The resulting equation for a Poisson model, for example, then becomes

$$\mathbf{E}(y_i|\mathbf{x_i}, T_i) = \lambda_i = e^{\mathbf{x_i}\boldsymbol{\beta} + \ln T_i}$$
(5.1)

<sup>&</sup>lt;sup>3</sup>Exposure variables are also commonly known as offset variables in the literature (Greene 2007).

where  $T_i$  is the exposure variable in the model. Using algebra and logarithm rules we can rearrange Equation 5.1 to

$$\frac{\mathrm{E}(y_i|\mathbf{x_i}, T_i)}{T_i} = e^{\mathbf{x_i}\boldsymbol{\beta}}$$
(5.2)

thus demonstrating the transformation of the dependent variable to a measure of the rate of the quantity of interest over the extent of the exposure.

A number of independent variables are expected to be related to these measures of individual anxiety. Most of these measures will appear in each set of models, although there are a few exceptions where adequate data is not available for one of the time periods. The first class of measures reflect an individual's political affiliations and beliefs. The standard ANES party identification and ideology 7-point branching measures are coded to represent party and ideological similarity.<sup>4</sup> The resulting partisanship measure ranges from -3, a strong in-party affiliation to 3, a strong outparty affiliation and is measured in the January 2008 and November 2008 panel waves. Similarly, ideology ranges from -3, an extreme ideologue matching the candidate(s) in question, to 3, an extreme ideologue of the opposing ideology to the candidate(s) and is obtained from the February and November waves.

Issue attitudes may also impact an individual's emotional appraisals of attitude objects. Issue attitudes are measured using the issue distance from the candidate in question. This is possible only for the November models, when there is only one candidate per party being considered. Issue distance is measured as the average squared distance between the respondent's attitudes and the mean candidate placement on the same issues (Alvarez 1997). Perceptions of candidate issue positions are obtained from the September wave, while individual issue attitudes come from October.

An individual's political sophistication is also an important influence on the experience of emotion. I attempted to construct a similar measure of sophistication to Miller (2011) using measures of political knowledge, interest in political information, one's general interest in politics, and the

<sup>&</sup>lt;sup>4</sup>Miller (2011) uses a similar methodology in his examination of whether sophistication relates to the experience of emotion.

number of days in a week an individual discusses politics. A principal components analysis of these indicators failed to load clearly on a single factor, however. Removing the political knowledge measure, which did correlate strongly with the other interest measures, produced a resulting first dimension factor that captured almost as much variation as the four-measure version. The resulting component measure of only interest and the solo knowledge measure correlate moderately at 0.36 in February and 0.31 in November. The first dimension factor score was standardized and flipped so that higher values reflect greater interest.

Environmental factors also are a part of the emotional appraisal process. Evaluations regarding the economy's performance in the last year are available in the January and November waves of the survey. Evaluations range from -2 to 2, with -2 indicating an evaluation that the economy is much worse, 0 about the same, and 2 much better than a year before. A second systematic factor that may impact appraisals is optimism or pessimism regarding the future. I include two self-assessments regarding the future – one regarding the nation's future and another regarding one's own future. Unfortunately, these measures are only available for the November models. Each of these measures range from -3 representing extreme pessimism to 3 representing extreme optimism, with 0 representing a neutral midpoint.

Lastly, the model includes a number of demographic controls in order to account for any additional heterogeneity that may exist with regards to emotional appraisals of candidates. As a result, measures of age, gender, race, education, and income are included to account these potential possibilities. Age is given in years with Election Day 2008 as the reference point. The measure of education using a five-level education attainment question ranging from no high school diploma up to a graduate degree. Income is based on a nineteen-category measure, gender receives a one for females and a zero for males, and race is a dummy variable that flags whether a respondent is African-American or not. Of these variables, age may be associated with lower anxiety as one becomes exposed to more politics, and education may increase anxiety as a result of being better able to process political discourse. I am agnostic as to consistent expectations with regards to other three variables.

# 5.4 Analysis and Discussion

In order to examine what factors may explain the uneven experience of electoral anxiety, I model two different dependent variables – the count of the number of candidates within each party with at least some anxiety reported and the summed extent of anxiety towards the groups of candidates belonging to each party – at two points, February and November. This combination of time points and perspectives on anxiety should provide a variety of perspectives on the emotional experiences of individuals during a presidential campaign. I expect that anxiety should broadly be more concentrated in the early phases of the election than in the general election when almost all citizens are actively engaged with the ongoing campaigns.

The first model examines the factors underlying the number of candidates in the primary fields of each party towards which respondents report at least some anxiety. Figure 5.2 shows the high proportion of zero reports in the data regarding anxiety towards candidates in February. The mean and standard deviation of the number of candidates with reported anxiety are nearly equal at 1.46 and 1.50 respectively. Therefore, the results of a zero-inflated Poisson model are shown in Table 5.1.<sup>5</sup> The first part of the model is a standard Poisson count model with coefficients that are comparable to that of a standard Poisson model. Positive coefficients are associated with larger reported counts, where the exponent of the coefficients gives the factor increase in the expected number of reported cases of anxiety towards a party's candidates associated with a one-unit increased in the associated variable. The bottom panel of the results is the zero-inflation portion of the model that separately models the probability of having a zero count, which is here defined as the Y = 1 outcome (Long 1997). I include my three key predictors of emotional experience – political interest, party identification and ideology – here to model the zero-count process.

<sup>&</sup>lt;sup>5</sup>A Vuong test (Vuong 1989) of a standard Poisson and this zero-inflated Poisson model find that the zero-inflated Poisson model fits the data better than the basic Poisson model (z = -8.29,  $p = 5.35 \times 10^{-17}$ ). This model does not presently contain robust standard errors in order to account for any heterogeneity in the errors due to the data structure and the existence of nonindependent observations in the dataset.

The model finds positive and significant effects for the two chief political affiliations – party identification and ideology. This indicates that the expected number of cases of expressed anxiety increases as a respondent moves away from the party whose candidates are in question. For each one unit shift in party affiliation away from the party in question, the model predicts a 6.65% increase in the number of candidates about which anxiety is expressed, all else being equal. Similarly, a one-unit shift in ideology away from that of the party in question is associated on average with a 7.04% increase in the count of reported anxiety. Given that each of these variables have seven-point ranges, we can see that shifting across the range of this variable can have a great impact on the number of candidates within a party about which anxiety is expressed. This is unsurprising given the strong cognitive biases and predilections associated with holding a particular partisan affiliation or ideology.

