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'Cause You've Got Personality: Understanding the Impact of Personality on Political Participation

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’CAUSE YOU’VE GOT (PERSONALITY):

UNDERSTANDING THE IMPACT OF PERSONALITY ON POLITICAL PARTICIPATION

by

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ABSTRACT

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In this dissertation, I ask why some people participate more intensely in political life than others, a classic question in political science. Previous answers have focused on socioeconomic status, demographics, socialization, political context, attitudes, and resources. To date, very little political science research has acknowledged that individual personality traits may play a role in determining political behaviors. I argue that there is good reason to believe that individual personality traits influence individual participatory habits in the political realm. In short, what I am suggesting is that some people have natural predispositions toward participating (or not participating) in politics and civic activities. I argue that understanding the relationship between individual personality attributes and political behavior is necessary to build a more complete understanding of the antecedents of political participation. This dissertation makes several contributions to the literature and our understanding of democratic politics. First, I integrate the psychology literature on personality and the political science literature on political participation, expanding our understanding of who participates and why. Second, I develop theoretical insights as to how (and which) personality traits translate into

political action. Third, I develop several measures designed to capture personality traits that lead some people to participate more than others. I use longitudinal and cross-sectional data to test my hypotheses. I find that individual personality traits have important effects on political engagement. In some cases, the effects of personality rival or exceed the effects of canonical predictors of political participation. Future research on political and civic participation should continue to examine how deeply rooted individual differences shape participatory decisions.

To my parents, who have always believed in me and supported me.

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Chapter I.
Introduction

Why do some people vote while others choose to stay home on Election Day? Why do some individuals contact public officials or volunteer to work on political campaigns while others do not? And why do some people do *all* of these things while others do none? The question of why some people participate in political activities more intensely than others is one of *the* classic questions in political science. Many normative theories of democracy suggest that an active and engaged citizenry is a key component of democratic governance, so understanding why people participate with more intensity than others is an important endeavor (Dahl 1997). Over 60 years ago, Key (1949) observed that "The blunt truth is that politicians and officials are under no compulsion to pay much heed to classes and groups of citizens that do not vote" (99). Indeed, a great deal of empirical research has shown that patterns of political participation can have important consequences for democratic processes (Bartels 2008; Hajnal 2010). In some instances, the lack of citizen involvement in public affairs leads to biases in representation (Hajnal and Trounstine 2005; Hajnal 2010). Related to political participation is the question of why some people choose to engage in civic activities while others do not. Although civic and political participation are correlated, political participation entails interactions with political institutions while civic engagement refers to "people's connections with the life of their community, not merely with politics" (Putnam 1995, 665). Scholars of social capital, and of collective action, have long been interested in the factors that influence the extent to which people join community groups, voluntary organizations, and clubs, along with the consequences of those decisions (see Putnam, Leonardi, and Nanetti 1993; Putnam 1995). Putnam (2000) highlights the importance of civic participation, noting that

involvement in civic activities helps foster a sense of trust among people that enables them to act more effectively in the pursuit of common interests. Despite their differences, it is clear that both political participation and civic engagement are important elements of democratic governance. It should not come as a surprise, then, that scholars have spent a great deal of time trying to understand why it is that some people are more "participatory" than others.

Broadly speaking, my research seeks to answer the question of why some people participate in political and civic life with more intensity than others. This is, admittedly, a very broad question and one that cannot be answered within the confines in a single study. However, by developing and testing new hypotheses about the determinants of individual engagement, it is possible to develop a more comprehensive understanding of what motives people to get involved in (or stay away from) politics or civic affairs. In this dissertation, I focus on one specific set of factors that may influence political and civic engagement, namely, individual personality traits. Thus, I ask whether and how personality attributes shape political and civic participation. In the chapters that follow, I develop and test hypotheses about how personality traits influence individual political and civic participation.

Why Care about Personality?

The suggestion that personality influences people's behaviors may seem self-evident. Indeed, most of us can probably think of people we know who have vastly different personalities and prefer vastly different things. For instance, extraverts tend to enjoy social activities like going to parties, while introverts tend to prefer spending time alone or with a close friend or two. People who are very conscientious keep their desks

organized and clean, while people who are less conscientious may have disheveled desks. Although these examples demonstrate obvious connections between personality attributes and behaviors or habits, political scientists have spent very little time thinking about how personality might influence political behaviors or habits. In the 1950s and 60s, a number of scholars argued for the inclusion of personality in models of political behavior and attitudes but little research materialized on this topic. In an early article on personality and political behavior, Levinson noted that

> Many social scientists have been so impressed with the influence of the socio-cultural matrix on human behavior, that they have tended to see political and other participation as almost entirely determined by the social, economic, and cultural variables...political behavior cannot adequately be explained without some understanding of the interplay among the intra psychic influence, the socio-cultural opportunities and demands, and the political behavior itself (1958, 1).

In addition, Froman (1961) pointed out that "very little attempt has been made to suggest relationships between various personality syndromes and political behavior. Most of the literature has made the direct jump from environmental factors to political behavior, skipping the 'little black box' "(346-47). Given that personality influences behaviors at home, in the work place, and in social settings, it seems appropriate to begin to think more seriously about how personality might influence behaviors in the political realm. One reason why research on personality and political behavior did not take off (despite the calls by a number of political scientists) is because the psychology literature on personality and the measurement of individual differences was not well developed in the 1950s and 60s (John and Srivastava 1999).

A Gap in the Participation Literature: The Unmeasured "Taste for Participation"

Despite the absence of systematic empirical research on the effects of personality on political behavior, the notion that personality might "matter" to politics has been hinted at

in a number of studies on political and civic participation, some of which have become classics within the participation literature. In one of the most well known studies on political participation, Brady, Verba, and Schlozman (1995) suggest that politically relevant individual resources, namely, time, money, and civic skills, play a key role in determining the extent to which people engage in politics and civic affairs. Although their "resource model" represents a major advance in the study and understanding of political participation, Brady et al. recognize that participation is *not just about resources*. One of the most interesting aspects of their argument revolves around the idea that some people have a "taste for participation" or a "taste for involvement" that is expressed at an early age, which implies that some "types" of people may be predisposed to participate (or not participate) in political or civic activities (278-279). In a similar vein, La Due Lake and Huckfeldt (1998, 579) and Walker (2008, 116) have observed that some individuals are "joiners." Put simply, these are the people who consistently participate in political and civic life at high rates. The notion that there is a participatory "type" suggests that there is something about people—perhaps identifiable early on in life—that predisposes them to participation.

Other scholars, too, have grappled with the idea that there is *something about people* that leads them to be participators. Indeed, in their seminal work on political engagement, Verba and Nie (1972) suggest that there is a "participation proneness" among some people (194). Sobel (1993) elaborates on this point, noting that there appears to be a "participatory personality," which refers to the idea that some people participate in politics and other social activities "because it is their nature to do so" (345). Despite the intuition long held by political scientists that, in part, the motivation to

participate in politics comes from *within* individuals—from their personality tendencies—very little research has investigated the influence that individual personality traits have on participatory choices. Theoretical and empirical advances in the study of individual personality differences, along with new datasets, however, have made it possible to begin assessing the role of personality in shaping decisions to get involved in political and civic life.

Despite the hints about personality and participation outlined above, none of the scholars devote serious attention to hypothesizing about how personality might translate into political or civic participation or to developing ways to measure the "taste for participation" or "participatory personality" that is thought to exist. This dissertation represents an attempt to bring personality to the forefront of research on political participation and civic engagement. Below, I outline the layout of the dissertation.

Chapter Layout

In this study, I develop models of political and civic participation that account for individual differences in personality. The second chapter provides an overview of the existing literature on the determinants of individual political participation and civic engagement. I highlight the factors that pervious scholars have linked to participation, which include socioeconomic variables like education and income, political attitudes and orientations, and mobilization efforts. I also draw attention to a burgeoning body of research (genopolitics) aimed at assessing the link between deeply rooted differences to political behavior.

The third chapter introduces readers to the measurement of personality. Because personality is new to the political behavior literature, it is important to provide a bit of

background on how psychologists have gone about measuring individual personality attributes. In this chapter, I discuss the validity and reliability of personality measures and show that concerns over endogeneity, which are prominent in the literature on political attitudes and participation, are not particularly important when using personality traits to explain political and civic participation.

The fourth chapter introduces several initial hypotheses about how personality traits influence citizen involvement in public affairs as life unfolds. I also provide the first empirical test of the impact of personality traits on participation. Here, I use data from several longitudinal studies—the National Longitudinal Study of Adolescent Health (Add Health) and the National Childhood Development Study (NCDS)—to show that personality measures collected at a fairly young age have predictive power when it comes to political behavior in adulthood. The results of this chapter provide the first *longitudinal* evidence on the importance of personality to political and civic participation in the United States. I also use cross-sectional data from a nationally representative survey fielded in 2010 to show that personality influences the depth of engagement in civic groups and clubs.

In the fifth chapter, I argue that political scientists need to integrate measures of personality *above and beyond* the Big Five, the predominant model of personality, into models of political and civic engagement. In this chapter, I introduce a series of personality traits and psychological dispositions to the literature on political and civic engagement. My analysis focuses on the conflict avoidance trait, need for power, need for influence, need to affiliate, need to belong, and self-efficacy. Using data collected from an original survey fielded in 2011, I show that a number of these personality traits

influence the extent to which people get involved in politics and civic groups. Interestingly, different sets of personality attributes influence the appeal of different types of engagement. Participation in politics is driven by an enjoyment of conflict and by predispositions toward opinionation. On the other hand, participation in civic groups is driven primarily by a need for belongingness and self-efficacy. I show that the effects of personality traits and dispositions on political and civic engagement rival and, in some cases, exceed the effects of classic predictors of participation, including political discussion in the home and income.

In the sixth chapter, I summarize the findings from the empirical chapters and offer concluding thoughts on the implications of my findings. I also offer ideas for future research and for future data collection efforts. Given the results of this study, I argue that political scientists should continue to think about the ways in which personality and other individual differences influence political behavior.

Chapter II.
Putting Personality and Political Participation in Context: An Overview of Existing Literature on the Determinants of Political and Civic Participation

Introduction

As I noted above, this dissertation is about the ways in which personality traits influence the extent to which people get involved in politics and civic activities. To be sure, the question of what motivates participation is one that has been approached by many scholars before me. In this chapter, I provide an overview of the existing literature on political participation and civic engagement. At the outset, it is worth noting that studies on the determinants of political and civic engagement have taken a number of approaches. For instance, some scholars have examined participation at the aggregate level (e.g., across cities or states), while others have examined participation at the individual level. Some scholars have looked at participation in only one place, while others have explored participation cross-nationally. In addition, some scholars have used experimental data, while others have relied on observational data. In this dissertation, I am interested in how individual personality traits influence political and civic engagement, so my unit of analysis is the individual. In addition, I focus primarily on political and civic participation in the United States. Thus, my overview of the literature centers on the individual-level determinants of political and civic engagement in the United States. In summarizing the literature, I focus on several broad determinants of participation: (1) socioeconomic status, (2) political attitudes and orientations, (3) socialization factors, (4) mobilization efforts and political context, and (5) genetic factors. Although political scientists are starting to pay attention to the association between

deeply rooted individual differences and participation habits, researchers have only just scratched the surface in learning about how individual attributes (above and beyond demographic characteristics) shape political and civic engagement.

