

USING THE FIVE FACTOR MODEL OF PERSONALITY STRUCTURE TO IDENTIFY
THE ANTECEDENTS OF POLITICAL AMBIVALENCE

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ABSTRACT

DELIA NICHOLE ACEVEDO: Using the Five Factor Model of Personality Structure to
Identify the Antecedents of Political Ambivalence
(Under the direction of Pamela Johnston Conover)

Research suggests that citizens may experience ambivalence if they use multiple values or cues from various social groups that champion conflicting views in their attempt to provide structure to their political attitudes, or if they find themselves in information environments where diverse positions about political objects are discussed. While valuable, these explanations ignore the roles that personality traits may play in predisposing individuals to experience this attitudinal state. In this dissertation, I offer an individual-level theory of the antecedents of political ambivalence, and contend that ambivalent attitudes are likely caused by deeply rooted individual differences that systematically influence behaviors and attitudes, in addition to the external factors that have been addressed in past studies. Using the Five Factor Model of personality structure as my theoretical framework, I develop a set of hypotheses about the direct effects that the “Big Five” traits of Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism have on the likelihood that a citizen will experience ambivalence. I test my hypotheses using data gathered from the 2008 Cooperative Congressional Election Survey (CCES) and a series of survey experiments administered to undergraduate students at the University of North Carolina at Chapel Hill between 2008 and 2011. I find some support for my theory that personality traits contribute to attitudinal ambivalence. However, variables such as group

affect conflict and value conflict continue to exhibit a powerful influence on this attitudinal state even when controlling for the “Big Five” traits.

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CHAPTER ONE

INTRODUCTION

During the 2004 Presidential election, reporters from the *New York Times* interviewed a number of Evangelical Christians to uncover their attitudes toward the issue of amending the Constitution to outlaw same-sex marriage. As expected, some strongly supported this amendment on “biblical” grounds. However, other Evangelical Christians and pastors alike were ambivalent on the issue. Even though they expressed some support for an amendment based on their faith and Christian values, they were opposed to the amendment because of their personal relationships with gays and lesbians and their opinions regarding the proper role of government in regulating individual behavior (Kirkpatrick 2004). Ambivalence toward this proposed amendment may have been even more pronounced among other voters who did not identify strongly as Evangelicals. Scholarly evidence suggests that the American public, broadly defined, demonstrates ambivalent attitudes on a number of other gay rights issues—particularly on issues that could be seen as violations of civil rights and liberties such as prohibiting gays from joining the Boy Scouts and allowing gays and lesbians to serve in the military (Craig et al. 2005).

Attitudinal ambivalence is not limited to gay rights issues. Scholars have uncovered evidence of attitudinal ambivalence on a number of political issues such

as social welfare, abortion, and immigration (Feldman and Zaller 1992; Craig, Kane, and Martinez 2002; Alvarez and Brehm 1995; Martinez, Craig, and Kane 2005). Other studies also suggest that individuals experience attitudinal ambivalence toward political candidates in the contexts of U.S. presidential and congressional elections and toward members of minority racial groups (Keele and Wolak 2008; Lavine 2001; Basinger and Lavine 2005; Katz and Hass 1988). The idea that “conflict is at the root of politics” is not a new one (Craig and Martinez 2005: xv). Conflict in the considerations that citizens hold about political objects has noteworthy consequences for political attitudes and behavior.

Ambivalence is significant for a number of reasons. Political science and social psychological research suggests that attitudinal ambivalence likely plays an important role in mediating and moderating the relationships between political attitudes and behavior (Martinez, Craig, and Kane 2005: 10; Lavine 2001). Specifically, those citizens who are ambivalent about an issue or which political candidate they will support in a general election take significantly longer to express their opinions when compared to others who are not ambivalent (Lavine 2001; Lavine and Steenbergen 2005; Albertson, Brehm, and Alvarez 2005). Since ambivalent citizens may recognize the merits of two opposing sides of a political debate, or like *and* dislike a political party or candidate at the same time, heuristics like partisan identification and ideological labels mean less and do not translate into reliable decision-making cues (Basinger and Lavine 2005). Over the course of a campaign, those voters who are ambivalent exhibit more instability in their candidate evaluations and voting preferences when compared to others with single-sided political attitudes (Lavine and Steenbergen 2005; Fournier 2005). Finally, ambivalent attitudes are held with “less confidence and clarity” when compared to one-sided political attitudes (Basinger and Lavine

2005: 171). As a result, ambivalent individuals may be more prone to persuasive attempts made by politicians than those who are not ambivalent about the same political object (Mendelberg 2001; Lavine 2001).

If we examine some of the most far reaching and important studies of voting behavior and ideological identification in the American context, voters who are deemed the most “sophisticated” or politically thoughtful are those who possess a highly constrained set of beliefs and whose beliefs about political objects are not subject to much change much over time (Campbell et al. 1960; Converse 1964). An assumption that is implicit in much of this literature and one that is also present in classic psychological theories of cognitive consistency (e.g., balance theory or cognitive dissonance) is that cognitive conflict is an uncomfortable state of mind—and a quality that is not valued in the American voter (Heider 1946; Festinger 1957).

But if we take a closer look at the concept of ambivalence, it may actually cast citizens in a positive light, especially given the evidence that suggests that a considerable portion of the public is politically disinterested and/or ignorant (Meffert, Guge, and Lodge 2004; Lavine 2001; Berelson, Lazarsfeld and McPhee 1954; Campbell et al. 1960; Converse 1964; Smith 1989; Delli Carpini and Keeter 1996). From a normative standpoint, political ambivalence “suggests openness” (Keele and Wolak 2008: 654) and can be considered a sign of thoughtfulness among voters (Meffert, Guge, and Lodge 2004). Instead of relying solely on one-sided political beliefs, ambivalent individuals possess some of the qualities that we would like “ideal” democratic citizens to hold. Since they have multiple and conflicting thoughts about political objects, they may be likely to recognize that political debates are complex and consider multiple sides of an argument when faced with a decision (Green,

Visser, and Tetlock 2000; Nir 2005). Those who “easily take a position in an issue debate are less likely to be reflective in their decision making and resist consideration of relevant evidence” when compared to others who possess multiple and conflicting thoughts about political objects (Keele and Wolak 2008: 654).

Yet, while we know a great deal about the consequences of ambivalence, we know comparatively little about its underlying causes (Martinez, Craig, and Kane 2005; Keele and Wolak 2008). One of the key questions that remains unanswered is whether all citizens are equally likely to possess ambivalent attitudes toward political objects. If we examine the literature to identify those who are likely to make up this subsample of the American electorate, we do not find a satisfying answer. Since ambivalence has important implications for political attitudes and behavior, it is useful to identify the characteristics of individuals who are likely to experience it.

In this dissertation, I examine a set of causal factors that are hypothesized to lead citizens to experience attitudinal ambivalence about political issues. Much of the existing research on the antecedents of ambivalence focuses on three explanations: the inherently conflicting nature of the values that structure individual attitudes within our political culture (Alvarez and Brehm 1995, 1997; Feldman and Zaller 1992; Katz and Hass 1988); the ties to multiple identity groups that conflict with regard to their stances on policies or toward candidates running for office (Lavine and Steenbergen 2005); and exposure to multiple points of view within an individual’s information environment (Huckfeldt, Mendez, and Osborn 2004; Keele and Wolak 2008). While valuable, these explanations all hinge on the assertion that if some sort of conflict exists within a citizen’s thought process or environment, ambivalence will be a more likely result. Furthermore, value conflict and

competing reference groups are not only conceptualized in the literature as causal factors contributing to ambivalence (Baek 2010; Alvarez and Brehm 1995; McGraw, Hasecke, and Conger 2003; Huckfeldt, Mendez, and Osburn 2004; Craig et al. 2005), but they are sometimes equated with forms of ambivalence as well (see, for example, Feldman and Zaller 1992; Steenbergen and Brewer 2004; Lavine and Steenbergen 2005). It is therefore unclear whether these explanatory factors are truly antecedents of ambivalence or simply modified forms of ambivalence itself.

At its most basic level, political ambivalence is an attitudinal state experienced by a citizen that is characterized by conflict in the considerations that the individual holds about an object. In the chapters that follow, I offer a theory about the antecedents of attitudinal ambivalence that is rooted in the personality traits of citizens. Most simply stated, some individuals, by virtue of their core dispositions or personality traits, may be more likely to experience attitudinal ambivalence than others. Furthermore, these traits may predict the likelihood of experiencing ambivalence across a range of political issues.

Systematic research within the field of personality psychology strongly suggests that the structure of human personality can be broken down into five core traits: Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (Wiggins and Trapnell 1997; Digman 1990; McCrae and Costa 1996, 1997, 2003, 2008; Goldberg 1992, 1993; Saucier and Goldberg 1996; Mondak 2010; Mondak and Halperin 2008). Importantly, these traits have well established links to attitudes and behavior—even in political contexts (Digman 1990; Schoen and Schumann 2007; Caprara et al. 2006; Mondak and Halperin 2008; Gerber et al. 2010, 2011; Mondak 2010; Mondak et al. 2010). In line with current

research on the influence that personality exerts on political attitudes and behavior, I employ this model of personality structure in my research as well.

In this dissertation, I first consider the concept of attitudinal ambivalence, its implications for politics, and past accounts of the conditions under which it may be experienced by individuals. I then move on to a discussion of the Five Factor Model, or “Big Five” framework, of personality structure and the effects that personality traits have on political behavior and attitudes. Next I employ this framework to offer a theoretical argument for how the five personality traits are expected to influence the likelihood of experiencing attitudinal ambivalence. Empirically, I test my hypotheses using data collected from undergraduate students at the University of North Carolina at Chapel Hill, and a random sample of adults in the American electorate with question space obtained on the 2008 Cooperative Congressional Election Study. Finally, in my concluding chapter, I discuss the implications of my study for our understanding of political ambivalence and other political attitudes and behaviors.

CHAPTER TWO

LITERATURE REVIEW

Attitudinal Ambivalence

What is Attitudinal Ambivalence?

In his seminal article on the nature of belief systems of the mass public, Philip Converse (1964) noted the instability of attitudes when respondents were asked to report their beliefs on a variety of political issues at repeated points in time, suggesting that most citizens did not possess strongly held views on political issues at all. Only a small portion of the public—the most highly educated or political elites—appeared to pay careful attention to politics and hold consistent or ideologically “constrained” attitudes. The majority of respondents accepted information about political issues from elites in bundled packages, without a complete understanding of how those packages of issues “fit” together ideologically. Moreover, “nonattitudes” seemed to run rampant. Research that has been conducted since that time continues to find evidence of a lack of political interest and knowledge among the electorate (see, for example, Smith 1989; Delli Carpini and Keeter 1996). However, Converse’s characterization of the American public has been challenged. In particular, research on attitudinal ambivalence questions the notion that ordinary individuals do not think much of, or carefully about, politics. Instead of lacking constrained attitudes about political issues, parties, or candidates, this newer line of work suggests that some citizens may hold a number of competing considerations about

political objects at the same time (Meffert, Guge, and Lodge 2004; Lavine 2001; Yoo 2010).

The grounds for this challenge stem, in part, from how one conceptualizes the structure of attitudes in political science research. Unidimensional attitude theory has strongly influenced the way scholars think about and measure political attitudes (Yoo 2010; Meffert, Guge, and Lodge 2004; Lavine 2001). According to this theory, as a citizen's negative evaluation of a political issue, candidate, or party increases, the positive evaluation of the same political object decreases; likewise, an increase in the positive evaluation of a political issue, candidate, or party is met with a decrease in the negative evaluation of the object. To measure a political attitude, respondents are typically asked to indicate their stance toward the object on a bipolar scale. The midpoint of the scale indicates "neutrality," which is supposed to be indicative of *either* a balance of negative and positive feelings or thoughts *or* indifference, which is a complete lack of any feelings or thoughts (Campbell et al. 1960; Yoo 2010; Lavine 2001). This is problematic because thinking about politics affects political behavior differently than not thinking about politics at all.¹ Grouping these distinct attitudinal states into the same "neutral" response category impedes our ability to understand the unique effects that different types of political attitudes have on behavior (Yoo 2010; Meffert, Guge, and Lodge 2004).

Social and political psychologists have reevaluated the unidimensional conceptualization of attitudes. They recognize that the evaluations a person possesses about a political object may be consistent with one another (Eagly and Chaiken 1993): evaluations of

¹Yoo (2010) finds that the attitudinal states of ambivalence and indifference have distinct effects on turnout. Ambivalent citizens are more likely to turn out in elections than indifferent citizens. Because they lack any affect or thoughts about political candidates or parties, indifferent citizens exhibit lower turnout levels when compared to all other citizens. Ambivalent citizens, however, turn out to the polls in levels more similar to those with one-sided attitudes.

a political issue, candidate, or party may be marked by extremely positive *or* negative beliefs or feelings. But attitudes can also be more complex: some individuals can “simultaneously hold evaluatively inconsistent beliefs” about an object (Eagly and Chaiken 1993: 123; Meffert, Gue, and Lodge 2004; Cacioppo and Berntson 1994; Cacioppo, Gardner, and Berntson 1997). For instance, in a political context, citizens may recognize the pros and cons of a political issue stance, or find that they like *and* dislike a candidate or party at the same time (see, for example, Yoo 2010; Feldman and Zaller 1992; Zaller 1992; Lavine 2001; Meffert, Gue, and Lodge 2004; Basinger and Lavine 2005). Furthermore, these citizens may place similar weights on those positive and negative evaluations. This simultaneous existence of conflicting evaluations is known as *attitudinal ambivalence* (Martinez, Craig, and Kane 2005; Steenbergen and Brewer 2004; Eagly and Chaiken 1993; Feldman and Zaller 1992; Zaller 1992; Cacioppo and Berntson 1994; Priester and Petty 1996, 2001; Lavine 2001; Yoo 2010).

More specifically, there is general agreement in both political science and social psychology regarding two “necessary and sufficient conditions” for the experience of attitudinal ambivalence (Thompson and Zanna 1995: 263; Basinger and Lavine 2005). First, the positive and negative evaluations that a person directs toward an object should be of analogous magnitude (Basinger and Lavine 2005: 197; see also, Thompson, Zanna, and Griffin 1995: 263; Meffert, Gue, and Lodge 2004; Priester and Petty 1996). Conflict in the thought process of an individual will decrease, and attitudes will become more single-sided, as the evaluations favoring one side of a political debate increase relative to the other side (Thompson and Zanna 1995). Second, the positive and negative evaluations about a political object should be of “moderate intensity,” such that ambivalence will increase when citizens

have stronger positive and negative evaluations, and decrease when they have weaker positive and negative evaluations directed at the same object (Thompson and Zanna: 1995: 263; Thompson, Zanna, and Griffin 1995; Meffert, Guge, and Lodge 2004).

Research and inquiry into attitudinal ambivalence in political contexts is relatively new, although social psychologists have been studying the concept since the late 1960s and early 1970s (Kaplan 1972; Eagly and Chaiken 1993; Martinez, Craig, and Kane 2005). The lack of ambivalence research in political science can be traced to a pair of complicating factors. First, research conducted by social psychologists studying cognitive dissonance and balance theory suggested that individuals prefer cognitive consistency to experiences like logical inconsistency and dissonance (see, for example, Heider 1946; Festinger 1957; Thompson and Zanna 1995; Meffert, Guge, and Lodge 2004; Eagly and Chaiken 1993). Instead of being willing to tolerate inconsistent thoughts or feelings about an object, citizens were expected to take whatever steps necessary to resolve their psychological discomfort, even if that meant denying or ignoring that any conflict existed or choosing to create a new “belief structure” about the attitude object (Eagly and Chaiken 1993). These expectations made their way into theories and expectations regarding political attitudes.

Dissonance, or cognitive imbalance, may be a taxing psychological state. However, while cognitive imbalance *can* produce a motivational force for resolving evaluative discrepancy, evidence suggests that this force may be greater for *some* individuals than it is for others. For example, Thompson and Zanna (1995) found that individuals who score high on one aspect of personality (Need for Cognition) enjoy thinking through problems, dislike ambiguity, work to resolve conflict, and are less likely to be ambivalent about social issues than those who score low on this psychological need. Alternatively, scoring high on another

aspect of personality (Fear of Invalidity) is associated with a significant increase in the likelihood of experiencing attitudinal ambivalence on some social issues.² Those who score high on Fear of Invalidity report being anxious about making decisions and fear making costly mistakes; but, they also enjoy thinking through problems, are more hesitant to resolve cognitive inconsistencies, and tend to value opposing arguments on social issues more equally (Thompson and Zanna 1995). Additionally, those who are motivated by accuracy goals when making political judgments and who are willing to devote more cognitive effort to a judgment task have been shown to be more likely to be ambivalent than others who do not share those motivations (Rudolph and Popp 2007). Thus, the overarching assumptions and expectations that have grown out of the existing literature on cognitive conflict may be too simple. A careful evaluation of existing evidence suggests that enduring individual differences may lead some individuals to be more tolerant of cognitive inconsistencies about political objects than others. Furthermore, cognitive inconsistency is not perceived by all people to be a negative attitudinal state.

Second, the recent emergence of ambivalence research in political science also stems from the long standing assumption discussed previously that attitudes are bipolar in nature (Eagly and Chaiken 1993; Meffert, Gue, and Lodge 2004: 64-66; Thompson and Zanna 1995; Yoo 2010; Feldman and Zaller 1992). Many influential survey techniques that were developed to measure attitudes among members of the public (e.g., Thurstone, Likert, and Semantic Differential scales) grew out of this assumption (Thompson and Zanna 1995; Meffert, Gue, and Lodge 2004). While there is now recognition, especially in social

²Thompson and Zanna (1995) utilized a small group of undergraduate students at the University of Waterloo as participants in their study, as inventories that measure psychological constructs like the Need for Cognition, Fear of Invalidity, or personality traits are typically absent from large-N surveys of political attitudes.

psychology, that individuals may hold both positive and negative evaluations of political objects concurrently, new measurement tools that are able to capture these separate evaluations are rarely included in survey instruments (Cacioppo and Bernston 1994; Cacioppo, Garner, and Bernston 1997; Thompson and Zanna 1995; Meffert, Guge, and Lodge 2004; Feldman and Zaller 1992).

This is especially true in the field of political science. Often times, respondents on a large-scale survey instrument, such as the National Election Study or the General Social Survey, are asked to report their summary stances on important political issues like same-sex marriage and stem cell research, among many others. It is useful to ascertain whether citizens support or oppose a particular issue, in addition to the strength of their evaluation(s). However, the response categories offered to survey respondents inevitably mask the complexity of their attitudes.

For example, if some citizens have competing considerations about a political object, then they may simply average across the considerations that come to mind when they are taking the survey (Zaller 1992; Zaller and Feldman 1992). This process may result in a moderate or neutral response, which might also explain why attitudes held by some members of the mass public appear to be unstable if measured repeatedly over time. Meanwhile, other citizens may choose the same neutral response category on the survey instrument if they are indifferent toward that political object, since they lack any considerations about it at all (Meffert, Guge, and Lodge 2004; Yoo 2010).

These are two entirely different attitudinal states, but they end up being grouped together in the same response category, and thereby cloud its meaning. Unless we ask specific questions that tap into citizens' positive and negative evaluations of a political

object, we are unable to uncover empirical evidence of ambivalence because we cannot distinguish it from genuine absence of affect or thoughts toward an attitude object (Kaplan 1972; Thompson, Zanna, and Griffin 1995; Meffert, Guge, and Lodge 2004). Thus, the lack of research on political ambivalence may be a function of the survey instruments we use in much of our work. Since ambivalence cannot be easily measured with existing data it is often ignored and perceived as an insignificant attitudinal state—even though research on the psychology of attitudes across a number of different political contexts would suggest otherwise (Eagly and Chaiken 1993; Thompson and Zanna 1995; Craig and Martinez 2005).

Political Consequences of Ambivalence

Ambivalence is experienced by a significant portion of the American electorate across a variety of political issues and in partisan and candidate evaluations. In their study of cognitive reactions to presidential candidates during the 1980-1996 presidential election years, Meffert, Guge, and Lodge (2004) found that 25 percent of respondents simultaneously expressed positive and negative considerations about candidates. When they expanded their definition of ambivalence to include conflicting cognitions *and* feelings about candidates, they found that almost 40 percent of the public expressed ambivalence (70). Similarly, Basinger and Lavine (2005) found that voters who held ambivalent partisan attitudes constituted approximately 30 percent of the electorate. Clearly, a substantial portion of the public experiences ambivalence; it is not a trivial attitudinal state experienced by an insignificant number of Americans in the mass electorate.

Moreover, ambivalence about political objects has serious consequences. Specifically, attitudinal ambivalence can mediate and moderate relationships between

attitudes and behavioral intentions. In their examination of House elections, Basinger and Lavine (2005) found that ambivalence mediated the extent to which some voters relied on partisanship and ideology when making vote choice decisions. Specifically, those voters who were politically informed but ambivalent about their partisan identification used ideology, while those who were politically *uninformed* but partisan ambivalent used retrospective economic evaluations, to guide their vote choice decisions. Similarly, in their examination of attitudes toward gay rights policies, Craig et al. (2005) found that ambivalence in this policy area weakened the relationship between attitudes toward gay rights and overall evaluations of the incumbent governor. Lavine (2001) found that ambivalence moderated the relationship between one's expressed intent to vote for a Democratic or Republican candidate and actual vote choice. Those who were less ambivalent were more likely to vote for their "intended candidate" (926).

There are other attitudinal implications of ambivalence as well. Compared to those with single-sided attitudes, people experiencing attitudinal ambivalence tend to take longer when deciding which candidate they will support in a general election contest (Lavine 2001; Lavine and Steenbergen 2005), which may make them more open to political ads and other persuasive messages expressed by politicians during the course of a campaign. Lavine and Steenbergen (2005) also found that compared to those with one-sided attitudes toward candidates, voters who were ambivalent exhibited more instability in their presidential candidate evaluations over the course of the electoral campaign and were more likely to split their tickets at the polls. In his analyses of a number of different voting decisions in the United States, Great Britain, and Canada across nine different surveys, Fournier (2005) found that the voting preferences of ambivalent individuals were more likely to change when

compared to the voting preferences of individuals who were not ambivalent. Mendelberg (2001) suggested that those who experience ambivalence about policies dealing with race (i.e., experience conflict between the value of equality and racial resentments) may be more prone to implicit appeals made by politicians. In their study of ambivalence toward presidential candidates between 1980 and 1996, Meffert, Guge, and Lodge (2004) discovered that those who were ambivalent showed less polarized attitudes and a greater aptitude to make more balanced and accurate political judgments compared to those who held one-sided and indifferent attitudes. Most recently, using data from the 1980-2004 National Election Studies, Yoo (2010) found that compared to those who were indifferent about presidential candidates, ambivalent individuals were more likely to turn out at the polls and participate in campaign activities (173). Interestingly, ambivalent voters also had similar turnout levels when compared to those who held more polarized views about political candidates (173).

Thus, while the experience of political ambivalence may be more cognitively taxing for citizens than simply holding univalent political attitudes, evidence suggests that it is nonetheless experienced by a substantial portion of the electorate. Furthermore, the experience of attitudinal ambivalence has noteworthy consequences for political attitudes and behavior. Making the assumption that all citizens possess univalent political attitudes, and that indifference and ambivalence can be included within the same attitudinal response category, leads us to develop incomplete—and inaccurate—expectations about the political behavior and attitudes of voters.

Gaps in Our Understanding

Past research suggests that attitudinal ambivalence is experienced by members of the

American electorate across a variety of political issues, elections, and partisan evaluations. Ambivalence has important consequences for our study of political behavior and attitudes. However, while we know many of the consequences of attitudinal ambivalence, we know much less about its underlying causes (Martinez, Craig, and Kane 2005, Thompson and Zanna 1995; Keele and Wolak 2008). Our understanding of ambivalence is restricted and incomplete if we cannot identify the characteristics and conditions that cause individuals to possess multidimensional political attitudes. As such, the broad research question that my dissertation will address is: “What are the antecedents of political ambivalence?”

Potential Causes of Attitudinal Ambivalence

Before I move on to a more in depth discussion of my theory regarding the personality trait antecedents of attitudinal ambivalence, it is important to summarize the findings of a few key approaches that scholars have taken in their attempts to answer this research question. A small number of studies have examined the association between demographic and other individual-level variables commonly used in studies of political attitudes and various forms of ambivalence. For example, those who have strong partisan or ideological ties are typically less likely to experience ambivalence than those who have weaker ties (Rudolph and Popp 2007; Steenbergen and Brewer 2004). Older Americans are more likely to be ambivalent than younger Americans, while those who are more politically sophisticated are less likely to be ambivalent than others who are not as sophisticated (Steenbergen and Brewer 2004). Those who score high on Personal Fear of Invalidity and fear making mistakes are more likely to experience ambivalence than those who score low on this characteristic (Thompson and Zanna 1995). But, Need for Cognition and liberal

ideological identification have been shown to be both positively associated with ambivalence in some studies (Rudolph and Popp 2007; Feldman and Zaller 1992), and negatively associated with ambivalence in others (Thompson and Zanna 1995; Steenbergen and Brewer 2004).

Much of the remaining research that has been conducted on the antecedents of ambivalence focuses on three factors:

- the experience of value conflict toward a specific policy issue;
- the exposure to a wide variety of viewpoints on an issue or toward a candidate in a particular information environment (e.g., in a heterogeneous discussion group or general election); and
- the individual's favorable evaluation of multiple social groups that are relevant to a political judgment, but that conflict with regard to the stance(s) they take on key political issues or candidates.

These explanatory accounts have done a great deal to advance our knowledge in this area. The explanations are logical and make intuitive sense. Further, they are complimentary in that they offer an internal, value-based account of the source(s) of ambivalence (i.e., value conflict) as well as an account stemming from *external or situational* factors (e.g., exposure to diverse viewpoints in the information environment). However, weaknesses in these explanations also exist. I will present, and evaluate, each of these three explanations in turn.

Explanation I: Value Conflict

There is a fairly extensive literature on the experience of value conflict. The premise of this work is that a set of core values—equality of opportunity, individualism, and self

reliance—shape citizens’ policy and candidate preferences and form the basis of ideology (Feldman and Zaller 1992; Feldman 1988; McClosky and Zaller 1984; Rokeach 1973). However, when these core values are applied to concrete policy areas, they often conflict, which can lead citizens to experience ambivalence. For example, Feldman and Zaller (1992) and Gainous and Martinez (2005) examine attitudes toward social welfare policies in the United States, and find that both conservatives and liberals experience some ambivalence as a result of value conflict. Other evidence suggests that individuals experience value conflict on racialized policy issues and abortion (Katz and Hass 1988; Alvarez and Brehm 1995).

The value conflict explanation has merit. If people use more than one value to structure their views on issues or toward political candidates, it is possible that those values could come into conflict. For example, on the issue of same-sex marriage, the application of the value of egalitarianism might push a citizen to support the policy; however, if moral traditionalist values are also important, then that individual may be pushed to oppose the policy. This value conflict may lead that person to hold an ambivalent position on the issue due to the competing considerations that are brought to bear based upon the values used to structure the attitude.

While insightful, the value conflict explanation accounts for one form of conflict in considerations with another. While this may be a partial explanation, it still does not address the underlying mechanism for *why* this may occur. Several questions remain unanswered. Are all individuals equally likely to experience value *conflict* when evaluating their position on an issue? Or, can some individuals more easily order the relative importance of two competing values, and thereby avoid internal conflict in their considerations? Are some people simply more comfortable with inconsistency or conflicting considerations when

evaluating their position(s) on policies when compared to others? Furthermore, value conflict is not only conceptualized in the literature as a causal factor contributing to ambivalence (Baek 2010; Alvarez and Brehm 1995; McGraw, Hasecke, and Conger 2003), but it is also sometimes characterized as a form of ambivalence as well (Feldman and Zaller 1992; Steenbergen and Brewer 2004). It is therefore unclear whether value conflict is an antecedent of ambivalence, or simply another form of ambivalence itself.

Explanation II: Overabundance of Information in the Environment

Another explanation for the origins of attitudinal ambivalence focuses on factors that lie outside of an individual's psyche—specifically, the information environment. Scholars contend that citizens who are exposed to a two-sided and concentrated flow of information will be more likely to consider multiple viewpoints when formulating political judgments (Huckfeldt, Mendez, and Osborn 2004; Mutz 2002; Keele and Wolak 2008; Nir 2005). Ambivalence may be experienced by those citizens who find that they value multiple, opposing beliefs about the same political object following exposure to diverse viewpoints.

A two-sided information environment can take different forms. For example, a general election may provide a “two-sided flow of persuasive information” intended to convince voters to support one candidate over another (Lavine 2001: 926). Consequently, some voters may be likely to accept messages from both sides, which can lead to ambivalence over which candidate the voter will support in an election (Lavine 2001; Keele and Wolak 2008). Heterogeneous political discussion networks also have the potential to create a diverse information environment for individuals. Mutz (2002) contends that if individuals participate in heterogeneous discussion networks, they inevitably will be exposed

to arguments that challenge their existing views. If this exposure leads them to equally value opposing arguments relating to an object or issue, then the likelihood that an individual will experience ambivalence may increase as a result (840).

In a similar study, Huckfeldt, Mendez, and Osborn (2004) examined the role that political discussion partners can play in creating ambivalence about political candidates. Using data from the National Election Study, they found that ambivalence toward political candidates—in this study Bush or Kerry—was highest among those whose discussion partners included supporters of both presidential candidates. Alternatively, ambivalence was lowest amongst those whose discussion partners shared the same presidential candidate preferences.

Again, this theoretical account for the origins of attitudinal ambivalence is logical. When citizens are exposed to a wider variety of considerations with regard to a political issue or candidate, some citizens may come to hold and value beliefs that conflict. However, this explanation leaves some questions unanswered as well. First, people may be able to cite a number of apparently conflicting considerations (likes/dislikes, pros/cons) after engaging in conversation with others who hold dissimilar attitudes, or after being exposed to campaign information from politicians. But simply being aware of multiple competing considerations, and being able to report them when answering a question on a survey instrument, does not necessarily constitute evidence of evaluative conflict. If the positive considerations are not held with the same passion or fervor as the negative considerations, then attitudinal ambivalence is unlikely.

Second, the assumption that engaging in political discussions with others who are dissimilar will lead one to experience conflict in the considerations used to evaluate a

political issue or candidate is probably overstated. Cass Sunstein's research on the "Law of Group Polarization" speaks to this point. Drawing on past work that examines heterogeneous discussion groups in the medical field, he contends that participants often value the views of members perceived to be of "high status" groups, and discount the viewpoints offered by "low status" group members (e.g., women, African Americans, and those who are not well educated). He also questions the implicit assumption that all individuals enter group discussions without particular "pre-deliberation tendencies"—preexisting preferences about the position that they would like to take on the issue. Because people enter group discussions with these preferences, they are more likely to actually intensify their preexisting view(s) as a result of discussion and exposure to alternative viewpoints offered by group members. He finds that this is especially likely to occur when a more "dominant" group member holds a similar attitude,³ and if the persuasive appeals offered by group members with opposing views are not convincing. Like Huckfeldt, Mendez, and Osborn (2004), Sunstein (2002) concedes that attitude moderation (perhaps due to ambivalence) may occur if the discussion group consists of members who equally oppose and favor the political object (i.e., issue or candidate).⁴ However, this simply may not be a realistic discussion situation. Moreover, even when convincing competing viewpoints are made public in heterogeneous discussion networks, it does not follow that *all* individuals will carefully consider these conflicting

³If that dominant group member also shares the same sense of identity or "common fate" with the individual making a political judgment, the movement of the individual's attitude toward that of the group member(s) perceived to be similar will likely be even more pronounced (Sunstein 2002).

⁴Similar findings have been uncovered in social psychology research. For example, Visser and Mirabile (2004) found that individuals who were a part of heterogeneous social networks held weaker attitudes toward issues when compared to others who were a part of "attitudinally congruent" social networks. They were also more able to be persuaded. Levitan and Visser (2009) found that social networks significantly influence attitude strength, in that those who were in attitudinally diverse social networks had less stable and more malleable attitudes than those who were in attitudinally congruent social networks.

views, and subsequently experience ambivalence. In sum, this account of the origins of ambivalence still does not help us to predict “who,” amongst those who are exposed to competing viewpoints, will experience attitudinal ambivalence over a political object as a result.