Interpreting the terms associated with the interaction been retrospective economic evaluations and the party in question requires a bit more care. First off, the stand-alone term for the Democratic candidate dummy variable indicates that for respondents who feel the economy is about the same as a year ago, the average difference in count between judging Republican and Democratic candidates is positive and significant. That is, Democratic candidates were more likely to elicit broader anxiety than their Republican counterparts. This coefficient translates into a 22.5% difference in the number of candidates with associated anxiety between the Republicans and Democrats for this group of theoretical respondents. Looking at the other stand-alone term, we see that retrospective economic evaluation has a significant impact when judging Republican candidates and the effect of this measure is significantly different as one moves to judging Democrats. Here the effect of retrospective economic evaluations is (-0.0642 + 0.1640) = 0.0998 for Democrats and -0.0642 for Republicans. We see here a distinct dual effect of economic evaluations contingent on the party in question.

Looking at the rest of the model, one finding of particular note regards the impacts of political knowledge and political interest. As discussed earlier, previous findings using a factor score derived from a principal components analysis of interest and knowledge measures have shown that

this factor is positively and significantly associated with the probability of experiencing at least some anxiety when considering a presidential candidate (Miller 2011). In this analysis, however, these measures do not load cleanly onto one factor and alternatively appear to be best captured as one factor reflecting the three political interest measures and a separate measure of political knowledge. When these two terms are included in the model of the count of reported anxiety responses, we find that both of these terms fail to attain statistical significance. This is particularly notable in the case of political interest, a topic that will be addressed in greater length below.

Lastly, amongst the demographic controls one measure is significant - the dummy variable marking African American respondents. The coefficient associated with the race of respondent is negative and statistically significant, indicating that African American respondents express significantly lower levels of anxiety towards a party's set of candidates. African American respondents report anxiety towards 28.5% fewer candidates in a party on average than non-white respondents, all else being equal. This finding aligns with the work of Miller (2011), who looks instead at the difference in anxiety between white and non-white respondents.

The second, or zero-inflation, portion of the model is designed to predict cases of respondents reporting no anxiety towards any candidates in one party's slate of prompted contestants. Each of the terms has a negative sign, indicating a decrease in the probability of observing a zero count as their values increase. This aligns with positive coefficients in the count model in the case of variables like party identification and ideology – variables that increase the overall count of reported anxiety should unsurprisingly also reduce the probability of reporting no anxiety at all. It should be noted though that the coefficient for party identification is not significant however; only ideology has a significant effect. As the ideology of a respondent moves away from that of the party in question, they are less likely to say they experience no anxiety when considering the candidates of that party.

The particularly interesting coefficient in this model is that of political interest. While not significant in the count portion of the model, here its effect is negative, statistically significant, and largest effect of the three variables in this portion of the model. Greater levels of political

interest are strongly associated with lower probabilities of reporting no anxiety towards a party's set of candidates, but appear to have no impact on the actual count of reported anxiety beyond this. In effect, political interest is a *precondition* to experiencing any anxiety, but does not impact the extent of the anxiety once it is capable of occurring. Miller (2011) claims that his significant factor represents political sophistication, but this finding and the insignificance for both terms in the count model calls into question as to whether his factor captures this attribute and not political interest. It may be the case that the role of political sophistication vs. political interest differs between early in a campaign and its later stages.

The previous model collapses the 4 different potential degrees of anxiety into one lump set of "at least some anxiety", but this may remove valuable variation in the data. A different way to consider reported anxiety is through a straight sum of values representing the various intensities of anxiety reported, running from zero for no anxiety to four for extremely anxious. Figure 5.3 gives the distribution of respondents in this measure. Over thirty percent of respondents express no anxiety at all towards a party's slate of candidates and the vast majority of the density of the distribution is in values of five or less on this measure. There are respondents who fall into each of the potential values, but no more than five percent of respondents belong to any value over four.

This new measure is used as a dependent variable in the model contained in Table 5.2, which presents the results of an ordinary least squares regression utilizing the summed anxiety scores. Once again, the coefficients for party identification and ideology are positive and significant, but here they are stand-alone terms that are part of interactions with political interest. In line with my theory, I argue that political interest should increase the effect of these predispositions by heightening the amount of information with which they could be cognitively associated. Thus a one-unit shift away from the party in question for a respondent of mean political interest is associated on average with a 0.33 unit increase in the sum of reported anxiety and similarly a 0.39 unit increase for the analogous case of ideology. The overall partial effect of party identification on the summed report of anxiety is

$$\frac{\partial}{\partial PartyID} = 0.3261 + 0.0704 \text{ x Interest}_i.$$
(5.3)

As we can see, the effect of party identification on reported anxiety increases as political interest increases, but is always positive regardless of the level of interest. Each one-unit increase in political interest above the mean increases the impact of party identification, indicating that it increases in salience for those with high levels of political interest. Similarly, the overall partial effect of ideology is

$$\frac{\partial}{\partial I deology} = 0.3935 + 0.0893 \text{ x Interest}_i, \tag{5.4}$$

showing a similar pattern as party identification. Once again, the impact of ideology is positive regardless of interest level, but ideology is of greater salience for those with higher attention levels.

Lastly, the effect of political interest depends on the values of both party identification and ideology. The partial effect here can be expressed as

$$\frac{\partial}{\partial Interest} = 0.4593 + 0.0704 \text{ x } PartyID_i + 0.0893 \text{ x } Ideology_i.$$
(5.5)

As Table 5.2 shows, both of the coefficients for the interaction terms here are statistically significant, and so the effect of political interest on the extent of reported anxiety depends on both an individual's party identification and ideology. Moving from the zero point for both party identification and ideology (a pure independent and moderate) to the out-party extreme (values of three for each variable) effectively doubles the partial coefficient for political interest. Similarly, shifting from the center point to an extreme in-party identification effectively zeroes out the effect of interest. We will return to this finding later.