Socioeconomic Factors

Some of the earliest research on the determinants of individual political and civic participation focused on how differences in socioeconomic status might influence participatory habits (see Verba and Nie 1972). Perhaps unsurprisingly, education and income received (and continue to receive) a great deal of attention from political scientists. Indeed, one of the most consistently documented findings in the political behavior literature is the close connection between a person's education level and the extent of their participation in political activities and civic groups (Campbell et al. 1960; Nie et al. 1996; Wolfinger and Rosenstone 1980; Verba and Nie 1972). For many scholars, the reason behind the observed correlation is quite clear: the process of becoming educating provides people with skills and resources that are relevant to political life. In their seminal work on participation, Verba et al. (1995) argue that education is important because it allows citizens to acquire the "civic skills" (e.g., writing, speaking, etc.) that are needed in order to be able to communicate their concerns and needs to elected officials. Rosenstone and Hansen (1980) point out that education "imparts the knowledge and skills most essential to a citizen's task...Because of their schooling, the well educated have the skills people need to understand the abstract subject of politics, to follow the political campaign, and to research and evaluate the issues and candidates" (1993, 136). Although it is very difficult to isolate and measure the particular mechanism(s) behind the education-participation connection (e.g., cultivation of civic

skills, development of political knowledge or a sense of civic duty, resource acquisition, etc.), virtually all models of political and civic engagement account for individual differences in educational attainment.

Above and beyond education, individual income has become a prominent explanation for differences in political participation. As is the case with education, there has been a fairly consistent relationship between income level and individual participation. Indeed, work by Brady et al. (1995) and Rosenstone and Hansen (1980) has shown that people with higher incomes are much more likely to participate in a range of activities than their low-income counterparts. The difference is especially stark when it comes to political activities that entail money, such as donating to a political party or candidate (Brady et al. 1995).

Although the empirical connections between income, education, and participation are well documented, scholars have been interested in trying to theorize about the mechanisms behind socioeconomic status that drive participation. For instance, in their well-known article on political engagement, Brady et al. (1995) examine the connection between time, money, resources, and participatory habits. Their argument is based on the idea that education and income are proxies for "civic skills." For instance, they note that

> Citizens who can speak or write well or who are comfortable organizing and taking part in meetings are likely to be more effective when they get involved in politics. The acquisition of civic skills begins early in life-at home and, especially, in school. However, the process need not cease with the end of schooling but can continue throughout adulthood. Adult civic skills relevant for politics can be acquired and honed in the nonpolitical institutions of adult life-the workplace, voluntary associations, and churches. Managing a reception for new employees and addressing them about company benefits policy, coordinating the volunteers for the Heart Fund drive, or arranging the details for a tour by the church children's choir-all these undertakings represent opportunities in nonpolitical settings to learn, maintain, or improve civic skills (1995, 273).

Although this is an appealing idea, there are a number of potential concerns. For one thing, Brady et al. (1995) view politics as the last step in the causal chain. In other words, they suggest that people participate in politics *after* they participate in activities in the workplace, voluntary associations, and religious organizations. This logic, however, fails to take into account the fact that people may be engaging in these things simultaneously. In other words, it is not clear that the development of "civic skills" *causes* political participation. In Chapter 4, I argue that *participation in civic activities should not be used as predictors of political participation*. Because it is not clear that one's engagement in civic activities precede (or cause) political participation, and because civic and political participation are important and distinct forms of engagement in public life, these measures of participation should be considered separately.

In addition, Brady et al.'s (1995) model does not adequately capture variables, such as personality attributes, that may lead people to select themselves into participatory activities across a wide range of settings (e.g., politics, work, church, hobbies). In short, there may be some people who are simply "participatory" by their nature. One of the most interesting aspects of Brady et al.'s study is the finding that people who participate in high school activities are much more likely to participate in politics later on in life. These scholars use participation in high school government as a rough measure of the "taste for participation" that they think exists. The fact that there is a relationship between high school activities and political behaviors in adulthood makes theoretical sense, however, Brady et al.'s study does not illuminate why some people are more inclined to participate in high school than others *in the first place*. Indeed, it seems quite plausible that high school participation might itself be influenced by underlying personality traits

that lead people to participate at high or low rates. In a section that follows, I provide a more detailed discussion of how this dissertation attempts to address Brady et al.'s failure to account for deeply-rooted individual differences in personality.

Psychological Resources: Political Attitudes and Orientations

In addition to education and income, scholars have been interested in the extent to which psychological resources translate into political action. Here, the primary variables of interest have been political knowledge, internal and external efficacy, interest, the sense of civic duty, and strength of partisanship (Rosenstone and Hansen 1993; Delli Carpini and Keeter 1996; Blais and Labbe St. Vincent 2011). Political scientists have repeatedly shown that people with high levels of interest in politics and knowledge, strong feelings of efficacy, and a strong sense of civic duty are more inclined to participate in public life than their counterparts (Blais 2000; Blais and Labbe St. Vincent 2011). In addition, people who proclaim strong allegiances to political parties tend to participate in politics with more intensity than those who have weak connections (Conway 1981). One potential concern with research on the psychological antecedents of participation is endogeneity. The idea here is that while attitudes and orientations may influence participatory habits, they may also be shaped by participation. For instance, when one participates in politics, he or she may feel a stronger sense of civic duty, interest, or efficacy as a consequence. A number of studies have found evidence of a reciprocal relationship between participation and political attitudes and orientations (see, e.g., Finkel 1985). In the next chapter, I provide a discussion of the potential for endogeneity when it comes to personality and participation. To be clear, although research on variables like political knowledge (a cognitive resource), interest, and efficacy do focus on

psychological antecedents of participation, most of the measures used are explicitly political and do not attempt to capture general personality differences across individuals.

Political Socialization

Thus far, the research outlined above has focused on things "about people" that influence their decisions to get involved in politics and civic affairs. Researchers have also been interested in examining how the things that "happen to people" influence their political behaviors over the life cycle. The most notable line of research in this area centers on the impact of parental socialization on individuals. Work by Niemi and Jennings (1968, 1971, 1991) exemplifies the exploration of how early interactions between parents and children can have an enduring impact on political behavior. Using data from the Niemi and Jennings Youth-Parent Socialization Study (YPSS), scholars have shown that children whose parents voted when they were young are more likely than their counterparts to vote over the life cycle (see Plutzer 2002). In addition, empirical research has demonstrated that kids who come from families where politics was a frequent topic of discussion around the house are much more likely to get involved in public life than those whose families rarely talked about politics (McIntosh, Hart, and Youniss 2007). The implication of these studies is very clear: experiences that people have *early on in life* can matter a great deal to political behavior as life progresses. In a section that follows, I provide a discussion of how personality traits, which develop and are expressed early on in life, fit with socialization perspectives on participation.

Political Mobilization and Contextual Determinants

While the experiences that people have growing up can certainly have an impact on political engagement over time, there are a number of other things that can "happen to

people" that encourage (or discourage) them to get involved in (or stay away from) political life. Political scientists have spent a great deal of time examining how contact from parties and candidates can mobilize people to vote or to engage in other political acts. Perhaps the most well known research in this area is the work done by Gerber and Green (2000) and Green and Gerber (2004). These scholars have used a number of field experiments to show that contacting people and providing them with information about voting (e.g., reminders of when Election Day is, campaign ads, ads that prime the sense of civic duty) can boost their likelihood of turning out, sometimes by a substantial amount. A great deal of follow up work (Gerber, Green, and Larimer 2008; Gerber, Green, and Larimer 2010; Panagopoulos 2011) has illustrated how different mobilization messages can impact voter turnout.

In addition to the effects exerted by mobilization efforts, other elements of the political context in which one is situated can have important effects on participation. For instance, living in a competitive political environment can encourage people to participate in elections, presumably because competition is a signal to voters that their votes will have a greater chance of influencing the outcome (Jackson 1995; Jacobson and Kernell 1983; Cox and Munger 1989; Blais 2000).

Genopolitics

One of the most recent avenues of on research on the determinants of participation focuses on the role that human genetics play. This line of research is often referred to as "genopolitics." In a number of articles, Fowler, Baker, and Dawes (2008), Fowler and Dawes (2008), and Dawes and Fowler (2009) have provided evidence that biological factors play a role in shaping levels of individual political engagement. Research in the

realm of genetics either focuses on identifying how much of a given attitude or behavior is heritable (using a twin-study design) or identifying a particular gene or set of genes that influences participation (Fowler and Dawes, forthcoming). Much of the research in this area has focused on voter turnout, although some scholars (Fowler, Baker, and Dawes 2008) have shown that other acts of participation have a genetic basis. In addition to examining the effects of genetics on participation, researchers have examined the genetic bases of political attitudes and orientations, including partisanship (Hatemi et al. 2009; Settle, Dawes, and Fowler 2009), the sense of civic duty (Loewen and Dawes 2012), and ideology (Alford, Funk and Hibbing 2005). Although a number of scholars have suggested that deeply rooted biological factors influence political behavior, it seems worthwhile to investigate how personality traits, which are heritable to at least some extent (Stelmack 1991; McCrae and Costa 2006; Bouchard 1994; Bouchard 2004), influence participation. Indeed Hatemi et al. (2009) have pointed out that "It is reasonable to hypothesize that political intensity may come from some component of personality intensity" (585).

Given the results of genetics and political behavior research, the study of personality and politics is starting to emerge in the political science literature. To date, a great deal of the work has focused on personality as an antecedent to political attitudes (Mondak 2010; Gerber et al. 2010; Gerber et al. 2012; Gerber et al. 2013; Gerber et al. 2012). A few studies have examined the link between the Big Five personality traits and participation using cross-sectional survey data (Mondak et al. 2010; Gerber et al. 2011), although there have been mixed and inconsistent results when it comes to the performance of a number of personality traits. In addition, no study on personality and

U.S. political and civic participation has used longitudinal data to assess whether personality traits exert an influence on participation choices when they are measured *early on in life.* In each of the chapters that follow, I use a number of longitudinal studies to showcase the relevance of personality to participation as life unfolds. I also move beyond the Big Five traits and show that a number of distinct personality traits (not measured by the Big Five) have an impact on political and civic participation.

Conclusion

In this chapter, I have provided an overview of the literature on the determinants of individual political and civic participation. To date, research has focused on socioeconomic variables like education and income, political attitudes and orientations, socialization experiences, mobilization efforts, and political context. Recently, political scientists have started to explore the impact of deeply rooted individual differences on participation. The most notable line of research in this area is the work on the genetic basis of participation. This kind of research is just beginning to take shape and has hinted at the idea that personality traits, or deeply rooted differences in "what people are like," may also be relevant when it comes to explaining why some people participate in public life with more intensity than others. Although a few recent studies have emerged on the association between personality attributes and participation, there is a great deal of work to be done in terms of theorizing, data collection, and empirical testing. In the chapter that follows, I make the case that measures of personality are valid and reliable, which serves as an important starting point for integrating individual personality traits into models of participation.

Chapter III.
On the Measurement and Stability of Personality Traits

Introduction

The key argument advanced in this dissertation is that personality traits, even when measured at a fairly young age, predict individual participatory habits. The use of personality traits to predict political behavior is appealing because personality traits are "stable through the life cycle" and "causally prior" to political attitudes and behaviors (Gerber, Huber, Doherty, and Dowling 2011, 1). Although little research has examined whether personality measures collected early on in life are predictive of later political behaviors, this idea makes a great deal of theoretical sense. Put simply, if personality traits are really "causally prior" to political behavior then they should have predictive power when measured earlier in time. Research on personality and political behavior rests on some important assumptions about the nature and measurement of personality (in general and over the life cycle) that need to be explored before moving forward.