Explanation III – Multiple, Competing Identities or Ideologically Inconsistent Group Affect

Finally, another plausible explanation for the origins of attitudinal ambivalence stems from the idea that individuals possess ties, or felt affect, toward multiple social identity groups. When an issue or candidate emerges on the political agenda, and citizens are asked to indicate their positions in relation to that attitude object, a person may use “likes” and “dislikes” of social groups to inform their political judgments (Converse 1964; Conover and Feldman 1981; Lavine and Steenbergen 2005). According to a “group centrism hypothesis,” individuals may use felt affect toward social groups as relevant cues for formulating judgments because “social groups are central organizing elements of political belief systems” that introduce “order to what might otherwise be largely haphazard collections of cognitively isolated opinions” (Lavine and Steenbergen 2005: 7; see also Eagly and Chaiken 1993: 141; Converse 1964; Campbell et al. 1960; Brady and Sniderman 1985; Conover and Feldman 1981). However, when a person holds positive affect toward social groups that stand in opposition to one another on a particular issue or candidate, those social group cues may not be useful to the individual making the political judgment. Instead, the groups that were initially perceived to be relevant information sources may expose the person to competing considerations on the issue or candidate in question (Lavine and Steenbergen 2005).

This idea has its roots in the “cross pressures” hypothesis, which was first put forth by Lazarsfeld, Berelson, and Gaudet (1944) in *The People’s Choice*. In this book, the authors examined a panel of potential voters in the 1940 Presidential election to understand better how people formulate their political judgments. They found that individuals may be faced with two or more social affiliations (like race and religion, or class and religion) that tend to pull them in opposing directions. In this type of situation, those voters faced with conflicting identities, or cross pressures, are more likely to split their tickets at the polls, have lower levels of interest or information about elections and politics in general, and hold disparate attitudes with regard to political objects due to the contradictory positions espoused by their social groups. There is additional empirical evidence that complements this notion. Lavine and Steenbergen (2005) uncover similar findings when they examine citizens’ affective evaluations of multiple social groups. Their empirical results show that potential voters who hold positive (or negative) feelings toward both liberal *and* conservative social groups experience significantly more ambivalence toward choices involving policies and candidates than individuals who do not hold similar “ideologically inconsistent” group feelings (24).

Like the other two approaches to studying the origins of attitudinal ambivalence, the competing identities explanation has merit. This idea is seemingly supported by a major implication that stems from tests of Heider’s balance theory in numerous social situations: individuals are prone to “agree with people [and groups] that they like, and disagree with people [and groups] that they dislike” (Eagly and Chaiken 1993: 141). Thus, if a person has positive affect for more than one social group, and perceives their cues to be of roughly equal relevance to the decision at hand, that person may experience some psychological, or

internalized, conflict in considerations if those groups take opposing positions on a particular political object (e.g., an issue, presidential candidate, etc.).

But while these empirical accounts focus on felt affect toward social groups, they do not consider factors such as identity group salience and status, which may minimize the likelihood of ambivalence stemming from conflicting reference groups. Identifying as a member of a social group provides a person with a cognitive foundation for interpreting experience and appropriate role behaviors (Stryker and Burke 2000), just as felt affect towards social groups can serve as judgment cues. Identity theorists (Mattis et al. 2008; Shapiro et al. 2010) acknowledge that individuals possess multiple cross-cutting identities. For example, a woman may identify as African American, while simultaneously thinking of herself as an Evangelical Christian who is a member of the middle class. If such a woman were faced with taking a position on an issue like abortion, these identities could potentially pull her in opposing directions. Her identity as an Evangelical might lead her to oppose abortion rights, while her identity as a woman might simultaneously lead her to support abortion rights. However, evidence suggests that people are relatively adept at ordering the salience of their identities when making political judgments; the higher the “salience of an identity relative to other identities...the greater the probability of behavioral [or attitudinal] choices in accord with the expectations attached to that identity” (Stryker and Burke 2000: 286). Individuals are also aware that some social identities are perceived to be of higher status than others. Thus, in order to preserve a positive sense of self, individuals may often defer to the higher status identity group when making a decision, and this tendency is even more pronounced in situations that make the relative group status rankings apparent (Sunstein 2002).

Others who study the effects that social identity can exert on political decision-making note that rather than assuming that social categories are independent entities that act alone to shape the choices that individuals make, it is important to recognize that these categories (e.g., race or ethnicity, gender, and class) “intersect” and “interact” to form different meanings and experiences for individuals that cannot be explained by each identity on its own (Warner 2008: 454; Shields 2008; Purdie-Vaughns and Eibach 2008; Hancock 2007; Crenshaw 1994). The academic study of “dueling” identities and their influence on political judgments produces an artificial choice dichotomy (Hancock 2007; Crenshaw 1994). Examinations of personal narratives support the notion that identities are not discrete entities (Bowleg 2008). Take, for example, Maya Rupert, an African American woman who was asked to discuss how her sense of identity influenced her decision about whether she would support Barack Obama or Hilary Clinton in the democratic presidential primary race in 2007. She stated that her “dual identities” as an African American and a woman could produce some psychic conflict. But, she also urged the public to acknowledge that the decision for whom to vote for is not solely a “symbolic” choice. She states,

...of course identity doesn't work like that. Women of color are not “women who happen to be racial minorities” and we're not “racial minorities who also happen to be female.” We're women of color. And both of those identities inform our decisions, along with *many* other identities we happen to embrace...Dividing the issue...[forces] an artificial ranking of identities in which no one wants to engage (Rupert 2007: E-3, emphasis added).

When we think of organized identity groups as “coalitions” (e.g., reconceptualize “race” as a coalition of “men” and “women” or as a coalition of members of the working, middle, and upper classes) we recognize that the intersection of these different group identities creates unique perspectives on political issues (Bowleg 2008; Warner 2008).

Thus, while individuals may often have multiple, conflicting identities, this state may not necessarily lead to attitudinal ambivalence. While some individuals may experience attitudinal ambivalence as a result of these competing identities, others may not. For example, if some people evaluate multiple social groups positively and perceive those groups to be of roughly equal status, then competing cues regarding political issues taken from those groups may lead them to experience attitudinal ambivalence. But this may not always be the case. Some may be able to rank the relative salience of one identity group cue over another, while others may use their collective identities to formulate a unique and strongly held viewpoint. Simply focusing on the affective evaluations of multiple social identity groups and their potential for causing psychological conflict in considerations does not provide us with information regarding what makes someone systematically less able to rank the relative salience of ideologically inconsistent social reference groups.

Drawing Connections

The three explanations outlined above provide us with plausible accounts of the conditions under which individuals may experience attitudinal ambivalence. These accounts share the common premise that attitudinal ambivalence is likely to occur only when the potential for conflict in considerations exists in a person's choice set—whether that be in the inherently conflicting nature of the values that structure the political decision in question, or in the social setting in which the choice is made. But while valuable and logical, each of the explanations is also lacking. More specifically, the three overarching accounts address the value bases and environmental factors that contribute to the experience of political ambivalence. But, they fail to provide us with a satisfying *psychological* explanation for why,

all else constant, some individuals are more likely than others to consider and place value on the merits of two competing sides of a debate and experience political ambivalence as a result.

Each of the approaches leads us to ponder the following question: Are we overlooking systematic differences among individuals when we try to identify those who will be most likely to experience attitudinal ambivalence toward a political object, such as a policy or candidate? I contend that the answer is yes, and in this dissertation, I provide a personality trait explanation for why some citizens are more likely to entertain competing considerations and experience attitudinal ambivalence than otherwise similar individuals. In doing so, I apply McCrae and Costa's (1996, 1997, 2003, 2008) Five Factor Model of Personality to the study of ambivalence, and contend that broad, non-conditional dimensions of personality, in combination with environmental factors and values, contribute to the experience of this attitudinal state.

In the chapters that follow, I apply this framework of personality structure to the study of attitudinal ambivalence. Systematic research on the structure of human personality within the field of personality psychology over the past forty years strongly suggests that it can be broken down into five basic traits: Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism (Digman 1990; Pervin 1996; McCrae and Costa 2008, 2003, 1997, 1996; Mondak 2010; Mondak et al. 2010; John, Naumann, and Soto 2008; John and Srivastava 1999; Gerber et al. 2010, 2011). This framework consists of personality traits that are "nonpolitical" in nature, though it has been employed in studies of partisanship and political behavior in Italy, Germany, and most recently in the United States (Digman 1990; Schoen and Schumann 2007; Caprera et al. 2006; Mondak and Halperin

2008; Mondak 2010; Mondak et al. 2010; Gerber et al. 2010, 2011; Hibbing, Ritchie, and Anderson 2011). By considering the direct effects that personality traits have on attitudinal ambivalence, I will supplement existing causal explanations and formulate a more complete understanding of this phenomenon.

Personality and Political Science Research

Before I present my theory and hypotheses on the personality trait antecedents of attitudinal ambivalence, it is useful to examine the model of trait structure that I employ, as well as some of the key findings of how personality traits influence political behavior and attitudes. On a daily basis, we come into contact with others whom we may perceive to be patient, social, tolerant of ambiguity, and/or intellectually curious. We also come into contact with people we would describe as being generally nervous across social settings, quick to make judgments, and relatively intolerant of ambiguity. Research in personality psychology suggests that these individual differences, which are known as *personality traits*, “provide coherence and continuity in behavioral [and thought] patterns across different settings” in our everyday lives (Caprara and Zimbardo 2004: 582). They also “create, foster, and preserve a sense of personal identity” (582; see also, McCrae and Costa 2008, 2003, 1996).⁵ They are “enduring dispositions” and help us to describe “what people are like” (Roccas et al. 2002).⁶ If we can come to understand better the psychological tendencies of individuals, we should

⁵Similarly, McCrae and Costa (1995) define personality traits as “dimensions of individuals in tendencies to show consistent patterns of thought, feeling, and action.”

⁶Thus, traits are different from another important type of construct that we study in political science—values. Roccas et al (2002) define values as cognitive representations of desirable, abstract goals.

be better able to predict their attitudes and behaviors (Mondak 2010; Mondak et al. 2010; Gerber et al. 2010, 2011; McCrae and Costa 1996; Hibbing, Ritchie, and Anderson 2011).

Importantly for political science research, personality traits exert significant effects on political attitudes and behavior (Mondak et al. 2010; Mondak 2010; Gerber et al. 2010, 2011; Hibbing, Ritchie, and Anderson 2011; Mondak and Halperin 2008: 335; see also Adorno et al. 1950; Altmeyer 1987, 1996, 1998; Ekehammar et al. 2004; McFarland 1998; Feldman and Stenner 1997; Sidanius and Pratto 1999; Sidanius, Pratto, and Bobo 1994; Pratto et al. 1994). In political psychology, we can find numerous examples where scholars use personality traits to explain the actions and judgments of political leaders (Winter 1987, 2004; Barber 1977, 1988, 1992; Choiniere and Kiersey 1992; Post 1993). Political psychologists have also published studies examining the connection between personality traits and political tolerance, authoritarianism, social dominance, and political ideology (Gerber et al. 2010; Adorno et al. 1950; Stenner 2005; Altmeyer 1987, 1996, 1998; Feldman and Stenner 1997; Sidanius and Pratto 1999; Pratto et al. 1994; Ekehammar et al. 2004; McFarland 1998; McClosky 1964). But even though there has been an increase in interest in such topics and evidence of significant political implications, political scientists continue to be unlikely to employ personality traits as variables in their analyses of the general political attitudes and behaviors of members of the mass American electorate (Mondak 2010; Mondak et al. 2010; Mondak and Halperin 2008; Gerber et al. 2010, 2011; Hibbing, Ritchie, and Anderson 2011). Why is this the case?

The relative lack of personality research in political science does not mean that studying traits is unimportant for gathering a more complete understanding of political behavior and attitudes (Mondak et al. 2010; Mondak 2010; Mondak and Halperin 2008).

Instead, the lack of research focusing on personality traits and political science research stems from a number of other factors. First, and perhaps most importantly, political scientists prefer to use large-scale (“big N”) surveys to explain political attitudes and voting behavior. There is great appeal in generalizing findings across samples that are representative of the American electorate. However, utilizing these surveys as a primary data source for explaining political attitudes and behavior comes at a cost. More often than not, personality inventories are too long to be included on these instruments (Mondak et al. 2010; Gosling, Renfrow, and Swann 2003). Thus, while appealing, using these surveys may lead researchers to fall victim to the “law of the instrument” (Kinder and Palfrey 1992), wherein data collection and measurement drives theorizing. That is, researchers tend to neglect studying interesting and plausible research questions since data on the personality traits of members of the general electorate may not be readily available.⁷

Second, when we think of how personality may affect political behavior and attitudes, there are a large number of potentially applicable personality traits. This has led some scholars to “pick and choose” traits that could perhaps be of most interest to the phenomena they wish to explain (Mondak 2010; Mondak and Halperin 2008). For example, among those who do attempt to use personality traits to more completely understand the political attitudes and behavior of members of the general public, their works tend to focus on a very limited number of personality characteristics (such as the Need for Cognition, Self Esteem, Social Dominance Orientation, or Right Wing Authoritarianism) rather than on traits that have been demonstrated to be part of a comprehensive model of personality structure (Sniderman 1975;

⁷These surveys are expensive, and time is of the essence when collecting data. Therefore, extensive personality trait inventories are not included on the survey instruments, and as a result, we are left with large-N datasets that do not provide us with any information regarding the personality traits of members of the electorate.

Thompson and Zanna 1995; Mondak and Halperin 2008; Mondak 2010). This is especially evident in research that focuses on the role(s) that particular personality factors, such as Social Dominance Orientation (SDO) or Right Wing Authoritarianism (RWA), play in explaining deviant, undesirable, or negative behaviors like political intolerance or prejudice toward social groups (see, for example, Altmeyer 1997, 1998; Pratto et al. 1994; Akrami and Ekehammar 2006; Ekehammar and Akrami 2007; Ekehammar et al. 2004; McFarland 1998).

While these personality factors are powerful predictors, a focus on select factors or traits has led some to argue that the study of personality and politics is a field with a “jerry built appearance” (Sniderman 1975; quoted in Mondak and Halperin 2008; Mondak 2010). But from a more practical standpoint, the approach of picking and choosing only some personality traits for study—while simultaneously ignoring others that could be important—limits our understanding of how traits can influence political attitudes and behavior, because it is difficult or impossible to generalize findings both within the broad field of political behavior and across different academic disciplines as well (Mondak 2010; Mondak and Halperin 2008).

Personality Structure and the Application of the Five Factor Model of Personality

While personality psychologists largely agree that traits are important to study, the quest to identify, in a systematic manner, a useful taxonomy of traits to apply to studies of behavior and attitudes has been ongoing since the 1930s (Digman 1996, 1990). Over the course of the past two decades, however, the field of personality psychology has largely reached a consensus on a framework for studying the composition of human personality (Digman 1996, 1990; Pervin 1996; Gosling, Renfrow, and Swann 2003; John, Naumann, and

Soto 2008; Mondak 2010; Mondak and Halperin 2008; Mondak et al. 2010; Gerber et al. 2010). Since the 1990s, the leading approach to studying the effects that personality has on behavior and attitudes has been the trait-based approach (Schoen and Schumann 2007).⁸ The underlying premise of this research is the idea that behaviors and attitudes that appear to be random in specific settings are actually quite systematic if similar behaviors and/or attitudes are studied across different domains or contexts (Thompson and Zanna 1995; McCrae and Costa 1982, 1995, 1996, 1997, 2003, 2006, 2008). Enduring individual dispositions, or personality traits, underlie those systematic patterns of behavior and attitudes (Gerber et al. 2010; McCrae and Costa 1996).

A relatively “new” conceptual framework for studying the effects that personality traits have on individual behavior and attitudes emerged in the 1980s, and is called the “Big Five” or Five Factor Model (FFM) of personality (Digman 1996: 1; McCrae and Costa 1987, 1996, 1997, 2003, 2008; Goldberg 1993; Wiggins 1996; Wiggins and Trapnell 1997). Over 2,000 articles that use this model of personality structure have been published (John, Naumann, and Soto 2008; John and Srivastava 1999). This framework for studying personality traits has a long history and might actually be a “rediscovery” (Digman 1996: 12). In his Presidential Address at the American Psychological Association meeting in 1933, Thurstone discussed a factor analysis that he conducted on 60 adjectives that were used by his subjects to rate acquaintances, and noted that “it is of considerable psychological interest to know that the whole list of [60] adjectives can be accounted for by postulating only five

⁸This agreement follows the “skepticism” of the 1960s, in which behaviorists dismissed the importance of traits and argued for psychologists to focus on the more “objective” task of counting responses to stimuli. Others questioned the importance of studying traits and argued that they were “figments of observers’ imaginations” with “little practical value in the real world of behavior prediction and management” (Digman 1996: 12). This skepticism has since been dismissed by most scholars in the field of personality psychology (Digman 1996; Schoen and Schumann 2007).

independent common factors” (quoted in Digman 1996: 1). A few years later, Allport and Odbert (1936) examined all adjectives found in the dictionary to identify the language markers that individuals use to identify personality traits. Using the traits identified by Allport and Odbert, Cattell then conducted three separate factor analytic studies of bipolar ratings scales in the 1940s, and he identified 16 primary factors (De Raad 2000; Digman 1996). Scholars have since reexamined Cattell’s work and have been unable to replicate the 16 factor findings. Instead, they find robust evidence for a five factor structure for human personality traits (Tupes 1957; Tupes and Christal 1992; Norman 1963; Borgatta 1964; Eysenck 1970; Guilford 1975; Goldberg 1993, 1992, 2006; McCrae and Costa 2008, 2006, 2003, 1997, 1996, 1987).

Five common personality traits have repeatedly emerged across different studies conducted over time (refer to footnote 8, or see Digman 1996; John, Naumann, and Soto 2008; John and Srivastava 1999; Wiggins and Trapnell 1997; McCrae and Costa 1996, 2006, 2008; Goldberg 1992, 1993; Tupes and Christal 1992). This “Big Five” framework or FFM provides an encompassing taxonomy that serves to organize the myriad trait concepts (or adjectives) examined in past research into a single classification framework (John and Srivastava 1999; Mondak and Halperin 2008; Mondak 2010; McCrae and Costa 1996; Caprara and Zimbardo 2004). In this framework, traits are viewed as “dimensions of individuals in tendencies to show consistent patterns of thought, feeling, and action” (McCrae and Costa 1995). They have been shown to have some basis in genetics and are quite stable over the course of the life cycle (Bouchard 1997; Van Gestel and Van Broeckhoven 2003; Costa and McCrae 1988, 2006; McCrae and Costa 2003, 1996, 1982; Gosling, Renfrow, and Swann 2003; Mondak 2010). As such, these core, or dispositional,

traits are theorized to be “causally prior” to characteristic adaptations and previously formed attitudes and behaviors (McCrae and Costa 1996; Gerber et al. 2011: 113). The five personality factors that have materialized are Agreeableness, Conscientiousness, Extraversion, Neuroticism, and Openness to Experience.⁹

Those who are high in the trait of Agreeableness tend to be more “trusting,” “empathetic,” and “sensitive,” while those who are low on this trait are more “suspicious” and “demanding” (Caprara et al. 2006; Mondak and Halperin 2008; John and Srivastava 1999). Individuals who are Conscientious like to avoid uncertainty, and tend to be “dependable,” “responsible,” “organized,” and “resourceful,” those who are low on this trait are marked by impulsiveness, impatience, and carelessness (John and Srivastava 1999; Mondak and Halperin 2008). Extraverts are described as “assertive,” “talkative,” “warm,” “outgoing,” and “energetic,” while those low on this trait dimension (i.e., introverts) tend to be more reserved or shy in social situations (Mondak and Halperin 2008; McCrae and Costa 1996; John and Srivastava 1999). Those who score high on the Neuroticism trait tend to be more “anxious,” “depressed,” and self conscious, while others who score low on this trait are typically more positive in their outlooks, “calm,” and relaxed across different settings (McCrae and Costa 1996; John and Srivastava 1999). Finally, those who are high on the Openness to Experience trait appreciate diversity, and they are inquisitive and imaginative;

⁹Personality psychologists often use an acronym (OCEAN or CANOE) to represent the five factors. “N” stands for Neuroticism or Emotional Instability. That factor title unfortunately conveys some negative, normative connotations to some people. Many of the personality studies also use “loaded” or judgmental adjectives to describe the other four factors as well. Some might even argue that the labels are either too broad or too restrictive to be appropriate labels of the five broad personality dimensions. However, to keep in line with current research on the FFM in both political science and psychology, and to avoid confusion in the application of the model and the interpretation of the findings across disciplines, I will employ similar language in my description of the traits. However, in this dissertation, I will not make *any* claims about whether it is “better” or “worse” to possess high levels of certain traits over others. In addition, when measuring these traits in my student surveys, I will use balanced trait scales (with statements worded in both the positive and negative direction).

those low on this trait are typically described as more “cautious” in their actions and “conventional” or “dogmatic” in their beliefs (Mondak and Halperin 2008; Gerber et al. 2011).

The “Big Five” framework of personality structure, or Five Factor Model (FFM), draws on two different approaches—lexical and conceptual—to determine which personality traits are relevant for study, but both lines of work reach very similar conclusions (Saucier and Goldberg 1996; Costa and McCrae 1996; Mondak 2010; Goldberg 1990). The lexical approach contends that all the personality traits that are important in personal relationships will be represented in language (Saucier and Goldberg 1996; Gerber et al. 2010; John and Srivastava 1999). Accordingly, since personality differences can be captured by language, indicators of personality traits can be created through the use of associated adjective markers (Mondak et al. 2010; Goldberg 1992). Questions designed to measure the traits of interest may use a semantic differential or unipolar response format in which individuals rate how closely an adjective describes them (Barbaranelli et al. 2007; Mondak 2010; Goldberg 1992, 1993). Alternatively, the conceptual approach uses theory about the distinctiveness of personality traits to create questionnaires to measure them (McCrae and Costa 2008, 2006, 2003, 1996; Costa and McCrae 1992). These questionnaires consist of a series of phrases that describe a wide array of behaviors. Such personality inventories, like the proprietary NEO-PI-R, International Personality Item Pool (IPIP) scales, or other publicly available inventories designed to measure the “Big Five” factors (Costa and McCrae 1992; Goldberg et al. 2006; Goldberg 1992, 1993) are administered to samples of respondents who rate how well the

statement fits them. Then, their answers are factor analyzed.¹⁰ With both approaches, five common factors emerge. Furthermore, the five factors appear to include the major dimensions of personality measured in most independent personality scales, across different response formats (e.g., observer ratings and self report) and different cultures (Costa and McCrae 1988; McCrae and Costa 1996; McCrae and Allik 2002; McCrae et al. 1998; Gerber et al. 2010).¹¹

Application of the Five Factor Model to Political Science and Public Opinion Research

While the Five Factor Model or “Big Five” framework is generally accepted as an encompassing taxonomy that can organize personality research, its application to research in political science has been quite limited, and until very recently was largely ignored in the study of political behavior and attitude formation in the American political context (Gerber et

¹⁰The proprietary NEO-PI (revised) was originally created by Costa and McCrae to measure the five factors of personality structure. The long version consists of 240 balanced questions designed to describe behavior with the purpose of measuring the five personality dimensions. There are two possible response formats: self report and observer report and both take approximately thirty to forty minutes to administer to participants. There is also a shorter, sixty item, instrument called the NEO-FFI designed to measure the five domains when time is a factor in gathering data. Given the renewed interest in personality studies, scholars recognize the need to develop valid and reliable personality inventories of varying lengths that can be made accessible to researchers to facilitate the incorporation of personality traits into their questionnaires (Goldberg 1992). Multiple “Big Five” inventories and response formats are now used, including those that ask respondents to rate how well a set of statements describes them (Goldberg 1993; Costa and McCrae (1992)), univocal adjective scales (Goldberg 1992), and bipolar scales (Mondak et al. 2010). No one response scale is “better” than another. Rather, researchers who are interested in studying the effects of the five broad traits and who face the task of choosing amongst alternative sets of Big-Five markers “must decide between markers based on a reasonably representative sampling of variables and those that provide roughly equal coverage of each of the Big Five domains” (39). Researchers will also “face the inevitable compromises between increasing reliability by using larger marker sets and decreasing subject testing time by using smaller sets” (Goldberg 1992: 39).

¹¹The five factors encapsulate key traits measured in other major personality questionnaires like the Myers-Briggs Personality Inventory, Wiggin’s Circumplex, and the California Q-Set, among others. For a comprehensive list of the personality instruments that converge with the five-factor/”Big Five” model of personality, see McCrae and Costa (1996: 63). Individual personality constructs employed in other works also correlate quite highly with the five factors (e.g., Openness is negatively correlated with Authoritarianism) (see McCrae, Costa, and Busch 1986; McCrae and Costa 1989a; McCrae and Costa 1988b; Harvey, Murry, and Markham 1995). These factors have been subjected to cross-cultural validation (see, McCrae and Allik 2002; McCrae and Costa 2006). Furthermore, the same findings in these studies hold for both self report and expert rating response formats (McCrae and Costa 1987, 1982).

al. 2010, 2011; Mondak and Halperin 2008; Mondak 2010; Mondak et al. 2010; Carney et al. 2008). To be sure, some scholars have focused on the relationship between personality traits and partisan support. For example, in their study of voters in Germany, Schoen and Schumann (2007) investigate how personality traits influence voter attitudes and vote choice at the polls. They rely on the “attraction paradigm”—that an individual will hold a more positive opinion of a stranger (or political party representative) when that person thinks the stranger is like him/herself—as a basis for their theory (475). They find that voters who are higher in the Openness trait are more likely to support parties that endorse social liberalism, and voters high on the Neuroticism trait support parties that purport to guard “against material and cultural challenges” (492). Finally, those who are high on Agreeableness and voters who are low in Conscientiousness are more likely to support parties that subscribe to economic or social liberalism. Similarly, in their analysis of Italian voters, Caprara et al. (2006) found that center left voters scored higher than center right voters on the traits of Friendliness (Agreeableness) and Openness. Center left voters also scored lower on Extraversion and Conscientiousness than center right voters.

In the context of American politics, Mondak and Halperin (2008) employed the “Big Five” personality framework to examine the direct effects of personality traits on a wide variety of variables of interest to the study of American political behavior and attitudes. Using two telephone surveys, and a “paper and pencil” survey conducted between 1998 and 2005, they take a first glance at the effects Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism on a laundry list of familiar dependent variables such as partisanship, ideology, presidential approval, trust in government, political discussion, and political knowledge. The “Big Five” were measured with a 10-item trait inventory that the

authors developed. No personality trait consistently influenced *every* political behavior and attitude variable, but they did find significant evidence of trait effects across each of the dependent variables, and argue that more attention should be paid to studying the effect(s) of personality traits on political behavior.

Mondak and Halperin's (2008) study was largely exploratory in nature and helped to lay the groundwork for new, theory-driven research that investigates how the "Big Five" personality traits influence American political behavior and attitudes. Using a 10-item personality inventory on the 2006 Congressional Elections Survey that they devised, Mondak et al. (2010) conducted a more focused analysis in which they examined the relationship between personality traits and civic engagement. They found that the traits of Extraversion and Openness exerted strong and positive effects on indicators of political engagement (e.g., contact with a House/Senate member in the past two years; attendance at a public meeting with a House/Senate member in the past two years; work for a party or candidate). Conscientiousness, however, was negatively associated with the majority of political engagement indicators.

In another recent study, Gerber et al. (2010) used data from the 2007-2008 Cooperative Campaign Analysis Project, an internet-based survey, to examine how personality traits influence attitudes toward economic policies (i.e., role of government in health care and support for raising taxes), social policies (i.e., abortion and support for civil unions), and ideology. The authors used the Ten-Item Personality Inventory (Gosling, Renfrow, and Swann 2003) to measure the "Big Five" traits. Overall, they found that Conscientiousness was associated with conservative attitudes in economic and social policy areas. Openness was associated with liberal attitudes in economic and social policy areas.

Agreeableness was associated with liberal economic attitudes and conservative social attitudes, and Emotional Stability was associated with economic conservatism. Importantly, the magnitude of the effect sizes of Conscientiousness and Openness were similar to other predictors such as income and education.

In their most recent work, Gerber et al. (2011) used data from the 2007-2008 Cooperative Campaign Analysis Project and a telephone survey of a random sample of 1,800 Connecticut residents conducted in 2008 to demonstrate that personality traits significantly influence different measures of political participation. They found that Extraversion and Emotional Stability were positively associated with voter turnout. Emotional Stability was also positively associated with donating money to candidates. Conscientiousness and Agreeableness were negatively associated with voter turnout, although the effect for Agreeableness was not significant in the sample of Connecticut voters. Openness did not exert a statistically significant effect on political participation. Once again, they found that the effects of two traits in particular—Extraversion and Emotional Stability—were comparable to income and education.

Personality traits significantly improve our ability to predict and understand political attitudes and behavior. When the traits are examined individually, empirical evidence suggests that they exert systematic and significant direct effects on a wide variety of political variables of interest. Scholars are just beginning to “view personality within the broader context of the various forces that combine to influence political behavior” (Mondak et al. 2010: 87; Gerber et al. 2010, 2011; Hibbing, Ritchie, and Anderson 2011). The idea motivating this research is that personality traits may affect political behavior and attitudes differently depending upon contextual or situational factors (Mondak et al. 2010; see also

Gerber et al. 2010).

Personality traits may interact with a multitude of situational factors to influence political attitudes and behaviors. Mondak et al. (2010) and Gerber et al. (2010) take a first cut look at possible interactions to demonstrate how the effects of traits may vary across situations or contexts. For example, Mondak et al. (2010) interact Conscientiousness with perceived importance of political involvement and find that when political involvement is viewed as important, those who are high on this trait are more likely to get involved in politics; but when political involvement is viewed as unimportant, those who are Conscientious are hesitant to participate politically (97). In their examination of the effects of Openness on political engagement, they find that 40% of the effect of this trait on political engagement is mediated by political knowledge and internal efficacy; internal efficacy and political knowledge exert a positive impact on political engagement. The authors also question the notion that as network size increases, exposure to diverse viewpoints increases. They contend that personality traits, particularly Extraversion and Agreeableness, moderate the impact of network size on exposure to cross-cutting viewpoints.

Gerber et al. (2010) also explore how personality trait effects vary across contexts. They argue that race acts as a context that conditions the influence of personality traits. They find that among whites, Conscientiousness is more strongly associated with conservatism than it is among blacks. Openness is also more strongly associated with liberalism among whites than it is among blacks. Finally, blacks who score high on the Extraversion trait are more economically liberal while whites who score high on this trait are more economically conservative. They conclude by suggesting that the findings show that the relationships between personality traits and attitudes are likely to be affected by features of the political

environment, and that more research should be conducted in this area.

While interactions between traits and situational variables are important to study, it is also likely that traits interact as well. This possibility has not been explored by personality psychologists who employ the five factor model of personality structure in their research. Organizational psychologists have entertained this possibility, though. These scholars tend to limit their focus to the interaction between Extraversion and Neuroticism, and find support for the idea that the “best” or most productive workers in organizations tend to be those who are more extraverted *and* emotionally stable (i.e., content, social, and devoid of anxiety) (Judge and Erez 2007). Given the recent application of this framework to political science and public opinion research, it is not surprising that trait interactions have not yet been explored.

Looking Ahead: Remarks

In this chapter, I have offered an overview of past theories that provide researchers with valuable insights about the origins of ambivalence. While published literature on the root causes of political ambivalence is rather sparse compared to that which is published on its consequences (Craig and Martinez 2005), existing theories suggest that it is plausible that citizens may experience this attitudinal state if they use multiple values or cues from ideologically inconsistent social groups in their attempt to provide structure to their political attitudes (see, for example, Feldman and Zaller 1992; Gainous and Martinez 2005; Alvarez and Brehm 1995; Lavine and Steenbergen 2005). Furthermore, information environments where diverse viewpoints about political objects are discussed and shared may also provide a setting that is more conducive to the development of attitudinal ambivalence than an

otherwise similar setting where citizens are only exposed to one-sided political views (Keele and Wolak 2008; Lavine 2001; Huckfeldt, Mendez, and Osborn 2004).

While valuable, these existing theories share one characteristic in common: they hinge on the presence of conflicting views in the environments in which individuals make decisions. Politics is typically wrought with conflict as citizens and politicians alike offer competing opinions and viewpoints on issues or candidates in political discourse. Politicians, political parties, and newscasters, among others, often frame discussions of political issues so that they may be understood in terms of values such as equality, self reliance or individualism, and moral traditionalism, or in terms of positions taken by social groups. But while exposure to and awareness of multiple and conflicting viewpoints may be a necessary condition for attitudinal ambivalence, it is not a sufficient condition. Put simply, ambivalence is not experienced by *all* individuals who are exposed to competing viewpoints offered in their information environments, or by those who take attitudinal or behavioral cues from a number of different social reference groups. Similarly, while multiple values may be primed in political debates and discussions, not all citizens are unable to order the relative salience of values that they may perceive to be relevant to the construction of an evaluation of a political object.

After a review of the literature, one overarching question remains: why is it that some individuals become ambivalent toward political objects, while others are able to order the importance and salience of considerations and reach a univalent attitude? In the chapters that follow, I offer an individual-level theory of the antecedents of ambivalence—that personality traits predispose individuals to experience this attitudinal state—and test it across a variety of political issues and within different information environments.