These results can be compared to similar models of the extent and depth of anxiety at the end of election campaign in November 2008. As discussed earlier, anxiety is deeper and more widespread towards Barack Obama and John McCain at the end of the long campaign season. In addition to the variables included in the previous models, these models are include three new variables that tap the issue distance between the respondent and the candidate in question along with optimism or pessimism regarding the nation's and their personal futures. The results of the logit breadth model and ordered logit extent model are in Table 5.3.

Looking first at the model of whether at least some anxiety is experienced, most of the results align with expectation. Once more both party identification and ideology has positive and significant effects. Moving away from one's own party or ideology increases the probability of experiencing at least some anxiety towards a candidate. As expected political interest fails to attain statistical significance in the more engaged environment of the general election, but interestingly political knowledge has a negative and significant effect on the probability of experiencing anxiety. As else equal, it appears that respondents who score higher on the political knowledge scale are less likely to report experiencing anxiety when considering the general election candidates than those who fared worse on the knowledge questions.

Three demographic variables also show consistent, negative effects on the probability of anxiety. First, as in the previous models, African American respondents are significantly less likely to report at some anxiety towards a candidate. This finding is not surprising though as one of the two candidates, Barack Obama, was the first African American major party nominee for president. Unlike previous models, age also has a statistically significant effect; older respondents are less likely to report some level of anxiety when considering the two major candidates for the presidency. Additionally female respondents are also significantly less likely to report anxiety than males. Interestingly, each of the variables related to the interaction between economic evaluations and the candidate in question are insignificant in the model. When considered in light of the environment at the time of this panel wave, though, the results are unsurprising. Almost all respondents viewed the recent performance economy poorly by November 2008, leading to very little variation in the measure, both overall and between members of the parties.

Lastly, the three new variables in the November models provide two interesting insights into the potential origins of candidate-focused anxiety. The coefficient for issue distance shows a strong, positive effect on the probability of experiencing anxiety towards a candidate. As the distance between the respondent's issue positions and that of the candidate in question increase, so also does the probability of experiencing anxiety towards that candidate. This evidence, combined with the consistent effects for party identification and ideology, shows that both symbolic affiliations and individual attitudes are associated with the experience of anxiety. The other set of variables concerning optimism or pessimism towards the nation's and one's own future also present an inter-

esting dichotomy of findings. The measure of optimism towards the nation's future has a negative, significant effect on the probability of anxiety, while the companion measure regarding one's own future has no impact. As one might predict, individuals who are optimistic about the nation's future are less likely to report at least some anxiety towards the candidate under consideration. This, however, is not the case for optimism (or the lack thereof) regarding one's own future. I will return to this interesting finding later.

The ordered logit model of the extent of anxiety towards the general election candidates show broadly similar results. Party identification and ideology are all once again positively and significantly associated with the depth of anxiety felt towards a party's candidate(s). As in the case of having at least some anxiety, issue distance also has a significant effect in the depth model as well. Political interest and not political knowledge is significant in the depth model, as was also the case in the one part of the February model.<sup>6</sup> Age and not being an African American are also both associated with greater levels of reported anxiety as they were in the extent model, and gender is no longer significant. Once more, economic evaluations did not seem to either increase or decrease the depth of anxiety felt overall or towards any one candidate during the general election. Lastly, relative optimism or pessimism regarding the nation's future is also associated with the depth of anxiety felt object of broader societal perspectives in the experience of anxiety towards political figures.

These results present several interesting insights that cannot be ascertained from the model during the earlier phase of the campaign process. First, the issue distance between an individual and the political object under consideration plays an important role in predicting whether and how much anxiety will experience when faced with that candidate. The previous February results show only that party identification and ideology were key factors behind the breadth and depth

<sup>&</sup>lt;sup>6</sup>In an additional unreported model, political interest has a significant impact on the effect of ideology, but not party identification nor issue distance, in line with the results from the analogous February model. This illustrates once more that ideology has a greater impact for respondents with higher levels of political interest.

of reported anxiety due to a lack of candidate issue placements. These new models confirm the impact of both political identities and issue preferences on emotional appraisals.

The November models also show changes in the place of political knowledge and interest in the emotional appraisal process. Political interest held a strong place in the process during the primary election phase in February, while political knowledge was not significant in either of the models considered. During the later general election, political interest fades in importance, significant with regard to the depth of anxiety reported, but not whether anxiety occurs or not. This result is not surprising upon consideration – the volume of political discourse increases greatly during the general election, as the candidates, parties, and outside interest groups pour hundreds of millions of dollars into advertising and other outreach activities. The amount of news coverage of the election increases to some extent during the general election as well. This aligns with the general 'tuning in' of large swaths of the public to the election in the fall. Political knowledge are less likely to report at least some anxiety about the two candidates. This may reflect the fact that the politically knowledgable are better able to comprehend political messages and ascertain the objects of blame or concern. This ability differentiates whether an individual experiences anger as opposed to anxiety in response to a stimuli.

The most interesting findings from the November results may involve the differing impacts of the two optimism-pessimism measures. In all four models, optimism about the nation's future is associated with lower counts and levels of reported anxiety, while a similar measure concerning one's own future is not significant in any of the models. These contrast between perceptions about the nation's future versus one's own future may reflect the relative roles of sociotropic and personal considerations in emotional appraisals regarding politics. As has long been observed, the majority of Americans separate their personal everyday life from the broader societal and political world around them. One's personal circumstances do not seem to color the general emotional appraisal process in this self-reported anxiety at least.

A few hypothetical examples of potential individuals can help provide a feel for the magnitude of the effects found in these models. The February 2008 models demonstrate these effects best as they include a larger number of candidate stimuli, thus providing a greater range in the dependent variable of reported anxiety. In each of the following examples, each of the other independent variables in the model are held at their mean, unless specified otherwise. Figure 5.4 shows the effect of he alignment of party identification and ideology between respondent and candidate, along with political interest in the Poisson model from Table 5.1. using three hypothetical respondents who vary in terms of their party identification and ideology. The black center line is that of the mean respondent, which in this case is a pure independent and moderate ideologically.<sup>7</sup> The two gray lines that flank the center line represent two extreme hypotheticals on either side of this moderate individual. The first, at the bottom, is an individual who is an extreme partisan and ideologue of the same party as the candidates under consideration. The second individual is one who has the exact opposite partisanship and ideology as the given set of candidates.