In this chapter, I review the psychology literature on the development of personality and on the stability of personality traits when measured longitudinally. I also examine psychology research on the validity of self-reported measures of personality. Finally, I use data from several longitudinal surveys, which will be employed in later chapters, to examine the measurement properties of personality measures. I show that personality measures are highly correlated over time, that personality traits are not highly correlated with one another (e.g., they are tapping different elements of personality), that changes in personality, which are uncommon, are generally not predicted by respondent demographics, that personality traits are not simply encapsulated in respondent demographics, that self and peer reports of personality traits correlate at reasonably high

levels, and that there is not an endogenous relationship between participation and personality (e.g., early participation does not influence personality traits). The findings from this chapter serve as a useful foundation for building a model of political participation that incorporates personality traits.

The Study of Personality

Over time, the study of personality has undergone considerable change. Personality theories can be broken down into several broad categories, the most prominent of which are psychoanalytic and dispositional. One of the earliest approaches to personality came from Freud, who attempted to develop a theory of personality by interpreting the self-reports of his patients. Freud's approach is known as psychoanalytic. Numerous prominent psychologists such as Adler, Erikson, and Jung have also advocated the use of psychoanalysis to understand personalities. For the most part, psychologists operating in this tradition did not use standardized assessment inventories to measure personality. As Feist and Feist note, "Although Freud, Alder, and Jung all developed some form of projective tool, none of them used this technique with sufficient precision to establish its reliability and validity" (2009, 14). I am interested in studying the association between personality traits and the participatory habits of a large number of people (via survey data) and am highly concerned with measurement, reliability, and validity, thus psychoanalytic theories that rely on the in-depth interpretation and analysis of information from individuals are not appropriate for this study. In this dissertation, I rely on standardized personality tests to measure individual personality traits, which I discuss in more detail below.

Overview of the Big Five Personality Traits

By far, the most widely used model for understanding and measuring personality is the

Five-Factor Model or FFM (Gosling, Rentfrow, and Swann 2003). John and Srivastava (1999) provide a nice overview of the development of the model, noting that "After decades of research, the field is approaching consensus on a general taxonomy of personality traits, the 'Big Five' personality dimensions. These dimensions do not represent a particular theoretical perspective but were derived from analyses of the natural-language terms people use to describe themselves and others. Rather than replacing all previous systems, the Big Five taxonomy serves an integrative function because it can represent the various and diverse systems of personality description in a common framework" (2-3). Gosling, Rentfrow, and Swann (2003) note that "The Big-Five framework is a hierarchical model of personality traits with five broad factors, which represent personality at the *broadest level of abstraction*. Each bipolar factor (e.g., Extraversion vs. Introversion) summarizes several more specific facets (e.g., Sociability), which, in turn, subsume a large number of even more specific traits (e.g., talkative, outgoing). The Big-Five framework suggests that most individual differences in human personality can be classified into five broad, empirically derived domains" (506, italics added). Thus, the Big Five model can be used to construct aggregate measures of personality and to glean measures of specific traits (e.g., shyness, assertiveness, dutifulness).

To be clear, the "Big Five" moniker was not selected as a proclamation of the inherent greatness of the factors but instead to emphasize that each of the five factors is extremely broad (John and Srivastava 1999). The Big Five traits are: Openness, Conscientiousness, Extraversion (or Introversion), Agreeableness, and Emotional Stability (or Neuroticism). The acronym OCEAN is often used to describe the Big Five

traits. John and Srivastava (1999) provide a nice description of each of the factors:

> Extraversion implies an *energetic approach* to the social and material world and includes traits such as sociability, activity, assertiveness, and positive emotionality. Agreeableness contrasts a *prosocial and communal orientation* toward others with antagonism and includes traits such as altruism, tender-mindedness, trust, and modesty. Conscientiousness describes *socially prescribed impulse* control that facilitates task-and goal-directed behavior, such as thinking before acting, delaying gratification, following norms and rules, and planning, organizing, and prioritizing tasks. [Emotional Stability describes even-temperedness and] contrasts...with negative emotionality, such as feeling anxious, nervous, sad, and tense...Openness to Experience (versus closed-mindedness) describes the breadth, depth, originality, and complexity of an individual's *mental and experiential life* (121).

Typically, the Big Five are measured by having respondents rate themselves (or others) on a range of adjectives or adjective pairs using measurement batteries, such as the 240-item NEO-PI-R (NEO Personality Inventory, Revised), the 60-item NEO-FFI (NEO Five-Factor Inventory), the 44-iem BFI (Big Five Inventory), or the TIPI (Ten-Item Personality Inventory). The justification for using adjectives to measure personality comes from the lexical hypothesis, which suggests that "Those individual differences that are most significant in the daily transactions of persons with each other become encoded into their language. The more important such a difference is, the more people will notice it and wish to talk of it, with the result that eventually they will invent a word for it" (Goldberg 1982, 204). Gosling, Rentfrow, and Swann (2003) developed the TIPI (shown in Table 3.1) as an alterative to administering long personality batteries to survey respondents. Although measures collected from longer instruments tend to have more desirable statistical properties than those collected from short ones, the TIPI actually performs quite well (e.g., in terms of test-retest reliability, correlation with peer reports, correlation with longer batteries) given its brief nature and has thus become widely used in surveys and experiments in psychology and other disciplines (Gosling et al. 2003).

Table 3.1: Ten Item Personality Inventory (from Gosling et al. 2003)

Here are a number of personality traits that may or may not apply to you. Please indicate the extent to which you agree or disagree with each statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other. I see myself as...
Extraverted, enthusiastic (Extraversion) Critical, quarrelsome (Agreeableness; reverse-coded) Dependable, self-disciplined (Conscientiousness) Anxious, easily upset (Emotional Stability; reverse-coded) Open to new experiences, complex (Openness to Experience) Reserved, quiet (Extraversion; reverse-coded) Sympathetic, warm (Agreeableness) Disorganized, careless (Conscientiousness; reverse-coded) Calm, emotionally stable (Emotional Stability) Conventional, uncreative (Openness to Experience; reverse-coded)

The Stability of Personality Traits

In addition to identifying the key components of individual personality, psychologists have also assessed the stability of personality traits over the life cycle. At a basic level, it seems quite reasonable to think that personality would be stable over time. Put very simply, "If you're aggressive today, the odds are high you'll be aggressive tomorrow. If you're shy now, you'll very likely still be shy when you wake up tomorrow morning" (Kasschau 1985, 433). Although personality is certainly not perfectly stable over time, McCrae and Costa (2006) use longitudinal data to show that correlations among personality trait measures are quite high across time. They note that:

> Individual differences in personality traits, which show at least some continuity from early childhood on, are also essentially fixed by age 30. Stability coefficients (test-retest correlations over substantial time intervals) are typically in the range of .60 to .80, even over intervals of as long as 30 years, although there is some decline in magnitude with increasing retest interval. Given that most personality scales have short-term retest reliabilities in the range from .70 to .90, it is clear that by far the greatest part of the reliable variance (i.e., variance not due to measurement error) in personality traits is stable (1994, 1).

Based on these results (and many replications), some psychologists have argued that personality is 'set like plaster' (James, as cited in Costa and McCrae 1994, 21). McCrae and Costa have spent a vast amount of time investigating the stability of personality, with a particular focus on the Big Five (see McCrae and Costa 1990; McCrae 2001; McCrae and Costa 2006; McCrae, Costa, and Arenberg 1980). Much of their work has made use of the Baltimore Longitudinal Study of Aging, which has been criticized on the grounds that people who commit themselves to being studied for several decades might be individuals who have more stable personalities (see Ardelt 2000). Fortunately, scholars have also examined the stability of personality (Big Five) in different contexts, counties, samples, among people of different ages, and in shorter longitudinal studies (Cobb-Clark and Schurer 2011; Small, Hertzog, Hultsch, and Dixon 2003; Terracciano, Costa, and McCrae 2006; De Fruyt and Bartels 2006). Although McCrae and Costa point out that personality shows at least some continuity from early childhood to adulthood, some psychologists have speculated that personality might be less stable among young people. Pullmann et al. (2006) use longitudinal data collected when individuals are 12, 14, 16, and 18 years old to examine the stability of personality. These scholars find evidence that the Big Five traits are quite stable during adolescence, which supports the work done by McCrae and Costa (2006). Pullmann et al. (2006) note that "individual scores in about 82% cases remained on the same level concerning any of the five dimensions of personality over the 2-year period in this sample" (455).

The stability of personality makes a great deal of sense given the finding that personality is partially heritable (Stelmack 1991; McCrae and Costa 2006; Bouchard 1994; Bouchard 2004). McCrae and Costa (2006) summarize the literature on the origins

of personality, noting that "All of these studies are remarkably consistent. They suggest that about half the variance in personality scores is attributable to genes and that almost none is attributable to a shared family environment" (194). Stelmack (1991) explains that "The remaining 50% of the variation in these traits can be accounted for by unique, individual effects of environment and measurement error. Although environment contributes significantly to the determination of personality, an important result of this research is the observation that the common family environment that twins share does not contribute substantially to variation in personality" (134). Although research on "genopolitics" has recently taken off in political science, scholars interested in the genetic basis of political behavior have pointed out that personality will be useful in explaining political behavior (Dawes 2010a; Dawes 2010b). It is certainly possible that observed genetic effects are expressed via individual personality traits.

Overall, the key point is not that an individual's personality traits are *incapable* of changing, but that there is a strong relationship between personality measures over time, even among young people. In a later section, I provide some sense of how personality trait measures correlate across a relatively long period of time.

External Ratings of Personality

Another potential concern with studying personality is that researchers often rely on self-ratings of personality. In short, respondents are typically asked to rate how much a given trait or set of traits describes them. Figure 1, which contains the Ten Item Personality Inventory, provides an example of how personality batteries typically look when included on surveys or in experiments. Although all survey research relies on self-reported information, one might suspect that people sometimes misreport how well a given

personality trait applies to them. For example, social desirability bias might make people think that saying they score low on a given trait (Extraversion, for instance) is a bad thing. After all, being an outgoing and sociable person is widely viewed as a positive within society. Although surveys including personality items are often administered in a way designed to reduced social desirability bias (e.g., pen and paper, online, etc.), scholars have tackled the validity issue by having respondents' peers provide independent ratings using an identical instrument (respondents and peers are asked to perform the ratings and have no opportunity to discuss the survey before hand). Although peers may be biased to provide favorable ratings about respondents (e.g., they are extraverted or conscientious), they are less likely than a respondent to deceive themselves about how a given set of traits applies (McCrae and Costa 2006). Comfortingly, McCrae and Costa (2006) have shown that self and peer reports from adjective-based personality tests correlate at fairly high levels, as do peer and peer ratings. The average correlations—across all of the Big Five measures—are .43 for peer-to-peer ratings, .40 for peer to spouse ratings, .50 for peer to self-ratings, and .56 for spouse to self-ratings (calculated from McCrae and Costa 2006, Table 3).