Using the Five Factor Model (FFM) of personality structure as my theoretical framework, I offer a set of hypotheses about the direct effects that the “Big Five” traits of Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism have on the likelihood that a citizen will experience ambivalence. These traits, with the exception of Extraversion, are hypothesized to be significant predictors of ambivalence toward political issues, controlling for other explanatory factors. The hypotheses presented will then be tested using two different measures of ambivalence (i.e., subjective and objective), two personality inventories (a 50-item IPIP inventory and the Ten-Item Personality Inventory), and a number of different political issue domains, including stem cell research, the wars in Iraq and Afghanistan, same-sex marriage, and mandatory health insurance and health care reform.

CHAPTER THREE

THEORY AND HYPOTHESES

In this chapter, I offer an individual-level theory of the antecedents of political ambivalence. Using the Five Factor Model (FFM) of personality structure as my theoretical framework, I develop a set of hypotheses about the direct effects that the “Big Five” traits of Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism have on the likelihood that a citizen will experience ambivalence. Simply stated, I contend that these core personality traits, in addition to environmental or situational factors, play an important role in predisposing individuals to experience political ambivalence.

Personality and Political Attitudes Research

Political scientists seek to identify the factors that affect the political attitudes of individuals in the mass public, and typically, the focus is on explaining the roles that demographic variables, values, and various environmental stimuli (e.g., information from partisan elites, social groups, discussion partners, the media, etc.) play in shaping those attitudes. Research into the personality trait antecedents of those attitudes has been lacking in comparison (Mondak et al. 2010; Mondak 2010).

Due to their roots in inherited genetic differences, early socialization experiences, and/or early psychological interventions, personality traits display remarkable resistance

to external influences and remain quite stable over the course of the life cycle (McCrae and Costa 1995, 1996: 68, 1997, 2003, 2008; Costa and McCrae 2006, 1988; Gerber et al. 2010; Mondak 2010). These traits are therefore able to afford consistency in thought, feeling, and behavior patterns across a variety of settings (Caprara and Zimbardo 2004; Roccas et al. 2002; McCrae and Costa 2008, 1996, 1995). If we are able to understand better individuals' personality traits, then we should be able to predict their political attitudes and behaviors more precisely (Mondak and Halperin 2008; Mondak 2010; Mondak et al. 2010; Gerber et al. 2010, 2011)

To be sure, scholars have not ignored personality characteristics entirely; on the contrary, they have long recognized that dispositions or traits likely play an important role in shaping individual-level attitudes and behaviors. But, the typical focus has been on a limited number of personality characteristics (e.g., Need for Cognition, Fear of Personal Invalidity, Self Esteem, Social Dominance Orientation, Right Wing Authoritarianism) rather than on a broad set of traits shown to be part of a comprehensive model of human personality structure (Mondak and Halperin 2008; Mondak 2010; Sniderman 1975; see, for example, Thompson and Zanna 1995; Pratto et al. 1994; Sidanius, Pratto, and Bobo 1994; Whitley 1999; Ekehammar et al. 2004; Altmeyer 1988, 1996).

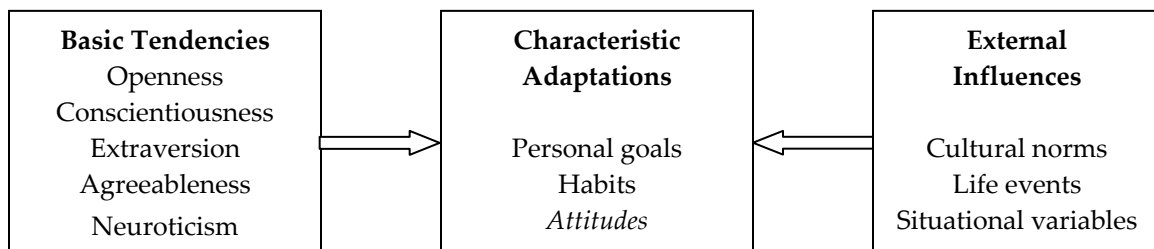
As discussed in Chapter Two, the field of personality psychology has largely reached a consensus on a framework for studying human personality (Digman 1990, 1996; Pervin 1996; John, Naumann, and Soto 2008; John and Srivastava 1999). The FFM, or "Big Five" framework, is now generally accepted as a useful taxonomy that can organize personality research (John and Srivastava 1999; McCrae and Costa 1996; Mondak and Halperin 2008; Mondak et al. 2010; Mondak 2010; Caprara and Zimbardo 2004). But, its application to

research in political science—especially the study of political behavior and attitude formation in the American context—has been limited (see, for example, Mondak 2010; Mondak et al. 2010; Gerber et al. 2010, 2011; Mondak and Halperin 2008; Hibbing, Ritchie, and Anderson 2011).

Theoretical Framework

In line with current research, I employ McCrae and Costa’s Five Factor Model (FFM) of Personality structure as the theoretical framework for my study. The basic framework is outlined in Figure 3.1 below.

Figure 3.1. Five Factor Model of Personality



Note: Figure adapted from McCrae and Costa (1996: 73)

In the work and theory of those who employ the FFM, *basic tendencies* or “dispositional traits” represented by the five factors of personality (Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) and *external influences* such as environmental or situational factors, shape and influence the development of “mid-level units” (goals, habits, or attitudes) known as *characteristic adaptations* (McCrae and Costa 1996: 72-75; Gerber et al. 2010: 111-112). For example, in recent research, political scientists conceptualize economic and social policy attitudes, as well as various behaviors indicative of political or civic engagement, as characteristic adaptations (Gerber et al. 2010;

Mondak et al. 2010). The characteristic adaptation of concern in this research is *political ambivalence*. Thus, I am conceptualizing of political ambivalence as a function of *both* basic personality traits and external influences.

To date, much of the research conducted in this area has focused on the *external influences* that lead individuals to experience political ambivalence. These explanations share a common premise: attitudinal ambivalence is likely to be high when the potential for conflict exists in a person's choice set, whether that be in the conflicting nature of the values that structure the political decision in question, conflicting messages from social groups that an individual uses as cues to form political attitudes, or the presence of conflicting information made available to citizens in political discussions or in campaign environments.¹²

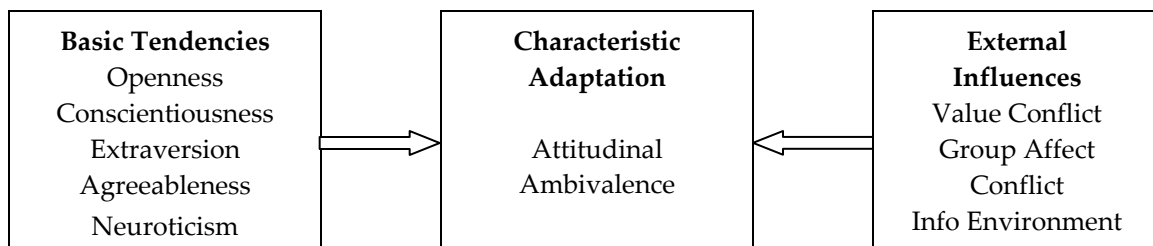
While valuable, I contend that these existing explanations exclude an important factor from the analytical framework that should also be used to understand the antecedents of political ambivalence: the "basic tendencies" or *personality traits* of individuals (McCrae and Costa 1996: 73). These broad, non-conditional dimensions of human personality shape the way that individuals view, understand, and interact with the political world. It is well known that people vary on the basic personality tendencies or core dispositions that shape their thoughts, feelings, and actions (McCrae and Costa 1996), and empirical evidence demonstrates that these traits exert direct and independent effects on various political attitudes and behaviors (Mondak 2010; Mondak et al. 2010; Gerber et al. 2010, 2011; Mondak and Halperin 2008; Hibbing, Ritchie, and Anderson 2011). As such, I contend that

¹²To be sure, individual-level factors (e.g., political information/knowledge, age, partisan and/or ideological affiliation) have been examined in past studies of ambivalence. These factors are included as control variables in my models.

these dispositional traits may also predispose individuals to experience attitudinal ambivalence toward political issues.

Therefore, I argue that it is important to consider *not only* the “external influences” or environmental factors and previously formed attitudes when identifying the antecedents of political ambivalence, *but also* the “basic tendencies” or personality traits of individuals that may predispose them to experience ambivalence (McCrae and Costa 1996: 73). To reiterate, I am conceptualizing of political ambivalence as a function of *both* basic personality traits and environmental or external factors. My theoretical framework (as modified from McCrae and Costa 1996) is presented in Figure 3.2 below.

Figure 3.2. Theoretical Framework Summary



By considering the influence of both personality traits and external influences on political ambivalence, I supplement existing accounts of ambivalence and formulate a more complete explanation of the antecedents of this type of attitude.

Why the “Big Five?”

Before moving on to a discussion of how the “Big Five” traits influence the likelihood of experiencing ambivalence, it is important to acknowledge that the Five Factor Model (FFM) of personality is not the *only* model of human personality structure that exists in the literature. Additionally, those who employ the FFM in their research do not contend that the traits of Openness to Experience, Conscientiousness, Extraversion, Agreeableness,

and Neuroticism are the *only* personality variables worthy of study (Mondak et al. 2010: 86; Mondak 2010; McCrae and Costa 1996).

Rather, the “Big Five” traits are viewed as “broad domains that organize and summarize the vast majority of subsidiary traits” (Mondak et al. 2010: 86; see also Gerber et al. 2010; McCrae and Costa 2008, 2003, 1995, 1996; Digman 1996; Saucier and Goldberg 1996; Hogan 1991; John, Naumann, and Soto 2008; John and Srivastava 1999; Harvey, Murry, and Markham 1995). Empirical research shows that there is significant overlap between the FFM and other personality trait inventories, including the California Personality Inventory, the California Q-set, Right Wing Authoritarianism and Social Dominance Orientation scales, Holland’s Vocational Preference Inventory, and Murray’s Needs, among others, even though these inventories employ different questions and measures (Akrami and Ekehammar 2006; Duriez and Soenens 2006; Ekehammar et al. 2004; Furnham 1996; McCrae and Costa 2008, 1996, 1986, 1989a, 1989b; McCrae, Costa, and Busch 1986; Harvey, Murry, and Markham 1995). Notably, four of the five traits of the FFM are related to the four scales of the well known Myers-Briggs Type Indicator (MBTI) (Harvey, Murry, and Markham 1999; McCrae and Costa 1989b; Furnham 1996).

Due to their use by political psychologists, the Social Dominance Orientation (SDO) and Right Wing Authoritarianism (RWA) scales deserve additional attention here. These scales have been used frequently in studies examining the links between personality characteristics and prejudice or intolerance toward women, lesbians and gays, African Americans, and other social groups (Ekehammar et al. 2004; Altmeyer 1998, 1996, 1987; McFarland 1998; Pratto et al. 1994). Those who score high on RWA tend to be more likely to abide by and value conventional norms; they are submissive to authority figures and have

hostile feelings toward individuals that they believe to be norm violators (Altmeyer 1998). Others who score high on the Social Dominance Orientation scale are prone to favor hierarchical relationships among social groups (Pratto et al. 1994).

While they are powerful predictors of prejudice and tolerance, the RWA and SDO scales are two commonly used examples of personality characteristics employed in political psychology studies that do *not* encompass a comprehensive model of personality structure. Furthermore, existing research now questions whether RWA and SDO are really measures of personality at all; instead, these studies conclude that RWA and SDO should be viewed as ideological attitudes or social evaluations (Sibley and Duckitt 2009; Duckitt et al. 2002; Reynolds et al. 2001). In their studies of the overlap among the core “Big Five” traits and RWA and SDO, Akrami and Ekehammar (2006) and Ekehammar et al. (2004) find support for the argument that RWA and SDO are actually *caused* by the core “Big Five” traits, and subsequently predict prejudice (Akrami and Ekehammar 2006). Nevertheless, scholars have studied the correlational relationships between the “Big Five” and the RWA and SDO. High SDO is associated with low Agreeableness and low Openness scores, while high RWA is associated with low Openness, high Conscientiousness, and high Extraversion scores (Akrami and Ekehammar 2006; Duriez and Soenens 2006; Ekehammar et al. 2004).

Another popular measure of personality structure often used by members of the general public, as well as organizational and industrial psychologists, is the Myers-Briggs Type Indicator (MBTI). The MBTI measures four dimensions of personality rather than five, which include: Introversion-Extraversion (EI); Sensing-Intuition (SI); Judging-Perception (JP); and Thinking-Feeling (TF). In terms of dimensional correspondence with the “Big Five” traits, empirical examination suggests that the “E” pole of the Introversion-

Extraversion dimension corresponds to high ratings on Extraversion; the “N” pole of the Sensing-Intuition dimension is similar to high scores on Openness to Experience; the “F” pole of the Thinking-Feeling dimension corresponds to high ratings on Agreeableness, Neuroticism, and Extraversion; and the “J” pole of the Judging-Perception dimension is much like Conscientiousness (Harvey, Murry, and Markham 1995; McCrae and Costa 1989b). But while similarities exist between the MBTI and the FFM, the interpretation of the scales of the MBTI differ quite significantly from other trait-based models of personality structure. Researchers who employ the MBTI use the responses to items on this inventory to classify individuals into one of 16 possible “type” categories based upon their profile of dichotomous preference scores (e.g., INTP, ESJF, etc.) (McCrae and Costa 1989b; Harvey, Murry, and Markham 1995). Then, the “type” scores that are produced are intended to provide bases for inference about how respondents would *potentially* behave in or react to a wide variety of circumstances.

The MBTI has been criticized heavily for two primary reasons. First, while the type categories may be useful for developing predictions of behavior across a wide variety of settings, the interpretation of the MBTI “types” as mutually exclusive categories is troublesome amidst the evidence that the four dimensions do *not* have bimodal response structures (McCrae and Costa 1989b; Harvey, Murry, and Markham 1995). Since a bimodal response structure does not exist, responses would be more accurately interpreted in terms of continuous preferences ranging from higher to lower scores on each of the dimensions presented above—much like the interpretation of the “Big Five” traits (McCrae and Costa 1989b). Second, and more importantly for my own theory, the MBTI excludes Neuroticism

(Emotional Stability) entirely from its conception and measurement of the 16 categorical personality types (McCrae and Costa 1989b; Harvey, Murry, and Markham 1995).

Interestingly, this exclusion is *not* based on a theory that this personality dimension is insignificant. The MBTI actually includes 95 items that typically are “unscored” when researchers create “type” scales; when a number of these items are scored and factor analyzed (e.g., “obsessive worrying,” “pronounced mood swings,” etc.) they form a unique fifth dimension that is similar to Neuroticism (Harvey, Murry, and Markham 1995). One of the goals of the MBTI was to avoid measuring dimensions of personality that could be perceived as “undesirable;” however, this leads researchers to ignore a separate personality dimension covering emotional well-being (Harvey, Murry, and Markham 1999)—a dimension that has been deemed as independent and significant by personality psychologists since the 1930s (see, for example, Thurstone 1934; Cattell 1946; Guilford and Guilford 1936, 1939a, 1939b).

The FFM of personality structure has been the dominant taxonomy in trait research in the literature on personality psychology over the last twenty years (John, Naumann, and Soto 2008; John and Srivastava 1999; Mondak et al. 2010; Mondak 2010; Mondak and Halperin 2008; Digman 1996; Saucier and Goldberg 1996; McCrae and Costa 2008, 2003, 1996; Harvey, Murry, and Markham 1995). It has been shown to be robust across different types of samples, raters, and questionnaire-types (McCrae and Costa 2008, 2006, 2003, 1995, 1997, 1996, 1987, 1982; McCrae and Allik 2002; John, Naumann, and Soto 2008; John and Srivastava 1999; Goldberg 1993). Given the comprehensiveness of the model, its overlap with other widely used personality inventories, and the evidence suggesting that the “Big Five” traits are predictive of attitudes and behaviors in general (McCrae and Costa 2008,

2003, 1996), there is substantial reason to believe that these traits influence citizens' *political* behaviors and attitudes (Gerber et al. 2010, 2011; Hibbing, Ritchie, and Anderson 2011; Mondak 2010; Mondak et al. 2010; Mondak and Halperin 2008). Thus, I have chosen to employ this theoretical framework in my dissertation research. My hypotheses for how the "Big Five" traits are expected to influence the experience of ambivalence about political issues are presented in the sections that follow.

Hypotheses

Hypothesis 1: Openness to Experience

High Openness to Experience is positively associated with high attitudinal ambivalence.

Those who are high on the trait of Openness to Experience tend to be more "analytical," "tolerant of diversity," "curious," and "imaginative" (De Raad 2000: 73; Gerber et al. 2010, 2011; Mondak et al. 2010; Mondak and Halperin 2008). They engage in political discussions frequently, are opinionated and knowledgeable about political issues, and are significantly more flexible in their political views when compared to individuals who are low on this trait (Mondak and Halperin 2008). Those who are low on this trait prefer simple solutions and are more "dogmatic" in their views (De Raad 2000; Mondak and Halperin 2008). Therefore, they may be less likely to entertain competing considerations when making political judgments. Thus, I expect a high score on the Openness to Experience trait to be positively associated with the likelihood of experiencing attitudinal ambivalence. Conversely, I expect that a low score on the Openness to Experience trait will be negatively associated with the likelihood of experiencing attitudinal ambivalence.

Hypothesis 2: Conscientiousness

High Conscientiousness is negatively associated with high attitudinal ambivalence.

Those who are high in Conscientiousness prefer to avoid uncertainty, while those who are low in this trait are more comfortable with ambiguity. Compared to individuals who score low on this trait, those who score high tend to be more “responsible,” “dependable,” “organized,” and “persistent,” they are also more likely to think before acting and have a strong tendency to follow social rules and norms (McCrae and Costa 2008, 1996; John and Srivastava 1999; Gerber et al. 2010, 2011; Harvey, Murry, and Markham 1995). Survey evidence suggests that individuals who score high on this trait tend to be significantly more “conservative” and “dogmatic” than those who are low on this trait; they also tend to know comparatively less about politics and voice fewer opinions in political discussions when compared to those who score lower on Conscientiousness (Mondak et al. 2010; Mondak and Halperin 2008: 353-354). It follows that while individuals who are high in Conscientiousness may be likely to engage in political discussions with others, this interaction may not necessarily lead them to entertain multiple, or conflicting, views on issues that may lead to ambivalence. Since they tend to prefer certainty and consistency to uncertainty, I expect that they will be more rigid and uncompromising in their attitudes, and therefore will be less likely to be ambivalent than a similar individual who does not score high on this trait. Those who are low in Conscientiousness tend to be more spontaneous and indecisive (De Raad 2000). Since they do not share the same desire to be definitive and resolute in their decisions, I expect that they will be comparatively more likely to entertain competing considerations when it comes to evaluating their position(s) on political issues, and, therefore, more likely to experience ambivalence as a result.

Hypothesis 3: Agreeableness

High Agreeableness is negatively associated with high ambivalence.

I hypothesize that those who are high in Agreeableness will be significantly less likely to be ambivalent than those who are low in Agreeableness. Past research suggests that agreeable persons tend to be less likely to engage in political discussions than individuals who are low on this trait; they also appear to be less opinionated, more “trusting” of others, and not particularly tied to an ideological orientation (Mondak and Halperin 2008; Gosling, Renfrow, and Swann 2003). While these individuals may attend political events on occasion (Mondak and Halperin 2008), they may not entertain competing considerations about political issues and candidates so that they can better “fit in” with those around them. On the other hand, personality psychologists (John and Srivastava 1999; McCrae and Costa 1996) contend that those who are *low* in this trait are more “suspicious,” “argumentative,” and “demanding,” and need less social validation of their opinions and judgments when compared to those who are high on Agreeableness. Given these tendencies, those who are low in Agreeableness may desire to hear both sides of arguments and may hold competing considerations when faced with making a judgment of whether or not to support a political issue. Those who depend less on social validation when it comes to their beliefs may even *enjoy* the experience of ambivalence.

Hypothesis 4: Neuroticism

High Neuroticism is positively associated with high ambivalence.

Those who score low on Neuroticism tend to be more relaxed and calm, and are less likely to engage in political discussion with others. Individuals who score high on this trait

tend to be more “self conscious,” “anxious,” and dissatisfied with their surroundings in general (McCrae and Costa 1996). To the extent that this discontent and anxiety encourages these individuals to think more carefully about their social allegiances or issue positions, they may be more likely to hold conflicting considerations on political issues than otherwise similar individuals who are calmer and relaxed (Marcus, Neuman, and MacKuen 2000). Likewise, those who are low on this trait tend to be more emotionally stable, undemanding, and adapt well to challenging surroundings; they also tend to be more effective at developing strategies for dealing with stressful situations (De Raad 2000; McCrae and Costa 1996). To the extent that entertaining competing considerations is an uncomfortable psychological state, those who score low on Neuroticism may be better equipped at resolving the ambivalence they experience toward a political object than those who are more self conscious and anxious about making poor decisions.

Hypothesis 5: Extraversion

There is no relationship between Extraversion and ambivalence.

I have no clear expectation about how this trait will directly relate to ambivalence. Instead, I entertain competing theoretical expectations. First, since an individual who scores high on the Extraversion trait tends to be more “assertive” and likely to experience positive emotions than a person who is low on this trait (McCrae and Costa 1996; Gerber et al. 2010), those who score high on this trait may be less likely to experience ambivalence than individuals who are more introverted. Past research has shown that positive affect does not necessarily encourage citizens to carefully consider, much less reconsider, current attitudes when they are faced with multiple points of view on political issues; instead, the experience

of positive emotions such as enthusiasm is associated with an increase in the likelihood to rely on learned habits when making judgments (Marcus, Neuman, and MacKuen 2000, Brader 2005). Individuals who are more introverted tend to possess more political knowledge compared to those who are more extraverted; therefore, they may possess more knowledge of multiple viewpoints on political matters (Mondak and Halperin 2008: 329). For introverts, though, the simple acquisition of political knowledge does not necessarily imply that the person will value both sides of a political debate and be more likely to experience ambivalence as a consequence.

Alternatively, those who are extraverted tend to enjoy socializing with others more than introverted individuals do (McCrae and Costa 1996; Gerber et al. 2010). Those who are more introverted are more “passive” and “reserved” (DeRaad 2000: 72). The act of socializing with others may lead extraverted people to be exposed to multiple points of view in an information-rich environment, and they may be more likely to participate in discussions about politics in their social networks than those who are more introverted. In the survey evidence offered by Mondak and Halperin (2008) and Mondak et al. (2010), extraverts are significantly more likely than introverts to be politically active, engage in political discussions frequently, and voice numerous opinions on social issues (2008: 358-359). However, this does not mean that they are discussing competing opinions on these issues, and there is also no direct evidence (to date) to suggest that these individuals are more likely to discuss politics with people who hold diverse views on political matters than introverted individuals. Thus, I do not have firm expectations of how this trait will relate to political ambivalence.

Trait Interactions

Researchers who utilize the MBTI instrument in their studies of personality in the fields of organizational and personnel psychology contend that traits interact to form an individual's personality. Due to the overlap between the FFM and the MBTI, it may be beneficial to examine interactions between selected personality traits from the Five Factor Model of personality structure as well. To date, no studies have been published that examine the interactions between the "Big Five" personality traits and their corresponding effects on political behavior and attitudes.

While the "Big Five" framework for studying personality traits contends that there are no "types" of people, there are some theoretical reasons to expect that certain traits may modify the expression of other traits in individuals. In the paragraphs that follow, I examine the potential effects of two personality trait interactions (Openness to Experience x Neuroticism; Conscientiousness x Agreeableness). Other researchers may find it worthwhile to explore alternative and/or additional interactions between and among personality traits. Given that there are greater than 100 possible interactive effects, this is expected. However, I choose to focus on the following two interactions based upon my theoretical expectations about how these traits may influence information processing.

Hypothesis 6: Openness to Experience x Neuroticism

High Openness to Experience and high Neuroticism are positively associated with high ambivalence.

The Openness to Experience trait may moderate the effect of the Neuroticism trait when predicting the likelihood that a person will experience attitudinal ambivalence. Those

who are high on the Openness to Experience trait are more analytical, curious, and tolerant of diverse viewpoints, while those who are low on this trait are more short-sighted and less likely to entertain competing viewpoints. A person who scores high on the Neuroticism trait is more likely to be self-conscious, demanding, and anxious than a person who scores low on this trait. When examining the theoretical potential for an interactive effect, it is possible that Neuroticism will only lead to ambivalence among those who are also curious and analytical. If a person is Neurotic, but also intolerant of diverse perspectives, then that individual may seek out additional information on only one side of an issue. This would result in a truncated view of the relevant viewpoints in that issue area. As a result, ambivalence may only be likely for Neurotic individuals who are also Open to Experience(s).

Hypothesis 7: Conscientiousness x Agreeableness

High Conscientiousness and high Agreeableness are negatively associated with high ambivalence.

Conscientiousness may moderate the effect of Agreeableness. Those who are high on the trait of Agreeableness are less opinionated and more trusting of “popular” opinions than those who are low on this trait. Those who are high on the trait of Conscientiousness prefer to avoid uncertainty and are more conservative and dogmatic in their views, while those who are low on this trait are comfortable with ambiguity and multiple opinions. If a person is Agreeable, and also Conscientious, then that individual may be the least likely candidate for the experience of attitudinal ambivalence, due to a tendency to be overly trusting of popular opinion and a general disdain of ambiguity. However, if that Agreeable person is low on the trait of Conscientiousness, then this may result in an increase in the likelihood of

experiencing ambivalence. A person who is trusting of the opinions of others, who is comfortable with ambiguity and exposure to multiple opinions, may have trouble discerning which opinions are more valued than others. Thus, that person may internalize the merits of both sides of an issue debate and become ambivalent after exposure to that information as a result.

Conclusion

Existing studies of the antecedents of attitudinal ambivalence largely focus on values and environmental factors that shape individuals' evaluations. While these explanations provide researchers with plausible explanations and valuable information, they exclude the individual-level, psychological factors that may contribute to the likelihood of experiencing this attitudinal state. This is problematic, as an ambivalent attitude is likely caused by core personality traits or dispositions *and* environmental or external factors (McCrae and Costa 2008, 1996).

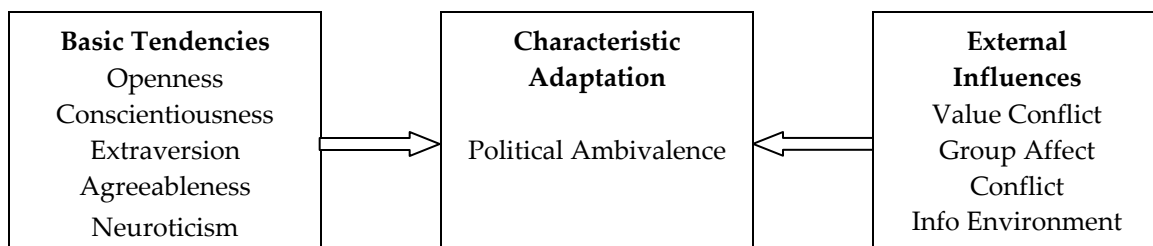
In the empirical chapter that follows, I test my theory that the core “Big Five” personality traits are antecedents of attitudinal ambivalence toward political issues. I test my hypotheses using data gathered from multiple sources: the 2008 Cooperative Congressional Election Survey and a series of surveys with experimental treatments administered to undergraduate students recruited from the Political Science Subject Pool at the University of North Carolina at Chapel Hill between 2008 and 2011. In the final chapter, I discuss the implications of my findings for our understanding of political ambivalence.

CHAPTER FOUR

PERSONALITY TRAITS AS ANTECEDENTS OF POLITICAL AMBIVALENCE

In this chapter, I test my theory that personality traits are causal factors that contribute to a state of attitudinal ambivalence toward political issues. I conceptualize political ambivalence as a *characteristic adaptation*. Characteristic adaptations are “acquired skills, habits, attitudes, and relationships that result from the interaction of [the] individual and [the] environment” (McCrae and Costa 1996: 69). I contend that political ambivalence is caused by *basic tendencies* or dispositional traits represented by the five factors of personality (Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism) and *external influences*, such as conflict in the information environment, value conflict, and conflict in social group affect. My theoretical framework is summarized in Figure 4.1 below.

Figure 4.1. Theoretical Framework Summary



Specifically, I conduct several empirical tests of my theory that personality traits are causal factors that contribute to the experience of attitudinal ambivalence toward political issues. In doing so, I draw on multiple data sources, including experiments and surveys conducted using samples of college students and a national sample of adults. Moreover, different measures of ambivalence (i.e., subjective and objective) and the “Big Five” personality traits are employed as well. The data sources are described and findings are discussed in the sections that follow.

Data

Unfortunately, large-scale surveys such as the National Election Study and General Social Survey that are commonly used to explain political attitudes and behavior cannot be used to test this theory, since critical measures of ambivalence and personality traits are not included on those surveys. Therefore, I constructed original instruments and used alternative data sources and samples for my analyses.

Four data sets were used in my research. The first is the 2008 Cooperative Congressional Election Study (CCES), which was based on a national sample. The remaining three datasets—the 2008-2009, 2010-2011, and the Fall 2011 Political Attitudes Studies—are survey experiments that used samples of undergraduate students from the University of North Carolina at Chapel Hill. These studies vary in their measures of ambivalence, the key dependent variable, as well as measures of personality traits, the key independent variables.

Those who study ambivalence agree that an ambivalent attitude consists of inconsistent thoughts and/or feelings—considerations—about an object. These considerations pull a person in opposing directions when formulating an attitude about it (Mulligan 2006;

Martinez, Craig, and Kane 1995; Meffert, Guge, and Lodge 2004). Furthermore, as the intensity of inconsistent considerations increases, ambivalence becomes more strongly felt. However, there are different ways that researchers conceptualize and measure ambivalence.

First, a *subjective* measure of ambivalence may be used, in which respondents are asked to report how “mixed” their feelings and beliefs about an attitude object are through a series of items on which they provide subjective ratings (Mulligan 2006; Martinez, Craig, and Kane 2005; Priester and Petty 1996, 2001; Tourangeau et al. 1989). In effect, respondents are asked to report an “introspective perception of their ambivalence” (Mulligan 2006). A second type of measure of ambivalence is called *objective* ambivalence. Rather than asking respondents to explicitly assess their own ambivalence, researchers ask respondents to report whether they have positive and/or negative considerations about an object, and how strongly those considerations are held; then, the researcher calculates the degree of ambivalence. Both ambivalence measures are employed in the analyses that follow. Specifically, three of these studies focus on objective ambivalence, while one measures subjective ambivalence.

Personality inventories of varying lengths have been developed to measure the “Big Five” trait as well. Recently published studies that examine the roles that personality traits play in shaping political behaviors and attitudes use brief 10-item inventories to measure the “Big Five” traits (Mondak 2010; Mondak et al. 2010; Gerber et al. 2010, 2011). While these abbreviated inventories are appealing in that they are less time consuming and short enough to be placed on national surveys, they have limitations in terms of their reliability and (potentially) validity. Even those who use the 10-item inventories recommend that the “Big Five” be measured by longer inventories whenever possible (Mondak et al. 2010: 103) to

determine whether findings can be replicated using different measures. Therefore, two of my studies use a longer 50-item measure of the “Big Five,” while the other two use a shorter 10-item inventory.

Table 4.1 provides a data source matrix, which details the dependent and independent variables included in each data set.

Table 4.1. Data Source Matrix (Variables by Study and Semester)

	2008 CCES (CCES 1)	2008-2009 PAS (PAS 1)	2010-2011 PAS (PAS 2)	Fall 2011 PAS (PAS 3)
Timeline				
Semester		Fall 2008 Spring 2009	Fall 2010 Spring 2011	Fall 2011
Dependent Variable				
Objective Ambivalence (by issue area)	Embryonic Stem Cell Research; Same-Sex Marriage; Mandatory Health Insurance; Privatization of Social Security		Stem Cell Research; Same-Sex Marriage; Health Care Reform; Troop Withdrawal from Iraq; U.S. Troop Increase in Afghanistan	Embryonic Stem Cell Research; Same-Sex Marriage; U.S. Troop Withdrawal from Afghanistan; Health Care Reform; Privatization of Social Security
Subjective Ambivalence (by issue area)		Stem Cell Research; Same-Sex Marriage; Government Health Insurance Plan; Timeline for Troop Withdrawal from Iraq		
Personality Trait Inventory				
Ten Item Inventory (TIPI)	X			X

50-Item Inventory (IPIP)		X	X	
Experimental Treatments				
Treatment	Baseline (No Info)	Baseline (No Info)** Competing Info Positive Info Negative Info	Baseline (No Info) Competing Info Positive Info Negative Info	Baseline (No Info) Competing Info
Explanatory Variables				
Value Conflict		X	X	X
Group Affect Conflict		X	X	X
Issue Importance	X	X	X	X
Partisan Strength	X	X	X	X
Liberal	X	X	X	X
Conservative	X	X	X	X
Political Information		X	X	X
Education	X			
Diverse Discussion Partners		X	X	X

Note: Each study has been given a number, which will be used (along with the study's name) to identify the data source throughout the explanation and analyses that follow. PAS stands for Political Attitudes Study. All Political Attitudes Studies used samples of UNC-Chapel Hill undergraduate students. In the Fall of 2008, only the baseline version of the survey was administered; no survey experiments were conducted. During the Spring of 2009, survey experiments were conducted. Otherwise, the instruments were the same. Due to their similarities, and the fact that there were no differences in ambivalence between and among conditions (as described in the detailed description and analyses that follow), these samples were combined.