First, for the extreme partisan and ideologue considering one's own party, the average expectation of the count of anxiety reports is quite low, but still significantly higher than zero and hovers just short of one.<sup>8</sup> Second, for the moderate and independent respondent, we see a slightly higher count ranging from around one for a completely uninterested individual up to around 1.5 for a very interested one. We can also see that political interest has a noticeable, but limited in magnitude, effect on the anxiety count in these cases. Lastly, for the respondent considering the opposing party's candidates, we see a significantly higher expected count than for each the moderate or same party cases, and as interest increases, the expected count gains almost a full extra candidate. Remembering that the two parties had three and five candidates, these predictions show that the expected

<sup>&</sup>lt;sup>7</sup>Remember that the models include two observations for each respondent, one for each of the two parties. Given that party identification and ideology ranged from same party as the candidate in question to opposite party, the variation cancels out, leaving means of zero.

<sup>&</sup>lt;sup>8</sup>It seems plausible that the relationship between partisanship or ideology as measured in this manner with the experience of anxiety may not be strictly linear at the ends of the distribution. That is, extreme ideologues or partisans may be more likely to report anxiety about their own party's candidates than those 'in the middle' of the party.

counts for the extreme opposing partisans reflect anxiety towards well over half of the candidates in question.

Figure 5.5 shows the analogous figure for the OLS extent model in Table 5.2. The look of this figure differs from that of the count model due to the significant interaction term between ideology and political interest. Once more the predicted values for the same condition are at the bottom, around one on the predicted extent scale. Political interest appears to have no effect on this value over its range for a hypothetical respondent with this set of party identification and ideology values. Moving next to the mean, moderate hypothetical respondent, we can see that political interest begins to demonstrate its expected, positive effects, with predicted values of summed anxiety ranging generally between two and four. Lastly, the polar opposite case demonstrates very strong interest effects. The expected amount of summed anxiety for a party's slate of candidates increases three-fold as political interest ranges from its minimum to maximum. Only in this admittedly simplified example do we see any predicted values that rise above a value of five and into the long tail seen earlier in the distribution of the observed anxiety variable. These examples clearly demonstrate the strong impacts of both party identification and ideology along with the conditional effects of political interest on the depth of experienced anxiety.

The strong relationship between the expression of anxiety and strong partisanship and ideology would seem to be desirable given the arguments of Marcus, Neuman, and MacKuen (2000) about anxiety's effects. While it is true that they demonstrate that anxiety can mitigate the influence of partisanship on vote choice, as discussed in chapter 2, this relationship exists only though in the case of anxiety about candidates of one's *own* party. As we have seen throughout this dissertation though, most anxiety occurs when considering candidates of the opposing party. Hence much of the anxiety examined here does not have the potential to reduce the strength of partisanship on decision making, but rather to increase information seeking and the other effects discussed earlier. As a result, the connection between strong partisans and ideologues and anxiety does not seem to provide room for optimism about the distribution of the experience anxiety observed in this

analysis. Anxiety appears to be a mechanism by which those who already have strong opinions maintain their interest in politics and reinforce their previously held beliefs.

# 5.5 Conclusion

Recent scholarship (MacKuen et al. 2010) has argued that the two categories of negative emotions - anxiety and anger - serve to regulate the type of citizenship individuals utilize in the face of disconcerting stimuli. This finding, which would serve to connect the arguments and findings of Affective Intelligence theory with the long-running set of findings regarding citizen capacity and engagement with politics, is only useful however to the extent that the experience of these emotions are widespread (or capable of being widespread) within the mass public. Taking the 2008 presidential election as an example of a time period that would be highly amenable to the development of politically-directed emotion, this chapter has examined how broadly and deeply distributed anxiety responses towards the major party presidential candidates are during the primary and general election phases of the campaign season.

In both the primary and general election phases of the campaign, around 20-25% of respondents report no anxiety towards *any* of the candidates in question. Models that seek to understand the sources of variability in both the breadth and depth of reported anxiety paint a picture of anxiety responses towards the candidates that is disproportionately concentrated amidst those individuals are most engaged and extreme in their political allegiances, as we have seen in the results of the previous two chapters. Like most, if not all, potentially beneficial mechanisms for engagement with political world, those individuals who are already connected and interested with politics stand to benefit most from the potential effects of experiencing anxiety. The only case found where interest in politics does not seem to systematically affect the probability of anxiety is during the late general election phase, a unique, atypical phase of U.S. politics with high stakes but limited duration.

While the distribution of these responses is predominantly based on individual characteristics, we have seen that aspects of the contemporary environment such as perceptions of the economy's

performance and nation's future can also systematically increase the breadth and depth of anxiety experienced. These non-political causes of emotion provide some reason for optimism regarding the potential place of the anxiety/anger dynamic for individuals who are less engaged in politics, but their effects are dwarfed by the effects of partisanship, ideology, and political interest. In the everyday, non-campaign world of politics, it seems quite likely that anxiety is the domain, by and large, of the class of individuals for whom politics is a persistent concern. Only events of great importance, of the type that occurred during the timeframe of this study, can break through the typical detachment of most Americans to politics and make the experience of anxiety a plausible expectation. In the concluding chapter, I consider these ideas and the more general tenor of the findings, developing a fuller understanding of the remaining promise and significant limitations of anxiety's impact on political life.