Data on the Stability of Personality

As a way of examining the measurement properties of personality traits, I use data from the Midlife Development in the United States (MIDUS) and the National Longitudinal Study of Adolescent Health (Add Health). A brief overview of the studies is necessary before moving forward. The MacArthur Foundation Research Network on Successful Midlife Development conducted the first national survey of MIDUS from 1995 to 1996. The purpose of the survey was to investigate the role of behavioral, psychological, and

social factors in accounting for age-related variations in health and well-being in a nation sample of Americans. The study employed a national probability sample (random digit dialing) but did contain a number of oversamples (the study included over-samples in select metropolitan areas, a sample of siblings of the main respondents, and a national sample of twin pairs). In this chapter, I only make use of the representative sample. Respondents in the sample range from 21 to 74 years old. A longitudinal follow-up of the first wave of MIDUS respondents was carried out from 2004 to 2006.

The Add Health study began with a nationally representative sample of adolescents in grades 7-12 in the United States in 1994 and 1995 (Wave I). Respondents were between the ages of 11 and 19. The original cohort was followed into young adulthood, with in-home interviews in 1996 (Wave II), 2001-2002 (Wave III, aged 18-26), and 2007-2008 (Wave IV, aged 24-32). The study was designed to gather data on the influence of individual attributes and environmental characteristics on the health and health-related behavior of respondents. In several waves of the survey (Waves I, II, and IV) respondents were also asked questions about their personality traits, with the most detailed battery occurring in Wave IV.

I focus first on the Add Health Study. To measure personality in the Add Health study, I make use of a series of adjective-based sentences where respondents rate the extent to which a given statement describes them, an approach commonly used in psychology. Although political scientists have primarily used the TIPI (2 items for each of the Big Five factors) to collect measures of personality from survey respondents, the Add Health Study took its measures from the NEO-PI, a personality battery that has not yet been used in political science. The TIPI (Gosling et al. 2003) uses adjective pairs,

such as “extraverted, enthusiastic” to measure personality, while the NEO-PI uses phrases, such as “I don’t talk a lot” or “I keep in the background.” Table 3.2 contains a list of the trait items available in Wave IV (2007-2008 survey), Wave II (1996), and Wave I (1994-1995) of the Add Health study. The preamble for the personality trait questions in Wave IV read: “How much do you agree with each statement about you as you generally are now, not as you wish to be in the future?” Respondents could rate themselves on a five-point scale ranging from strongly agree to strongly disagree. This format is similar to the format employed in many Big Five batteries, although it is certainly not identical. I present Cronbach’s alpha for each of the Big Five factors, which indicate that many of the items in form reliable measures, along with factor loadings for each item. Because the Big Five subsume a range of personality facets (e.g., Activity, Assertiveness, Intellect, etc.), I group the trait items into the appropriate facets. For each of the personality factors, higher values correspond to higher levels of the associated factor.

Although Wave IV of the study contained a large number of personality trait measures, Waves I and II contained just a few personality measures, making it impossible to obtain measures of all of the Big Five factors. The personality sections in Waves I and II of the study began with the following preamble: “The next questions ask for your feelings on a broad range of subjects. Please tell me whether you agree or disagree with each of the following statements.” Respondents were asked to provide answers on a five-point scale, ranging from strongly agree to strongly disagree.

Table 3.2: Personality Items in the Add Health Study, 3 Waves Containing Personality Items

Personality Factor	**Facets and Traits, Wave IV (2007-2008)**	**Wave II Trait Measures (1996)**	**Wave I Trait Measures (1995-1996)**
Openness	*Imagination:* I have a vivid imagination (.53); I do not have a good imagination (.59). *Intellect:* I am not interested in abstract ideas (.54); I have difficulty understanding abstract ideas (.56). *Emotionality:* I feel others' emotions (.23). α=.70	----	----
Conscientiousness	*Self-discipline:* I get chores done right away (.52). *Order:* I forget to put things back in their proper place (.59); I make a mess of things (.56); I like order (.48). α =.70	----	----
Extraversion	*Gregariousness:* I don't talk a lot (.56); I am the life of the party (.53); I talk to a lot of different people at parties (.64). *Assertiveness:* I keep in the background (.69). *Excitement seeking:* I like to take risks (.27). *Friendliness:* I am not really interested in others (.34). α =.72	You have a lot of energy (.55); You are shy (.63); You are assertive (.65). α =.70	----
Agreeableness	*Sympathy:* I am not interested in other people's problems; I sympathize with others' feelings. α =.50, r=.33	You are sensitive to other people's feelings	You never criticize other people
Emotional Stability	*Depression:* I have frequent mood swings (.63); I seldom feel blue (.32). *Anger:* I get angry easily (.75); I rarely get irritated (.54); I lose my temper (.67); I keep my cool (.64); I get upset easily (.79). *Anxiety:* I am not easily bothered by things (.60); I don't worry about things that have already happened (.33); I am relaxed most of the time (.49); I get stressed out easily (.68); I go out of my way to avoid having to deal with problems in my life (.22). *Impulsivity:* I live my life without much thought for the future (.20); When making a decision, I go with my 'gut feeling' and do not think much about the consequences of each alternative (.21). α =.84	You usually go out of your way to avoid having to deal with problems in your life (.46); Difficult problems make you very upset (.50); You are emotional (.24); After carrying out a solution to a problem, you usually try to think about what went right and wrong (.18); You live your life without much thought for the future (.31); When making decisions you usually go with your gut feeling without thinking too much about the consequences of each alternative (.41). α =.50	You never get sad (.13); You usually go out of your way to avoid having to deal with problems in your life (.12); Difficult problems make you very upset (.06); When you have a problem to solve, one of the first things you do is get as many facts about the problem as possible (.64); When you are attempting to find a solution to a problem, you usually try to think of as many different ways to approach the problem as possible (.65); When making decisions, you generally use a systematic method for judging and comparing alternatives (.62); After carrying out a solution to a problem, you usually try to think about what went right and wrong (.57); When making decisions you usually go with your gut feeling without thinking too much about the consequences of each alternative (.08). α =.50

In Table 3.3, I provide the correlation coefficients for all personality trait measures that were asked in at least two survey waves. It is worth noting that all of the correlations are statistically significant at the $p<.05$ level. The correlations range from a low of .15 to a high of .35. Although the correlations among personality measures observed over time by psychologists are generally higher than the ones reported below, it is worth noting that psychologists typically have lengthy measurement batteries (e.g., 240 item NEO-PI-R) and can construct aggregate measures (e.g., Extraversion) using numerous trait measures, thereby reducing measurement error. Below, I show how more detailed measurement batteries lead to higher stability estimates due to the reduced measurement error associated with aggregated measures (Ansolabehere, Rodden, and Snyder 2008). Given that each of the correlations reported in Table 3.3 are between two questions, it is not surprising that the average correlation in Table 3.3 is .26. It is noteworthy that the correlations in Table 3.3, which were collected over time, are in line with those reported in cross-sectional studies that employ two or three trait items to measure a given personality factor. For the sake of comparison, Table 3.4 shows the correlation between two survey items designed to measure each personality trait from 3 recent cross-sectional surveys (U.S. national samples).

Table 3.3: Correlations between Personality Measures from Add Health Waves I, II and VI

Personality Measure	Pearson's r, Wave I and Wave II	Pearson's r, Wave II and Wave IV	Pearson's r, Wave I and Wave VI
You live life without much thought for the future	---	.21 [p<.05]	---
When making a decision, you usually go with your gut feeling	.35 [p<.05]	.21 [p<.05]	.20 [p<.05]
You like to take risks	---	.30 [p<.05]	---
You usually go out of your way to avoid having to deal with the problems in your life	.28 [p<.05]	.17 [p<.05]	.15 [p<.05]
Difficult problems make you very upset	.32 [p<.05]	---	---
After carrying out a solution to a problem, you usually try to think about what went right and wrong	.24 [p<.05]	---	---

Table 3.4: Correlation between Components of Big Five across 3 National Samples

Factor	2010 Dataset Components	Pearson's r, 2010 Americas Barometer data	Pearson's r Gerber et al. (2012) 2007-08 CCES	Pearson's r Mondak (2010) 2006 CES
Extraversion	Sociable, active Quiet, shy	0.34	0.43	0.53
Agreeableness	Critical, quarrelsome Generous, warm	0.14	0.25	0.47
Conscientiousness	Dependable, self-disciplined Disorganized, careless	0.37	0.38	0.29
Em. Stability	Anxious, easily upset Calm, emotionally stable	0.43	0.49	0.43
Openness	Open to new experiences, intellectual Uncreative, unimaginative	0.27	0.28	0.28

Notes: All correlations are statistically significant at the $p<.05$ level.

In both the original MIDUS survey and the follow-up, respondents were asked to rate themselves on a number of adjectives traits derived from the Big Five. The trait measures were as follows: for Extraversion (outgoing, friendly, lively, active, and talkative), for Neuroticism (moody, worrying, nervous, and calm), for Openness (creative, imaginative, intelligent, curious, broad-minded, sophisticated, and adventurous), for Conscientiousness (organized, responsible, hardworking, and careless), and for Agreeableness (helpful, warm, caring, softhearted, and sympathetic). Each of trait questions asked respondents to "Please indicate how well each of the following describes you," with a lot, some, little, and not at all as response categories. The traits are

aggregated into the Big Five factors, with higher values corresponding to higher levels of the trait.[1] Given that there are two waves available containing all of the trait measures, it is possible to examine the correlations across time. Table 3.5 below shows the correlation between the Big Five measured in the first wave and the follow-up wave. The correlations indicate that there is a great deal of stability in personality over time. The correlations range from a low of .61 for Conscientiousness to a high of .69 for Openness. All of the correlations are statistically significant at the $p<.05$ level. These correlations are particularly impressive given the large time gap between survey waves (9 years). The higher levels of stability observed here (compared to the Add Health stability estimates) are due to the fact that multi-item measurement batteries typically have less measurement error (Ansolabehere, Rodden, and Snyder 2008). Gerber et al. (2011) report correlations of .702 for Conscientiousness, .686 for Openness, .700 for Agreeableness, .719 for Emotional Stability, and .816 for Extraversion for measures (2 items for each trait) collected before and after an election (range of time between surveys was 6-60 days, with a mean of 27 days). When analyzing the stability of personality measures, some scholars (see Olsson 1979) have recommended calculating polychoric correlation coefficients, which, unlike Pearson's correlation coefficients, do not assume that the variables are interval level (the assumption is that they are only ordinal). An analysis using polychoric correlations yielded virtually identical results.

[1] Cronbach's alpha for 1995-96 wave items: Emotional Stability=.74, Extraversion=.78, Openness=.77, Conscientiousness=.60, Agreeableness=.80. For 2004-06 wave items: Emotional Stability=.74, Extraversion=.77, Openness=.78, Conscientiousness=.60, Agreeableness=.81.