Let me now explain the nature of each data set in greater depth.

Political Attitudes Studies with 50-Item “Big Five” Trait Inventory

One of the key variations across datasets is the personality measure that I used. I employed two measures (i.e., a 50-item inventory and a 10-item inventory) of the “Big Five” in my research to examine whether the relationships between the traits and political ambivalence would be similar across studies. Two of the data sets used a 50-item trait inventory. During the 2008-2009 and 2010-2011 academic years, I recruited college students from the Political Science Subject Pool at the University of North Carolina at Chapel Hill to participate in web-based Political Attitudes Studies. In each case, students participated in the study to fulfill a course research requirement. Participants received an e-mail inviting them to participate in the study, and they were able to access a survey instrument to which they were randomly assigned through a unique hyperlink provided in the e-mail.

During each academic year, 2008-2009 and 2010-2011, the studies were conducted during the fall and spring semesters; the samples for the year were combined. Seven hundred and fifty (750) students participated in the Political Attitudes Study (PAS 1) during the 2008-2009 academic year, while 696 participated during the 2010-2011 academic year (PAS 2). The demographic composition of both samples was similar. Since the Political Science Subject Pool draws students primarily from Introduction to American Government courses, the majority of respondents were first-year college students (PAS 1: 59%; PAS 2: 64%). Female respondents outnumbered male respondents in both studies, (PAS 1: 62% female, 38% male; PAS 2: 66% female, 34% male), and more respondents leaned Democratic than Republican in terms of their partisan affiliation. This was especially the true in the 2008-

2009 sample (PAS 1: 58% Democratic, 34% Republican; PAS 2: 47% Democratic, 44% Republican). Finally, in both Political Attitudes Studies, the majority of participants identified as Caucasian (PAS 1: 77%, PAS 2: 78%). African Americans comprised 11% of the sample in 2008-2009 (PAS 1) and 9% in 2010-2011 (PAS 2), while Hispanic students made up the next 6% and 7% respectively.

The web-based Political Attitudes Studies used a survey instrument that included questions traditionally employed on large-scale surveys to measure political and ideological affiliations, values, and social group affect. In addition to those items, a 50-item personality trait inventory designed to measure the “Big Five” factors of Openness to Experience, Neuroticism, Extraversion, Agreeableness, and Conscientiousness was included (Goldberg 1992, 2006), as well as batteries of questions designed to measure the dependent variables of interest. During the 2008-2009 academic year (PAS 1), the dependent variable was subjective ambivalence toward four different political issues: stem cell research, setting a timetable for the withdrawal of U.S. troops from Iraq, implementation of a government health insurance plan, and same-sex marriage. Objective ambivalence toward five political issues was the dependent variable during the 2010-2011 academic year (PAS 2). The political issues were similar to those included on the 2008-2009 instrument, and included ambivalence toward stem cell research, setting a timetable for the withdrawal of U.S. troops from Iraq, health care reform, same-sex marriage, and increasing U.S. troop presence in Afghanistan.

Beginning in the spring of 2009, and continuing through the 2010-2011 academic year, the study instruments included experimental manipulations that varied respondents’ exposure to different types of information relating to the political issues for which ambivalence was measured. These experimental manipulations were included due to past

research findings that suggest that the experience of attitudinal ambivalence may, in part, be a function of the information made available to individuals within their environments (Keele and Wolak 2008). Current theory suggests that when individuals are subjected to a roughly equal number of competing or opposing viewpoints on a political issue, they tend to be more ambivalent with regard to that issue as a result (Feldman and Zaller 1992, Huckfeldt, Mendez, and Osborn 2004). In essence, providing a great deal of information about a particular political issue to citizens may make taking a one-sided stance on the issue more difficult (Alvarez and Brehm 2002). Information exposure could influence the likelihood of experiencing ambivalence, regardless of the personality traits possessed by individuals.

Exposure to political information can occur in a variety of different ways, the vast majority of which cannot be controlled for in an experimental setting. But, in order to assess whether simply exposing respondents to different types of information about political issues influences the likelihood of experiencing attitudinal ambivalence, respondents in the Political Attitudes Studies (PAS 1 and 2) were randomly assigned to one of four conditions:

1. a *baseline/no information* condition;¹³
 2. a *competing considerations* condition, in which participants were presented with introductory question stems that provided them with two competing arguments both for and against a political issue from an ambiguous, but credible, source;
 3. a *positive considerations* condition, in which participants were only exposed to positive information from an ambiguous, but credible, proponent of a political issue;
- or

¹³Only the baseline survey was administered in Fall 2008.

4. a *negative considerations* condition, in which participants were only exposed to negative information from an ambiguous, but credible, opponent of a political issue.

While the wording of the introductory issue statements varied by treatment condition, the remainder of the survey instrument was identical across all conditions. On average, it took respondents approximately 25-30 minutes to complete the studies. The wordings of the introductory issue statements are presented in the Appendix.

2008 CCES and 2011 Political Attitudes Study with Ten-Item Personality Inventory

In 2008, the Political Science department at the University of North Carolina at Chapel Hill purchased question space on the 2008 Cooperative Congressional Election Study (CCES 1) survey, which was administered to a national sample of adults via the web by Polimetrix. I included four sets of objective ambivalence measures on this survey, which assessed respondents' ambivalence toward four issues: federal funding of embryonic stem cell research, banning same-sex marriage, privatizing Social Security, and making health insurance mandatory for all citizens. I also included *six* personality trait questions taken from the Ten-Item Personality Inventory (TIPI) on the national CCES. Indicators measured the traits of Openness to Experience, Neuroticism, and Conscientiousness. Questions for Agreeableness and Extraversion were not able to be included on the CCES survey due to question space constraints.

The UNC module of the CCES had 1,000 respondents who participated in the study by taking a web survey. This sample (CCES 1) was composed of a roughly equal number of men and women (men: 49%; women: 51%), the mean age of respondents was 49, and the majority of respondents self-identified as Caucasian (75%). African Americans made up 11%

of the sample, and 9% identified as Hispanic. Respondents were well educated on average, with 37% of the sample having a two-year college degree, four-year baccalaureate degree, or graduate degree, 24% having completed at least some college, and 36% having completed high school.¹⁴

I was unable to include all 10 of the TIPI measures, as well as other key independent variables of interest (e.g., group affect conflict, value conflict, political discussion partners, information exposure, etc.), on the national CCES. Therefore, I conducted a follow-up Political Attitudes Study (PAS 3) that was administered via the web to respondents recruited from the Political Science Subject Pool at the University of North Carolina at Chapel Hill during the fall semester of 2011. This study's survey instrument included all 10 of the TIPI items to measure the "Big Five" traits, as well as questions to measure the other key independent variables. As in past administrations of the study's instruments, students were able to fulfill a course research requirement by participating, and they were able to access the survey through a unique hyperlink provided in an e-mail invitation. On average, the survey took participants approximately 20 minutes to complete.

The fall 2011 (PAS 3) student sample included 442 respondents, and was composed of more females than males (women: 63%; men: 37%). Respondents were more likely to lean Democratic than Republican in terms of their partisan affiliation (Democrats: 49%; Republicans: 42%). Since the Political Science Participant Pool draws students primarily from Introduction to American National Government courses, a majority (62%) of respondents were first-year college students. Most participants in this study self-identified as

¹⁴Only 4% of respondents reported that they had not finished high school.

Caucasian (78%). African Americans comprised 9% of the sample, and self-identified Hispanics made up 7% of the sample.¹⁵

There were two major differences between the Political Attitudes Study instruments used in the fall of 2011 (PAS 3) and previous administrations. First, in addition to the items designed to measure such variables as value conflict, group affect conflict, ideology, and partisan affiliation, the 50-item personality inventory was replaced by the full Ten-Item Personality Inventory (TIPI) (Gosling, Renfrow, and Swann 2003). Second, rather than including four information experimental treatment conditions, only two were used: (1) the *baseline (no information)* condition, and (2) the *competing considerations* condition. Otherwise, the dependent variable was objective ambivalence, and ambivalence was measured toward five political issues: embryonic stem cell research, same-sex marriage, privatizing Social Security, setting a timetable for the withdrawal of U.S. troops from Afghanistan, and health care reform.

Virtues of Using Multiple Data Sources

This is the first study that examines whether the “Big Five” personality traits are antecedents of political ambivalence, and using multiple sources of data to test my theory has several advantages. Past studies that examine the antecedents of ambivalence typically operationalize this attitudinal state as *either* objective *or* subjective, but do not examine both measures. While existing studies shed light on causal factors, they are unable to demonstrate whether the contributing factors are significant across *both* measures of this type of attitude. In this dissertation, I examine whether the five traits influence *both* subjective and objective

¹⁵The remaining 6% of respondents self-identified as Asian, Native American, or Other.

measures of ambivalence across similar political issue areas, which allows us to test whether the effects of personality traits are consistent or variable across these measures.

In addition, I was able to use a longer 50-item inventory as well as a shorter 10-item inventory to measure the “Big Five” personality traits and their effect(s) on objective ambivalence in particular. Ten-item inventories are being used more often in studies of political attitudes and behavior because they are brief; however, using both the longer and shorter inventories allows us to determine whether similar findings are uncovered across both measures. If they are not, then this may lead us to question whether the shorter inventories are truly adequate indicators of these traits.

Finally, I was able to test my theory using student samples and a national sample of adults, while measuring political ambivalence toward similar issue items across surveys. While personality traits should exert similar effects on the likelihood of experiencing ambivalence despite the age of the sample, using both types of samples will help to provide a more comprehensive test of the theory. Including similar issue items across multiple study administrations further allows for greater continuity of analysis.

Measures

Dependent Variables

Subjective Ambivalence

The first dependent variable in this analysis is subjective ambivalence, conceptualized as “psychological” or “felt” ambivalence toward a political issue (Mulligan 2006; Priester and Petty 2001). On the 2008-2009 Political Attitudes Studies (PAS 1) respondents were asked to report their subjective ambivalence toward four major issues—same-sex marriage,

the implementation of a government health insurance plan, stem cell research, and setting a timetable for the withdrawal of U.S. troops from Iraq. These issues were selected because they were deemed to be “hard issues;” proponents and opponents of the issues appeal to principles or values that Americans share when advocating their positions to the public (Alvarez and Brehm 1995, 2002). As such, I expected that individuals in the electorate could recognize the merits of the pros and cons surrounding the debates on these issues, and could potentially experience subjective ambivalence as a result. Furthermore, since the issues were present on the national political agenda and the students were enrolled in an introductory American Government course, they were likely to have some understanding of these issues and the debates surrounding them.

To assess the degree of subjective ambivalence toward each of the issue areas, a subjective ambivalence index was employed. The index was created by Ken Mulligan (2006), and is a more thorough measurement tool than a single question that would ask respondents whether they feel “torn” or “conflicted” about an issue. A similar measurement tool is also used by psychologists Priester and Petty (2001) in their published work on subjective ambivalence. The first question following each issue item asked respondents whether or not they perceived their views to be consistent on the issue in question. Then, eight questions probed further to assess respondents’ levels of subjective ambivalence. These questions are outlined in Table 4.2.

Four of these questions were phrased so that a positive response indicated ambivalence, while the other four were worded so that a negative response indicated ambivalence. The responses to the latter were then reverse coded so that for all eight items, higher values reflect higher levels of subjective ambivalence. Based on the responses to these

questions, an additive scale of subjective ambivalence was created, ranging from 0 to 1, with higher values indicating greater subjective ambivalence. The Cronbach's alpha coefficients for the items comprising the indices were above .90 for all issue areas (for PAS 1 studies conducted in both the fall 2008 and spring 2009 semesters), and are presented in the Appendix to this chapter.

Table 4.2. Subjective Ambivalence Index Items (Mulligan 2006)

1. I have both positive and negative thoughts about this issue at the same time.
2. When I think about whether I favor or oppose this issue, I feel like I could go either way.
3. When I think about whether I favor or oppose this issue, I think both sides of the debate over this issue are equally correct.
4. I feel extremely ambivalent about this issue.
5. My views on this issue are extremely consistent (reverse coded).
6. When I think about this issue, I do NOT think I could move back and forth between favoring and opposing this issue; my position is firmly on one side (reverse coded).
7. I do NOT find myself feeling torn between favoring and opposing this issue. My feelings go in one direction only (reverse coded).
8. I feel strongly that one side of the debate over this issue is completely right and the other side is completely wrong (reverse coded).

Note: Seven-point response scale ranging from Disagree Very Strongly to Agree Very Strongly. Responses indicating "Neither Agree nor Disagree" were excluded, as they indicate an absence of thought/opinion about the issue in question.

Objective Ambivalence

The second dependent variable used in this analysis is objective ambivalence. Respondents were asked to report their objective ambivalence toward a similar set of major political issues, including stem cell research, health care reform, increasing U.S. troop presence in Afghanistan, setting a timetable for the withdrawal of U.S. troops from Iraq and

Afghanistan, same-sex marriage, and privatization of Social Security (depending upon the data source). The political issues included on each study are outlined in Table 4.1.

Once again, these issues were selected because they were deemed to be somewhat difficult issues (Alvarez and Brehm 2002), and it was entirely possible that different social groups could provide cues for “appropriate” stances to take on those issues. As such, I expected that individuals in the electorate could recognize the merits of the pros and cons surrounding the debates on these issues, and could potentially experience objective ambivalence as a result. Furthermore, since the issues were present on the national political agenda and student respondents were enrolled in an introductory American Government course, they were likely to have some understanding of these issues and the debates surrounding them. Subjective ambivalence toward the same or related issues was also measured, which allows for some discussion of similar and dissimilar findings.

For each issue area, respondents were asked first to report whether they had any favorable thoughts about the issue. If they responded “yes,” a follow-up question asked them to report how favorable their favorable thoughts were on a scale ranging from slightly favorable (1) to extremely favorable (4). Respondents were then asked whether they had any unfavorable thoughts about the issue. Again, if they responded “yes,” a follow-up question asked them to report how unfavorable their unfavorable thoughts were on a scale ranging from slightly unfavorable (1) to extremely unfavorable (4). The full-text of each of the questions is provided in the Appendix to this chapter.¹⁶

¹⁶This measure was developed by Martinez, Gaius, and Craig (2007) in their manuscript entitled, “Measuring Ambivalence about Government in the 2006 ANES Pilot Study.”

The responses to these questions were used to calculate a measure of objective ambivalence using the traditional algorithm developed by Thompson, Zanna, and Griffin (1995):

$$\text{Objective Ambivalence} = [(P + N)/2] - |P - N|$$

In this formula, P is the positive (favorable) reaction score and N is the negative (unfavorable) reaction score. The scores that result range from 5 (both positive *and* negative thoughts about the issue that are extremely favorable) to -2.5 (extremely favorable thoughts and no unfavorable thoughts about the issue, or vice-versa).

The objective ambivalence scale that was derived from the algorithm had 15 ordinal categories, some with more respondents than others.¹⁷ To simplify the interpretation of the statistical models and to make them more intuitive, the 15-point scale was divided into three major categories: low ambivalence, which included scale values ranging from -2.5 to -.5; moderate ambivalence, which included scale values ranging from .5 to 2.5; and high ambivalence, which included scale values ranging from 3 to 5.¹⁸

Key Explanatory Variables

Personality Traits

The “Big Five” personality traits of Openness to Experience, Conscientiousness,

¹⁷Those who responded that they had no favorable thoughts and no unfavorable thoughts about the issue in question were coded as “0,” which represents indifference or an absence of thoughts about the issue. Indifferent respondents were excluded from these analyses, leaving a 15-point ordinal scale ranging from -2.5 (one-sided considerations/low ambivalence) to 5 (mixed thoughts/high ambivalence).

¹⁸The statistical analyses were conducted using the full 15-point scale, a collapsed 5-point scale, and a collapsed 3-point scale. The results did not differ in a substantive manner, and the 3-point scale resulted in an ordinal logit model that *did not* violate the parallel lines assumption. Thus, the results of the statistical analyses using the 3-point (low, medium, high) ambivalence scale as the dependent variable are reported in this chapter. The use of this scale improves the clarity of the interpretation of results.

Extraversion, Agreeableness, and Neuroticism were measured using both a longer 50-item personality inventory drawn from the International Personality Item Pool (Goldberg 1992, 2006) and a brief Ten-Item Personality Inventory (TIPI) developed by Gosling, Renfrow, and Swann (2003).

50-Item Personality Trait Inventory

The Big Five personality traits of Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism were measured with a 50-item inventory developed by Dr. Lewis R. Goldberg (1992, 2006) on the 2008-2009 and 2010-2011 Political Attitude Studies (PAS 1 and 2).¹⁹ Goldberg created a scientific “collaboratory” for the development of measures of personality and individual differences known as the International Personality Item Pool (IPIP) (<http://ipip.ori.org/>). Based on his extensive research on the “Big Five” structure of personality, Goldberg has developed and compiled others’ measures of the “Big Five,” and has made them available in the public domain.²⁰

Respondents were provided with the following instructions:

Please use the rating scale to describe how accurately each statement describes you. Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as

¹⁹A full discussion of why the “Big Five” traits were used as opposed to other personality trait indices (e.g., Authoritarian Personality scale, Social Dominance scale, Myers-Briggs) can be found in Chapters 2 and 3 of my dissertation.

²⁰The IPIP scales are readily used by personality psychologists. An extensive list of IPIP scale related publications can be found at <http://ipip.ori.org/newPublications.htm>. Prior to the creation of this collaboratory, scholars had to rely on personality inventories such as the NEO-PI-R (240 item) or the NEO-FFI (60 item) that were created by Costa and McCrae (1992). While these inventories are also very well respected within the field of personality psychology, they are not publicly available. Rather, they are copyrighted by Psychological Assessment Resources (PAR) in Florida, and can only be ordered by professionals for limited use by permission only (<http://www.parinc.com>). While the IPIP scales do not replicate exactly the NEO-PI-R/NEO-FFI inventories, this is not essential. Research which compares the two inventory types suggests that they measure the same underlying factors. Both are acceptable measurement tools of the “Big Five” factors of personality. Furthermore, political scientists are using other publicly available inventories, such as the Ten Item Personality Inventory, or creating their own for inclusion on surveys of political attitudes (Mondak et al. 2010, Gerber et al. 2010).

you are, and roughly your same age. Please read each statement carefully, and then choose the response that best fits you.

Each trait was then measured by a balanced set of ten indicators; a set of statements which describe peoples' behaviors. A five-point response scale ranged from Very Inaccurate (1) to Very Accurate (5). Based on the responses to these questions, an additive scale for each personality trait was created and rescaled, ranging from 0 to 1, with higher values indicating higher scores on the particular trait. The full personality trait inventory, and the Cronbach's alpha coefficients for the items that made up the five indices for each trait, are presented in the Appendix to this chapter.

Ten-Item Personality Inventory (TIPI)

The "Big Five" personality traits of Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism were also measured with a 10-item inventory developed by Gosling, Renfrow, and Swann (2003) known as the Ten-Item Personality Inventory (TIPI) on the 2008 CCES and the 2011 Political Attitudes Study (PAS 3). The TIPI was designed as an alternative to the longer and more time consuming personality inventories (e.g., NEI-PI-R, IPIP, NEO-FFI, etc.) that are sometimes used by personality psychologists. In this inventory, two pairs of adjectives serve as indicators for each of the five traits. Respondents are instructed to rate the extent to which a pair of adjectives/short phrases applies to them, even if one of the characteristics applies more strongly than another. The respondents provide the ratings for each pair of traits on a seven-point Likert scale, which ranges from Strongly Disagree to Strongly Agree. Based on the responses to these questions, an additive scale for each personality trait was created and rescaled, ranging from 0 to 1, with higher values indicating higher scores on the particular trait. The full personality trait

inventory, and the Cronbach's alpha coefficients for the items that made up the five indices for each trait, are presented in the Appendix to this chapter.

While the longer personality inventories are generally thought to be more reliable measures of the five factors, experimental results suggest that the TIPI is strong in content validity and it exhibits high test-retest correlations (Gosling, Renfrow, and Swann 2003). Moreover, findings suggest that the TIPI is a reasonably proxy for a longer "Big Five" inventory, especially when researchers face time and space constraints on larger scale surveys (Gosling, Renfrow, and Swann 2003).

Other Determinants of Ambivalence

Value Conflict

Value conflict is used much in the ambivalence literature to explain political behavior and preferences (Gainous and Martinez 2005; Feldman and Zaller 1992). This variable measures the conflict between two core values, in this case, egalitarianism and moral traditionalism. The egalitarianism variable is comprised of an additive index of six items borrowed from the National Election Study; the index for moral traditionalism consists of four items, which are generally the same across large-scale surveys. The questions that comprise both scales, along with the respective Cronbach's alpha coefficients, are presented in the Appendix. The response scale for each value question ranged from Agree Strongly to Disagree Strongly. All items were recoded on a 0 to 1 scale, with 1 indicating strong agreement with the value and 0 indicating strong disagreement.

The value conflict scale was then computed by taking:

$$1 - |\text{Equality Index} - \text{Moral Traditionalism Index}|$$

Low scores indicate relatively greater support for one value over the other (i.e., low value conflict), while high scores indicate equivalent support for the two values (i.e., high value conflict).

Group Affect Conflict

The measure of group affect conflict is borrowed from the group ambivalence work of Lavine and Steenbergen (2005), and was created using the feeling thermometer ratings of social groups. Feeling thermometer questions used commonly in the National Election Study were used in the student Political Attitudes Studies. These thermometer questions were employed to assess respondents' feelings toward a number of different groups; ratings below 50 indicated "cold" feelings toward a group and scores greater than 50 signified "warm" feelings toward a group. Two group indices, liberal groups and conservative groups, were created by averaging the feeling thermometer scores across groups that were positively correlated with liberal ideology and negatively correlated with conservative ideology, and groups that were positively correlated with conservative ideology and negatively correlated with liberal ideology (Lavine and Steenbergen 2005). After rescaling the indices from 0 to 1, the group ambivalence variable was created by taking:

$$1 - |\text{Liberal Group Index} - \text{Conservative Group Index}|.$$

Thus, if an individual evaluates both liberal and conservative groups about the same, the value on the scale will be closer to 1—indicating a high degree of group affect conflict. Likewise, if an individual feels more positively or negatively about liberal groups relative to conservative groups, then the value on the scale will be closer to 0—indicating a lower

degree of group affect conflict. The social groups used to create the variable are outlined in the Appendix.

Control Variables

A number of control variables were included to account for additional factors that could influence whether an individual experiences attitudinal ambivalence, including the homogeneity of political discussion partners, perception of issue importance, political information, ideological identification, strength of partisan identification, and the semester in which the survey was taken. These control variables are discussed below:

- *Homogeneous Discussion Partners.* Respondents were asked to characterize the nature of their political discussion partners by answering the question: “Would you say your political discussion partners share your political views all of the time, most of the time, sometimes, or never?” The four-point response scale ranged from never (0) to all of the time (3). Those who discuss politics with others whose views are dissimilar to their own may be exposed to a wider range of political views and information than those who do not. If ambivalence is a function of exposure to diverse viewpoints, then having heterogeneous political discussion partners is expected to increase the likelihood of experiencing ambivalence while having homogeneous discussion partners is expected to decrease the likelihood of experiencing ambivalence.
- *Perception of Issue Importance.* For each issue examined, survey respondents were asked to report their perception of issue importance. The wording of each issue importance question is presented in the Appendix to this chapter, and the response

- scale for each ranged from 0, not at all important, to 5, very important. It is possible that if individuals feel invested in an issue and believe it to be important, then they may be more likely to take a firm, one-sided stance with regards to the issue and experience less ambivalence as a result. Thus, it is important to control for this factor.
- *Political Information.* Some have suggested that ambivalence may simply be associated with political information (see, for example, Alvarez and Brehm 2002); the reason being that if citizens do not know much about politics or political issues, then they will not have a knowledge base upon which they can evaluate those issues and take a stance as a result. The more knowledge citizens possess about politics, the more ambivalent they may be as a result, since having a great deal of information may make taking firm, one-sided policy stances more difficult. To account for this explanation, a political information variable is included in each of the issue ambivalence models (with the exception of the CCES 1 study), and ranges from 0 (low information) to 1 (high information).
 - *Partisan Strength.* Partisanship is often the lens through which citizens view politics and political issues. It is plausible that stronger partisans may be more likely to adopt partisan stances on issues and experience less conflict in their thoughts and feelings toward particular issues as a result. As such, a variable for partisan strength is included in each of the issue ambivalence models. This variable was created by folding the partisan identification scale in half, and categorizes Democrats and

Republicans as partisan identifiers. The partisan strength scale ranges from 0 (independents) to 3 (strong partisans).²¹

- *Ideological Orientation.* Dummy variables are included for ideological orientation (i.e., Liberal and Conservative) to account for the possibility that liberal orientation may be positively associated with the experience of attitudinal ambivalence, while conservative orientation may be negatively associated with the experience of this attitudinal state (Feldman and Zaller 1992). While this effect is usually associated with attitudes towards social welfare issues, it may be seen across other types of issues as well.
- *Condition.* Control variables for the information conditions to which student respondents were assigned were included in the models to account for any variation in ambivalence levels between groups.
- *Semester.* Finally, a control variable for the semester in which the survey was administered was also included in the models to account for any unexplained variation in ambivalence levels across semesters.

The control variable questions are included in the Appendix to this chapter.²²

²¹My models were built solely on theory. There is no reason to expect differences between Democrats and Republicans, other than those associated with ideology, which I control for; thus, I do not include additional dummy variables for partisanship in addition to the partisan strength variable.

²²Additional issue specific control variables, such as military service and lack of health insurance, were included in models predicting objective ambivalence towards Setting a Timetable for the Withdrawal of U.S. Troops from Iraq/Afghanistan, and the Implementation of a Government Health Insurance Plan or Health Care Reform. These variables did not reach statistical significance and did not change the substantive conclusions drawn from the current model specifications. Thus, in an effort to keep the model specifications the same across issue areas and to simplify presentation, they were excluded from the models and from the analyses that follow.

Personality Traits as Predictors of Subjective Ambivalence

Subjective ambivalence was the focus of the 2008-2009 Political Attitudes Study (PAS 1). This study was conducted over the course of two semesters: Fall 2008 and Spring 2009. As mentioned in Table 4.1, only the baseline (no information) version of the survey was administered to UNC undergraduates during the fall of 2008. In the Spring 2009 semester, the survey experiments were conducted and students were randomly assigned to one of four experimental conditions. Otherwise, the PAS instruments were identical, and a 50-item “Big Five” trait inventory was used to measure Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.

Before conducting the analyses, one-way ANOVAs were performed to test whether the means of subjective ambivalence in each of the four issue areas differed across the information conditions that respondents were randomly assigned to during the Spring 2009 semester. For each issue area, neither the null hypothesis of equal means nor the null hypothesis of equal variances could be rejected at the $p < .05$ level. These results were corroborated further by Kruskal-Wallis tests, which test the null hypothesis of equal medians. Each test showed that the exposure to different types of information (i.e., conflicting information, positive information only, negative information only) did not promote more or less subjective ambivalence compared to the baseline/control condition in any of the issue areas. Thus, the experiment failed.

The failure of the experiment suggests that subjective ambivalence is not overly sensitive to manipulating respondents’ information environments—at least in this experimental setting. Respondents who were exposed to conflicting information or one-sided information (either positive or negative) about the four issue areas were not any more or less

ambivalent than those who were not exposed to information about the political issue at all. Individuals hold preexisting considerations about political issues, and they use these considerations to form their own attitudes. Simply exposing individuals to different kinds of information, or withholding information, does not make them report feeling any more or less torn or conflicted about the issue in question.

Although the experiment failed, the treatment groups can be combined and used to explore the antecedents of attitudinal ambivalence; but, the sample is not random. Other than the introductory issue prompts, the questions posed on each survey and survey experiment administered during the Fall 2008 and Spring 2009 semesters were identical. Thus, these datasets were combined, and control variables were added to the model specifications to account for any variation between semesters or among experimental treatment conditions.

Table 4.3 reports regression coefficients for antecedents of subjective ambivalence in each of the four issue areas: stem cell research, same-sex marriage, the implementation of a government health insurance plan, and setting a timetable for the withdrawal of U.S. troops from Iraq.

Table 4.3. Antecedents of Subjective Ambivalence, PAS 1

Predictor	Stem Cell Research	Same-Sex Marriage	Gov't Health Insurance	Troop Withdrawal Iraq
Neuroticism	.06 (.06)	.14*** (.05)	.14** (.06)	.08 (.06)
Openness	-.13* (.08)	-.01 (.07)	.08 (.07)	.08 (.06)
Extraversion	.06 (.06)	-.03 (.05)	-.04 (.05)	-.03 (.05)
Conscientiousness	.03 (.06)	.06 (.05)	.01 (.06)	-.08 (.06)
Agreeableness	.08 (.07)	.18*** (.06)	.07 (.06)	.12 (.07)
Issue Importance	-.07*** (.01)	-.07*** (.01)	-.08*** (.01)	-.04*** (.01)
Group Affect Conflict	.21*** (.05)	.14** (.05)	.14** (.06)	.11** (.05)
Value Conflict	.12*** (.05)	.19*** (.04)	.12*** (.04)	.13*** (.05)
Discussion Partners	-.02* (.01)	-.01 (.01)	.01 (.01)	-.00 (.01)
Liberal	.01 (.02)	-.04* (.02)	.04* (.02)	-.01 (.02)
Conservative	-.01 (.03)	-.05** (.03)	-.07*** (.03)	-.03 (.02)
Partisan Strength	-.01 (.01)	.00 (.01)	-.03*** (.01)	-.04*** (.01)
Political Information	-.04 (.03)	-.01 (.02)	-.03 (.02)	-.02 (.02)
Condition 2: Competing Info	.02 (.03)	.02 (.02)	.01 (.03)	-.04 (.03)
Condition 3: Negative Info	.01 (.03)	.01 (.02)	-.01 (.02)	-.05* (.03)
Condition 4: Positive Info	-.01 (.03)	.03 (.02)	.01 (.02)	.01 (.02)
Semester	-.02 (.02)	-.01 (.02)	-.01 (.02)	.05*** (.02)
Constant	.75*** (.03)	.65*** (.03)	.82*** (.03)	.72*** (.04)
	N=618 F(17,600) = 12.64*** R ² = .--	N=616 F(17,596) = 28.96*** R ² = .39	N=612 F(17,594) = 27.40*** R ² = .39	N=616 F(17,598) = 14.93*** R ² = .25

Note: Data source is the 2008-2009 Political Attitudes Study (PAS1). Robust Regression coefficients are reported for stem cell ambivalence model; regression coefficients with robust standard errors are reported for the remaining models. Interaction terms for Neuroticism x Openness and Conscientiousness x Agreeableness were included initially but did not reach statistical significance or change the substantive interpretation of other coefficients. The simple base model is presented here (and in later tables in this chapter). *p<.10, **p<.05, ***p<.01

Due to the nature of the dependent variable, requisite regression diagnostics were conducted. Robust regression (M-estimation) coefficients are reported for the stem cell research model, while regression coefficients with robust standard errors are reported for the three remaining issue models.

The results show that when we seek to identify the antecedents of subjective ambivalence, personality traits are important variables to consider, even when controlling for other predictors. However, some personality traits matter more than others. High values of Neuroticism were hypothesized to be positively associated with high subjective ambivalence. This relationship is evident in two of the four issue models. A one unit increase in Neuroticism leads to a .14 unit increase in subjective ambivalence toward the issues of same-sex marriage ($p < .01$) and the implementation of a government health insurance plan ($p < .05$). The Agreeableness trait is also a powerful predictor of subjective ambivalence in one of the issue models. High values of Agreeableness were initially hypothesized to be negatively associated with high subjective ambivalence, but the opposite effect is observed in these data. A one unit increase in this trait leads to a .18 unit increase in subjective ambivalence toward same-sex marriage ($p < .01$). Perhaps those college students who are high on Agreeableness feel a greater need to express that they feel conflicted they feel on this issue due to social pressures that pull them in opposing directions. The Openness to Experience trait only approached statistical significance in the stem cell research issue model ($p < .10$). High values of this trait were hypothesized to be positively associated with high subjective ambivalence, but a one unit increase in Openness actually leads to a .13 unit *decrease* in subjective ambivalence toward stem cell research. The two remaining traits, Conscientiousness and

Extraversion, were not significant predictors of subjective ambivalence toward any of the four issue areas examined.