APPENDIX

# 5.6 Appendix: Tables and Figures

	Count		
Variable	Coefficient		
	(Std. Err.)		
Party Identification	0.0644*		
	(0.0131)		
Ideology	0.0680*		
	(0.0152)		
Political Knowledge	-0.0025		
	(0.0142)		
Political Interest	0.0110		
	(0.0151)		
Age	-0.0003		
	(0.0013)		
Female	-0.0286		
	(0.0364)		
African American	-0.3348*		
	(0.0802)		
Education	0.0255		
	(0.0185)		
Income	0.0079		
	(0.0049)		
Retrospective Economic Evaluation	-0.0642*		
	(0.0305)		
Democratic Candidates	0.2026*		
	(0.0607)		
Econ. Eval. x Dem. Cands	0.1640*		
	(0.0444)		
Intercept	-0.9867*		
	(0.1163)		
	Zero-Inflation		
	(Std. Err.)		
Party Identification	-0.0743		
	(0.0447)		
Ideology	-0.2165*		
	(0.0524)		
Political Interest	-0.3630*		
	(0.0532)		
Continued on next page			

Table 5.1: Zero-Inflated Poisson Model of Number of Candidates with Reported Anxiety, February

Table 5.1 – continued from previous page			
	Zero-Inflation		
Variable	Coefficient		
	(Std. Err.)		
Intercept	-1.2746*		
	(0.0793)		
N	2626		
Log-likelihood	-3940.968		

\* indicates statistical significance from zero at the p < .05 level

	OLS	
Variable	Coefficient	
	(Std. Err.)	
Party Identification	0.3261*	
	(0.0387)	
Ideology	0.3935*	
	(0.0465)	
Political Knowledge	0.0507	
	(0.0489)	
Political Interest	0.4593*	
	(0.0470)	
Party Identification x Interest	0.0704*	
	(0.0260)	
Ideology x Interest	0.0893*	
	(0.0301)	
Age	-0.0076	
	(0.0045)	
Female	-0.0649	
	(0.1276)	
African American	-0.8805*	
	(0.2263)	
Education	0.0654	
	(0.0644)	
Income	0.0137	
	(0.0169)	
Retrospective Economic Evaluation	-0.3718*	
	(0.1050)	
Democratic Candidates	0.3579*	
	(0.2037)	
Econ. Eval. x Dem. Cands	0.7792*	
	(0.1528)	
Intercept	2.6511*	
	(0.3844)	
N	2626	
$R^2$	0.2583	

Table 5.2: Model of Sum of Reported Anxiety Toward Party's Candidates, February

	Logit	Ordered Logit		
Variable	Coefficient	Coefficient		
	(Robust SE)	(Std. Err.)		
Party Identification	0.1750*	0.2373*		
	(0.0295)	(0.0381)		
Ideology	0.3003*	0.2716*		
	(0.0363)	(0.0469)		
Political Knowledge	-0.1060*	-0.0923		
	(0.0390)	(0.0503)		
Political Interest	0.0276	0.1489*		
	(0.0345)	(0.0542)		
Age	-0.0179*	-0.0163*		
	(0.0031)	(0.0043)		
Female	-0.3512*	-0.0711		
	(0.1015)	(0.1390)		
African American	-1.4468*	-1.4096*		
	(0.1836)	(0.2777)		
Education	0.0716	0.0465		
	(0.0501)	(0.0686)		
Income	-0.0136	-0.0183		
	(0.0149)	(0.0206)		
Issue Distance	0.4502*	0.6782*		
	(0.0856)	(0.1173)		
Optimistic Nation's Future	-0.1439*	-0.2120*		
-	(0.0362)	(0.0470)		
Optimistic Own Future	0.0451	0.0009		
	(0.0396)	(0.0487)		
Retrospective Economic Evaluation	0.1667	0.0992		
	(0.0899)	(0.1405)		
Democratic Candidate	0.2522	0.6373		
	(0.2436)	(0.3311)		
Econ. Eval. x Dem. Candidate	-0.1111	0.0011		
	(0.1364)	(0.1852)		
Intercept	0.4283			
	(0.3761)			
Cut 1		0.2854		
		(0.4515)		
Cut 2		1.5750*		
		(0.4538)		
Cut 3		2.4927*		
		(0.4609)		
Continued on next page				

Table 5.3: Breadth and Depth Models of Reported Anxiety, November

10010 010			
Variahle	Logit Coefficient	Ordered Logit	
Variable	(Robust SE)	(Std. Err.)	
	(100005052)	(500 2110)	
Cut 4		3.4309*	
		(0.4730)	
Weighted N	1028	1015.153	
Log-likelihood	-542.049	-1093.124	

Table 5.3 – continued from previous page

\* indicates statistical significance from zero at the p < .05 level

Figure 5.1: Distribution of Number of Anxiety Responses Towards Primary Candidates in February 2008







at least some anxiety is reported





Figure 5.4: Effect of Political Interest on Anxiety Count in February 2008


Figure 5.5: Effect of Political Interest on Anxiety Extent in February 2008



#### **Chapter 6**

### **CONCLUSION: THE EMOTIONAL VOTER**

Emotion is a core component of the political experience for millions of Americans everyday. Whether in response to things we hear, see, discuss, or consider, emotion arises in response to the high stakes and common prominence of politics in the lives of significant proportion of the mass public. While political science was relatively late to the appreciation and integration of this fact into its research and conceptualization of political behavior, it is rapidly making up for lost time, churning out an increasing number of studies that increase the discipline's understanding of the sources and effects of these psychological responses to the political world. Although not all emotions have been given equal treatment in research to date – a subject to which we'll return later, anxiety is one emotion that has been the subject of a significant amount of theorizing and empirical research. Despite this level of attention, a number of gaps exist in our understanding of how, for whom, and to what extent anxiety operates in the political experience of citizens.

This dissertation has sought to extend current knowledge about anxiety, which is primarily based on studies of presidential general elections or laboratory experiments, to a relatively new area of study – the primary election phase of presidential elections. In particular, this dissertation has aimed to expand the range of knowledge about for who, with what effects, and with what regularity or extent voted-experienced anxiety is a salient aspect of the U.S. political experience. To this end, I have conducted three related studies regarding anxiety that attempt to provide a better grasp of what factors explain who experiences anxiety during primary elections, whether this anxiety has attitudinal implications, and to what extent anxiety at this early phase or later in the campaign season occurs broadly and/or deeply in the mass public. At the most general level, the findings of these studies have shown that anxiety is a concentrated phenomena throughout the campaign process (albeit to differing extents and with other differing correlates) and that it has limited at best implications for attitude change.

This final chapter of the dissertation reviews these findings in greater depth, pointing out connections, parallels and limitations in these findings along with their implications for political behavior and politics more broadly. As with all research though, this work produces as many questions as answers, and so I end this chapter with a discussion of future avenues of research based on the results here and in other recent research on emotion and political behavior. I conclude with a discussion of whether the election used as the study timeframe for this project is atypical or reflective of the new normal state of the electorate in modern U.S. politics.