Table 3.5: Correlations between Personality Measures from 1995-96 Wave and 2004-06 Wave, Midlife Development in the United States Data

Personality Measure from 1996 survey	Correlation with same measure from 2004-06 survey
Extraversion	.68, $p<.05$
Openness	.69, $p<.05$
Agreeableness	.63, $p<.05$
Conscientiousness	.61. $p<.05$
Emotional Stability	.63, $p<.05$

Measuring Changes in Personality Over Time

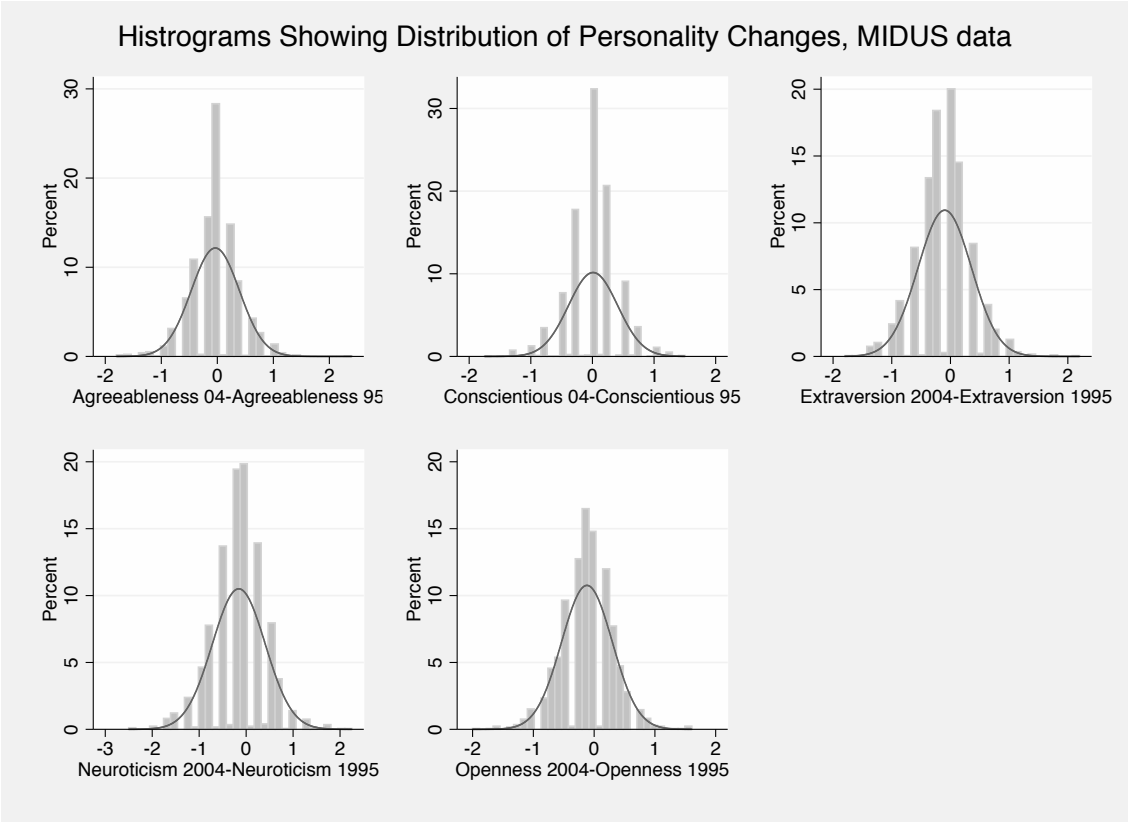
In addition to examining the correlations among personality items, it is also worthwhile to measure the changes in personality that occur over time, especially since all of the trait measures in the MIDUS are on the same scale. To estimate an individual's change score on each personality trait, I used the following formula:

$$\text{Personality } \Delta = \text{Trait}_{2004} - \text{Trait}_{1995}$$

Comfortingly, all of the change scores have 0 as their median. The mean levels of change are quite small. For Extraversion the mean change is -.10 (SD=.46), for Agreeableness the mean change is -.04 (SD=.43), for Conscientiousness the mean change is .01 (SD=.40), for Openness the mean change is -.12 (SD=.42), and for Neuroticism the mean change is -.16 (SD=.56). Given the possible ranges of the scores, these changes are remarkably small. The distributions of the change variables are particularly informative: for Agreeableness 95.49 percent of the sample changed by less than 1 point, for Extraversion 93.92 percent of the sample changed by less than 1 point, for Openness 95.98 percent of the sample changed by less than 1 point, for Conscientiousness 96.07 percent of the sample changed by less than 1 point, and for Neuroticism 87.96 percent of the sample changed by less than 1 point. A series of histograms of the distribution of the

change score measures are shown in Figure 3.1. All of the graphs reveal that the change scores are normally distributed around 0.

Figure 3.1: Distribution of Personality Change Scores



Modeling Changes in Personality

Although personality does exhibit stability over time, it is worthwhile to try to explain the shifts in personality that occur. As a way of examining the sources of change in personality, I developed OLS models where the changes in each of the Big Five traits were the dependent variables, controlling for the baseline level of each trait. Personality changes were modeled as a function of respondent characteristics, including sex, age, education, and race. There were only a few instances when respondent characteristics were statistically significant predictors of changes in each trait. Age was positively associated with becoming more open over time. Men became less extraverted, agreeable,

conscientious, and emotionally stable. Age also had a statistically significant effect on change in several traits, namely, extraversion, agreeableness, and emotional stability (negative effect). None of the other respondent attributes were statistically significant across the five separate change models.

A Comment on Endogeneity

In addition to the MIDUS data, one recent paper on personality changes by Gerber et al. (2011) also speaks to the shifts in personality and to the causes of those shifts. Gerber el al. (2011) use a narrow-window panel survey conducted immediately prior to and after the 2010 midterm elections to examine whether personality items included on a political survey are stable and whether they are influenced by political variables. More specifically, Gerber et al. (2011) capitalize on the fact that Republicans made substantial gains in the 2010 midterm to determine whether the Big Five are influenced by the intersection of partisan attachments and political events. Their results confirm the results from the MIDUS data, which suggest that changes in the Big Five are quite small, and demonstrate that personality traits are not influenced by partisanship. This finding is comforting for those interested in examining the effect of personality traits on political attitudes but doesn't tell us anything about the influence of participation on personality.[2]

[2] Gerber et al. (2011) note that "Because of the lack of prior scholarship on the question of stability in measured personality in combination with partisanship and political events, we do not have clear expectations about how partisanship and political events will cause changes for those measures included in the first two categories. However, this is not to say that there is no reason to expect such effects. For example, in the context of a political survey where political events may be particularly salient to respondents, Democrats may report lower levels of Agreeableness (individuals scoring high on Agreeableness are generally compassionate and eager to cooperate, while those scoring low tend to be hardheaded and skeptical, Costa and McCrae 1992) following an election where Republicans make substantial gains. If this is the case, estimates of the relationship between Agreeableness and policy preferences from the post-election wave may be

On a theoretical level, there is little reason to be concerned with an endogenous relationship between personality and political variables, including political participation. One common critique of previous accounts of participation that use attitudinal predictors is that there is an endogenous relationship between participation and attitudes (Finkel 1985; Stenner-Day and Fischle 1992). For example, successful participation may foster increased political efficacy or interest in public life. Such critiques are unlikely to apply to the association between participation and individual personality. Although personality theory suggests that personality develops early in life and is "causally prior" to attitudes and behaviors, one could argue that successful participation in social or political acts might foster changes in personality. For instance, a person who participates in the social aspects of politics might become more extraverted as a consequence of their interactions. While it should be the case that the opposite is true—that Extraverts participate because it appeals to them—it is possible to test the endogeneity idea by using early participation measures to predict later personality.

In Table 3.6, I present the results of a simple regression where the Extraversion measure from the 2007 wave of the Add Health study is predicted by the 3 available measures of Extraversion from Wave II and an index measuring the extent to which each respondent participated in politics (voted, attended a rally, contacted government, donated money, or ran for an public or non-public office) collected in Wave III (2001). While the early measures of personality should have strong predictive power given the stability of personality, the lagged participation measure should not influence personality.

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biased— e.g., an apparent relationship between Agreeableness and support for conservative policies may reflect the tendency of Republicans to report levels of Agreeableness that are higher than they would be under other circumstances" (10).

Table 3.6: Early Participation Does Not Predict Later (2007) Personality

Variable	Coeff. (se)
Shy 1996	.17 (.01)*
Assertive 1996	.10 (.01)*
Energetic 1996	.07 (.01)*
2001 Participation	.07 (.07)
N of Obs.	3256
Adj R^2	.12

Note: * means significant at $p<.05$ (one-tailed).

The model in Table 3.6 performs just as we would expect. All three of the lagged Extraversion measures are statistically significant predictors ($p<.05$) of the later measure of Extraversion, while the lagged participation measure does not predict future levels of Extraversion at a statistically significant level.

Assessing the Overlap Between Demographics and Personality Traits

Another potential concern with personality traits is that they might be highly correlated with other respondent attributes like demographics. If this is the case, then the use of personality trait measures in models of political participation is unlikely to add much—such measures will likely not explain much of the variance in individual participation. To get a feel for how personality traits are related to other respondent characteristics, in Tables 3.7 and 3.8 below I present partial correlation matrices between individual demographic attributes commonly employed in participation models and personality traits. Each cell shows the correlation between a given personality trait and demographic attribute, controlling for all of the other demographics in the table. Within the MIDUS data, the correlations are fairly small in magnitude, although the correlation between respondent sex and Agreeableness is fairly large at -.31. The average correlation across all items in the table is only .07, though. The Add Health data also indicates that the

correlations between the personality measures and respondent demographics are fairly small, although the correlation between sex and Agreeableness is -.25 and the correlation between Openness and education is .24. The average correlation across all items is the Add Health study is .07 as well. It appears that personality traits are not simply being captured by other respondent attributes. The correlations between sex and Agreeableness have been observed in psychological research on personality, and scholars have suggested both biological and sociocultural explanations (Chapman, Duberstein, Sorenson, and Lyness 2007; Costa, Terracciano, and McCrae 2001).

Table 3.7: Partial Correlations Among Personality Measures and Respondent Demographics, MIDUS Data

	Extrav.	Open	Agree.	Conscient.	Em. Stabil.
Male	-.11	.02	-.31	-.15	-.14
Religiosity	.06	-.05	.13	.00	-.06
Age	.06	.07	.10	.03	-.20
White	-.06	-.02	-.06	-.03	-.03
Black	.00	.02	-.05	-.04	-.03
Income	.10	.10	.04	.14	-.05
Education	-.09	.11	-.05	.04	-.08

Table 3.8: Partial Correlations Among Personality Measures and Respondent Demographics, Add Health Data

	Extrav.	Open	Agree.	Conscient.	Em. Stabil.
Male	-.04	.15	-.25	-.10	.21
Age	-.05	-.07	-.01	.00	-.02
White	.02	.04	.04	.00	-.01
Black	.00	.04	.04	.03	-.00
Income	.09	.00	.02	.06	.07
Education	.03	.24	.16	.06	.18

Correlations Among Personality Measures

One final concern with personality measures revolves around whether or not the measures are highly correlated with one another. If several personality measures are tapping the same dimensions of individual personality, they are unlikely to add much to participation models. Theoretically and empirically, the Big Five tap different elements of personality. The Big Five traits were actually identified by conducting factor analyses on survey responses from adjective-based questionnaires. German, Allport and Odbert (1936) conducted an early lexical study of the personality-relevant terms by using an unabridged English dictionary. Their analysis included nearly 18,000 items that could be used to "distinguish the behavior of one human being from that of another" (Allport and Odbert, 1936, p. 24). Building on their approach, later scholars used more advanced statistical methods to identify the items that grouped together. This approach eventually identified the Big Five. There are now widely agreed upon personality batteries (ranging from 10 items to 240 items) that have been employed in hundreds of survey and experimental analyses (Gosling et al. 2003). It is worth noting that "the Big Five structure does not imply that personality differences can be reduced to only five traits. Rather, these five dimensions represent personality at the broadest level of abstraction, and each dimension summarizes a large number of distinct, more specific personality characteristics" (John and Srivastava 1999, 7). In short, even when it is not possible to construct aggregate measures of the Big Five, individual trait measures may still shed light on the sources of individual behavior. Even more, there may be traits above and beyond the Big Five that are relevant to human behavior. Paunonen and Ashton (2001) note that "Even if there are no other dimensions of personality lying beyond the sphere of

influence of the five-factor model, there are other variables of personality that might contribute to the prediction and understanding of behavior beyond that achieved by the Big Five" (2001, 524).