Group affect conflict and value conflict were the strongest and most consistent predictors of subjective ambivalence. High values of both group affect conflict and value conflict were hypothesized to be positively associated with high subjective ambivalence, and these relationships were supported in each of the four issue models at the $p < .05$ level of statistical significance or below. A one unit increase in group affect conflict leads to a .21 unit increase in subjective ambivalence toward stem cell research, a .14 unit increase in subjective ambivalence toward the issues of same-sex marriage and implementation of a government health insurance program, and a .11 unit increase in subjective ambivalence toward setting a timetable for the withdrawal of U.S. combat troops from Iraq. Similarly, a one unit increase in value conflict leads to a .12 unit increase in subjective ambivalence toward stem cell research, a .19 unit increase in subjective ambivalence toward same-sex marriage, a .12 unit increase in subjective ambivalence toward the implementation of a government health insurance plan, and a .13 unit increase in subjective ambivalence toward setting a timetable for the withdrawal of troops from Iraq.

The perception of issue importance was also a significant explanatory variable. As hypothesized, in each of the four issue models, perception of issue importance was negatively associated with subjective ambivalence ($p < .01$). A one unit increase in issue importance leads to a .07 unit decrease in subjective ambivalence toward stem cell research and same-sex marriage, a .08 unit decrease in subjective ambivalence toward the implementation of a government health insurance program, and a .04 unit decrease in subjective ambivalence toward setting a timetable for the withdrawal of troops from Iraq.

As discussed previously, exposing respondents to different information conditions (conflicting or one-sided) did not make them more or less likely to experience subjective ambivalence. Simply exposing individuals to both a number of pros and cons or one-sided viewpoints about political issues did not lead them to be significantly more or less likely to experience subjective ambivalence as a result. Exposing respondents to only negative considerations about setting a timetable for the withdrawal of U.S. troops from Iraq led to a .05 unit decrease in subjective ambivalence toward this issue. But, the effect was small and only significant at the $p < .10$ level in one issue area. This finding is certainly not evidence of a trend.

Engaging in political discussions with others who hold attitudes that are dissimilar did not exert a strong influence on subjective ambivalence either. The discussion partners variable only approached statistical significance in one issue area, stem cell research ($p < .10$). In this area only, there was a negative association between having discussion partners who share similar views and subjective ambivalence toward this issue. Discussing politics with others who have dissimilar opinions did not lead individuals to report higher levels of subjective ambivalence toward the other political issues examined.

Ideological identification and partisan strength exerted significant effects on subjective ambivalence. Partisan strength was hypothesized to be negatively associated with subjective ambivalence, and this predicted effect was significant at the $p < .01$ level in two issue areas: implementation of a government health insurance plan and setting a timetable for the withdrawal of U.S. troops from Iraq. A one unit increase in partisan strength leads to a .03 unit decrease in subjective ambivalence toward the implementation of a government health insurance plan, and a .04 unit decrease in subjective ambivalence toward setting a

timetable for the withdrawal of U.S. troops from Iraq. Conservative identification was hypothesized to be negatively associated with the experience of subjective ambivalence, and this effect was uncovered in the same-sex marriage (-.05**) and implementation of a government health insurance plan (-.07**) issue areas. Liberal identification was hypothesized to exert the opposite effect on the likelihood of experiencing subjective ambivalence; however, the findings were weak and mixed. Liberals were more likely to experience subjective ambivalence toward the implementation of a government health insurance plan (.04*), but less likely to experience subjective ambivalence toward same-sex marriage (-.04*). Perhaps the discrepancy in the latter findings can be attributed to the length of time that those issues have been on the national political agenda. Liberals have been associated with having more favorable views toward same-sex marriage for a longer period of time, and may be less ambivalent as a result. While liberals may have been open to arguments both for and against the idea of implementing a government health insurance plan, the issue is relatively newer in comparison, and they may not have reached a one-sided political view.

Personality Traits as Predictors of Objective Ambivalence

Objective ambivalence was the focus of the 2010-2011 Political Attitudes Study (PAS 2), and it was examined across five issue areas: stem cell research, same-sex marriage, health care reform, U.S. troop withdrawal from Iraq, and increasing U.S. troop presence in Afghanistan. This study was conducted over the course of two semesters: Fall 2010 and Spring 2011. During the fall and spring semesters, the survey experiments were conducted and students were randomly assigned to one of the four experimental conditions (i.e.,

baseline/no information, competing considerations, one-sided positive considerations, or one-sided negative considerations). A 50-item IPIP “Big Five” trait inventory was used to measure Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism.

As was the case in the subjective ambivalence models, the information treatments did not significantly influence the experience of objective ambivalence. One-way ANOVAs were performed to test whether the means of objective ambivalence in each of the five issue areas differed across the information conditions to which respondents were randomly assigned. For each issue area, neither the null hypothesis of equal means nor the null hypothesis of equal variances could be rejected at the $p < .05$ level. These results were corroborated further by Kruskal-Wallis tests, which test the null hypothesis of equal medians. Each test showed that the exposure to different types of information (i.e., conflicting information, positive information, negative information) did not promote more or less objective ambivalence compared to the baseline/control condition in any of the issue areas.

The failure of the experiment may well have been due to the strength of the treatment itself. Students in the competing considerations and one-sided considerations conditions were asked to summarize the information that they were presented with to help control for issues related to comprehension of the treatment. However, the treatment was still a relatively passive event in comparison to a “real-life” situation in which individuals could be exposed to the same sorts of information from people that they trust, or through face-to-face conversations with others. But the results do provide interesting and valuable information: simply exposing respondents to multiple political viewpoints, or one-sided viewpoints, does

not make them more or less likely to report having both positive and negative thoughts about an issue.

Even though the experiment failed, the treatment groups can be combined and used to explore the antecedents of attitudinal ambivalence; but, once again, the sample is not random. The questions posed on each of the survey experiments administered during the Fall 2010 and Spring 2011 semesters were identical, with the exception of the issue prompts. Thus, these datasets were combined, and control variables were added to the model specifications to account for any variation between semesters or among experimental treatment conditions.

Due to the ordinal nature of the dependent variable, ordered logit models were run for each issue area. Table 4.4 reports ordered log-odds regression coefficients for the antecedents of objective ambivalence in each of the five issue areas. For the sake of substantive interpretation, Table 4.5 shows the proportional odds ratios for these ordered logit models.

Table 4.4. Antecedents of Objective Ambivalence (Ordered Logistic Regression), PAS 2

Predictor	Stem Cell Research	Same-Sex Marriage	Health Care Reform	Troop Withdrawal Iraq	Troop Increase Afghanistan
Neuroticism	.81 (.69)	2.25*** (.89)	.79 (.67)	.35 (.67)	.09 (.68)
Openness	.88 (.92)	2.10* (1.18)	2.46*** (.90)	1.36 (.85)	1.66* (.89)
Extraversion	-.37 (.71)	1.17 (.91)	-.64 (.70)	-.19 (.68)	.23 (.70)
Conscientiousness	1.04 (.81)	1.14 (1.04)	.68 (.80)	-.28 (.76)	-.54 (.82)
Agreeableness	1.53* (.91)	.76 (1.14)	.92 (.87)	.24 (.84)	.07 (.87)
Issue Importance	-.46*** (.09)	-.48*** (.09)	-.21** (.10)	.10 (.09)	-.13 (.10)
Group Affect Conflict	2.86*** (.81)	2.64** (1.12)	2.29*** (.78)	1.95*** (.75)	1.67** (.78)
Value Conflict	.11 (.11)	.20 (.16)	.04 (.11)	.13 (.11)	.01 (.11)
Discussion Partners	-.19 (.18)	-.03 (.22)	.11 (.17)	.08 (.16)	-.07 (.17)
Liberal	-.12 (.29)	.09 (.35)	-.23 (.28)	-.15 (.27)	-.31 (.29)
Conservative	.19 (.29)	.16 (.35)	-.14 (.29)	.47* (.28)	.29 (.29)
Partisan Strength	.06 (.12)	-.19 (.16)	-.39*** (.12)	-.04 (.12)	.10 (.12)
Political Information	-.13 (.29)	-.05 (.36)	-.06 (.28)	.44 (.27)	.01 (.29)
Condition 2: Competing Info	.22 (.24)	.46 (.31)	-.01 (.24)	.13 (.23)	.34 (.24)
Condition 3: Negative Info	-.14 (.24)	.13 (.31)	-.18 (.24)	.28 (.23)	.32 (.24)
Condition 4: Positive Info	-.20 (.25)	.27 (.31)	-.23 (.24)	.13 (.23)	.02 (.25)
Semester	.14 (.23)	-.40 (.28)	-.37 (.22)	.01 (.21)	.24 (.23)
Log-Likelihood	-498.27	-318.76	-512.93	-569.91	-520.22
	N = 556 LR Chi ² (17) = 82.76*** Pseudo R ² = .08	N=563 LR Chi ² (17) =78.19*** Pseudo R ² = .11	N=580 LR Chi ² (17) =57.72*** Pseudo R ² = .05	N=566 LR Chi ² (17) =34.61*** Pseudo R ² = .03	N=534 LR Chi ² (17) =25.64* Pseudo R ² = .02

Note: Data source is the 2010-2011 Political Attitudes Study (PAS 2). Entries are ordered log-odds coefficients; standard errors are in parentheses. Additive scale variables are centered. The simple base model is presented.

*p<.10, **p<.05, ***p<.01

Table 4.5. Antecedents of Objective Ambivalence (Proportional Odds Ratios), PAS 2

Predictor	Stem Cell Research	Same-Sex Marriage	Health Care Reform	Troop Withdrawal Iraq	Troop Increase Afghanistan
Neuroticism	2.26 (1.56)	9.47*** (8.45)	2.19 (1.48)	1.42 (.95)	1.10 (.75)
Openness	2.40 (2.22)	8.16* (9.63)	11.67*** (10.56)	3.90 (3.33)	5.28* (4.69)
Extraversion	.69 (.49)	3.21 (2.93)	.53 (.37)	.83 (.56)	1.26 (.89)
Conscientiousness	2.84 (2.31)	3.14 (3.27)	1.97 (1.58)	.75 (.57)	.58 (.48)
Agreeableness	4.60* (4.17)	2.15 (2.46)	2.50 (2.18)	1.28 (1.08)	1.07 (.93)
Issue Importance	.63*** (.06)	.62*** (.06)	.81** (.08)	1.11 (.10)	.87 (.08)
Group Affect Conflict	17.50*** (14.14)	14.07** (15.80)	9.92*** (7.73)	7.04*** (5.27)	5.32** (4.16)
Value Conflict	1.11 (.13)	1.23 (.20)	1.04 (.12)	1.14 (.12)	1.01 (.11)
Discussion Partners	.83 (.15)	.97 (.21)	1.11 (.19)	1.08 (.18)	.93 (.16)
Liberal	.89 (.26)	1.10 (.38)	.80 (.22)	.86 (.23)	.74 (.21)
Conservative	1.21 (.35)	1.18 (.41)	.87 (.25)	1.60* (.44)	1.33 (.39)
Partisan Strength	1.07 (.13)	.83 (.13)	.68*** (.08)	.97 (.11)	1.11 (.13)
Political Information	.87 (.25)	.95 (.34)	.94 (.26)	1.55 (.42)	1.01 (.29)
Condition 2: Competing Info	1.24 (.30)	1.59 (.49)	.99 (.26)	1.13 (.26)	1.40 (.34)
Condition 3: Negative Info	.87 (.21)	1.14 (.36)	.83 (.20)	1.33 (.30)	1.38 (.33)
Condition 4: Positive Info	.82 (.21)	1.32 (.41)	.79 (.19)	1.14 (.26)	1.02 (.25)
Semester	1.15 (.26)	.67 (.18)	.69 (.15)	1.01 (.21)	1.27 (.29)
Log-likelihood	-498.27	-318.76	-512.93	-569.91	-520.22
	N=556 LR Chi ² (17) = 82.76*** Pseudo R ² = .08	N=563 LR Chi ² (17) = 78.19*** Pseudo R ² = .11	N=580 LR Chi ² (17) = 57.72*** Pseudo R ² = .05	N=566 LR Chi ² (17) = 34.61*** Pseudo R ² = .03	N=534 LR Chi ² (17) = 25.64* Pseudo R ² = .02

Note: Data source is the 2010-2011 Political Attitudes Study (PAS 2). Entries are proportional odds ratios with standard errors are in parentheses. Additive scale variables are centered. The simple base model is presented.

*p<.10, **p<.05, ***p<.01

Similar to the findings reported for subjective ambivalence, the results show that personality traits do matter when predicting the antecedents of objective ambivalence; but some traits matter more than others. To recap, the personality trait hypotheses discussed in detail in Chapter Three are outlined below:

- High Neuroticism will be positively associated with high ambivalence.
- High Openness to Experience will be positively associated with high ambivalence.
- High Agreeableness will be negatively associated with high ambivalence.
- High Conscientiousness will be negatively associated with high ambivalence.

Openness to Experience, Neuroticism, and Agreeableness each reach statistical significance at the $p < .10$ level or below in at least one of the issue areas examined, with the exception of ambivalence toward the decision to withdraw U.S. combat troops from Iraq. Conscientiousness and Extraversion did not reach significance in any of the models of issue ambivalence. Extraversion was not hypothesized to have a significant effect on attitudinal ambivalence.

The hypothesized relationship between Neuroticism and objective ambivalence is observed in these data. Neuroticism reaches statistical significance at the $p < .01$ level when predicting ambivalence towards the issue of same-sex marriage. A one unit increase in Neuroticism would result in a 2.25 unit increase in the ordered log-odds of being in a higher same-sex marriage ambivalence category, while all of the other variables in the model are held constant. To provide a more intuitive interpretation of the meaning of this effect, the proportional odds ratios for the ordered logit model are presented in Table 4.5. For a one unit increase in the Neuroticism score, the odds of high ambivalence versus the combined moderate and low ambivalence categories are 9.47 times greater, given that other variables

are held constant in the model. Likewise, the odds of the combined categories of high and moderate ambivalence versus low ambivalence are 9.47 times greater given all other variables are held constant.

Openness to Experience also exerts the hypothesized effect on ambivalence in three of the issue areas examined. Higher values of this trait are positively associated with ambivalence toward same-sex marriage, health care reform, and the decision to increase U.S. troop presence in Afghanistan. A one unit increase in the score on the Openness to Experience scale results in a 2.10 unit increase in the ordered log-odds of being in a higher same-sex marriage ambivalence category, while the other variables are held constant. Similarly, a one unit increase in this trait is also associated with a 2.46 unit increase in the ordered log-odds of being in a higher ambivalence category towards health care reform, and a 1.66 unit increase in the ordered log-odds of being in a higher ambivalence category on the issue of increasing U.S. troop presence in Afghanistan.

The proportional odds ratios make the interpretation of these effects more straightforward. For a one unit increase in Openness to Experience, the odds of high ambivalence versus the combined moderate and low ambivalence categories are 8.16 times greater in the same-sex marriage issue model ($p < .10$), 11.67 times greater in the health care reform model ($p < .01$), and 5.28 times greater in the increasing U.S. troop presence in Afghanistan model ($p < .10$). Those who are open to new ideas and experiences are more likely to entertain both positive and negative thoughts/feelings of similar intensity about these issue areas than those who score lower on this personality trait.

Finally, Agreeableness was hypothesized to be negatively associated with attitudinal ambivalence. Existing research suggests that those who score high on this trait are less likely

to engage in political discussions and tend to be less opinionated than those who score low on the trait (Mondak and Halperin 2008: 356-358). However, the hypothesized relationship was not observed in these data; instead, Agreeableness was *positively* associated with ambivalence toward stem cell research ($p < .10$). A one unit increase in Agreeableness results in a 1.53 unit increase in the ordered log odds of being in a higher ambivalence category, while the other variables are held constant. For a one unit increase in the Agreeableness score, the odds of high ambivalence versus combined moderate and low ambivalence are 4.6 times greater in this issue area. The odds of the combined categories of high and moderate levels of ambivalence versus low are 4.6 times greater, given that other variables are held constant. Thus, those who score high on Agreeableness may have a more difficult time devaluing the multiple viewpoints that they are exposed to with regards to political issues and experience greater ambivalence as a result.

However, personality traits are not the most important antecedents of attitudinal ambivalence. As hypothesized, group affect conflict was a very significant predictor, and was positively associated with the experience of objective ambivalence. Indeed, the group affect conflict variable was the most significant and consistent predictor of ambivalence across all five issues examined in my study ($p < .05$ or below). A one unit increase in group affect conflict results in a 2.86 unit increase in the ordered log-odds of being in a higher stem cell research ambivalence category, a 2.64 unit increase in the ordered log-odds of being in a higher same-sex marriage ambivalence category, a 2.29 unit increase in the ordered log-odds of being in a higher health care reform ambivalence category, a 1.95 unit increase in the ordered log-odds of being in a higher category of ambivalence toward the withdrawal of U.S. combat troops from Iraq, and a 1.67 unit increase in the ordered log-odds of being in a higher

category of ambivalence toward increasing U.S. troop presence in Afghanistan, holding all other variables in the models constant. For a one unit increase in group affect conflict score, the odds of high ambivalence versus the combined moderate and low ambivalence categories are 17.50 times greater in the stem cell research model, 14.07 times greater in the same-sex marriage model, 9.92 times greater in the health care reform model, 7.04 times greater in the troop withdrawal from Iraq model, and 5.32 times greater in the increasing U.S. troop presence in Afghanistan model, holding all other variables constant.

The perception of issue importance variables were also powerful predictors of attitudinal ambivalence, and were negatively associated with it in three of the issue models. A one unit increase in perception of issue importance results in a .46 unit decrease in the ordered log-odds of being in a higher stem cell research ambivalence category, a .48 unit decrease in the ordered log-odds of being in a higher same-sex marriage ambivalence category, and a .21 unit decrease in the ordered log-odds of being in a higher health care reform ambivalence category. For a one unit increase in issue importance, the odds of high ambivalence versus the combined middle and low ambivalence categories are .63 times less in the stem cell research ambivalence model, .62 times less in the same-sex marriage ambivalence model, and .81 times less in the health care reform ambivalence model, holding all other variables constant.

Strong partisans were hypothesized to experience less ambivalence than weak partisans or independents, because they receive clearer and more powerful cues from partisan elites who serve as signals to them regarding appropriate partisan positions to take on issues. Thus, strong partisans were expected to be less likely to hold both positive and negative considerations about political issues—especially those prominent on the national agenda.

When controlling for other plausible antecedents, the hypothesized relationship emerges only in the health care reform issue area—one of the most prominent issues on the national political agendas for both parties. A one unit increase in partisan strength is associated with a .39 unit decrease in the ordered log-odds of being in a higher ambivalence category, and the odds of high ambivalence versus combined moderate and low ambivalence are .68 times less, given that all other variables are held constant. The two political parties have taken clear stances on this issue, thus, strong partisans are significantly less likely to experience attitudinal ambivalence toward it. However, in the other issue areas, partisan strength was not a significant predictor of objective ambivalence when controlling for other plausible explanatory variables.

Ideological orientation did not exert as powerful of an effect on attitudinal ambivalence as was expected either. Liberal orientation was hypothesized to be positively associated with the experience of ambivalence, while conservative orientation was hypothesized to be negatively associated with this attitudinal state. The liberal variable did not have a statistically significant effect on ambivalence toward any of the issues examined, including social issues, but the conservative variable was *positively* associated with ambivalence toward the withdrawal of U.S. combat troops from Iraq. Conservative identification was associated with a .47 unit increase in the ordered log-odds of being in a higher ambivalence category, and the odds of higher ambivalence versus combined moderate to low ambivalence are 1.6 times greater for Conservatives, holding other variables constant. It is possible that Conservatives are more likely to experience ambivalence on this issue because they are being faced with cues that are inherently conflicting. Conservative leaders are typically associated with positions that favor staying the course in foreign policy

conflicts, but on the war in Iraq, even conservative leaders have expressed views that it is time for U.S. combat troops to withdraw.

As discussed previously, exposure to experimental information conditions did not exert a significant influence on the experience of ambivalence. Control variables for information condition were included in the model specifications to account for any variation, but clearly did not reach statistical significance. Simply exposing respondents to multiple viewpoints, or one-sided views, does not make them more or less likely to experience ambivalence. Finally, being politically informed and having political discussion partners with dissimilar views were not significantly associated with objective ambivalence towards any of the issues examined either. When controlling for other significant predictors like personality traits, group affect conflict, partisan strength, etc., simply having knowledge of political processes and leaders does not lead one to be more or less ambivalent toward particular issues. Likewise, talking with others who have dissimilar views does not automatically lead individuals to be more ambivalent toward specific political issues.

TUPI and Objective Ambivalence

The final test of my theory was conducted using data from the 2008 CCES (CCES 1) and the Political Attitudes Study conducted using undergraduates during the fall 2011 semester (PAS 3). Due to the ordinal nature of the dependent variable, ordered logit models were run for each issue area using the two data sources. First, I present the results of the limited CCES models. Table 4.6 reports ordered log-odds regression coefficients for the antecedents of objective ambivalence in four issue areas: embryonic stem cell research, same-sex marriage, making health insurance mandatory, and privatizing Social Security. For

the sake of substantive interpretation, Table 4.7 shows the proportional odds ratios for these ordered logit models.

Then, I present the results of the full empirical models using data from the 2011 student Political Attitudes Study (PAS 3). Table 4.8 reports the ordered log-odds regression coefficients and Table 4.9 reports the corresponding proportional odds ratios for the models predicting attitudinal ambivalence toward embryonic stem cell research, same-sex marriage, health care reform, setting a timetable for the withdrawal of U.S. combat troops from Afghanistan, and privatizing Social Security.

Table 4.6. Antecedents of Objective Ambivalence (Ordered Logistic Regression), CCES

Predictor	Stem Cell Research	Same-Sex Marriage	Mandatory Health Insurance	Social Security Privatization
Neuroticism	.00 (.13)	.00 (.16)	-.05 (.11)	.15 (.35)
Openness	-.11 (.14)	-.08 (.17)	-.06 (.12)	-.08 (.14)
Conscientiousness	-.23* (.13)	-.35** (.16)	-.05 (.11)	.01 (.14)
Issue Importance	-.39*** (.11)	-.07 (.11)	-.06 (.10)	-.11 (.10)
Liberal	.71* (.37)	-.02 (.50)	-.07 (.32)	.02 (.43)
Conservative	.26 (.36)	.91** (.40)	-.58* (.32)	.62* (.35)
Partisan Strength	-.20 (.14)	-.32** (.16)	-.21* (.12)	-.24* (.14)
Education	-.11 (.11)	-.06 (.12)	.09 (.09)	.03 (.11)
Log-Likelihood	-190.75	-149.89	-247.61	-181.47
	N = 377 LR Chi ² (8) = 26.27*** Pseudo R ² = .06	N=326 LR Chi ² (8) = 18.87*** Pseudo R ² = .06	N=404 LR Chi ² (8) = 8.75** Pseudo R ² = .02	N=352 LR Chi ² (8) = 10.60 Pseudo R ² = .03

Note: Data source is the 2008 Cooperative Congressional Election Study (CCES1). Entries are ordered log-odds coefficients; standard errors are in parentheses. The simple base model is presented.

*p<.10, **p<.05, ***p<.01

Table 4.7. Antecedents of Objective Ambivalence (Proportional Odds Ratios), CCES

Predictor	Stem Cell Research	Same-Sex Marriage	Mandatory Health Insurance	Social Security Privatization
Neuroticism	1.00 (.13)	1.00 (.16)	.96 (.11)	1.16 (.15)
Openness	.90 (.13)	.92 (.16)	.94 (.11)	.92 (.13)
Conscientiousness	.80* (.10)	.71** (.11)	.95 (.11)	1.00 (.14)
Issue Importance	.67*** (.08)	.93 (.10)	.95 (.09)	.89 (.09)
Liberal	2.04* (.76)	.98 (.49)	.93 (.30)	1.02 (.44)
Conservative	1.30 (.46)	2.48** (.99)	.56* (.18)	1.86* (.65)
Partisan Strength	.82 (.11)	.72** (.12)	.81* (.09)	.79* (.11)
Education	.89 (.10)	.94 (.12)	1.10 (.09)	1.03 (.11)
Log-Likelihood	-190.75	-149.89	-247.61	-181.47
	N = 377 LR Chi ² (8) = 26.27*** Pseudo R ² = .06	N=326 LR Chi ² (8) =18.87*** Pseudo R ² = .06	N=404 LR Chi ² (8) =8.75** Pseudo R ² = .02	N=352 LR Chi ² (8) =10.60 Pseudo R ² = .03

Note: Data source is the 2008 Cooperative Congressional Election Study (CCES 1). Entries are proportional odds ratios with standard errors in parentheses. *p<.10, **p<.05, ***p<.01

The CCES findings are limited in that only three of the five personality traits were measured on the survey instrument: Neuroticism, Openness to Experience, and Conscientiousness. In addition, other key explanatory variables, such as value conflict, group affect conflict, exposure to information about the political issue, diversity of discussion partners, and political information were not measured. However, perception of issue importance was measured for each of the issue areas, and three of the other control variables—liberal and conservative ideological orientation and strength of partisan identification—were included in the ordered logit models. Education was used as a proxy for political information.

In these models, the effects of personality traits did differ from those reported in previous analyses. Neuroticism and Openness to Experience were both hypothesized to be positively associated with the experience of attitudinal ambivalence, while Conscientiousness was hypothesized to be negatively associated with ambivalence. The findings show that neither Neuroticism nor Openness to Experience exerted a significant influence on ambivalence toward any of the four issue areas examined when using the TIPI indicators and this model specification. However, Conscientiousness did exert a significant effect in two of the issue areas: ambivalence toward stem cell research ($p < .10$) and same-sex marriage ($p < .05$). As hypothesized, an increase in one's score on Conscientiousness is negatively associated with the experience of attitudinal ambivalence. For a one unit increase in the Conscientiousness score, the odds of high ambivalence versus the combined moderate and low ambivalence categories are .80 times less in the stem cell research model and .71 times less in the same-sex marriage model, given that the other variables are held constant. Likewise, the odds of the combined categories of high and moderate ambivalence versus low

ambivalence are .80 times less in the stem cell research issue model and .71 times less in the same-sex marriage model.

The perception of issue importance variable was a significant predictor of ambivalence in only one of the issue areas examined: stem cell research. As hypothesized, an increase in the perception of issue importance was negatively associated with ambivalence. For a one unit increase in issue importance ratings, the odds of high ambivalence versus the combined moderate and low ambivalence categories are .67 times less, given the other variables in the model are held constant. This also means that the odds of the combined categories of high and moderate ambivalence versus low ambivalence are .67 times less given that all other variables are held constant.

Ideological orientation did exert a significant effect on this attitudinal state as well. Liberal orientation was a significant predictor of attitudinal ambivalence toward stem cell research. As hypothesized, liberal identification was positively associated with ambivalence. Liberal identification resulted in a .71 unit increase in the ordered log-odds of being in a higher ambivalence category, while other variables were held constant. The odds of high ambivalence versus the combined moderate and low ambivalence categories are 2.04 times greater for liberals, all else constant. However, stem cell research was the only area in which liberal identification was a significant predictor.

In the other three issue areas, conservative identification was a significant predictor of ambivalence. As you will recall, conservatives were hypothesized to be less likely to experience ambivalence. This hypothesized relationship was observed in the mandatory health insurance issue area. In this issue area, conservative identification resulted in a .58 unit decrease in the ordered log-odds of being in a higher ambivalence category, and the odds of

high ambivalence versus the combined moderate and low ambivalence categories was .56 times less for conservatives, all else constant. But, conservative identification was *positively* associated with ambivalence in the two remaining issue areas: same-sex marriage and privatization of Social Security. The odds of high ambivalence versus the combined moderate and low ambivalence categories were 2.48 times greater for conservatives in the same-sex marriage ambivalence model, and 1.86 times greater in the privatization of Social Security model.

Strength of partisan identification was hypothesized to be negatively associated with the experience of attitudinal ambivalence, and this relationship was observed in three of the issue models: same-sex marriage ($p < .05$), making health insurance mandatory ($p < .10$), and privatization of Social Security ($p < .10$). A one unit increase in partisan strength resulted in a .32 unit decrease in the ordered log-odds of ambivalence toward same-sex marriage, a .21 unit decrease in the ordered log-odds of ambivalence toward making health insurance mandatory, and a .24 unit decrease in the ordered log-odds of ambivalence toward privatization of Social Security. For a one unit increase in partisan strength, the odds of high ambivalence versus the combined moderate and low ambivalence categories are .72 times less in the same-sex marriage model, .81 times less in the mandatory health insurance model, and .79 times less in the privatization of Social Security model, given the other variables in the model are held constant.

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Table 4.8. Antecedents of Objective Ambivalence (Ordered Logistic Regression), PAS 3

Predictor	Stem Cell Research	Same-Sex Marriage	Afghanistan Withdrawal	Health Care Reform	Social Security Privatization
Neuroticism	-.03 (.09)	-.02 (.11)	-.12 (.09)	.07 (.08)	.06 (.09)
Openness	.01 (.13)	.22 (.17)	-.22* (.13)	-.13 (.12)	.01 (.14)
Extraversion	-.21*** (.08)	-.03 (.11)	.00 (.08)	-.06 (.08)	-.01 (.09)
Conscientiousness	.13 (.11)	-.07 (.13)	-.02 (.11)	-.19* (.10)	-.20* (.11)
Agreeableness	.25*** (.10)	-.04 (.12)	-.03 (.10)	.20** (.10)	.09 (.10)
Issue Importance	-.28** (.13)	-.45*** (.14)	-.27* (.15)	-.13 (.13)	-.19** (.09)
Group Affect Conflict	1.41 (.99)	.08 (1.26)	2.70*** (1.03)	1.39 (.97)	1.75* (1.01)
Value Conflict	-.99 (.83)	1.56 (1.21)	-2.21*** (.84)	.36 (.83)	.49 (.88)
Discussion Partners	.24 (.22)	.08 (1.26)	-.01 (.22)	.04 (.22)	-.03 (.23)
Liberal	-.40 (.34)	1.56 (1.21)	-.72** (.34)	-.18 (.33)	-.23 (.35)
Conservative	.80* (.42)	.37 (.50)	-.21 (.40)	.52 (.41)	.48 (.43)
Partisan Strength	.01 (.13)	.08 (.18)	.15 (.13)	-.15 (.13)	-.20 (.14)
Political Information	-.35 (.45)	-.11 (.60)	.67 (.45)	.34 (.44)	.19 (.47)
Condition 2: Competing Info	.01 (.24)	-.28 (.32)	.46** (.24)	-.38* (.23)	.02 (.24)
Log-Likelihood	-262.48	-159.98	-266.94	-275.09	-250.06
	N = 290 LR Chi ² (14) = 41.49*** Pseudo R ² = .07	N=305 LR Chi ² (14) =33.35*** Pseudo R ² = .09	N=302 LR Chi ² (14) =32.74*** Pseudo R ² = .06	N=296 LR Chi ² (14) =26.46** Pseudo R ² = .05	N=278 LR Chi ² (14) =18.78 Pseudo R ² = .04

Note: Data source is the Fall 2011 Political Attitudes Study (PAS 3). Entries are ordered log-odds coefficients; standard errors are in parentheses. Additive scale variables are centered. The simple base model is presented.