# 6.1 Discussion and Review of Research Findings

The first analysis chapter extended the exploration of the factors underlying anxiety responses to presidential primaries, an area heretofore not examined using observational data. Shifting to primaries from the general election provides variation both in candidate ideologies within each party, candidate visibility overall, and citizen interest to an extent not typical later in the campaign. This analysis also attempts to examine the role of the environment factors as they apply to non-incumbent candidates for the presidency by including retrospective economic evaluations as a possible source of general anxiety about current conditions.

Results of analyses broken out by responses to candidates belonging to same party as the respondent, those in the opposing party as the respondent, and pure independents provided results generally supportive of my hypotheses. Measures reflecting characteristics of the primary candidate under consideration, the individuals reporting their emotions, and the general conditions of the time all demonstrated statistically significant effects on the probability of reporting anxiety about a given candidate. The key distinction in these findings were between evaluating candidates of one's own party and those of the opposing party.<sup>1</sup> In the case of opposing party judgments, political interest, candidate visibility, ideological distance to the candidate, income, and the interaction between retrospective economic evaluations and party identification were all statistically significant.

<sup>&</sup>lt;sup>1</sup>Findings for pure independents hued closer to those for judgments of the opposing party.

Contrast this finding with the case of judging candidates for one's own party, where only candidate visibility is statistically significant.<sup>2</sup>

The significant interaction between party identification and retrospective economic evaluations in out-party anxiety responses is particularly interesting. If you judge that the economy has been poor and you are a Democrat, the model predicts that you will be anxious about Republican candidates; alternatively, if you evaluate the economy as being poor and you identify as a Republican, the findings predict that you will not be as anxious about Democrats. Contrast these findings with suggestive (but poorly supported in light of the economic downturn) evidence that if you judge the economy's performance to be strong and you are Democrat, you are less anxious about the Republicans, whereas in similar economic conditions, if you are a Republican, you are likely to be more anxious about the Democratic candidates. Although there is no incumbent in the 2008 presidential election, respondents still appear to be taking into account Republican control of the economy in the preceding years. Overall, the results indicate that very little can induce a partisan to become anxious about their party's candidates, but a number of factors can achieve the same result when considering candidates from the opposition.

Taking into account the preceding findings that candidate-based anxiety is more likely among the politically interested and those with more extreme ideologies, the second analysis chapter waded into the debate over whether anxiety is capable of producing attitude change, in addition to increased learning and more balanced information seeking. While approaching debates or new topics with an open mind is certainly laudable from a normative perspective, if this openness does not lead to any meaningful changes, its utility decreases significantly. In order to test whether anxiety has consistent effects of this kind, I examined individual attitude changes on four issues that were prominent around the time of the 2008 campaign – citizenship for illegal immigrants, raising taxes on those making over \$200,000 a year, government payment of health care costs, and raising the gas tax.

<sup>&</sup>lt;sup>2</sup>Coefficients for political interest, candidate visibility, an indicator flagging African American respondents, and retrospective economic evaluations are all statistically significant for the model examining only pure independents.

Regression analyses of the magnitude of attitude change with regard to these four issues failed to demonstrate any significant role for anxiety about one's own party's candidate or their opponent with one exception – raising the gas tax. For this one issue and one type of candidate (the opposition's candidate), the experience of anxiety had strong effects in the expected direction. As an individual's anxiety about your party's opponent increases and the issue distance between you and that candidate decreases, the results predict that you are more likely to experience a shift of greater magnitude in your attitudes on the issue than if your existing issue distance is large. This expected contrast effect occurs only once out of the four possible issues, and notably for the newest issue of the four. While this undoubtedly had an effect on the probability of an individual shifting their attitude on the issue, the mean magnitude of attitude change is not different from those for the other three issues. Instead, what is more likely the case is that a number of characteristics that tend to be associated with strongly-held, stable issue attitudes – high political interest, strong partisanship, and strong ideology – are all associated with the experience of anxiety. Thus not only are individuals with these characteristics more likely to experience anxiety during the primary election phase of a presidential election, when they do, this anxiety is less unlikely to produce any meaningful attitude change on their part.

With more evidence that anxiety is concentrated in a subset of the public for whom it is least likely to have an impact, the final analysis in this dissertation tackled the implications of the first two studies head on – are most emotional responses to political candidates concentrated in a small subset of the public, or are they more widely experienced by citizens? We can conceive of the spread of anxiety in two different ways – in terms of the number of candidates about which anxiety is experienced, but also in terms how deeply anxiety is experienced overall. I judge what factors may be associated with these characteristics of the experience of anxiety is distributed in the public utilizing analyses of the breadth and depth respectively of anxiety at two time points during the 2008 election.

The first set of models during the primary election benefit from containing reactions to eight different candidates. The model of the number of candidates eliciting anxious responses finds

that shifts towards belonging to the opposing party or ideology of the slate in question increase the number of candidates about which anxiety is reported. Additionally, positive retrospective economic evaluations are associated with a higher anxiety count for Democrats and a lower anxiety count for Republicans. Shifting towards being a strong ideologue of the opposing party and having increased political interest are also associated with increasing the probability that an individual reports at least one anxiety response to a party's slate of candidates. The related model for the depth of anxiety also finds party identification and ideology to have a significant effect, but that each also has a multiplier effect when considered in tandem with political interest, which is significant on its own as well. This model also finds a similar relationship for economic evaluations as the count model.

The analogous November models contain only one candidate per party – the nominee – but find broadly similar results to the first set of models. The November count model finds that political interest is no longer significant, but political knowledge is statistically significant with a negative coefficient (i.e. more knowledge is associated with not being anxious about a party's nominee). Female and older respondents are less likely to report anxiety; issue distance to the nominee has a positive, significant relationship with the likelihood of experiencing anxiety towards a party's nominee. The depth model for November finds similar effects but also finds political interest, and not political knowledge, has a positive and significant effect on the depth of anxiety experienced in response to a party's nominee. Once more, the coefficient for issue distance is also positive and statistically significant. In both November models, optimism about the nation's future is associated with a lower probability of reporting at least some anxiety and the depth of anxiety overall. A similar measure containing perceptions of one's own future is not significant in either model, an artifact of the continued deterioration of the U.S. economy.