In Table 3.9, I present a correlation matrix showing the associations among the Big Five measures. I use data from the Add Health study, although the MIDUS data provide very similar results. Although the measures are related to some extent, the correlations are not so high as to indicate that the items are measuring the same thing. Indeed, none of the correlations exceed a value of .22. Once again, polychoric correlations yield virtually identical correlation values to Pearson's r (reported below). Overall, the inclusion of multiple measures of personality in models of political and civic participation will not be problematic, since there is not a high degree of collinearity among personality measures.

Table 3.9: Inter-correlations Among Personality Measures, Add Health Data (Wave VI)

Traits	Extraverted	Agreeable	Openness	Conscientious	Em. Stability
Extraverted	1				
Agreeable	.20	1			
Openness	.22	.22	1		
Conscientious	.06	.14	.04	1	
Em. Stability	.10	.07	.19	.17	1

Conclusion

In this chapter, I have taken a close look at the measurement of personality traits via surveys. Theoretical and empirical issues surrounding the measurement of personality are relevant to their inclusion in models of political behavior. Given the newness of personality to models of political behavior and participation, it was important to establish

the empirical aspects of personality measures. Scholars should feel confident in using personality measures in political behavior research, given that they have sound theoretical reasons for including such measures.

Overall, my analyses have shown that personality measures are highly correlated over time, that mean levels of change in personality scores over time are quite small, that personality traits are not highly correlated with one another (e.g., they are tapping different elements of personality), that changes in personality (which are uncommon) are generally not predicted by respondent demographics (or political variables), that personality traits are not simply encapsulated in respondent demographics, that early acts of participation do not influence later personality measures, and that self and peer reports of personality traits correlate at reasonably high levels. Particularly noteworthy is the observation that *concerns over endogeneity do not apply to the relationship between personality and political participation*. The findings from this paper serve as a useful foundation for building a model of political participation that incorporates personality traits. We turn to that endeavor in the next chapter.

Chapter IV.
Participatory Predispositions: Early Personality Traits and Political Participation in Adulthood

Introduction

In Chapter 1, I noted that a number of scholars have suggested that is "something about people" that predisposes them to participation. In this chapter, I examine the extent to which the "participatory proneness" suggested by Verba and Nie (1972) is reflected in early personality traits. My analysis unfolds in a straightforward manner. First, I briefly outline existing research on the early factors that have been shown to influence individual political engagement as life unfolds. Personality traits have been notably absent from work on the early determinants of participation. Second, I outline the personality trait measures that may foster a participatory personality. Third, I develop hypotheses about how specific personality traits might be related to participatory acts and the tendency to join with others in civic groups. Finally, I use data from several waves of the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative set of surveys, to examine how personality traits affect the decision to engage in politics. I provide the first *longitudinal* evidence on the influence of personality traits on individual participation in the United States. I supplement my analysis of the Add Health data with longitudinal data from the National Childhood Development Study. I also use cross-sectional data from a nationally representative survey fielded in 2010 to examine the association between personality and the depth of engagement in civic groups and clubs.

Overall, my analysis makes several contributions to the literature. Beyond adding to the emerging research on personality and politics by providing new evidence demonstrating that personality attributes are relevant to mass political behavior, I

demonstrate that personality traits exert an influence over time. Impressively, measures of personality—ones not explicitly connected to politics—collected at a fairly young age are predictive of individual political participation years later. In some cases, personality traits are statistically significant predictors of participation even when they were measured over 30 years prior to participation. This holds when self-reported measures are used and when external (peer) ratings of personality are employed. My results shed light on the early factors that influence the tendency to get involved in political and civic activities and suggest that, in additional to early political socialization experiences and resources, personality traits, or deep-seated differences that define what a person is like, affect individual participation as life unfolds.

Early Factors and Participatory Choices

A host of factors have been identified to explain individual political participation and civic engagement, but virtually all work in this area recognizes the importance of education and income, which have become canonical predictors of participation. Research focusing on individual factors has paid great dividends, as we now have a solid understanding of how socioeconomic factors influence the decision to partake in political and civic life. Although resources like education and income are highly important to participation decisions, scholars have also recognized that *early* experiences and attributes might also play a role in individual participation decisions over the life cycle.

One of the most appealing frameworks for understanding participation is political socialization (Hyman 1959; Niemi and Jennings 1968; Niemi and Jennings 1991). Socialization studies focus on early factors that might influence political behavior and suggest that political orientations (e.g., partisanship) and habits (e.g., voter turnout) are

influenced by early experiences (Andolina, Jenkins, Zukin, and Keeter 2003; Beck and Jennings 1982; McIntosh, Hart, and Youniss 2007; Settle, Bond, Levitt 2011). Plutzer (2002), for instance, uses longitudinal data to show that high school students whose parents voted are more inclined to vote as life unfolds than those whose parents were not voters. Brady et al.'s (1995) model, though focused on the role of politically relevant resources in shaping participatory choices, integrates one early measure, a retrospective question asking whether a respondent participated in high school government but doesn't explore the factors that come before participation in student government that might be driving the tendency to get involved. Like Brady et al. (1995), Sobel (1993) attempts to get at early tendencies by using a retrospective survey question asking people about the extent to which they preferred to make decisions for themselves as children. Plutzer (2002), too, includes a measure of the extent to which people reported being involved in high school activities.

Recent research on "genopolitics" has taken the "early experiences" perspective one step further by suggesting that observed socialization effects (e.g., parental influences) might be genetically driven (Fowler, Baker and Dawes 2008; Fowler and Dawes 2009; Dawes and Fowler 2009; Settle, Dawes, and Fowler 2009; Hatemi et al. 2009). Although research in this area is just starting to emerge, it highlights the idea that intrinsic factors might be relevant to political behavior. The investigation of personality, which is heritable to some extent, as a determinant of political participation seems like a plausible way of linking innate individual attributes to participation (Stelmack 1991; McCrae and Costa 2006; Bouchard 1994; Bouchard 2004). Indeed, it seems quite intuitive that deeply rooted differences that define who a person is would shape the

appeal of social and political activities. Psychologists have done some interesting work on the association between early traits and political behavior, but the focus has been on political ideology not participatory habits. Block and Block (2005), for instance, use longitudinal data to show that personality attributes measured in nursery school children correlate with political ideology measured 20 years later. Little political science research has examined the link between personality attributes and the tendency to participate in political and civic activities using longitudinal data (but see Vecchione and Caprara 2009 for an analysis of how personality shapes participation among a sample of 71 students enrolled in junior high schools in Genzano, Italy). However, Block and Block note that important insights on the determinants of political behaviors and attitudes might be gained by attempting to understand how people "differ in their early childhood years, *before* they become political beings" (2005, 2).

It's The Extraverts: The Extraversion Personality Trait

By far, the most widely used model for understanding and measuring personality is the Five-Factor Model or FFM (Gosling, Rentfrow, and Swann 2003). Given its importance to understanding individual personality, the FFM serves as a useful framework for gleaning personality trait measures that may be relevant to political participation. Gosling, Rentfrow, and Swann (2003) note that "The Big-Five framework is a hierarchical model of personality traits with five broad factors, which represent personality at the broadest level of abstraction. Each bipolar factor (e.g., Extraversion vs. Introversion) summarizes several more specific facets (e.g., Sociability), which, in turn, subsume a large number of even more specific traits (e.g., talkative, outgoing). The Big-Five framework suggests that most individual differences in human personality can be

classified into five broad, empirically derived domains" (506).

Overall, the personality factor that has the greatest potential to shed light on the extent to which people have participatory personalities is Extraversion. The idea of an Extraversion-Introversion personality continuum was first introduced by Jung (1921), who thought that for individuals one side of the continuum tends to be more dominant than the other. Indeed, most of us probably find it quite easy to characterize people we know as being Extraverted or Introverted. Extraverts are characterized by a number of traits, including assertiveness, gregariousness, enthusiasm, a lack of shyness, talkativeness, and being energetic and active. John and Srivastava (1999) point out that "Extraversion implies an *energetic approach* to the social and material world" (121). In very simple terms, Extraverts enjoy external stimuli and tend to get cognitive, affective, and perhaps even biological pleasure from human interactions and social activities (Lieberman and Rosenthal 2001). Although social activities are generally appealing to Extraverts, cognitive attachments to groups (that do not necessarily entail actual social interactions) also seem to be more appealing to Extraverts than Introverts (see Gerber et al. 2011). Wilt and Revelle (2008) note that "extraversion has the potential to explain the covariation of a wide variety of behaviors, which is one of the central concerns for the field of personality" (1).

Theoretical Connections

Given the overview of personality research in Chapter 2, it is now appropriate to consider how personality traits might be related to political and civic engagement. Recent research (Mondak 2010; Mondak et al. 2010; Gerber et al. 2011) has explored the link between contemporaneous measure of personality and participation, but scholars have almost

exclusively relied on the Big Five measures. The have been inconsistences across studies, with significant effects from the Big Five showing up in some research but not showing up in other research. Although this research has helped focus attention on the influence of one personality battery on political behavior (TIPI), some of the Big Five factors lack a strong theoretical link to participation (e.g., Emotional Stability, Conscientiousness, and Agreeableness). In fact, in some studies scholars have found negative effects, while others have found positive effects, especially when it comes to Emotional Stability (Mondak et al. 2010 find negative and significant effects, while Gerber et al. 2011 find positive and significant effects). In this paper, I focus on using measures that have the strongest theoretical connection to social and political activities. Broadly speaking, I expect that traits associated with Extraversion will be positively related to political participation and civic engagement. People who are extroverts at a young age tend to be active, sociable, talkative, assertive, and outgoing. These are the people who do not mind sharing their ideas and being visible in public settings. These features of Extraversion are likely to translate into an enjoyment of social and political activities. Politics is about opinion expression and many acts of political engagement entail being active or social.