*p<.10, **p<.05, ***p<.01

Table 4.9. Antecedents of Objective Ambivalence (Proportional Odds Ratios), PAS 3

Predictor	Stem Cell Research	Same-Sex Marriage	Afghanistan Withdrawal	Health Care Reform	Social Security Privatization
Neuroticism	.97 (.08)	.98 (.11)	.89 (.08)	1.07 (.09)	1.06 (.09)
Openness	1.01 (.13)	1.25 (.22)	.80* (.10)	.87 (.11)	1.01 (.14)
Extraversion	.81*** (.07)	.97 (.10)	1.00 (.08)	.94 (.07)	.99 (.09)
Conscientiousness	1.14 (.13)	.93 (.12)	.98 (.11)	.82* (.09)	.82* (.09)
Agreeableness	1.28*** (.13)	.96 (.12)	.97 (.09)	1.22** (.12)	1.10 (.11)
Issue Importance	.76** (.10)	.64*** (.09)	.77* (.11)	.88 (.11)	.83** (.08)
Group Affect Conflict	4.10 (4.06)	1.08 (1.36)	14.82*** (15.24)	4.03 (3.91)	5.76* (5.80)
Value Conflict	.37 (.31)	4.74 (5.76)	.11*** (.09)	1.44 (1.20)	1.63 (1.43)
Discussion Partners	1.27 (.28)	1.09 (.32)	.99 (.22)	1.04 (.23)	.97 (.22)
Liberal	.67 (.23)	.57 (.25)	.49** (.16)	.83 (.27)	.79 (.27)
Conservative	2.22 (.93)	1.45 (.73)	.81 (.33)	1.70 (.69)	1.61 (.69)
Partisan Strength	1.00 (.13)	1.09 (.20)	1.16 (.15)	.86 (.11)	.82 (.11)
Political Information	.70 (.32)	.89 (.53)	1.95 (.87)	1.41 (.62)	1.21 (.57)
Condition 2: Competing Info	1.01 (.24)	.76 (.24)	1.58** (.38)	.68* (.16)	1.02 (.25)
Log-likelihood	-262.48	-159.98	-266.94	-275.09	-250.06
	N=290 LR Chi ² (14) = 41.49*** Pseudo R ² =.07	N=305 LR Chi ² (14) = 33.35*** Pseudo R ² =.09	N=302 LR Chi ² (14) = 32.74*** Pseudo R ² =.06	N=296 LR Chi ² (14) = 26.46** Pseudo R ² =.05	N=278 LR Chi ² (14) = 18.78 Pseudo R ² =.04

Note: Data source is the Fall 2011 Political Attitudes Study (PAS 3). Entries are proportional odds ratios with standard errors in parentheses. Additive scale variables are centered. The simple base model is presented.

*p<.10, **p<.05, ***p<.01

The Political Attitudes Study (PAS 3) administered to students during the fall 2011 semester measured attitudinal ambivalence toward five political issues: embryonic stem cell research, same-sex marriage, setting a timetable for troop withdrawal from Afghanistan, health care reform, and privatization of Social Security. While there were similarities in the findings as compared to those uncovered in the student surveys administered during the 2010-2011 academic year and the 2008 CCES, there were some differences as well.

Once again, it is evident that personality traits, even when measured with the Ten-Item Personality Inventory, matter when predicting the antecedents of attitudinal ambivalence. Four of the five personality traits were significant predictors of attitudinal ambivalence. Neuroticism was the only trait that did not reach statistical significance in any of the issue ambivalence models. As hypothesized, Conscientiousness was negatively associated with attitudinal ambivalence toward health care reform ($p < .10$) and privatizing Social Security ($p < .10$). In the health care reform ambivalence model, a one unit increase in the Conscientiousness score would result in a .19 unit decrease in the ordered log-odds of being in a higher ambivalence category; similarly, in the privatizing Social Security ambivalence model, a one unit increase in this trait would result in a .20 unit decrease in the ordered log-odds of being in a higher ambivalence category, holding all other variables in the model constant. In terms of odds, this means that for a one unit increase in Conscientiousness, the odds of high ambivalence versus the combined middle and low ambivalence categories are .82 times less for both issue areas, given the other variables are held constant.

Extraversion reached statistical significance in the stem cell research ambivalence model. I did not have a firm expectation about whether this trait would be positively or

negatively associated with the state of attitudinal ambivalence. When measured with the TIPI, Extraversion was negatively associated with ambivalence. A one unit increase in Extraversion would result in a .21 unit decrease in the ordered log-odds of being in a higher ambivalence category. The odds of high ambivalence versus the combined middle and lower ambivalence categories are .81 times less in this issue area, given that the other variables are held constant in the model.

Finally, Openness to Experience and Agreeableness also exerted significant effects on the state of attitudinal ambivalence. However, when measured with the TIPI, these traits exert effects that were opposite than those hypothesized. Openness to Experience was negatively associated with ambivalence toward the issue of setting a timetable for the withdrawal of U.S. troops from Afghanistan. A one unit increase in Openness would result in a .22 unit decrease in the ordered log-odds of being in a higher ambivalence category, all else constant. The odds of high ambivalence versus the combined middle and lower ambivalence categories are .80 times less in this issue area. Likewise, the odds of the combined categories of high and middle ambivalence versus low ambivalence are .80 times less given all other variables are held constant. Agreeableness was positively associated with the experience of ambivalence toward stem cell research ($p < .01$) and health care reform ($p < .05$). A one unit increase in Agreeableness would result in a .25 unit increase in the ordered log-odds of being in a higher stem cell research ambivalence category; a unit increase in this trait would also result in a .20 unit increase in the ordered log-odds of being in a higher health care reform ambivalence category. The odds of high ambivalence versus the moderate and low ambivalence categories are 1.28 times greater in the stem cell research issue area and 1.22 times greater in the health care reform issue area.

As in the Political Attitudes Studies conducted during 2008-2009 and 2010-2011, the Fall 2011 Political Attitudes Study (PAS 3) also included an experimental manipulation. Students were randomly assigned to either a competing considerations condition or to the baseline (no information) condition. One-sided information conditions were not used in this study since it was only conducted over the course of one semester and the sample size was smaller. In this study, exposure to political information *was* a significant predictor in two of the issue areas: setting a timetable for the withdrawal of U.S. troops from Afghanistan ($p < .01$) and health care reform ($p < .10$). However, the effects were not the same across both issue areas.

Those who were exposed to competing considerations about setting a timetable for troop withdrawal from Afghanistan were significantly more ambivalent than those who were not exposed to that information. However, in the health care reform area, those who were exposed to competing considerations were significantly *less* ambivalent than those who were not exposed to the same information. The results suggest, once again, that simply exposing individuals to contradictory information about political issues does not automatically make them more ambivalent as a result. The findings from these analyses, and those from previous chapters, indicate that the relationship is not that clear cut. Exposure to conflicting information may not exert any effect at all on the likelihood that an individual will experience attitudinal ambivalence, as was the case in the stem cell research, same-sex marriage, and privatization of Social Security issue areas in this study. Alternatively, this exposure may lead individuals to feel more ambivalent, due to all of the conflicting information they are given. Or, it may lead them to be significantly less ambivalent than

otherwise similar individuals who are not exposed to the same information, as some may be more likely to intensify preexisting viewpoints when faced with conflicting information.

The perception of issue importance variable was hypothesized to be negatively associated with attitudinal ambivalence. This relationship was uncovered in four of the issue ambivalence models; it was not a significant predictor in the health care reform ambivalence model. The odds of high ambivalence versus the moderate and low ambivalence categories are .76 times less in the stem cell research issue area, .64 times less in the same-sex marriage issue area, .77 times less in the setting a timetable for the withdrawal of U.S. troops from Afghanistan issue area, and .83 times less in the privatization of Social Security issue area. If an individual perceives an issue to be important, s/he will experience significantly less ambivalence as a result.

As for the other existing explanations for ambivalence, we find mixed results. Group affect conflict was a significant predictor in two of the issue areas: setting a timetable for the withdrawal of U.S. troops from Afghanistan ($p < .05$) and privatizing Social Security ($p < .10$). A one unit increase in the group affect conflict variable results in a 2.7 unit increase in the ordered log-odds of being in a higher ambivalence category; and the odds of high ambivalence versus the moderate and low ambivalence categories are 14.82 times greater, holding all other variables in the model constant. Similarly, a one unit increase in this variable would result in a 1.75 unit increase in the log-odds of being in a higher ambivalence category, and the odds of high ambivalence versus the combined moderate and low ambivalence categories are 5.76 times greater. Value conflict was expected to be positively associated with the experience of attitudinal ambivalence. However, this effect was not uncovered in these data at all. In four of the five issue areas, value conflict was not a

significant predictor. However, in the setting a timetable for the withdrawal of U.S. troops from Afghanistan issue area, value conflict was *negatively* associated with ambivalence. A one unit increase in value conflict resulted in a 2.21 unit decrease in the ordered log-odds of being in a higher ambivalence category; the odds of high ambivalence versus the moderate and low ambivalence categories are .11 times less, holding all other variables in the model constant.

Finally, ideological orientation did significantly predict the likelihood of attitudinal ambivalence in two of the issue areas. However, the observed effects were opposite of those that were hypothesized. Liberal orientation was negatively associated with ambivalence toward setting a timetable for the withdrawal of U.S. troops from Afghanistan, while Conservative orientation was positively associated with ambivalence toward stem cell research.

Conclusions

In this chapter, I have presented the results of four studies that I conducted to examine the influence that personality traits exert on attitudinal ambivalence. These studies employed two different measures of ambivalence (subjective and objective), two personality trait inventories (a 50-item “Big Five” IPIP Trait Inventory and the Ten-Item Personality Inventory), and used a national sample of adults and samples of undergraduate students from the University of North Carolina at Chapel Hill.

Personality Traits as Antecedents of Ambivalence

Table 4.10 below presents a summary of the personality trait effects across the

different studies and issue areas examined. The direction of the effects and indicators of significance for the personality traits are provided for each study.

Taken together, these findings show that personality traits do have an impact on ambivalence; but, their impact is not overwhelming, very great, or consistent. Out of 82 possible significant personality coefficients, only 17 coefficients reached statistical significance. The levels of significance also varied: eight personality coefficients were weakly significant at the $p < .10$ level, three were significant at the $p < .05$ level, and six were strongly significant at the $p < .01$ level. Now, let me discuss these findings in more detail.

Personality traits were more powerful predictors of ambivalence toward stem cell research, same-sex marriage, and the implementation of a government health insurance plan or health care reform. Across these issue areas, each trait was significant *at least* once. Openness was the only significant personality trait in the ambivalence toward U.S. troop involvement in Afghanistan model, while Conscientiousness was the only significant personality trait in the model that measured ambivalence toward privatizing Social Security. No personality traits were significant predictors of ambivalence toward setting a timetable for the withdrawal of U.S. troops from Iraq, perhaps because the war was beginning to wind down when the studies were being administered.

Table 4.10. Summary of Personality Effects across Measures and Studies

<u>Traits</u>	Stem Cell Research				Same-Sex Marriage				Health Insurance/Health Care Reform			
	PAS 1	PAS 2	CCES	PAS 3	PAS 1	PAS 2	CCES	PAS 3	PAS 1	PAS 2	CCES	PAS 3
	Subj. Ambiv	Obj. Ambiv	Obj. Ambiv	Obj. Ambiv	Subj. Ambiv	Obj. Ambiv	Obj. Ambiv	Obj. Ambiv	Subj. Ambiv	Obj. Ambiv	Obj. Ambiv	Obj. Ambiv
Neuroticism	+	+	+	-	+***	+***	+	-	+**	+	-	+
Openness	-.*	+	-	+	-	+*	-	+	+	+***	-	-
Extraversion	+	-		-.***	-	+		-	-	-		-
Conscientiousness	+	+	-.*	+	+	+	-.**	-	+	+	-	-.*
Agreeableness	+	+*		+***	+***	+		-	+	+		+**
<u>Traits</u>	Timetable for U.S. Troop Withdrawal from Iraq				U.S. Troop Increase or Timetable for Withdrawal from Afghanistan				Privatizing Social Security			
	PAS 1	PAS 2	CCES	PAS 3	PAS 1	PAS 2	CCES	PAS 3	PAS 1	PAS 2	CCES	PAS 3
	Subj. Ambiv	Obj. Ambiv	Obj. Ambiv	Obj. Ambiv	Subj. Ambiv	Obj. Ambiv	Obj. Ambiv	Obj. Ambiv	Subj. Ambiv	Obj. Ambiv	Obj. Ambiv	Obj. Ambiv
Neuroticism	+	+				+		-			+	+
Openness	+	+				+*		-.*			-	+
Extraversion	-	-				+		+				-
Conscientiousness	-	-				-		-			+	-.*
Agreeableness	+	+				+		-				+

Note: The four studies conducted are identified as PAS 1, PAS 2, CCES, and PAS 3. The 2008-2009 Political Attitudes Study (PAS 1) used a UNC undergraduate student sample and a 50-item personality inventory. The 2010-2011 Political Attitudes Study (PAS 2) used a UNC undergraduate student sample and a 50-item personality inventory. The Fall 2011 Political Attitudes Study (PAS 3) used a UNC undergraduate student sample and the Ten-Item Personality Inventory (TIPI). The 2008 CCES used a national sample of adults and six measures taken from the TIPI. * $p < .10$, ** $p < .05$, *** $p < .01$

While the effects of personality traits on ambivalence are not as consistent as hypothesized, some patterns do emerge in these data. Neuroticism and Agreeableness were the strongest predictors of attitudinal ambivalence across studies, relative to the other traits. High values of Neuroticism were hypothesized to be positively associated with high levels of political ambivalence. The reasoning behind this hypothesis was that those high on this trait tend to be more self conscious and anxious; and to the extent that this anxiety encourages them to think more carefully about their social allegiances or issue positions, or seek out additional information, they may be more likely to hold conflicting considerations than otherwise similar individuals who are calmer and more relaxed. Neuroticism reached statistical significance three times (out of a possible 18), and the hypothesized relationship was observed in these data. In each case, the coefficient was positive and significant at the $p < .05$ level or below. When this trait reached statistical significance, it was negatively associated with political ambivalence on a consistent basis.

I hypothesized that high levels of Agreeableness would be negatively associated with high levels of ambivalence due to past research that suggests that those who are high on this trait are less opinionated, more trusting, and not particularly tied to an ideological orientation (Mondak and Halperin 2008). Those who score low on this trait are more suspicious and demanding, and need less social validation of their opinions and judgments. Given those tendencies, I reasoned that those low on Agreeableness may desire to hear both sides of arguments and might even enjoy the experience of ambivalence. Agreeableness did reach statistical significance four times out of a possible 14; two coefficients were strongly significant at the $p < .01$ level, one was significant at the $p < .05$ level, and one was weakly significant at the $p < .10$ level. However, in each case, this trait was *positively associated* with

ambivalence. While this relationship was not hypothesized, it is not entirely surprising. Agreeableness is a broad trait that is comprised of six facets. These facets include trust in others, altruism, modesty, sincerity, compliance, and sympathy (Costa and McCrae 1992). To the extent that Agreeable persons desire to get along well with others, and believe that people are honest and trustworthy, they may have a difficult time taking one-sided stances on political issues—especially if they feel sympathy or compassion for those who are affected by the issue in question.

The traits of Conscientiousness and Extraversion were also significant predictors of political ambivalence. Those who are high on Conscientiousness prefer to follow social norms and rules, are uncomfortable with ambiguity, and know comparatively less about politics and voice fewer opinions than those who are low on this trait. Since these individuals prefer certainty and consistency, I hypothesized a negative association between this trait and ambivalence. This relationship was observed in these data. Conscientiousness reached statistical significance four out of a possible 18 times. In each case, the coefficient was negative. However, the relationship was not very strong; one of the coefficients reached statistical significance at the $p < .05$ level, while the other three coefficients were significant at only the $p < .10$ level.

As for Extraversion, I did not have a clear expectation about how this trait would relate to ambivalence. It reached statistical significance only one time ($p < .05$), and was negatively associated with ambivalence toward stem cell research. Extraversion was definitely *not* a consistent predictor of political ambivalence, as it failed to reach statistical significance 13 out of 14 possible times.

Finally, those who are high on the Openness to Experience trait tend to be more tolerant, analytical, and tolerant of diversity; they engage in political discussions often and are opinionated, knowledgeable about political issues, and flexible in their views (Mondak and Halperin 2008; De Raad 2000). Based on these tendencies, I hypothesized that high Openness to Experience would be positively associated with high levels of attitudinal ambivalence. While this trait reached significance five times, the effects were mixed. It was negatively associated with ambivalence twice (stem cell research and setting a timetable for the withdrawal of U.S. troops from Afghanistan issue areas) and positively associated with ambivalence three times (same-sex marriage, health care reform, and U.S. troop increase in Afghanistan issue areas). Furthermore, these mixed effects were not a result of the personality inventory used, as negative coefficients were present in models that measured the “Big Five” traits with either the longer 50-item or shorter 10-item inventories.

I do not have a firm explanation for why Openness to Experience was negatively associated with ambivalence. Those who score high on Openness tend to be more liberal in their views. Perhaps the negative relationship that was observed between this trait and ambivalence toward these issue areas is not entirely surprising, since liberals tend to support stem cell research and setting a timetable for the withdrawal of U.S troops from Afghanistan. While these individuals may typically be open to multiple ideas and viewpoints, the considerations that lead them to support these issue positions could have outweighed the considerations that would have lead them to stand against such positions. However, I cannot be sure that this is the case. More research needs to be conducted to explore the relationship between this trait and political ambivalence.

These data provide an opportunity to explore whether the effects of personality traits vary by *type* of ambivalence measure as well. Subjective ambivalence and objective ambivalence measures were employed in my research. The 2008-2009 Political Attitudes Study (PAS 1) examined subjective ambivalence, while objective ambivalence was the dependent variable in the other studies. Table 4.10 shows that Agreeableness, Openness, and Conscientiousness were more likely to be significant predictors of objective ambivalence than subjective ambivalence. Agreeableness was a significant predictor of objective ambivalence three times, but was a significant predictor of subjective ambivalence only once. Similarly, Openness to Experience was a significant predictor of objective ambivalence four times, but was a significant predictor of subjective ambivalence one time. Conscientiousness and Extraversion were not significant predictors of subjective ambivalence in *any* of the issue areas or studies, but were significant predictors of objective ambivalence. Neuroticism was the only trait that significantly predicted subjective ambivalence more than once—it did so twice. This trait was a significant predictor of objective ambivalence only once.

To be sure, it is important to note that subjective ambivalence was only measured in one of the four studies I conducted. Thus, each of the “Big Five” traits only had a chance of significantly predicting subjective ambivalence four times. Neuroticism was the strongest predictor of subjective ambivalence. Individuals who score high on this trait tend to be anxious and self conscious, so it was interesting that they were willing to *admit* that they *felt* torn or conflicted toward political issues.

An analysis of whether the type of personality measure employed affects the results can also be conducted using these data. As you will recall, I employed a 50-item personality inventory to measure the “Big Five” traits in the 2008-2009 and 2010-2011 Political

Attitudes Studies (PAS 1 and 2), and the Ten-Item Personality Inventory (TIPI) in the CCES and Fall 2001 Political Attitudes Study (PAS 3). Neuroticism and Openness to Experience were more likely to be significant predictors when the longer 50-item personality inventory was used. Neuroticism only reached significance when the longer inventory was used; Openness, a trait that tends to be difficult to measure well, was a significant predictor only one time when the TIPI was used, but reached significance four times when the longer inventory was used. The effects of Agreeableness appear to be unaffected by the choice of indicators. However, Conscientiousness and Extraversion were only significant predictors when the TIPI was used.

These results suggest that while shorter personality inventories may be attractive alternatives for survey researchers who wish to incorporate personality trait measures into their work, the inferences that are drawn about these traits may be largely dependent on the personality inventories used to construct the trait measures. Thus, repeating studies with different personality measures to determine whether the findings are replicable is a worthwhile venture.

Other Antecedents of Ambivalence

In some cases, personality traits *do* predispose individuals to experience political ambivalence. Furthermore, these findings hold even while controlling for variables that have long been associated with the experience of attitudinal ambivalence, such as value conflict, group affect conflict, exposure to different types of political information, and self-reported engagement in political discussions with individuals who have dissimilar thoughts and

beliefs. However, personality traits were not the strongest or most consistent predictors in my studies.

Group affect conflict was the most significant variable across all of the studies, and was positively associated with the experience of political ambivalence, regardless of whether a subjective or objective ambivalence measure was used. When citizens evaluate liberal and conservative social groups similarly, they are more likely to experience attitudinal ambivalence as a result. Presumably, if those individuals take cues from both liberal and conservative groups, and receive conflicting bits of information, it makes it more difficult for them to reconcile their evaluations into a one-sided political viewpoint.

However, value conflict, when measured as the conflict between the values of moral traditionalism and egalitarianism, did not exert the powerful influence that existing theory would lead me to expect. It was a significant predictor of subjective ambivalence, and was positively associated with this attitudinal state, but it was not a powerful predictor of objective ambivalence. This finding may have been a function partly of the student sample and the issues examined. Only the domestic issues really have an “egalitarian” component and moral traditionalism may only have been used to structure students’ views on same-sex marriage. Perhaps adults would use these values more to structure their attitudes, but I cannot test this possibility with these data. These findings beg the question of whether the influence of value conflict is ambivalence measure-specific.

Perception of issue importance was very significant and negatively associated with the experience of both subjective and objective ambivalence. The conclusion to be drawn from these results is that individuals are less ambivalent about issues they think are important, regardless of which ambivalence measure is employed. Partisan strength was also

negatively associated with the experience of objective and subjective ambivalence in some issue areas, but was clearly a more powerful predictor in the limited CCES models when other explanatory factors (e.g., group affect conflict, value conflict, political information, etc.) were not included in the model specifications.

Finally, I conducted experiments in three of my Political Attitudes Studies (PAS 1, 2, and 3) in which I varied the types of information about political issues that individuals were exposed to. These experiments failed a combined nine times in the 2008-2009 and 2010-2011 Political Attitude Studies. In the Fall 2011 Political Attitudes Study (PAS 3), varying exposure to conflicting information about political issues mattered in only two out of five issue areas, and the effects were *not* consistent. In one issue area, exposure to conflicting information lead to greater ambivalence; in the other, exposure to conflicting information lead to significantly less ambivalence among those in the treatment group. Simply exposing citizens to a variety of conflicting viewpoints will not necessarily make them more ambivalent as a result. Similar findings were uncovered with regard to the heterogeneous discussion partner(s) variable. Engaging in general political discussions with others who hold attitudes that are dissimilar to one's own political views did not independently influence the dependent variable either when controlling for other plausible antecedents of ambivalence, such as personality traits, group affect conflict, and value conflict.

Thus, these findings indicate that the information environment may not be as powerful of a predictor of ambivalence as past arguments would suggest. Perhaps the experiment failed because of the strength of the treatments, or because the samples were comprised entirely of students. Or, it is possible that exposure to conflicting views may actually serve to intensify pre-existing attitudes. In either case, additional research needs to

be conducted to evaluate further the role of the information environment in influencing political ambivalence.

In the conclusion, I will provide an overview of these findings, and discuss the limitations of the studies and the implications of these findings our understanding of the origins of political ambivalence. I will also discuss areas for future research.

CHAPTER FIVE

CONCLUSION

While literature published on the root causes of political ambivalence is sparse compared to that which is published on its consequences (Martinez, Craig, and Kane 2005), existing theories suggest that citizens may experience this attitudinal state if they use multiple conflicting values or cues from ideologically inconsistent social groups in their attempt to provide structure to their political attitudes (see, for example, Feldman and Zaller 1992; Gainous and Martinez 2005; Alvarez and Brehm 1995; Lavine and Steenbergen 2005). Furthermore, information environments where diverse viewpoints about political objects are discussed and shared may also be more conducive to the development of attitudinal ambivalence than settings where citizens are only exposed to one-sided political views (Keele and Wolak 2008; Lavine 2001; Huckfeldt, Mendez, and Osborn 2004).

While valuable, I have argued that these existing theories share one characteristic in common: they hinge largely on the presence of conflicting views in the environments in which individuals make decisions. Political discussions and coverage are ripe with conflict; citizens and politicians routinely offer competing opinions and viewpoints on issues or candidates in political discourse. Politicians, political parties, television networks, and campaign and grassroots organizations, among others, frame discussions

of political issues so that they may be understood in terms of values such as equality, self reliance, or moral traditionalism, and citizens take note of the positions taken by social groups. But ambivalence is not experienced by *all* individuals who are exposed to competing viewpoints offered in their information environments, or by those who take attitudinal cues from a number of different social reference groups. Similarly, while multiple values may be primed in political debates and discussions, not all citizens are unable to order the relative salience of values that they perceive to be relevant to the construction of a political attitude.

To date, political scientists have not put forth a comprehensive theory addressing why some individuals become ambivalent toward political issues, while others are able to order the importance and salience of considerations to reach univalent attitudes. As such, I offered an individual-level theory of the antecedents of ambivalence: that ambivalent attitudes are likely caused by deeply rooted individual differences that systematically influence behaviors and attitudes *in addition to* environmental factors that have been addressed in past studies (McCrae and Costa 1996).

Using the Five Factor Model (FFM) of personality structure as my theoretical framework, I developed a set of hypotheses about the direct effects that the “Big Five” traits of Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism would have on the likelihood that a citizen would experience ambivalence. These traits, with the exception of Extraversion, were hypothesized to be significant predictors of ambivalence toward political issues, controlling for other explanatory factors (e.g., the information environment, value conflict, and group affect conflict).

I tested my hypotheses using data gathered from multiple sources: the 2008 Cooperative Congressional Election Survey (CCES) and a series of three studies with

experimental treatments administered to undergraduate students at the University of North Carolina at Chapel Hill between 2008 and 2011. The dependent variables used in my analyses were either subjective or objective ambivalence toward a variety of political issues: stem cell research; health care reform and health care plans; same-sex marriage; and U.S. troop involvement in the wars in Iraq and Afghanistan. The key independent variables of interest, the “Big Five” traits, were measured using either a 50-item personality inventory borrowed from the International Personality Item Pool (IPIP, Goldberg 1992; Goldberg et al. 2006) or the Ten-Item Personality Inventory (TIPI) developed by Gosling, Renfrow, and Swann (2003). Experimental treatments that randomly varied exposure to information were included in the studies involving student respondents. Finally, control variables for perception of issue importance, value conflict, group affect conflict, ideology, partisan strength, homogeneity of discussion partners, and political information were included when available.²³

The results presented in Chapter Four represented a first look at the question of whether personality traits are antecedents of attitudinal ambivalence. They do lend some support to my theory. Several of the “Big Five” personality traits *did* predispose individuals to experience attitudinal ambivalence, even when controlling for other explanatory variables that have long been associated with the experience of this attitudinal state. When the 50-item IPIP Personality Inventory was used to create the personality trait variables, Neuroticism was positively associated with subjective ambivalence toward same-sex marriage and implementing a government health insurance plan; it was also positively related to objective ambivalence toward same-sex marriage. Agreeableness was positively associated with the

²³Please refer to Table 4.1 included in Chapter 4 for a breakdown of variables by study.

experience of objective ambivalence toward stem cell research and subjective ambivalence toward same-sex marriage. The relationship between Openness to Experience and ambivalence was mixed, though. This trait was positively associated with objective ambivalence toward health care reform, same-sex marriage, and increasing U.S. troop presence in Afghanistan; however, it was *negatively* associated with subjective ambivalence toward stem cell research. Extraversion and Conscientiousness did not reach statistical significance when the longer personality inventory was used to measure these traits.

Using the full Ten-Item Personality Inventory (TIPI) and an undergraduate student sample, I found that Openness to Experience was negatively associated with objective ambivalence toward U.S. troop withdrawal from Afghanistan. Agreeableness was positively associated with objective ambivalence toward stem cell research and health care reform. Conscientiousness was negatively associated with objective ambivalence toward health care reform and privatization of Social Security, and Extraversion was negatively associated with objective ambivalence toward stem cell research. When only six of the TIPI indicators were included on the CCES, Conscientiousness was negatively associated with objective ambivalence toward stem cell research and same-sex marriage. But, Neuroticism and Openness to Experience were not significant predictors in the CCES models.

Thus, these results show that the effects of personality traits were not as uniform or consistent as hypothesized. While each trait reached statistical significance in at least one model, not one trait predicted the experience of ambivalence (either subjective or objective) across all of the issue areas examined. Moreover, the Openness to Experience trait exhibited mixed effects and the influence of Agreeableness ran counter to the initial hypothesis. At this point, it is unclear whether these effects are limited to the questionnaires administered, or

whether they would be uncovered in additional studies as well. More research in this area is needed to gain a more comprehensive understanding of the influence of these traits on political ambivalence.

While personality traits were shown to be factors contributing to attitudinal ambivalence, they were not the *only* predictors to consider, nor were they the most important. The other predictors that were included in the models to account for situational factors still exhibited a powerful influence on attitudinal ambivalence, even while accounting for personality traits. The group affect conflict variable was a consistently strong predictor of both subjective and objective ambivalence. When citizens evaluate liberal and conservative social groups similarly, they are more likely to experience attitudinal ambivalence as a result. Value conflict, when measured as the conflict between the values of moral traditionalism and egalitarianism, was also positively associated with the experience of ambivalence. However, this relationship was only present in the models of subjective ambivalence; *not* objective ambivalence.

The lack of explanatory power of value conflict in the objective ambivalence models could be a function of the particular issues examined in this study. It could also be attributed to how ambivalence was operationalized. The experience of value conflict may be activated when respondents have to report how torn or conflicted they *feel* about particular issues. However, this may not be the case when individuals are only asked to respond to questions about whether they have positive and negative thoughts or feelings about the same issues. The nature of the samples themselves may also contribute to these findings. The Political Attitudes Studies samples were comprised entirely of undergraduate college students. Value

conflict may be more deeply rooted and a more powerful predictor of objective ambivalence among adults. However, I cannot determine whether this is the case with these data.

Interestingly, the findings indicate that when controlling for other plausible explanations, the information environment may not be as powerful of a predictor of ambivalence as past arguments (Keele and Wolak 2008; Lavine 2001; Huckfeldt, Mendez, and Osborn 2004) suggest. In my studies, I repeatedly found that simply exposing individuals to a number of pros and/or cons of political issues did not significantly influence whether they experienced subjective or objective ambivalence. Engaging in general political discussions with others holding similar views did not independently influence the dependent variable on a consistent basis either. When controlling for other probable antecedents, such as personality traits, group affect conflict, and value conflict, among others, these predictors did not exert a significant influence on attitudinal ambivalence. Even without controlling for these factors, the difference of means tests showed that the experimental information treatments failed. Thus, either the treatments did not capture the effects of the information environment, or the environment was not as powerful of a factor as previously thought.

On the one hand, it is not entirely surprising that information exposure and heterogeneous discussion partners did not exert a consistently significant influence on the experience of ambivalence. Individuals are presented with different types and varying levels of information on a daily basis and over the course of their lives. This exposure is relatively episodic. However, in comparison, personality traits are stable individual differences that are at least partly rooted in genetics (Bouchard 1997; Van Gestel and Van Broeckhoven 2003; Costa and McCrae 2006; McCrae and Costa 1996; Gosling, Renfrow, and Swann 2003). Thus, it is reasonable to expect that when placed in the same empirical model, traits may be

more important predictors than information exposure or heterogeneous political discussion partners.

But on the other hand, these conclusions regarding the effects of exposure to information on ambivalence should be taken with caution. It is possible that respondents who were exposed to varying types of information were not convinced of the arguments presented for and/or against the issue items, or that the source of the information was not perceived as credible. Furthermore, exposure to information (i.e., reading an introductory statement about an issue) was a relative passive experience, as participants did not actually engage in discussions about any of the issues with others before they answered the follow-up ambivalence questions. Thus, one can question how realistic or powerful this treatment actually was. In effect, the complex nature of the real world political information environment was not perfectly replicated in the web-based Political Attitudes Studies. For future research, it would be worthwhile to conduct additional studies to determine whether face-to-face engagement in political discussions with others who have dissimilar views has a more powerful effect on the experience of attitudinal ambivalence, while also accounting for personality traits.

When interpreting these results, it is important to consider that with the exception of the CCES dataset, I relied on data collected from samples of undergraduate students to test my hypotheses. The structure of human personality is consistent across age groups, so using a student sample to test the theory is not inherently problematic. If a particular trait exerts a significant effect on ambivalence, it should do so regardless of whether college-age students or older adults are sampled. However, it is possible that the effect of information exposure could vary across age groups. In addition, the effects of other key variables (e.g., group affect

conflict, value conflict) and controls (partisan strength, political information) could vary across age groups, as could the nature of ambivalence on particular issues. Thus, it would be beneficial to run a similar study with a sample consisting of a wider range of age groups to determine whether the conclusions drawn from these studies still hold true. It would also be beneficial to examine whether similar results are uncovered using different political issues.

But while the findings do have their limitations, they, nonetheless, demonstrate that personality traits *add* to our understanding of political ambivalence. However, environmental explanations—especially group affect conflict, and in some cases value conflict—are stronger and more important predictors. Personality traits, *in combination with* environmental factors and previously formed values and attitudes, contribute to the likelihood of experiencing this type of attitude. By including both external and psychological factors into the theoretical model, I provide a more complete understanding of the antecedents of ambivalence toward political issues.

The results of these analyses are promising enough to suggest that there is a need for additional research and empirical investigation into the effects that personality traits have on the experience of attitudinal ambivalence. In my dissertation, I focused attention on ambivalence toward political issues. But, it would be worthwhile to study whether personality traits exert a similar influence on partisan and ideological ambivalence as well to determine whether the five traits exert similar effects.

In addition, there is a growing literature on the interaction between personality traits and political contexts. Another area of future research would be to explore how personality traits interact with diverse political discussion networks, and whether these interactions lead to various forms of political ambivalence (e.g., issue ambivalence, partisan ambivalence,

ideological ambivalence). The information treatment conditions used in my dissertation do not provide a good forum to examine this question, since the respondents passively consumed information and did not engage in discussions with others with similar or dissimilar views. But personality traits likely shape the way that individuals talk and engage with others in political discussion groups. For example, extraverts may be more likely to become ambivalent about political issues if placed in heterogeneous discussion groups based upon their desire to interact with others, whereas introverts may not experience ambivalence in this type of setting because they do not enjoy interacting with those around them. Thus, the information environment may be a powerful predictor of ambivalence—but only among a subset of respondents.