These findings leave the distinct impression that party identification, ideology, and political interest (with issue distance to a somewhat lesser extent) are the prime movers behind whether, and to what extent, an individual will experience anxiety in response to a slate of candidates. Given that

these characteristics are not evenly distributed in the public, we see once again that the experience of anxiety is concentrated in the lives of the partisan, ideological, and politically engaged. These findings speak to several areas of prevailing wisdom that have developed regarding the extent and potential role of emotion in the experience of citizenship. The next section addresses these lessons from the perspective of whether anxiety is more appropriately considered as enabler of enlightened citizenship or a sustainer of previously developed advantages derived from other individual-level characteristics and experiences.

## 6.2 Anxiety: Enabler or Sustainer?

This dissertation has presented the notion that emotion serves as an important component of political experience, with meaningful attitudinal, motivational, and behavioral impacts. In particular, I have analyzed the correlates and attitudinal implications of one emotion, anxiety, which is theorized to have normatively desirable consequences. The research conducted within these pages finds that anxiety tends to be relatively concentrated in its experience, whether judged in relation to specific candidates during the primary election season or summarily either during the primaries or general election. These results call into question one possible role for emotion in a democratic system, that of a personal mechanism by which individuals can become a better, more rational citizen.

If anxiety occurs amongst an already interested and engaged element of the populace, it does not appear capable of facilitating capable citizenship within that subset of the populace for whom politics is already a bewildering abstraction. In this regard, these findings appear similar to those regarding the utility of heuristics to citizens. Lau and Redlawsk (2006) find that these shortcuts are best employed by the political informed, who can make sense of their implications, and not as one might hope or expect, by political novices. Similar to the cognitive effects of anger, the experience of anxiety may serve to reinforce or promote existing attitudes and habits.

Despite this general finding, it is not the case that we should be totally despondent about the concentration of anxiety in the mass populace. As we saw in chapter three, not all candidates

of a given party are viewed equally. In particular, higher-profile candidates were more likely to elicit anxiety than those with lower profiles. Retrospective judgments of economic conditions, in association with partisanship, were also associated with the probability of experiencing anxiety independent of other factors. Lastly, optimism or pessimism judgments regarding the nation's future were also significantly associated with differences in the breadth and depth of anxiety experienced in response to a party's candidate. All of these factors exist largely independent of an individual's current political aptitude. The state of the economy and presidential candidates are prominent, focal elements of U.S. campaigns, and likely to be perceived by even those citizens with low pre-existing levels of political ability.

In a similar vein, attitude change as a result of anxiety is not impossible, but most issues are entrenched and persuasion is infrequent. As we have seen, there are some issues where anxiety can lead to significant effects on individuals. While long-term, high-profile issues like health care, immigration, and tax policy do not appear amenable to consistent attitude change owing to anxiety, lower-profile or newer issues do seem to potentially be open to such effects. In these instances, opinions are not solidified, more information is actually novel and can inform opinions in such a way that attitude change is possible. Overall, while the findings of this study indicate that the experience of anxiety and any beneficial benefits deriving from its experience are more likely to concentrated among the political 'haves', this does not imply that they do *not* occur at all amongst those citizens for whom they could have particularly useful effects.

## 6.3 **Open Questions Regarding Emotion**

Despite the large (and rapidly increasing) literature on emotion in the political realm and the contributions of this project, important questions remain. In particular, the potential role of other individual-level differences such as personality with regard to the experience of anxiety, the strategic use of emotion by political actors, and the unresolved gap between pre- and post-conscious emotions are all areas that are deserving of additional enquiry. First, as we have seen in chapters three and five, there are a number of individual-level political and demographic factors that are associated with the probability of experiencing anxiety and the depth of anxiety if it is experienced. This aligns with research from psychology that indicates there are differences in how individuals appraise the same stimuli (Lerner and Keltner 2001). While the factors examined in this study are associated with a significant amount of variation in the experience of anxiety, one potentially quite important factor was omitted from examination – personality. In particular, it might be the case that personality has a distinct impact on the likelihood of experiencing anxiety beyond its downstream effects on one's political opinions and identities.<sup>3</sup>

An initial study by Wolak and Marcus (2007) attempts to connect these factors in the context of Affective Intelligence theory. They argue that individuals who are neurotic, one of the five dimensions of the "Big Five" factors of personality should be more likely to report feelings of anxiety.<sup>4</sup>. Wolak and Marcus, however, don't find a direct connection between neuroticism and anxiety as Cassese and Feldman (2005) find, observing only that an interaction between extraversion and neuroticism increases anxiety responses. They conclude that "personality differences play only a modest role in the activation of the emotional surveillance system" (Wolak and Marcus 2007, 180). This finding, based on only one experimental study, is only a first step though into this area of study.

Another open question exists regarding the supply side of the emotional dynamic – do political actors intentionally and intelligently utilize emotional appeals? This area of research moves beyond the mere question of whether emotional appeals affect voters into questions of strategy and the perceived potential consequences from "going emotional." This question reaches back to the discussion in the first chapter of how the media discusses the place of emotion in politics, where we saw Democrats debating what types of emotions would be best induced in the public. This discussion aside though, I have considered emotion-inducing stimuli as largely outside of the control

<sup>&</sup>lt;sup>3</sup>Marcus et al. (1995) find though that the effects on personality on tolerance are seen more via indirect pathways than in any direct connection.

<sup>&</sup>lt;sup>4</sup>Neuroticism represents emotional stability in this usage, and is often tied to the experience of negative emotions (Wolak and Marcus 2007)

of the political system throughout this dissertation, yet this assumption is implausible given what we know about the nature of politics. MacKuen et al. (2010) imply that elite political strategies utilize the complexity of negative emotions, but provide no evidence to support this claim.

To this end, Ridout and Searles (2011) attempt to connect the ideas of Affective Intelligence Theory to candidate strategy, theorizing that leading candidates will appeal to emotions tied to the disposition system (enthusiasm, anger, pride), and trailing candidates will attempt to activate the surveillance system via fear. Examining Senate races, they find that the antecedents of positive and negative emotions are similar, indicating that political professionals may think in terms of positivenegative valence rather than specific emotions as Affective Intelligence Theory might expect. It remains unclear though whether these appeals actually work amidst the din of the real world of campaigning. As discussed above regarding the measurement of emotion, attempting to induce an emotion is quite different than successfully eliciting it.