First Longitudinal Data Source: Add Health Study

To begin exploring the link between personality and participation, I use data from the National Longitudinal Study of Adolescent Health (Add Health), which I described in Chapter 2. It is worth pointing out this longitudinal study is limited in the personality items it provides, thus it is not possible to examine the full Big Five battery (recall that the full battery for Big Five traits was only asked in the most recent wave, so it is not possible to examine the lagged effects of personality). Longitudinal data are necessary in

order to investigate the link between personality traits measured early in life and participation as life unfolds. In short, we need to have personality measures that were collected earlier in time than participation, preferably many years earlier. The Add Health study has been used to study the genetic bases of political behavior (Dawes and Fowler 2009) but has not yet been used in research on personality and political participation. This study began with a nationally representative sample of adolescents in grades 7-12 in the United States in 1994 and 1995 (Wave I).[3] The original cohort was followed into young adulthood, with in-home interviews in 1996 (Wave II), 2001-2002 (Wave III, aged 18-26, with a few respondents who were turned 27 or 28 by the Wave III interview), and 2007-2008 (Wave IV, aged 24-32, with a few respondents who were 33 or 34 by the Wave IV interview). Some of the waves also contained interviews with parents, teachers, and peers. The study was designed to gather data on the influence of individual attributes and environmental characteristics on the health and health-related behavior of respondents. In this paper, I'm interested in the lagged effects of personality and draw personality measures from Wave II of the survey. In Waves III and IV, respondents were

[3] The primary sampling frame for Add Health is a database collected by Quality Education Data, Inc. Systematic sampling methods and implicit stratification ensure that the 80 high schools selected are representative of US schools with respect to region of country, urbanicity, size, type, and ethnicity. Eligible high schools included an 11th grade and enrolled more than 30 students. More than 70 percent of the originally sampled high schools participated. Each school that declined to participate was replaced by a school within the stratum. Participating high schools helped to identify feeder schools—that is, schools that included a 7th grade and sent at least five graduates to that high school. From among the feeder schools, one was selected with probability proportional to the number of students it contributed to the high school. If the feeder school declined to participate, a replacement was selected. The recruitment effort resulted in a pair of schools in each of 80 communities (Some high schools spanned grades 7 through 12; for those, a separate feeder school was not recruited.) There are 132 schools in the core study. More information on the study design can be found here: http://www.cpc.unc.edu/projects/addhealth/design.

asked questions about their participation in several political and civic activities. Thus, I use personality traits measured in Wave II to predict the extent of political and civic engagement in Waves III and IV.

A Defense of the Add Health Study

Before moving forward, it is worth noting one potential concern with the Add Health study, namely, that it focuses on a relatively narrow subset of the population. Although this study is nationally representative in terms of key characteristics like gender (49% women, 51% men) and race (12% Hispanic, 16% African American, 3% Asian, and 2% Native American), the age range of respondents certainly does not mirror the age range of respondents in commonly used public opinion surveys. While this aspect of the study design could be concerning to some, I suggest that the focus on adolescence and young/early adulthood is a benefit to the present analysis. Numerous scholars have pointed out that some people are "high participators" even at a young age (Berk and Goebel 1987; Kahne and Sporte 2008). Indeed, even in high school some people participate in social and political activities at a much higher rate than others. The notion that there is something about people that predisposes them to enjoy participation at a young age suggests that people in young and early adulthood would be an ideal population to explore the association between personality attributes (e.g., factors behind the taste for participation) and participation in political activities. There is little reason to think that associations between personality and acts of participation would be observed in a sample of young and early adults but that they would not be observed in a sample with more variation in age.

Measuring Extraversion in Add Health Study

To measure personality in the Add Health study, I make use of a series of adjective-based sentences where respondents rate the extent to which a given statement describes them, an approach commonly used in psychology. Although political scientists have primarily used the TIPI (2 items for each of the Big Five factors) to collect measures of personality from survey respondents, I measure personality traits using items from the NEO-PI, a personality battery that has not yet been used in political science. The TIPI (Gosling et al. 2003) uses adjective pairs, such as "extraverted, enthusiastic" to measure personality, while the NEO-PI uses phrases, such as "I don't talk a lot" or "I keep in the background." Mondak (2010) uses a series of bi-polar adjectives, such as "extraverted, introverted" or "outgoing, shy," in his work on personality and political behavior. Ulig and Funk (1999) measure one personality trait, conflict avoidance, by asking respondents whether they "try to avoid getting into political discussions because they can be unpleasant, whether they enjoy discussing politics even though it sometimes leads to arguments, or whether they are somewhere in between" and then use this measure as a predictor of political participation (271-272). I am interested in examining the link between *general* personality traits, which do not reference politics, and political participation. Personality questions that include references to politics are more likely to tap predispositions toward politics than general personality tendencies.

Wave II of the Add Health study contained just a few personality measures, making it impossible to obtain measures of all of the Big Five factors. Despite the limited number of measures, it is quite valuable to have lagged measures of personality available to use as predictors of later measures of participation. Not only are the personality

measures in the Add Health study completely unconnected to politics, they occur earlier in time, which enhances the ability to make causal assessments. Consistent with the observation about the influence of early factors on political ideology made by Block and Block (2005), if personality does matter to participation, it should have an effect when it is measured long before participation since it is relatively stable over time. Indeed, the use of personality traits to predict political behavior is appealing because personality traits are "stable through the life cycle" and "causally prior" to political attitudes and behaviors (Gerber, Huber, Doherty, and Dowling 2011, 1).

The personality section in Wave II of the study began with the following preamble: *The next questions ask for your feelings on a broad range of subjects. Please tell me whether you agree or disagree with each of the following statements.* Respondents were asked to provide answers on a five-point scale, ranging from strongly agree to strongly disagree. To measure traits associated with Extraversion, I use three items: "You have a lot of energy," "You are shy," and "You are assertive." The alpha score for the items is .70, which indicates that they are fairly reliable. I create a summed measure of Extraversion by averaging the three trait measures together. Although it would be ideal to have multiple measure of each trait item, Wave II of the study simply did not include a lengthy personality battery.

Participation Measures

Although political participation was not a central focus of the Add Health study, there are numerous participation questions available. Wave IV of the Add Health study contained just one question about political participation. The question asked: *How often do you usually vote in local or statewide elections?* The response categories were never (31% of

respondents), sometimes (26% of respondents), often (18% of respondents), and always (25% of respondents). Higher values correspond to more frequent voting. Although this is not the standard turnout question employed in political surveys, it does provide some sense of how engaged people are in political life. Wave III of the Add Health study contained more measures of political participation. In particular, Wave III of the survey asked respondents whether they had voted in the most recent (2000) presidential election (45% answered yes), donated money to a political party or candidate within the past 12 months (2% answered yes), contacted a government official regarding political or community issues within the past 12 months (3% answered yes), and attended a political rally or march within the past 12 months (4% answered yes), and run for a public or non-public office (less than 1%). All of these measures are dichotomous and were coded 1 if a respondent participated and 0 if they did not. An index based on these acts correlates with the vote frequency question from Wave IV at .41 ($p<.01$). The state and local vote frequency measure in Wave IV correlates with the presidential vote turnout (2000 election) question from Wave III at .44 ($p<.01$). The fairly strong correlations between these measures indicates that the state and local vote measure from Wave IV does get at how participatory people tend to be. In addition, the correlations show that participation is related over time, just as we would expect.

Beyond the political measures, Wave III of the study asked respondents whether they had participated in a number of civic groups or clubs over the past 12 months. The groups included in the study were: youth organizations (8% participated), service organizations like Big Brother or Big Sister (5% participated), political clubs or organizations (2% participated), solidarity or ethnic support groups (1% participated),

church or church-related groups—not including worship services (10% participated), community or neighborhood groups (9% participated), organized volunteer groups (5% participated), educational organizations (8% participated), and environmental groups (2% participated). Each group or club was coded 1 when a respondent said yes to particular group and 0 when they said no. An index based on participation the 9 groups correlates with a political participation index based on the acts discussed above at .30 ($p<.01$). Although personality traits should influence political participation, they should also be related to participating in groups and clubs. Participation in civic groups has long been thought to be important to the formation of social capital and provides us with an additional measure of participation that entails a high degree of social interaction (Putnam 2000).

Because the Add Health study was not designed primarily as a political survey, it does not contain a full battery of political attitude questions contained in many public opinion surveys like the ANES, such as internal and external efficacy or political interest. Wave III of the survey did ask respondents 3 questions about their levels of trust in the federal government, their state government, and their local government ("I trust my state government," "I trust my local government," "I trust the federal government."). Each of these items is measured on a five-point scale ranging from strongly agree to strongly disagree. In order to account for the socialization effects outlined in previous studies, I am also able to control for the extent to which respondent's parents were engaged in public life during the first wave of the study. To measure parental engagement, I create an additive measure based on whether a respondent's parent is a member of a Parent Teacher Organization (1 if yes, 0 if no), labor union (1 if yes, 0 if no), hobby or sports

group (1 if yes, 0 if no), or a civic or social organization, such as Junior League, Rotary, or Knights of Columbus (1 if yes, 0 if no). 49 percent participated in 0 of the 4 acts, 32 percent participated in 1 of the 4, 14 percent participated in 2 of the 4, 4 percent participated in 3 of the 4, and 1 percent participated in all of the acts. Parental measures of *political* engagement were not included in the study, but this measure provides some sense of how participatory of a family one comes from. Consistent with Plutzer's (2002) finding about the positive influence of parental voter turnout on the participatory habits of children, this measure should be positively related to the participatory habits of the respondents. I also control for parental education level by including a measure of how far a respondent's parent went in school (collected in Wave I). This variable ranges from 0 (did not go to school) to 9 (professional training beyond a 4-year college or university). The parental civic engagement and education variables are positively correlated (r=.40, $p<.01$), just as we would expect.

Above and beyond these measures, I include key respondent socio-demographic controls in all of the statistical models below, including respondent age, sex, education level, household income, and race. The education and income variables get at the resources aspect of participation highlighted by Brady et al. (1995). I am also able to control for whether a respondent reported identifying with a political party (1 if yes, 0 if no), which is useful given the strong relationship between the strength of partisanship and participation demonstrated in previous research (Rosenstone and Hansen 2003). The standard partisan strength measure was not available in the study. Partisans are generally more engaged and interested in politics than non-partisans, so this measure should serve as a useful control variable.

The Effects of Early Personality Measures on Later Political and Civic Participation

Given the above discussion, it is appropriate to turn to an analysis of the effects of personality on political participation and civic engagement. Table 4.1 shows the results of three models designed to test whether Extraverts are more "participatory" than their counterparts. I begin by examining the influence of the Extraversion measure from 1996 on political participation in 2001. Overall, many of the control variables perform as expected. For instance, those who report identifying with a political party participate at higher rates than those who do not. In addition, those who achieved higher levels of education by the 2001 wave of the survey participated in more political acts than their counterparts.

Table 4.1: Negative Binomial and Ordered Logit Models of Participation

Independent Variables	Politics 2001 b (se) Neg. Binomial	Civic Groups 2001 b (se) Negative Binomial	Vote 2007 b (se) Ordered Logit
Extraversion, 1996	.91 (.15)*	1.60 (.25)*	.93 (.03)*
Parental Participation, 1994	.14 (.03)*	.12 (.04)*	.11 (.04)*
Parent Education, 1994	.07 (.02)*	.05 (.02)*	.06 (.02)*
White	.31 (.20)	-.04 (.21)	.64 (.24)*
Black	.40 (.20)*	.13 (.23)	1.19 (.25)*
Male	.03 (.06)	-.05 (.08)	-.33 (.08)*
Income Level	.02 (.01)	-.01 (.01)	-.01 (.02)
Education	.10 (.02)*	.29 (.03)*	.20 (.02)*
Age	.01 (.02)	-.24 (.03)*	.01 (.03)
Partisan (Yes=1)	.69 (.06)*	.36 (.08)*	.95 (.09)*
Trust in Federal Gov. (2001 Politics model)/Trust in Local Gov. (for 2007 model)	-.03 (.03)	---	.06 (.05)
N of Obs.	2059	2065	2055
Pseudo R^2	.08	.07	.07

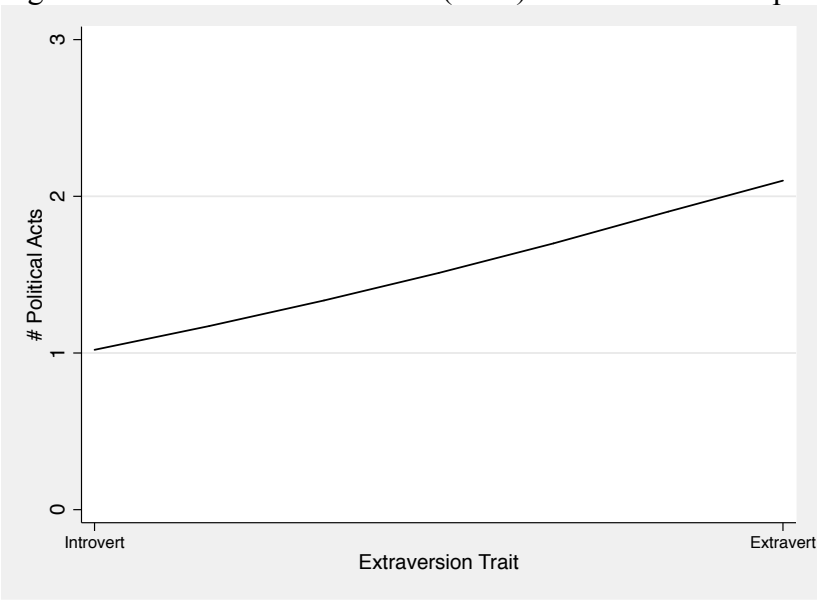
Notes: $p<.05$ (one-tailed tests).