Recent research conducted by political scientists suggests that the core personality traits influence a variety of political attitudes and behaviors, from partisan identification to civic engagement and voter turnout (Mondak and Halperin 2008; Mondak 2010; Mondak et al. 2010; Gerber et al. 2010, 2011; Hibbing, Ritchie, and Anderson 2011). My research adds to this growing literature by suggesting that personality traits also influence the experience of political ambivalence and should therefore not be ignored in our analyses. But political scientists have not yet examined the role(s) that the core traits may play in predisposing citizens to experience *indifference* toward political issues, parties, and ideology. Since traits shape the way that individuals interact with their surroundings and others, it is possible that traits may also play a role in predisposing some citizens to be politically disengaged and indifferent toward political parties and/or issues. This may be an area ripe for future research.

Moving forward, it is important to realize that political scientists who rely on large-N surveys to test their theories and hypotheses will most likely be unable to use long, multi-

item personality inventories to measure the “Big Five” traits. As such, they may have to use the shorter 10-item inventories, such as the TIPI, instead. These 10-item personality inventories are appealing due to time and space constraints that political scientists face when conducting surveys, and using these inventories to obtain trait measures is better than excluding traits entirely from our behavioral and attitudinal models. However, in my research, I found evidence that the conclusions we draw about the effects of personality traits do vary somewhat according to the personality inventories used to measure the “Big Five” traits. Whenever possible, scholars should attempt to replicate their work using longer personality inventories to ensure that the same conclusions are drawn when using longer and more reliable personality measures.

Finally, the core “Big Five” personality traits of Openness to Experience, Extraversion, Agreeableness, Conscientiousness, and Neuroticism are each comprised of six facets, or sub-traits. As our knowledge of how the five broad traits influence political behavior and attitudes improves, we can begin to examine how the facets of these traits affect political variables, and how the facets interact with environmental factors. Using longer personality inventories that include multiple indicators of each of the “Big Five” core traits’ facets will allow researchers to refine existing theories, improve the personality inventories we include on surveys, and deepen our understanding of how personality affects political attitudes and behavior.

Political attitudes and behaviors are a function of personality and environmental factors. By grounding our personality trait antecedent research in an accepted theoretical framework—the Five Factor Model or “Big Five” framework of personality structure—we are able to move past the critique that the study of personality and politics is a field with a

“jerry built appearance” (Sniderman 1975; Mondak 2010; Mondak and Halperin 2008). Instead, using this common framework of personality structure in political science research allows us to draw on the knowledge gleaned from past studies conducted in other fields such as personality and organizational psychology to improve our own theories of the causal factors of various political attitudes and behaviors. Its use also provides political scientists with the opportunity to generalize findings both within the field of political behavior and across other academic disciplines.

APPENDIX A
2008-2009 POLITICAL ATTITUDES STUDY (PAS 1)

Issue Information Conditions and Question Prompts

Condition 1 – Baseline/No Information Condition:

Issue Question Prompts
<p>Stem Cell Research</p> <p>Next, we will be asking you a series of questions about your thoughts on the issue of stem cell research.</p> <p>Timetable for Withdrawal of Troops from Iraq</p> <p>Now we would like to ask you about your thoughts on whether the government should set a timetable for the withdrawal of U.S. troops from Iraq.</p> <p>Implementation of Government Health Insurance Plan</p> <p>Now we would like to ask you about your thoughts on the implementation of a government health insurance plan which would cover all medical and hospital expenses for all citizens.</p> <p>Same-Sex Marriage</p> <p>Now we would like to ask you about your thoughts on the issue of same-sex marriage.</p>

Condition 2 - Competing Considerations Condition:

Issue Question Prompts
<p>Stem Cell Research</p> <p>Respected proponents of stem cell research argue that it may lead to cures for diseases and disabilities affecting large numbers of Americans, and should be funded.</p> <p>Respected opponents of stem cell research argue that a potential human life has to be destroyed in order to use these cells, and funding this research would be unethical.</p> <p>We would like to gather your thoughts on the issue of stem cell research</p>

Timetable for Withdrawal of Troops from Iraq

Now we would like to ask you about your position about setting a timetable for the withdrawal of U.S. troops from Iraq.

Respected proponents for setting a timetable argue that setting out a plan to withdraw would make Iraqis take responsibility for their country and become more independent of the United States.

Respected opponents of setting a timetable argue that we have a moral obligation to make sure Iraq is a stable democracy even if that takes a long time, and that setting a timetable would make terrorists grow bolder.

Implementation of Government Health Insurance Plan

Given concern about the rapid rise in medical and hospital costs, respected proponents of a government health insurance plan argue that health care is a right of the American people, and feel that the government has a responsibility for providing an insurance plan which would cover all medical and hospital expenses for all citizens.

Respected opponents are not supportive of a governmental insurance plan because they fear the quality of care for patients would decrease under such a program; instead, they feel that all medical expenses should be paid by individuals through private insurance plans like Blue Cross or other company paid plans.

Now we would like to ask you about your position on the implementation of a government health insurance plan which would cover all medical and hospital expenses for all citizens.

Same-Sex Marriage

Respected opponents of same-sex marriage argue that we should take steps to preserve the traditional definition of marriage. More specifically, they believe the institution of marriage should be restricted to one man and one woman, as is stated in the Defense of Marriage Act, and that this restriction should not be changed. Some opponents even argue that an amendment prohibiting same-sex marriage should be embedded in the U.S. Constitution.

Respected proponents of same-sex marriage argue that the institution of marriage should be opened to same-sex couples, and that current restrictions on gay and lesbian citizens are unfair. Proponents are especially against a constitutional amendment that would ban same-sex marriage and think its suggestion is an unnecessary attack on lesbian and gay Americans that would create a constitutionally-mandated second class of American citizens.

Now we would like to ask you about your thoughts on the issue of same-sex marriage.

Condition 3 – Negative Information Condition:

Issue Question Prompts
<p>Stem Cell Research</p> <p>Respected opponents of stem cell research argue that a potential human life has to be destroyed in order to use these cells, and funding this research would be unethical.</p> <p>We would like to gather your thoughts on the issue of stem cell research</p>
<p>Timetable for Withdrawal of Troops from Iraq</p> <p>Now we would like to ask you about your position about setting a timetable for the withdrawal of U.S. troops from Iraq.</p> <p>Respected opponents of setting a timetable argue that we have a moral obligation to make sure Iraq is a stable democracy even if that takes a long time, and that setting a timetable would make terrorists grow bolder.</p>
<p>Implementation of Government Health Insurance Plan</p> <p>Respected opponents are not supportive of a governmental insurance plan because they fear the quality of care for patients would decrease under such a program; instead, they feel that all medical expenses should be paid by individuals through private insurance plans like Blue Cross or other company paid plans.</p> <p>Now we would like to ask you about your position on the implementation of a government health insurance plan which would cover all medical and hospital expenses for all citizens.</p>
<p>Same-Sex Marriage</p> <p>Respected opponents of same-sex marriage argue that we should take steps to preserve the traditional definition of marriage. More specifically, they believe the institution of marriage should be restricted to one man and one woman, as is stated in the Defense of Marriage Act, and that this restriction should not be changed. Some opponents even argue that an amendment prohibiting same-sex marriage should be embedded in the U.S. Constitution.</p> <p>Now we would like to ask you about your thoughts on the issue of same-sex marriage.</p>

Condition 4 – Positive Information Condition:

Issue Question Prompts
<p>Stem Cell Research</p> <p>Respected proponents of stem cell research argue that it may lead to cures for diseases and disabilities affecting large numbers of Americans, and should be funded.</p> <p>We would like to gather your thoughts on the issue of stem cell research</p>
<p>Timetable for Withdrawal of Troops from Iraq</p> <p>Now we would like to ask you about your position about setting a timetable for the withdrawal of U.S. troops from Iraq.</p> <p>Respected proponents for setting a timetable argue that setting out a plan to withdraw would make Iraqis take responsibility for their country and become more independent of the United States.</p>
<p>Implementation of Government Health Insurance Plan</p> <p>Given concern about the rapid rise in medical and hospital costs, respected proponents of a government health insurance plan argue that health care is a right of the American people, and feel that the government has a responsibility for providing an insurance plan which would cover all medical and hospital expenses for all citizens.</p> <p>Now we would like to ask you about your position on the implementation of a government health insurance plan which would cover all medical and hospital expenses for all citizens.</p>
<p>Same-Sex Marriage</p> <p>Respected proponents of same-sex marriage argue that the institution of marriage should be opened to same-sex couples, and that current restrictions on gay and lesbian citizens are unfair. Proponents are especially against a constitutional amendment that would ban same-sex marriage and think its suggestion is an unnecessary attack on lesbian and gay Americans that would create a constitutionally-mandated second class of American citizens.</p> <p>Now we would like to ask you about your thoughts on the issue of same-sex marriage.</p>

Subjective Ambivalence Questions

The text of subjective ambivalence questions are provided in Chapter 4 – Table 4.2.

Response scale:

- 1-Disagree very strongly
- 2-Disagree somewhat strongly
- 3-Disagree
- 4-Neither agree nor disagree*
- 5-Agree
- 6-Agree somewhat strongly
- 7-Agree very strongly

**NOTE: "Neither agree nor disagree" responses were not included in the final subjective ambivalence scale.*

Scale Reliability Coefficients for Subjective Ambivalence Indices:

<u>Issue Area</u>	<u>Fall 2008</u>	<u>Spring 2009</u>
Stem Cell Research Index	α : .92	α : .91
Setting a Timetable for U.S. Troop Withdrawal from Iraq Index	α : .91	α : .91
Implementation of Government Health Insurance Program Index	α : .94	α : .94
Same-Sex Marriage Index	α : .94	α : .93

Issue Importance

How important is the issue of _____ to you?

- 5 – Very important
- 4 – Important
- 3 – Somewhat important
- 2 – Somewhat unimportant
- 1 – Unimportant
- 0 – Not at all important

Personality Traits

Scale Reliability Coefficients for Personality Trait Indices:

<u>Personality Factor</u>	<u>Fall 2008</u>	<u>Spring 2009</u>
Openness to Experience	α : .74	α : .75
Conscientiousness	α : .81	α : .86
Extraversion	α : .87	α : .88
Agreeableness	α : .77	α : .80
Neuroticism	α : .86	α : .85

Personality Inventory Items:

1. Often feel blue (N +)
2. Feel comfortable around people (E +)
3. Believe in the importance of art (O +)
4. Have a good word for everyone (A +)
5. Am always prepared (C +)
6. Rarely get irritated (N -)
7. Have little to say (E -)
8. Am not interested in abstract ideas (O -)
9. Have a sharp tongue (A -)
10. Waste my time (C -)
11. Dislike myself (N +)
12. Make friends easily (E +)
13. Have a vivid imagination (O +)
14. Believe that others have good intentions (A +)
15. Pay attention to details (C +)
16. Seldom feel blue (N -)
17. Keep in the background (E -)
18. Do not like art. (O -)
19. Cut others to pieces (A -)
20. Find it difficult to get down to work (C-)
21. Am often down in the dumps (N +)
22. Am skilled in handling social situations (E +)
23. Tend to vote for liberal political candidates (O +)
24. Respect others. (A +)
25. Get chores done right away. (C +)
26. Feel comfortable with myself. (N -)
27. Would describe my experiences as somewhat dull. (E +)
28. Avoid philosophical discussions. (O -)
29. Suspect hidden motives in others. (A -)
30. Do just enough work to get by. (C -)
31. Have frequent mood swings. (N +)
32. Am the life of the party. (E +)
33. Carry the conversation to a higher level. (O +)
34. Accept people as they are. (A +)
35. Carry out my plans. (C +)
36. Am not easily bothered by things. (N -)
37. Don't like to draw attention to myself. (E -)
38. Do not enjoy going to art museums. (O -)
39. Get back at others. (A -)
40. Don't see things through. (C -)
41. Panic easily. (N +)
42. Know how to captivate people. (E +)
43. Enjoy hearing new ideas. (O +)
44. Make people feel at ease. (A +)
45. Make plans and stick to them. (C +)

- 46. Am very pleased with myself. (N -)
- 47. Don't talk a lot. (E -)
- 48. Tend to vote for conservative political candidates. (O -)
- 49. Insult people. (A -)
- 50. Shirk my duties. (C -)

Feeling Thermometer

Liberal Groups:

- People on welfare (Liberal +)
- Gays (Liberal +)
- Democrats (Liberal +)
- African Americans (Liberal +)
- Jews (Liberal +)
- Liberals (Liberal +)
- Labor Unions (Liberal +)
- Poor people (Liberal +)
- Hispanics (Liberal +)
- Feminists (Liberal +)
- The elderly (Liberal +)

Conservative Groups:

- Christian fundamentalists (Conservative +)
- Catholics (Conservative +)
- Southerners (Conservative +)
- Rich people (Conservative +)
- Gun owners (Conservative +)
- Protestants (Conservative +)
- Republicans (Conservative +)
- Conservatives (Conservative +)
- The military (Conservative +)

Egalitarianism Items

Cronbach's α reliability coefficient for the egalitarianism items was .88 in Fall 2008 and .82 in Spring 2009.

1. Our society should do whatever is necessary to make sure everyone has equal opportunity to succeed.
2. We have gone too far pushing equal rights in this country.
3. One of the big problems in this country is that we don't give everyone an equal chance.
4. This country would be better off if we worried less about how equal people are.
5. It is not really that big a problem if some people have more of a chance in life than others.

6. If people were treated more equally in this country we would have fewer problems.

Moral Traditionalism Items

The Cronbach's α for the moral traditionalism items was acceptable at .66 in Fall 2008 and .76 in Spring 2009.

1. People in society should adjust their views to a changing world.
2. Newer lifestyles are causing societal breakdown.
3. Society should be more tolerant of different moral standards.
4. There should be more emphasis on traditional family ties.

Discussion Partners

Would you say your political discussion partners share your political views all of the time, most of the time, sometimes, or never?

Political Information ($\alpha = .69$)

1. How many seats are in the U.S. House of Representatives?
2. Who nominates judges for federal district courts?
3. How many justices must agree to hear a case before the Supreme Court will issue of writ of certiorari?
4. Who currently serves as the Speaker of the House?
5. Who currently serves as the Senate Majority Leader?
6. Who currently holds the office of Secretary of State?

Partisan Intensity

- 3 – Strong Democrats/Republicans
- 2 – Democrats/Republicans
- 1 – Weak Democrats/Republicans
- 0 – Independents

Liberals

- 1 – Very Liberal, Liberal, Slightly Liberal
- 0 – Other (Moderates and Conservatives)

Conservatives

- 1 – Very Conservative, Conservative, Slightly Conservative
- 0 – Other (Moderates and Conservatives)

2008-2009 PAS 1—Correlation Matrices
Subjective Ambivalence: Stem Cell Research

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Stem Cell Research	1.00																		
2. Neuroticism	.03	1.00																	
3. Openness	-.18	.04	1.00																
4. Extraversion	-.06	-.32	.28	1.00															
5. Conscientious	.01	-.33	.07	.22	1.00														
6. Agreeableness	-.38	-.39	.08	.07	.36	1.00													
7. Issue Importance	.22	.04	.21	.09	.10	.00	1.00												
8. Group Affect Conflict	.23	-.07	-.05	-.02	.04	.11	-.09	1.00											
9. Value Conflict	.23	-.07	-.37	-.07	-.03	-.00	-.20	.44	1.00										
10. Disc. Partners	-.08	-.00	-.01	.01	-.07	-.10	-.01	-.14	-.09	1.00									
11. Liberal	-.12	-.09	.49	.01	-.11	-.07	.13	-.14	-.42	.03	1.00								
12. Conservative	.03	-.14	-.51	-.01	.10	.08	-.11	-.02	.32	.01	-.74	1.00							
13. Partisan Strength	-.17	-.10	-.04	.06	.08	.00	.13	-.37	-.21	.08	.08	.19	1.00						
14. Political Information	-.16	-.11	.09	.09	.09	-.00	.10	-.13	-.15	.09	.05	.01	.17	1.00					
15. Baseline Condition	.03	.04	-.06	-.12	-.06	-.02	-.08	.03	.03	-.12	-.01	.03	.04	-.12	1.00				
16. Competing Considerations	.05	.08	.01	-.00	-.03	-.06	-.05	-.03	.06	-.08	-.00	.04	-.01	-.13	-.17	1.00			
17. Negative Considerations	-.04	-.07	.07	-.02	.02	.03	.05	.05	-.01	-.01	.05	-.03	.04	-.07	-.17	-.15	1.00		
18. Positive Considerations	-.05	.02	.04	-.00	-.01	-.02	.08	-.01	-.00	-.06	.04	-.04	-.02	-.12	-.18	-.16	-.16	1.00	
19. Semester	-.00	.05	.04	-.11	-.05	-.05	-.01	.04	.06	-.19	.05	-.01	.04	-.30	.38	.34	.34	.36	1.00

Subjective Ambivalence: Timetable for U.S. Troop Withdrawal from Iraq

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Troop Withdrawal-Iraq	1.00																		
2. Neuroticism	.04	1.00																	
3. Openness	-.03	.04	1.00																
4. Extraversion	-.05	-.33	.27	1.00															
5. Conscientious	-.07	-.32	.08	.23	1.00														
6. Agreeableness	-.04	-.40	.08	.07	.35	1.00													
7. Issue Importance	-.31	.08	.22	.00	.04	.04	1.00												
8. Group Affect Conflict	.24	-.07	-.07	-.03	.04	.11	-.08	1.00											
9. Value Conflict	.27	-.08	-.39	-.07	-.03	-.00	-.29	.44	1.00										
10. Disc. Partners	-.08	-.01	-.01	.00	-.07	-.10	-.07	-.14	-.09	1.00									
11. Liberal	-.12	-.09	.50	.00	-.11	-.06	.25	-.14	-.42	.04	1.00								
12. Conservative	-.00	-.14	-.51	-.01	.09	.09	-.25	-.02	.33	.01	-.74	1.00							
13. Partisan Strength	-.30	-.10	-.04	.05	.09	.01	.08	-.37	-.21	.08	.08	.19	1.00						
14. Political Information	-.20	-.10	.09	.08	.09	-.00	.15	-.13	-.15	.08	.05	.01	.16	1.00					
15. Baseline Condition	.10	.04	-.06	-.11	-.06	-.01	-.05	.02	.03	-.12	-.02	.03	.06	-.10	1.00				
16. Competing Considerations	.02	.08	.02	.00	-.02	-.07	-.06	-.03	.06	-.08	-.00	.04	-.01	-.12	-.17	1.00			
17. Negative Considerations	.00	-.07	.06	-.03	.02	.04	-.01	.05	-.01	-.01	.05	-.03	.03	-.07	-.16	-.15	1.00		
18. Positive Considerations	.12	.02	.04	-.01	-.00	-.02	-.01	-.00	-.00	-.06	.04	-.04	-.02	-.13	-.18	-.16	-.16	1.00	
19. Semester	.17	.05	.03	-.11	-.05	-.04	-.10	.03	.06	-.19	.05	-.01	.04	-.30	.38	.35	.34	.36	1.00

Subjective Ambivalence: Same-Sex Marriage

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Same-Sex Marriage	1.00																		
2. Neuroticism	.02	1.00																	
3. Openness	-.12	.04	1.00																
4. Extraversion	-.09	-.32	.28	1.00															
5. Conscientious	-.02	-.33	.08	.23	1.00														
6. Agreeableness	-.04	-.39	.08	.06	.36	1.00													
7. Issue Importance	-.44	.08	.23	.13	.03	.06	1.00												
8. Group Affect Conflict	.22	-.07	-.05	-.03	.04	.11	-.23	1.00											
9. Value Conflict	.29	-.08	-.38	-.06	-.03	.00	-.30	.44	1.00										
10. Disc. Partners	-.10	.00	-.00	.00	-.07	-.10	.05	-.14	-.08	1.00									
11. Liberal	-.15	.08	.51	.00	-.11	-.06	.16	-.14	-.43	.04	1.00								
12. Conservative	-.01	-.13	-.52	-.02	.09	.08	-.08	-.02	.33	.01	-.74	1.00							
13. Partisan Strength	-.15	-.11	-.04	.06	.09	.00	.16	-.37	-.21	.08	.08	.20	1.00						
14. Political Information	-.06	-.10	.10	.08	.10	-.01	-.0	-.13	-.14	.07	.05	.01	.17	1.00					
15. Baseline Condition	.03	.04	-.06	-.12	-.06	-.02	-.05	.04	.03	-.12	-.02	.03	.04	-.12	1.00				
16. Competing Considerations	-.00	.09	.02	.00	-.02	-.07	-.05	-.03	.06	-.08	-.00	.03	-.01	-.11	-.17	1.00			
17. Negative Considerations	.01	-.07	.07	-.02	.00	.04	-.01	.05	-.02	-.01	.05	-.04	.04	-.06	-.17	-.15	1.00		
18. Positive Considerations	.02	.02	.05	-.00	-.00	-.02	.06	-.00	.00	-.06	.04	-.05	-.02	-.13	-.18	-.16	-.16	1.00	
19. Semester	.04	.05	.05	-.10	-.06	-.05	-.03	.04	.06	-.19	.05	-.02	.03	-.30	.38	.34	.33	.36	1.00

Subjective Ambivalence: Implementation of Government Health Insurance Plan

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Government Health Insurance Plan	1.00																		
2. Neuroticism	.13	1.00																	
3. Openness	.03	.03	1.00																
4. Extraversion	-.10	-.33	.23	1.00															
5. Conscientious	-.09	-.33	.07	.23	1.00														
6. Agreeableness	-.00	-.40	.07	.07	.36	1.00													
7. Issue Importance	-.48	-.02	.22	.09	.09	-.01	1.00												
8. Group Affect Conflict	.30	-.06	-.04	-.03	.05	.11	-.22	1.00											
9. Value Conflict	.22	-.07	-.37	-.06	-.04	.00	-.28	.44	1.00										
10. Disc. Partners	-.04	.00	.00	.01	-.08	-.10	.06	-.15	-.10	1.00									
11. Liberal	-.08	.08	.50	.00	-.10	-.07	.18	-.14	-.42	.04	1.00								
12. Conservative	-.20	-.14	-.52	-.01	.09	.09	-.11	-.02	.32	.01	-.74	1.00							
13. Partisan Strength	-.37	-.10	-.05	.06	.06	.00	.23	-.37	-.22	.08	.09	.19	1.00						
14. Political Information	-.15	-.10	.11	.09	.09	-.00	.11	-.13	-.16	.08	.06	.00	.16	1.00					
15. Baseline Condition	-.00	.04	-.07	-.12	-.07	-.02	-.01	.03	.03	-.12	-.01	.03	.03	-.11	1.00				
16. Competing Considerations	.00	.07	.02	.01	-.00	-.06	.02	-.03	.08	-.08	-.01	.05	.00	-.10	-.17	1.00			
17. Negative Considerations	-.03	-.07	.06	-.03	.02	.02	.04	.05	-.01	-.01	.05	-.03	.04	-.07	-.17	-.15	1.00		
18. Positive Considerations	.03	.02	.04	-.00	-.01	-.01	.00	-.00	-.00	-.05	.05	-.05	-.02	-.13	-.18	-.16	-.16	1.00	
19. Semester	.00	.05	.03	-.11	-.05	-.06	.04	.04	.07	-.19	.05	-.01	.04	-.30	.38	.34	.34	.36	1.00

APPENDIX B

2010-2011 POLITICAL ATTITUDES STUDY (PAS 2)

Issue Information Conditions and Prompts

Condition 1 – Baseline/No Information Condition:

Issue Question Prompts
Stem Cell Research Next, we will be asking you a series of questions about your thoughts on the issue of stem cell research.
Timetable for Withdrawal of Troops from Iraq In the next set of questions, we would like to ask you about your thoughts on the U.S. government's decision to set a timetable for the withdrawal of U.S. troops from Iraq.
Health Care Reform Now we would like to ask you about your thoughts on the issue of health care reform.
Same-Sex Marriage Now we would like to ask you about your thoughts on the issue of same-sex marriage.
Increasing U.S. Troop Presence in Afghanistan Now we would like to gather your thoughts on President Obama's plan to increase U.S. troop presence in Afghanistan.

Condition 2 - Competing Considerations Condition:

Issue Question Prompts
Stem Cell Research Respected proponents of stem cell research argue that it may lead to cures for diseases and disabilities affecting large numbers of Americans, and funding this research is ethical because it may save human life. Respected opponents of stem cell research argue that a potential human life has to be destroyed in order to use these cells, and funding this research would be unethical.

Now we would like to gather your thoughts on the issue of stem cell research.

Timetable for Withdrawal of Troops from Iraq

Respected proponents for setting a timetable argue that setting out a plan to withdraw would make Iraqis take responsibility for their country and become more independent of the United States.

Respected opponents of setting a timetable argue that we have a moral obligation to make sure Iraq is a stable democracy even if that takes a long time, and that a timetable would make terrorists grow bolder.

Now we would like to ask you about your position about setting a timetable for the withdrawal of U.S. troops from Iraq.

Health Care Reform

Respected proponents of health care reform view health care as a right and argue that the government has a responsibility to ensure that health insurance is available and affordable to all citizens – even those with preexisting conditions.

Respected opponents of health care reform argue that if the government takes a more active role in reforming the health care system, then the quality of the system will become worse, higher taxes will likely result, and the deficit will inevitably increase.

Now we would like to gather your thoughts on the issue of health care reform.

Same-Sex Marriage

Respected opponents of same-sex marriage argue that we should take steps to preserve the traditional definition of marriage. More specifically, they believe the institution of marriage should be restricted to one man and one woman, as is stated in the Defense of Marriage Act, and that this restriction should not be changed. Some opponents even argue that an amendment prohibiting same-sex marriage should be embedded in the U.S. Constitution.

Respected proponents of same-sex marriage argue that the institution of marriage should be opened to same-sex couples, and that current restrictions on same-sex marriage are unfair. Proponents are especially against a constitutional amendment that would ban same-sex marriage and think its suggestion is an unnecessary attack on lesbian and gay Americans that would create a constitutionally mandated second class of American citizens.

Now we would like to ask you about your thoughts on the issue of same-sex marriage.

Increasing U.S. Troop Presence in Afghanistan

Respected proponents of President Obama's plan to increase U.S. troop presence in

Afghanistan argue that the plan is necessary to improve security; they contend that the plan will stabilize the volatile situation in the country, ensure that human rights are protected, and provide training to Afghan security forces and government officials so that the U.S. can eventually withdraw.

Respected opponents of President Obama's plan to increase U.S. troop presence in Afghanistan question whether a military solution will improve security; they contend that the plan exaggerates the threat of terrorism from the nation, and fear that an increased troop presence will fuel the insurgency and lengthen an endless and extremely costly war.

Now we would like to gather your thoughts on President Obama's plan to increase troop presence in Afghanistan.

Condition 3 – Negative Information Condition:

Issue Question Prompts

Stem Cell Research

Respected opponents of stem cell research argue that a potential human life has to be destroyed in order to use these cells, and funding this research would be unethical.

Now we would like to gather your thoughts on the issue of stem cell research.

Timetable for Withdrawal of Troops from Iraq

Respected opponents of setting a timetable argue that we have a moral obligation to make sure Iraq is a stable democracy even if that takes a long time, and that a timetable would make terrorists grow bolder.

Now we would like to ask you about your position about setting a timetable for the withdrawal of U.S. troops from Iraq.

Health Care Reform

Respected opponents of health care reform argue that if the government takes a more active role in reforming the health care system, then the quality of the system will become worse, higher taxes will likely result, and the deficit will inevitably increase.

Now we would like to gather your thoughts on the issue of health care reform.

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Marriage Act, and that this restriction should not be changed. Some opponents even argue that an amendment prohibiting same-sex marriage should be embedded in the U.S. Constitution.

Now we would like to ask you about your thoughts on the issue of same-sex marriage.

Increasing U.S. Troop Presence in Afghanistan

Respected opponents of President Obama's plan to increase U.S. troop presence in Afghanistan question whether a military solution will improve security; they contend that the plan exaggerates the threat of terrorism from the nation, and fear that an increased troop presence will fuel the insurgency and lengthen an endless and extremely costly war.

Now we would like to gather your thoughts on President Obama's plan to increase troop presence in Afghanistan.

Condition 4 – Positive Information Condition:

Issue Question Prompts

Stem Cell Research

Respected proponents of stem cell research argue that it may lead to cures for diseases and disabilities affecting large numbers of Americans, and funding this research is ethical because it may save human life.

Now we would like to gather your thoughts on the issue of stem cell research.

Timetable for Withdrawal of Troops from Iraq

Respected proponents for setting a timetable argue that setting out a plan to withdraw would make Iraqis take responsibility for their country and become more independent of the United States.

Now we would like to ask you about your position about setting a timetable for the withdrawal of U.S. troops from Iraq.

Health Care Reform

Respected proponents of health care reform view health care as a right and argue that the government has a responsibility to ensure that health insurance is available and affordable to all citizens – even those with preexisting conditions.

Now we would like to gather your thoughts on the issue of health care reform.

Same-Sex Marriage

Respected proponents of same-sex marriage argue that the institution of marriage should be opened to same-sex couples, and that current restrictions on same-sex marriage are unfair. Proponents are especially against a constitutional amendment that would ban same-sex marriage and think its suggestion is an unnecessary attack on lesbian and gay Americans that would create a constitutionally mandated second class of American citizens.

Now we would like to ask you about your thoughts on the issue of same-sex marriage.

Increasing U.S. Troop Presence in Afghanistan

Respected proponents of President Obama's plan to increase U.S. troop presence in Afghanistan argue that the plan is necessary to improve security; they contend that the plan will stabilize the volatile situation in the country, ensure that human rights are protected, and provide training to Afghan security forces and government officials so that the U.S. can eventually withdraw.

Now we would like to gather your thoughts on President Obama's plan to increase troop presence in Afghanistan.

Objective Ambivalence Questions

You might have favorable thoughts about _____. You might have unfavorable thoughts about _____. Or, you might have some of each. We would like to ask you first about any favorable thoughts you might have about this issue. Then, in a moment, we will ask you some separate questions about any unfavorable thoughts you might have.

First, do you have ANY favorable thoughts about _____, or do you NOT have any?

1 – Yes, I have favorable thoughts

0 - No, I do not have any favorable thoughts

How favorable are your favorable thoughts about _____?

4 – Extremely favorable

3 – Very favorable

2 – Moderately favorable

1 – Slightly favorable

Now we would like to ask about any unfavorable thoughts you have about _____.

Do you have ANY unfavorable thoughts about _____, or do you not have any?

1 – Yes, I have unfavorable thoughts

0 - No, I do not have any unfavorable thoughts

How unfavorable are your unfavorable thoughts about _____?

- 4 – Extremely unfavorable
- 3 – Very unfavorable
- 2 – Moderately unfavorable
- 1 – Slightly unfavorable

Issue Importance

How important is the issue of _____ to you?