Lastly, as noted by other scholars (Brader, Marcus, and Miller 2011), the distinction between emotions arising from pre-conscious evaluations and those based on judgments made after conscious awareness need to be reconciled. These two 'classes' of emotions, one with direct ties to the work of Gray, and by extension Affective Intelligence theory, and the other linked to cognitive appraisal theory possess different origin paths. While many of the theoretical expectations derived from Affective Intelligence theory have been confirmed experimentally (Brader 2006), it seems unlikely that the emotions studied by political scientists fall into the category of pre-conscious affective responses. Our measures of emotion in almost all cases are the result of self-report questions or conscious recall tasks. Both of these tasks last more than enough time for the cognitive systems of the brain to intercede and impact the evaluation process. In general, these longer-term (beyond initial impressions) dynamics of emotion remain an interesting, but still open, matter for discussion.

## 6.4 The Future and Role of Emotion in Public Opinion

While emotion may serve to explain many of the lingering questions practitioners have had regarding the operation of phenomena such as priming and the existence of behavioral heterogeneity (see MacKuen et al. 2010 and Brader et al. 2011), it does not and should not be viewed as the silver bullet with regard to rationalizing citizen behavior. The operation of emotion in the body politic has clear limitations both in extent and effect as this study shows, and these constraints have significant implications for the nature and operation of politics in the United States today. This dissertation shows, in line with a growing consensus in the field, that emotion is neither a pure evil nor an absolute positive, but rather an essential component of citizen behavior that can have positive or negative implications depending on the specific emotion under consideration and the characteristics of the situation in which emotion occurs.

The work contained in the preceding pages finds that the experience of anxiety, like other mechanisms such as cues, is concentrated amongst the partisan, ideological, and the highly informed and concerned, and that any attitudinal effects may be limited to newer, less entrenched issues. If this is the case, why then do we need anxiety to account for political behavior? While this study raised serious doubts about the potential impact of anxiety in terms of attitude change, there are still a number of important effects related to anxiety that remain. Anxiety is still associated with increased information search, learning, and participation, along with shifts in the means of opinion formation, and the impact of issue stances on vote choice. In addition, we have seen that emotion is key to understanding how the human brain processes information and allocates cognitive resources. No longer is it possible to conceive of cognition as entirely divorced from the impacts of affect; cognition and affect are dependent upon each other and interact to produce the attitudinal and behavioral outputs that are our chief interest in studying public opinion and political behavior (Brader, Marcus, and Miller 2011). It is no longer possible to put the genie of emotion back in its own, distinct bottle; it is now an inextricable part of the melange of factors that lead to human behavior.

Let us conclude with an attempt to place the findings and timing of this study in context. This project examined citizen anxiety during almost the worst conditions imaginable - at various points during the 2008 U.S. presidential election, in the midst of a downward spiraling economy, a deeply unpopular president in the White House, and a nation engaged in two wars. Considered in light of other findings about the contextual correlates of anxiety, the only major factor absent from the contemporary environment in 2008 was a clear incumbent running for re-election. Even here, the sitting president, George W. Bush, was a looming presence during the campaign and his putative successor, John McCain, was shackled to his predecessor's record despite his seeming independence from Bush. And yet, despite this combination of strong factors pointing towards a situation that was ripe for the development of anxiety, we observed the pattern of emotion in the populace presented in the foregoing chapters. Given this data, it's hard to imagine circumstances where emotion could reach a larger set of the public.<sup>5</sup>

Moving forward into the upcoming election and beyond, it seems likely that the amount of political emotion will only increase. An emerging storyline of the 2012 election is the highly motivated and angry Republican base that clearly attributes the nation's lagging economic recovery and seeming drift from its traditional moral and political moorings to the administration of Barack Obama. The anxiety that was a hallmark of 2008 may well be supplanted by anger in 2012, although anxiety may exist in some segments of the voting public, as noted in the journalistic accounts in chapter 1.

The 2012 Republican primary demonstrates though that anxiety still can play an important role in the voting public's responses to candidates. Frontrunner Mitt Romney struggled to breakthrough with Republican voters, many of whom undoubtedly experienced anxiety about Romney, who was viewed as insufficiently conservative. As their previously learned routines and assumptions about members of their party did not align with what they observed in Romney, these voters heightened

 $<sup>^{5}</sup>$ It is worth noting that a broader set of objects about which emotional responses were recorded could present a picture in which the public is even more emotionally engaged, but this study considers those objects that were most prominent at this point in time – the candidates vying for the presidency.

their attention to the campaign and searched for a candidate that better fit their political attitudes. This process seems to align with the observed dynamics of the primary process, as nearly every other Republican alternative received, at least for a time, significant popular and media attention.<sup>6</sup>

Additionally, the pattern and implications of anxiety and other emotions would seem to have implications for the polarization of politics in recent years. We have seen that anxiety is more likely amongst the strongly partisan and ideological (a finding that also is true for other emotions (Miller 2011) and that while anxiety may lead to an open mind, it doesn't necessarily lead to much in terms of meaningful shifts in opinion. The role of anger, although not the chief topic of study in this dissertation, seems particularly important here. If anger, which closes off an individual's mind and promotes reliance on preexisting knowledge and habits, occurs more often among strong partisans and ideologues, it seems plausible that a feedback cycle is possible, where preexisting opinions lead to anger responses which reinforce and entrench those opinions, and so on. This seems to be one particularly pernicious implication of emotion in the years to come. The consequences of anxiety in this vein are less negative, but the early findings here do not bode well either.

Thus while anxiety is an important component of the political life of many citizens, the pull of emotion may act to reinforce the existing ties of the engaged rather than to draw in those for whom politics is a more distant, less enticing matter. The passions of the public may not be inherently bad as historical observers feared, but neither is it a cause for optimism as well.

<sup>&</sup>lt;sup>6</sup>Perceptions of candidate viability (Abramson et al. 1992) undoubtedly also played a role in the cycling of conservative alternatives.

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