- 5 – Very important
- 4 – Important
- 3 – Somewhat important
- 2 – Somewhat unimportant
- 1 – Unimportant
- 0 – Not at all important

Personality Traits

Scale Reliability Coefficients for Personality Trait Indices:

<u>Personality Factor</u>	<u>Fall 2010</u>	<u>Spring 2011</u>
Openness to Experience	$\alpha: .79$	$\alpha: .79$
Conscientiousness	$\alpha: .84$	$\alpha: .86$
Extraversion	$\alpha: .86$	$\alpha: .86$
Agreeableness	$\alpha: .77$	$\alpha: .78$
Neuroticism	$\alpha: .85$	$\alpha: .80$

Personality Inventory Items:

1. Often feel blue (N +)
2. Feel comfortable around people (E +)
3. Believe in the importance of art (O +)
4. Have a good word for everyone (A +)
5. Am always prepared (C +)
6. Rarely get irritated (N -)
7. Have little to say (E -)
8. Am not interested in abstract ideas (O -)
9. Have a sharp tongue (A -)
10. Waste my time (C -)
11. Dislike myself (N +)
12. Make friends easily (E +)
13. Have a vivid imagination (O +)
14. Believe that others have good intentions (A +)

15. Pay attention to details (C +)
16. Seldom feel blue (N -)
17. Keep in the background (E -)
18. Do not like art. (O -)
19. Cut others to pieces (A -)
20. Find it difficult to get down to work (C-)
21. Am often down in the dumps (N +)
22. Am skilled in handling social situations (E +)
23. Tend to vote for liberal political candidates (O +)
24. Respect others. (A +)
25. Get chores done right away. (C +)
26. Feel comfortable with myself. (N -)
27. Would describe my experiences as somewhat dull. (E +)
28. Avoid philosophical discussions. (O -)
29. Suspect hidden motives in others. (A -)
30. Do just enough work to get by. (C -)
31. Have frequent mood swings. (N +)
32. Am the life of the party. (E +)
33. Carry the conversation to a higher level. (O +)
34. Accept people as they are. (A +)
35. Carry out my plans. (C +)
36. Am not easily bothered by things. (N -)
37. Don't like to draw attention to myself. (E -)
38. Do not enjoy going to art museums. (O -)
39. Get back at others. (A -)
40. Don't see things through. (C -)
41. Panic easily. (N +)
42. Know how to captivate people. (E +)
43. Enjoy hearing new ideas. (O +)
44. Make people feel at ease. (A +)
45. Make plans and stick to them. (C +)
46. Am very pleased with myself. (N -)
47. Don't talk a lot. (E -)
48. Tend to vote for conservative political candidates. (O -)
49. Insult people. (A -)
50. Shirk my duties. (C -)

Feeling Thermometer

Liberal Groups:

- People on welfare (Liberal +)
- Gays (Liberal +)
- Democrats (Liberal +)
- African Americans (Liberal +)
- Jews (Liberal +)
- Liberals (Liberal +)
- Labor Unions (Liberal +)

- Poor people (Liberal +)
- Hispanics (Liberal +)
- Feminists (Liberal +)

Conservative Groups:

- Conservatives (Conservative +)
- The military (Conservative +)
- Christian fundamentalists (Conservative +)
- Catholics (Conservative +)
- The elderly (Conservative +)
- Southerners (Conservative +)
- Rich people (Conservative +)
- Gun owners (Conservative +)
- Protestants (Conservative +)
- Republicans (Conservative +)

Egalitarianism Items

Cronbach's α reliability coefficient for the Egalitarianism items was .89 in Fall 2010 and .88 in Spring 2011.

1. Our society should do whatever is necessary to make sure everyone has equal opportunity to succeed.
2. We have gone too far pushing equal rights in this country.
3. One of the big problems in this country is that we don't give everyone an equal chance.
4. This country would be better off if we worried less about how equal people are.
5. It is not really that big a problem if some people have more of a chance in life than others.
6. If people were treated more equally in this country we would have fewer problems.

Moral Traditionalism Items

Cronbach's α reliability coefficient for the Moral Traditionalism items was .76 in Fall 2010 and Spring 2011.

1. People in society should adjust their views to a changing world.
2. Newer lifestyles are causing societal breakdown.
3. Society should be more tolerant of different moral standards.
4. There should be more emphasis on traditional family ties.

Discussion Partners

Would you say your political discussion partners share your political views all of the time, most of the time, sometimes, or never?

Political Information ($\alpha = .71$)

1. How many seats are in the U.S. House of Representatives?
2. Who nominates judges for federal district courts?
3. How many justices must agree to hear a case before the Supreme Court will issue of writ of certiorari?
4. Who currently serves as the Speaker of the House?
5. Who currently serves as the Senate Majority Leader?
6. Who currently holds the office of Secretary of State?

Partisan Intensity

- 3 – Strong Democrats/Republicans
- 2 – Democrats/Republicans
- 1 – Weak Democrats/Republicans
- 0 - Independents

Liberals

- 1 – Very Liberal, Liberal, Slightly Liberal
- 0 – Others (Moderates and Conservatives)

Conservatives

- 1 – Very Conservative, Conservative, Slightly Conservative
- 0 – Other (Moderates and Conservatives)

2010-2011 PAS 2—Correlation Matrices
Objective Ambivalence: Stem Cell Research

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Stem Cell Research	1.00																		
2. Neuroticism	.03	1.00																	
3. Openness	-.15	-.04	1.00																
4. Extraversion	-.05	-.33	.24	1.00															
5. Conscientious	.03	-.32	.09	.20	1.00														
6. Agreeableness	.08	-.35	.23	.14	.31	1.00													
7. Issue Importance	-.32	-.07	.27	.07	.08	.08	1.00												
8. Group Affect Conflict	.28	-.08	-.28	-.06	-.01	.17	-.13	1.00											
9. Value Conflict	.20	-.03	-.28	-.06	-.05	.01	-.12	.54	1.00										
10. Disc. Partners	-.08	.01	-.02	.02	-.02	-.05	-.02	-.21	-.08	1.00									
11. Liberal	-.19	.02	.58	.01	-.03	.06	.16	-.41	-.33	.01	1.00								
12. Conservative	.15	-.01	-.60	-.02	.05	-.09	-.15	.28	.23	.09	-.77	1.00							
13. Partisan Strength	-.01	-.04	-.16	.05	.13	.05	.01	-.11	-.14	.12	.10	.24	1.00						
14. Political Information	-.07	-.07	.04	.03	.02	-.02	.14	-.03	-.08	.01	.02	.04	.17	1.00					
15. Baseline Condition	.02	.02	.03	.02	.02	.04	.05	.03	.02	-.07	-.03	-.03	.01	.02	1.00				
16. Competing Considerations	.08	-.01	-.06	-.06	.01	-.06	-.01	-.01	.06	.00	-.05	.09	.09	.02	-.33	1.00			
17. Negative Considerations	-.04	-.02	.02	.03	-.01	-.03	.03	.01	-.02	.10	.02	-.04	-.03	.01	-.33	-.35	1.00		
18. Positive Considerations	-.06	.01	.01	.01	-.03	-.07	.08	-.03	-.10	-.03	.05	-.03	-.07	-.15	-.32	-.33	-.33	1.00	
19. Semester	-.01	.01	.03	-.01	-.01	-.01	-.04	-.09	.00	.01	.10	-.08	-.58	-.23	.01	-.02	.01	.02	1.00

Objective Ambivalence: Same-Sex Marriage

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Same-Sex Marriage	1.00																		
2. Neuroticism	.06	1.00																	
3. Openness	-.04	-.02	1.00																
4. Extraversion	-.01	-.34	.22	1.00															
5. Conscientious	.00	-.32	.06	.16	1.00														
6. Agreeableness	-.03	-.35	.20	.11	.30	1.00													
7. Issue Importance	-.39	-.01	.27	.05	.07	.15	1.00												
8. Group Affect Conflict	.25	-.08	-.30	-.04	.02	.09	-.33	1.00											
9. Value Conflict	.27	-.03	-.30	-.03	-.02	.02	-.40	.54	1.00										
10. Disc. Partners	-.04	-.02	-.01	.07	.02	-.03	-.02	-.20	-.08	1.00									
11. Liberal	-.12	.02	.59	.02	-.05	.05	.23	-.43	-.36	.02	1.00								
12. Conservative	.06	.00	-.60	-.01	.05	-.09	-.18	.28	.27	.10	-.76	1.00							
13. Partisan Strength	-.09	-.07	-.15	.05	.12	.03	.08	-.11	-.13	.12	-.08	.23	1.00						
14. Political Information	-.02	-.06	.05	.01	-.01	-.04	.04	-.03	-.08	-.00	-.01	.02	.15	1.00					
15. Baseline Condition	.03	-.01	.00	.01	.03	.04	-.02	.04	.01	-.04	-.05	-.02	.03	.01	1.00				
16. Competing Considerations	.04	-.01	-.06	-.04	-.01	.04	.03	.00	.07	.01	-.04	.09	.07	.04	-.34	1.00			
17. Negative Considerations	-.03	.01	.05	.03	-.01	-.03	.06	-.03	-.01	.09	.04	-.05	-.03	.01	-.33	-.34	1.00		
18. Positive Considerations	.02	.01	.01	-.00	-.01	-.05	-.06	-.02	-.07	-.05	.05	-.02	-.07	-.06	-.33	-.33	-.33	1.00	
19. Semester	-.06	.03	.02	-.02	-.02	-.02	.03	-.08	.02	.03	.10	-.07	-.58	-.22	-.02	.01	.01	.00	1.00

Objective Ambivalence: Health Care Reform

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Health Care Reform	1.00																		
2. Neuroticism	.05	1.00																	
3. Openness	.07	-.03	1.00																
4. Extraversion	-.07	-.34	.24	1.00															
5. Conscientious	-.01	-.31	.07	.18	1.00														
6. Agreeableness	.07	-.34	.23	.13	.30	1.00													
7. Issue Importance	-.16	-.07	.23	.10	.11	.08	1.00												
8. Group Affect Conflict	.22	-.08	-.29	-.05	.00	.08	-.21	1.00											
9. Value Conflict	.16	-.02	-.29	-.05	-.04	.02	-.25	.54	1.00										
10. Disc. Partners	-.07	-.02	-.01	.05	.04	-.05	.09	-.20	-.09	1.00									
11. Liberal	-.05	.02	.59	.02	-.04	.05	.18	-.42	-.35	-.00	1.00								
12. Conservative	-.03	-.01	-.61	-.01	.06	-.09	-.15	.29	.26	.11	-.76	1.00							
13. Partisan Strength	-.18	-.05	-.15	.04	.12	.05	.09	-.10	-.12	.11	-.09	.23	1.00						
14. Political Information	-.04	-.05	.03	.01	.00	-.04	.09	-.05	-.09	.02	-.02	.04	.16	1.00					
15. Baseline Condition	.03	-.01	.03	.03	.02	.05	.07	.03	-.00	-.05	-.04	-.03	.02	.02	1.00				
16. Competing Considerations	.03	-.01	-.06	-.05	.00	.04	-.04	.01	.08	.01	-.05	.09	.06	.02	-.33	1.00			
17. Negative Considerations	-.03	-.00	.02	.04	-.01	-.03	.01	-.01	.00	.10	.03	-.03	-.01	-.00	-.33	-.35	1.00		
18. Positive Considerations	.04	.02	.01	-.01	-.01	-.06	-.03	-.03	-.08	-.06	.05	-.03	-.07	-.04	-.33	-.34	-.34	1.00	
19. Semester	-.01	-.00	.02	.01	-.00	-.02	-.02	-.09	-.01	.03	.09	-.06	-.58	-.21	-.02	.00	.01	.01	1.00

Objective Ambivalence: Timetable for Withdrawal of Troops from Iraq

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Troop Withdrawal - Iraq	1.00																		
2. Neuroticism	.01	1.00																	
3. Openness	-.07	-.04	1.00																
4. Extraversion	-.02	-.32	.24	1.00															
5. Conscientious	-.00	-.31	.08	.18	1.00														
6. Agreeableness	.01	-.36	.23	.12	.30	1.00													
7. Issue Importance	-.17	-.05	.28	.09	.11	.14	1.00												
8. Group Affect Conflict	.22	-.06	-.29	-.07	-.01	.06	-.16	1.00											
9. Value Conflict	.19	-.02	-.28	-.06	-.05	.01	-.14	.56	1.00										
10. Disc. Partners	-.01	-.01	-.01	.06	.04	-.05	.01	-.20	-.10	1.00									
11. Liberal	-.19	.02	.59	.01	-.05	.06	.23	-.41	-.34	-.00	1.00								
12. Conservative	.16	-.01	-.61	.00	.06	-.12	-.20	.27	.25	.12	-.75	1.00							
13. Partisan Strength	-.02	-.03	-.16	.03	.13	.03	.00	-.11	-.13	.12	-.10	.24	1.00						
14. Political Information	-.06	-.07	.03	.02	.02	-.02	.03	-.04	-.07	.03	-.02	.05	.16	1.00					
15. Baseline Condition	-.03	-.02	.02	.02	.02	.03	.06	.03	.01	-.06	-.03	-.05	.01	.02	1.00				
16. Competing Considerations	.01	.00	-.06	-.07	.02	.06	.01	-.01	.06	.02	-.06	.10	.08	.04	-.33	1.00			
17. Negative Considerations	.04	-.01	.03	.05	-.01	-.03	.01	.02	.01	.09	.02	-.03	-.03	.01	-.33	-.34	1.00		
18. Positive Considerations	-.02	.03	.01	.00	-.02	-.06	-.08	-.04	-.08	-.05	.06	-.02	-.06	-.07	-.32	-.34	-.34	1.00	
19. Semester	-.02	-.01	.02	.01	-.01	.00	-.02	-.08	.00	.02	.10	-.07	-.58	-.22	-.00	-.01	.00	.01	1.00

Objective Ambivalence: Increasing U.S. Troop Presence in Afghanistan

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Troop Surge - Afghanistan	1.00																		
2. Neuroticism	-.00	1.00																	
3. Openness	-.04	-.03	1.00																
4. Extraversion	-.00	-.32	.22	1.00															
5. Conscientious	-.02	-.31	.07	.18	1.00														
6. Agreeableness	.02	-.34	.23	.13	.28	1.00													
7. Issue Importance	-.12	-.11	.13	.07	.15	.04	1.00												
8. Group Affect Conflict	.16	-.07	-.28	-.04	.00	.07	-.13	1.00											
9. Value Conflict	.10	-.01	-.27	-.04	-.03	.03	-.12	.54	1.00										
10. Disc. Partners	-.01	-.01	-.01	.06	.04	-.07	.03	-.22	-.08	1.00									
11. Liberal	-.12	.01	.59	.01	-.04	.07	.05	-.40	-.34	-.01	1.00								
12. Conservative	.11	-.01	-.61	-.00	.05	-.12	-.07	.27	.25	.12	-.76	1.00							
13. Partisan Strength	.01	-.05	-.15	.05	.12	.04	.01	-.10	-.11	.08	-.10	.24	1.00						
14. Political Information	.00	-.05	.04	.02	.01	-.04	.09	-.04	-.08	.02	-.04	.05	.17	1.00					
15. Baseline Condition	-.06	-.00	.04	.01	-.00	.02	.07	.03	.03	-.07	-.00	-.05	-.00	.02	1.00				
16. Competing Considerations	.05	-.00	-.08	-.07	-.00	.05	-.01	.02	.08	.04	-.07	.12	.08	.04	-.32	1.00			
17. Negative Considerations	.06	.00	.02	.05	.01	-.01	-.05	.01	.03	.08	-.00	-.02	-.04	-.01	-.33	-.35	1.00		
18. Positive Considerations	-.05	.01	.02	.01	-.00	-.06	.00	-.06	-.13	-.05	.07	-.04	-.04	-.05	-.32	-.33	-.34	1.00	
19. Semester	-.02	.01	.02	.00	-.00	.00	-.06	-.07	.00	.05	.09	-.07	-.59	-.23	-.02	.00	.00	.01	1.00

APPENDIX C

2008 CCES AND 2011 POLITICAL ATTITUDES STUDY (PAS 3)

Issue Ambivalence Introductions on 2008 CCES

Issue Question Prompts
Privatizing Social Security In the next series of questions, we would like to ask you about your thoughts on the issue of privatizing Social Security.
Embryonic Stem Cell Research Next, we will be asking you a series of questions about your thoughts on federal funding of embryonic stem cell research.
Mandatory Health Insurance Now we would like to ask you about your thoughts on making health insurance mandatory for all citizens.
Same-Sex Marriage Next, we will ask you a series of questions about your thoughts on banning same-sex marriage.

Issue Information Conditions and Prompts on 2011 Political Attitudes Study (PAS 3)

Condition 1 – Baseline/No Information Condition:

Issue Question Prompts
Embryonic Stem Cell Research Next, we will be asking you a series of questions about your thoughts on embryonic stem cell research.
Privatizing Social Security In the next series of questions, we would like to ask you about your thoughts on the issue of privatizing Social Security.

Health Care Reform

Now we would like to ask you about your thoughts on the issue of health care reform.

Same-Sex Marriage

Now we would like to ask you about your thoughts on the issue of same-sex marriage.

Setting a Timetable for Withdrawal of U.S. Troops from Afghanistan

Now we would like to gather your thoughts about setting a timetable for the withdrawal of U.S. combat troops from Afghanistan.

*Condition 2 - Competing Considerations Condition:***Issue Question Prompts****Embryonic Stem Cell Research**

Next, we will be asking you a series of questions about your thoughts on embryonic stem cell research.

Respected proponents of embryonic stem cell research argue that it may lead to cures for diseases and disabilities that are suffered by millions of Americans, and that this research offers the greatest potential for the alleviation of human suffering since the introduction of antibiotics.

Respected opponents of embryonic stem cell research argue that it is morally unacceptable since a potential human life has to be destroyed in order to use stem cells for research, and that research in this area has not resulted in any cures for diseases thus far.

Privatizing Social Security

In the next series of questions, we would like to ask you about your thoughts on the issue of privatizing Social Security.

Respected proponents of privatization contend that personal accounts are fundamental to Social Security reform. They argue that private investment would not only provide a higher rate of return for investors than government-invested funds, but would also impart a sense of ownership over one's retirement money.

Respected opponents of privatization contend that personal accounts are not fundamental to Social Security reform. They argue that private investment of retirement money is complicated and too risky, and that future returns to equity investment are likely to fall far below historical rates of return.

Health Care Reform

Now we would like to ask you about your thoughts on the issue of health care reform.

Respected proponents of health care reform view health care as a right and argue that the government has a responsibility to ensure that health insurance is available and affordable to all citizens – even those with preexisting conditions.

Respected opponents of health care reform argue that if the government takes a more active role in reforming the health care system, then the quality of the system will become worse, higher taxes will likely result, and the deficit will inevitably increase.

Setting a Timetable for Withdrawal of U.S. Troops from Afghanistan

Respected proponents for setting a timetable argue that the troop surge into Afghanistan has been a success, the U.S. military has halted Taliban advances, and that setting out a plan to withdraw will encourage Afghans to take responsibility for the governance of their own country, thereby ending an extremely costly and seemingly endless war for the U.S.

Respected opponents argue that the U.S. runs the risk of pulling large numbers of troops out of the country before the Afghans are prepared to assume control, which could reverse the gains made against the Taliban, and that setting an arbitrary timetable will destabilize the country further and put the U.S. at a greater risk of another terrorist attack.

Now we would like to ask you about your position about setting a timetable for the withdrawal of U.S. combat troops from Afghanistan.

Objective Ambivalence Questions (CCES and PAS 3)

You might have favorable thoughts about _____. You might have unfavorable thoughts about _____. Or, you might have some of each. We would like to ask you first about any favorable thoughts you might have about this issue. Then, in a moment, we will ask you some separate questions about any unfavorable thoughts you might have.

First, do you have ANY favorable thoughts about _____, or do you NOT have any?

- 1 – Yes, I have favorable thoughts
- 0 – No, I do not have any favorable thoughts

How favorable are your favorable thoughts about _____?

- 4 – Extremely favorable
- 3 – Very favorable
- 2 – Moderately favorable
- 1 – Slightly favorable

Now we would like to ask about any unfavorable thoughts you have about _____.

Do you have ANY unfavorable thoughts about _____, or do you not have any?

- 1 – Yes, I have unfavorable thoughts
- 0 – No, I do not have any unfavorable thoughts

How unfavorable are your unfavorable thoughts about _____?

- 4 – Extremely unfavorable
- 3 – Very unfavorable
- 2 – Moderately unfavorable
- 1 – Slightly unfavorable

Issue Importance (CCES and PAS 3)

How important is the issue of _____ to you?

- 5 – Very important
- 4 – Important
- 3 – Somewhat important
- 2 – Somewhat unimportant
- 1 – Unimportant
- 0 – Not at all important

Personality Traits

Scale Reliability Coefficients for Personality Trait Indices:

<u>Personality Factor</u>	<u>PAS 3</u>	<u>CCES 2008</u>
Openness	α : .35	α : .33
Conscientiousness	α : .52	α : .55
Extraversion	α : .73	—
Agreeableness	α : .42	—
Neuroticism	α : .63	α : .64

Personality Inventory Items:

Here are a number of personality traits that may or may not apply to you. For each question, please rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

1. I see myself as: Extraverted, enthusiastic (E+)
2. I see myself as: Critical, quarrelsome (A-)
3. I see myself as: Dependable, self-disciplined (C+)
4. I see myself as: Anxious, easily upset (N+)
5. I see myself as: Open to new experiences, complex (O+)
6. I see myself as: Reserved, quiet (E-)
7. I see myself as: Sympathetic, warm (A+)

8. I see myself as: Disorganized, careless (C-)
9. I see myself as: Calm, emotionally stable (N-)
10. I see myself as: Conventional, uncreative (O-)

Feeling Thermometer (PAS 3)

Liberal Groups:

- People on welfare (Liberal +)
- Gays (Liberal +)
- Democrats (Liberal +)
- Liberals (Liberal +)
- Labor Unions (Liberal +)
- Poor people (Liberal +)
- Feminists (Liberal +)
- The Elderly (Liberal +)

Conservative Groups:

- Conservatives (Conservative +)
- The Military (Conservative +)
- Christian Fundamentalists (Conservative +)
- Catholics (Conservative +)
- Southerners (Conservative +)
- Rich people (Conservative +)
- Gun owners (Conservative +)
- Republicans (Conservative +)

Egalitarianism Items (PAS 3)

Cronbach's α reliability coefficient for the Egalitarianism items: .84

1. Our society should do whatever is necessary to make sure everyone has equal opportunity to succeed.
2. We have gone too far pushing equal rights in this country.
3. One of the big problems in this country is that we don't give everyone an equal chance.
4. This country would be better off if we worried less about how equal people are.
5. It is not really that big a problem if some people have more of a chance in life than others.
6. If people were treated more equally in this country we would have fewer problems.

Moral Traditionalism Items (PAS 3)

Cronbach's α reliability coefficient for the Moral Traditionalism items: .61

1. People in society should adjust their views to a changing world.
2. Newer lifestyles are causing societal breakdown.
3. Society should be more tolerant of different moral standards.

4. There should be more emphasis on traditional family ties.

Discussion Partners (PAS 3)

Would you say your political discussion partners share your political views all of the time, most of the time, sometimes, or never?

Political Information (α : .61) (PAS 3)

1. How many seats are in the U.S. House of Representatives?
2. Who nominates judges for federal district courts?
3. How many justices must agree to hear a case before the Supreme Court will issue of writ of certiorari?
4. Who currently serves as the Speaker of the House?
5. Who currently serves as the Senate Majority Leader?
6. Who currently holds the office of Secretary of State?

Partisan Strength (CCES and PAS 3)

- 3 – Strong Democrats/Republicans
- 2 – Democrats/Republicans
- 1 – Weak Democrats/Republicans
- 0 – Independents

Liberals (CCES and PAS 3)

- 1 – Very Liberal, Liberal, Slightly Liberal
- 0 – Other (Moderates and Conservatives)

Conservatives (CCES and PAS 3)

- 1 – Very Conservative, Conservative, Slightly Conservative
- 0 – Other (Moderates and Liberals)

Education Level (CCES)

- 1 – Did not complete high school
- 2 – High School diploma
- 3 – Some College
- 4 – 2-year degree
- 5 – 4-year degree
- 6 – Post-grad

2008 CCES—Correlation Matrices

Objective Ambivalence: Privatization of Social Security

	1	2	3	4	5	6	7	8	9
1. Social Security Privatization	1.00								
2. Neuroticism	.13	1.00							
3. Openness	-.11	-.31	1.00						
4. Conscientious	-.04	-.33	.24	1.00					
5. Issue Importance	-.10	.01	-.05	-.07	1.00				
6. Liberal	-.15	-.08	.10	-.08	-.08	1.00			
7. Conservative	.10	-.08	-.10	.16	.10	-.42	1.00		
8. Partisan Strength	-.13	-.03	-.02	.05	.04	.15	.10	1.00	
9. Education	-.09	-.18	.18	.06	-.05	.12	-.06	-.06	1.00

Objective Ambivalence: Same-Sex Marriage

	1	2	3	4	5	6	7	8	9
1. Same-Sex Marriage	1.00								
2. Neuroticism	.10	1.00							
3. Openness	-.09	-.27	1.00						
4. Conscientious	-.10	-.38	.24	1.00					
5. Issue Importance	-.17	-.07	-.03	.06	1.00				
6. Liberal	-.05	.09	.11	-.09	-.18	1.00			
7. Conservative	-.01	-.08	-.06	.12	.40	-.38	1.00		
8. Partisan Strength	-.04	.00	-.03	.09	.00	.21	.13	1.00	
9. Education	-.05	-.11	.06	.01	-.07	.15	-.07	-.02	1.00

Objective Ambivalence: Mandatory Health Insurance

	1	2	3	4	5	6	7	8	9
1. Mandatory Health Insurance	1.00								
2. Neuroticism	.03	1.00							
3. Openness	-.06	-.32	1.00						
4. Conscientious	-.04	-.35	.23	1.00					
5. Issue Importance	-.05	.09	.14	-.08	1.00				
6. Liberal	-.03	-.07	.11	-.09	.30	1.00			
7. Conservative	-.08	-.10	-.10	.16	-.41	-.42	1.00		
8. Partisan Strength	-.12	-.01	.00	.05	.04	.15	.11	1.00	
9. Education	-.01	-.15	.19	.05	.09	.13	-.08	.07	1.00

Objective Ambivalence: Stem Cell Research

	1	2	3	4	5	6	7	8	9
1. Stem Cell Research	1.00								
2. Neuroticism	.14	1.00							
3. Openness	-.14	-.27	1.00						
4. Conscientious	-.16	-.38	.25	1.00					
5. Issue Importance	-.31	-.13	.13	.06	1.00				
6. Liberal	-.01	.09	.10	-.10	.12	1.00			
7. Conservative	-.02	-.08	-.04	.14	-.04	-.38	1.00		
8. Partisan Strength	-.05	.00	-.04	.09	.07	.21	.13	1.00	
9. Education	-.13	-.11	.06	.01	.09	.15	-.09	-.02	1.00

Fall 2011 PAS 3—Correlation Matrices

Objective Ambivalence: Social Security Privatization

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Social Security Privatization	1.00														
2. Neuroticism	.03	1.00													
3. Openness	-.00	-.11	1.00												
4. Extraversion	-.00	-.13	.33	1.00											
5. Conscientious	-.08	-.08	-.02	.02	1.00										
6. Agreeableness	.05	-.13	.11	.06	.14	1.00									
7. Issue Importance	-.09	.04	-.05	-.07	-.07	-.03	1.00								
8. Group Affect Conflict	.14	-.04	.00	-.11	-.03	.14	.05	1.00							
9. Value Conflict	.08	-.04	-.11	-.03	.07	.02	.06	.29	1.00						
10. Partisan Strength	-.04	-.03	-.04	.09	.02	-.06	-.11	-.20	-.11	1.00					
11. Discussion Partners	-.06	.01	.10	.05	.02	-.02	-.00	-.18	-.03	.12	1.00				
12. Liberal	-.10	.02	.01	-.05	-.05	-.02	-.03	-.13	-.23	-.34	.15	1.00			
13. Conservative	.09	-.01	-.03	.06	.04	-.07	-.07	-.05	.19	.48	-.04	-.67	1.00		
14. Political Information	-.02	-.04	-.03	.05	.12	.02	-.13	-.11	-.12	.07	.17	.13	-.05	1.00	
15. Competing Considerations	.00	.05	-.06	-.07	.01	.03	-.14	-.02	-.04	-.03	-.14	.02	-.02	.05	1.00

Objective Ambivalence: Stem Cell Research

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Stem Cell Research	1.00														
2. Neuroticism	-.06	1.00													
3. Openness	-.02	-.11	1.00												
4. Extraversion	-.12	-.10	.32	1.00											
5. Conscientious	.11	-.07	.02	.03	1.00										
6. Agreeableness	.15	-.16	.13	.07	.15	1.00									
7. Issue Importance	-.16	.09	.05	.01	-.08	-.14	1.00								
8. Group Affect Conflict	.11	-.06	-.03	-.14	-.03	.13	-.10	1.00							
9. Value Conflict	.04	-.07	-.10	-.03	.06	-.00	-.14	.32	1.00						
10. Partisan Strength	.09	-.01	-.03	.10	.07	-.05	.04	-.23	-.08	1.00					
11. Discussion Partners	.03	.02	.08	.06	.01	.03	-.12	-.18	-.03	.16	1.00				
12. Liberal	-.20	.04	.02	-.05	-.07	.01	.06	-.14	-.25	-.35	.11	1.00			
13. Conservative	.19	-.03	-.02	.07	.07	-.09	.05	-.03	.20	.48	-.02	-.68	1.00		
14. Political Information	-.08	-.04	-.03	.06	.10	.00	.00	-.10	-.13	.01	.14	.16	-.06	1.00	
15. Competing Considerations	-.01	.06	-.02	-.05	.03	.03	.01	-.01	-.03	-.01	-.12	.04	-.02	.01	1.00

Objective Ambivalence: Same-Sex Marriage

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Same-Sex Marriage	1.00														
2. Neuroticism	.0	1.00													
3. Openness	.00	-.09	1.00												
4. Extraversion	-.02	-.11	.30	1.00											
5. Conscientious	.01	-.05	.02	.04	1.00										
6. Agreeableness	-.04	-.13	.10	.07	.14	1.00									
7. Issue Importance	-.24	-.05	.22	.08	-.02	.06	1.00								
8. Group Affect Conflict	.04	-.07	-.07	-.13	-.04	.11	-.15	1.00							
9. Value Conflict	.17	-.03	-.11	-.04	.08	.01	-.31	.33	1.00						
10. Partisan Strength	.09	.00	.02	.09	.04	-.04	.05	-.25	-.12	1.00					
11. Discussion Partners	.01	.05	.09	.04	-.00	-.01	.02	-.17	-.01	.14	1.00				
12. Liberal	-.22	.00	.02	.00	-.05	-.01	.21	-.14	-.23	-.30	.12	1.00			
13. Conservative	.23	.01	-.01	.01	.04	-.08	-.21	-.03	.18	.45	.01	-.67	1.00		
14. Political Information	-.04	-.07	.00	.07	.09	.02	.00	-.12	-.15	.01	.16	.18	-.04	1.00	
15. Competing Considerations	-.10	.03	-.03	-.07	.03	.04	.12	-.02	-.04	.01	-.13	-.00	-.02	.02	1.00

Objective Ambivalence: Health Care Reform

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Health Care Reform	1.00														
2. Neuroticism	.04	1.00													
3. Openness	-.09	-.10	1.00												
4. Extraversion	-.09	-.09	.31	1.00											
5. Conscientious	-.09	-.05	.01	.04	1.00										
6. Agreeableness	.10	-.13	.11	.05	.15	1.00									
7. Issue Importance	-.13	-.06	.15	.12	.10	.08	1.00								
8. Group Affect Conflict	.14	-.07	-.07	-.16	-.04	.10	-.17	1.00							
9. Value Conflict	.13	-.06	-.12	-.04	.08	.02	-.22	-.35	1.00						
10. Partisan Strength	-.06	-.01	.02	.13	.05	-.03	.15	-.24	-.09	1.00					
11. Discussion Partners	-.00	.05	.08	.06	-.02	-.00	.02	-.18	-.03	.15	1.00				
12. Liberal	-.11	.00	.04	-.03	-.04	-.03	.05	-.16	-.25	-.31	.11	1.00			
13. Conservative	.08	-.01	-.00	.06	.01	-.09	-.01	-.05	.20	.45	-.01	-.67	1.00		
14. Political Information	-.01	-.07	-.00	.05	.08	.00	.13	-.10	-.10	-.01	.14	.16	-.04	1.00	
15. Competing Considerations	-.11	.03	.01	-.06	.03	.03	.07	-.04	-.08	-.01	-.09	.02	-.02	.00	1.00

Objective Ambivalence: Setting a Timetable for Withdrawal of U.S. Troops from Afghanistan

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Troop Withdrawal - AFG	1.00														
2. Neuroticism	-.06	1.00													
3. Openness	-.10	-.09	1.00												
4. Extraversion	-.04	-.09	.28	1.00											
5. Conscientious	-.00	-.04	.02	.05	1.00										
6. Agreeableness	.01	-.14	.10	.05	.12	1.00									
7. Issue Importance	-.12	-.17	.20	.16	.01	.03	1.00								
8. Group Affect Conflict	.12	-.08	-.06	-.12	-.06	.11	-.07	1.00							
9. Value Conflict	-.07	-.07	-.12	-.02	.07	.01	-.11	.34	1.00						
10. Partisan Strength	.07	-.00	.02	.10	.05	-.03	.04	-.22	-.09	1.00					
11. Discussion Partners	-.04	.05	.09	.03	.00	.01	-.02	-.16	-.05	.13	1.00				
12. Liberal	-.12	.01	.02	-.03	-.05	-.03	.04	-.16	-.26	-.31	.12	1.00			
13. Conservative	.04	.02	.01	.04	.04	-.05	-.00	.01	.21	.45	-.02	-.67	1.00		
14. Political Information	.04	-.05	-.01	.06	.08	.02	.08	-.10	-.12	-.00	.15	.18	-.04	1.00	
15. Competing Considerations	.11	.02	-.01	-.05	.02	.04	-.10	-.02	-.05	.01	-.12	.01	-.01	.01	1.00

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