It is also worth noting that the two socialization variables—parental civic participation and parental education—are both statistically significant ($p<.05$) predictors of political participation. I should point out that these two variables are answers from the adolescent's mother (or other female head of the household). The Add Health study noted that the mother "is the desired respondent to complete the questionnaire because, according to the results of previous studies, mothers are generally more familiar than fathers with the schooling, health status, and health behaviors of their children" (Add Health). Those respondents whose mothers had higher levels of education or whose mothers were more involved in civic activities participated in politics at higher rates than their counterparts. The results here confirm a long line of existing research on the enduring effects of socialization experiences (Plutzer 2002).

Despite the fact that individual attributes and socialization variables matter to participation, personality also exerts an important effect on political participation. The coefficient on the extraversion measure collected in 1996 is positively signed and statistically significant at the $p<.05$ level. Because the coefficients from negative binomial models are not intuitive to interpret, I emphasize the substantive effects of personality. In Figure 4.1, I plot the number of political acts that people are predicted to participate in as Extraversion moves from its highest to lowest value. All other variables in the model are held constant at their median values. Figure 4.1 shows that those with the lowest score on the Extraversion measure (Introverts) are expected to participate in 1 political act while those with the highest score are expected to participate in just over 2 political acts. Although a difference of 1 political act may not seem important at first, it is

important to keep in mind that those who participate in more political acts are increasing the chance that their opinions will be heard (Verba, Brady, and Schlozman 1993).

Figure 4.1: Effect of Extraversion (1996) on Political Participation in 2001 Wave



Of course, political participation is not the only way that people can contribute to public life. The second model in Table 4.1 examines the determinants of the number of civic groups that people participate in. Once again, many of the control variables have statistically significant effects on participation. As expected, the two socialization measures are, once again, important predictors of participation. I omit the trust in government measure from the civic groups model, because civic activities are often not done within the confines of political institutions. Thus, trust in government does not seem particularly relevant here. Importantly, the Extraversion measure from 1996 is predictive of civic engagement. The coefficient is positively signed and statistically significant at the $p<.05$ level. Again, I choose to emphasize the substantive effect of personality and participation. Figure 4.2 plots the effect of Extraversion as it moves from its minimum to maximum value, holding all other variables in the model constant at their median values.

Figure 4.2: Effect of Extraversion (1996) on Civic Group Participation in 2001 Wave

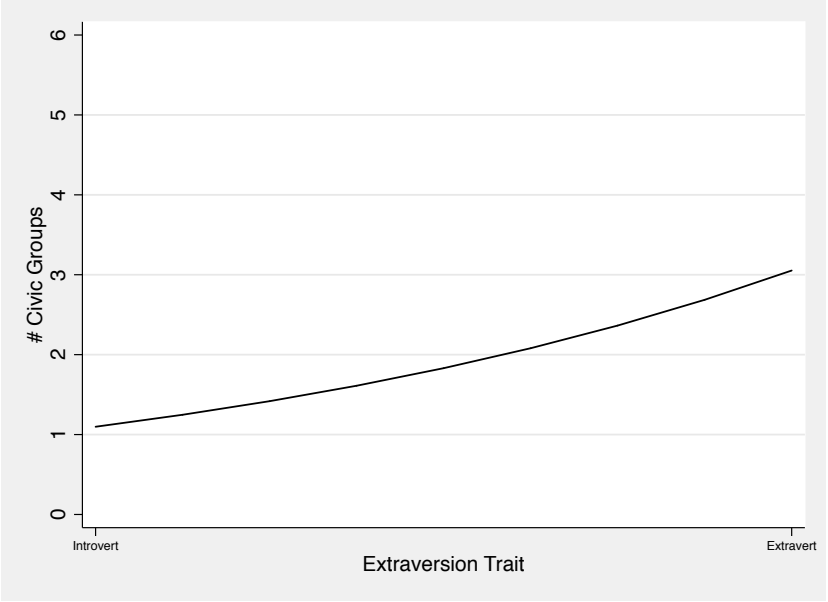


Figure 4.2 provides clear evidence that early personality measures have predictive power later on in life. Those with the lowest score on Extraversion in 1996 participated in about 1 civic group or club in 2001, while those with the highest score participated in 3 civic groups or clubs. Given the social nature of civic groups and clubs, it makes a great deal of sense that Extraversion would have a pronounced effect on civic participation. Again, although the difference between 1 group and 3 groups may not sound like a vast difference, it is important to underscore the point that participating in a number of civic groups provide people with more opportunities to connect with others, which Putnam (2000) argues is important to the development of social capital, and to work on civic issues and concerns (e.g., neighborhood improvement, raising money for charity, etc.).

As an additional way of examining the link between early personality traits and participation, I make use of one participation item from the most recent wave of the Add Health study—the vote turnout question from the 2007 survey wave. Although it would be ideal to have more participation measures, this was simply the only participation item

included on the 2007 survey. As I noted above, the 2007 state and local vote turnout question does correlate at a fairly high level with the 2001 participation measure and presidential turnout measure and thus serves as a useful measure of adult political engagement. Given that the time span between the personality measures and the dependent variable is 11 years, this represents an even more robust test of the effect of individual personality traits on political participation. It would be impressive if personality traits had predictive power over such a long period of time.

The third column in Table 4.1 shows the results of the vote turnout model. Once again, many of the controls perform as expected. Even in the presence of the controls, the personality measure from 11 years earlier has a statistically significant ($p<.05$) and positive effect on turnout. Since the coefficients in ordered logit models are difficult to interpret, in Figure 4.3 I plot the effect of Extraversion on the probability of "always voting" in state and local elections, holding all other variables at their medians.

Figure 4.3: Effect of Extraversion (1996) on Voting in 2007 Wave

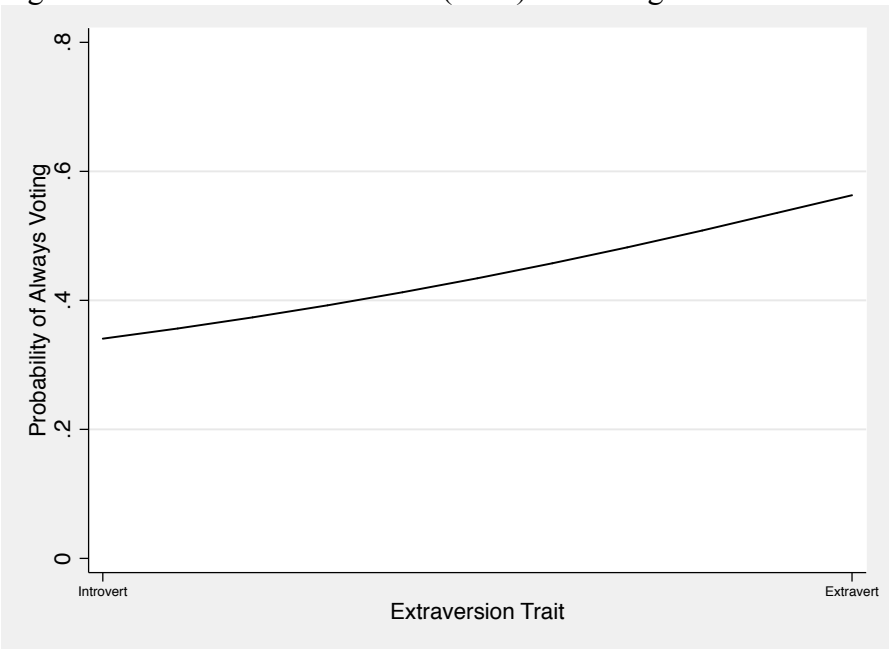


Figure 4.3 shows that Extraversion has an important effect on voter turnout in state and local elections. When Extraversion takes on its lowest value, the probability of always voting is .36, but when Extraversion takes on its highest value, the probability of always voting increases to .57, a difference of .21. The fact that personality has an effect over such a long time span (11 years) shows that the effects of personality on political behavior are enduring.

Longitudinal Data with External Personality Ratings

As another way of assessing the influence of personality traits on political and civic participation, I draw on data collected by the National Childhood Development Study (NCDS). The NCDS is a continuing longitudinal study that seeks to follow the lives of all those living in Great Britain who were born in one particular week in March (March 3rd-9th) of 1958. This study was sponsored by the National Birthday Trust Fund and was designed to track the 17,000 children born in England, Scotland and Wales in that one week. Survey waves were conducted in 1965 (age 7), 1969 (age 11), 1974 (age 16), 1981 (age 23), 1991 (age 33), 1999-2000 (age 41-42), 2004 (46), and 2008-2009 (age 50-51). The NCDS has gathered data from respondents on a range of topics ranging from medical care to cognitive and social growth. In one wave of the study (when respondents were 16 years old), class teachers of the participants were asked to rate them on a number of personality traits.[4] The question read: At the ends of each line on the scale below are adjectives which could describe a child's personality or behavior. Could you please rate the study child on each of these scales? For example, if you think that the word on the left clearly applies, please ring 1. If it is not completely true, but more appropriate than the word on the right, please ring 2. If the child is midway between the two descriptions, ring

[4] One teacher (the head teacher) rated each student.

3; and so on. The scales ranged from 1 to 5. The personality traits were presented as bi-polar adjectives. I use one of the personality items related to extraversion included in the 1974 wave of the NCDS (sociable versus withdrawn). People who are sociable (Extraverted) should enjoy expressing themselves and interacting with others as they perform various political acts.

In numerous waves of the study, participants were asked whether they had voted in recent general elections, participated in a public protest or demonstration, signed a petition, or attended a public meeting or rally. What is particularly nice about the study, aside from the fact that it is longitudinal, is that the personality ratings are not just self-reports from respondents. Although numerous psychology studies (see Norman and Goldberg 1966; Funder and Colvin 1988; Watson 1989; McCrae and Costa 2006) have shown that self-reports and peer-reports correlate at high levels, little political science research has used external (peer) personality trait ratings to predict political participation. The use of external personality ratings provides a robust test of the link between personality and political behavior.

I begin by examining the effects of the external personality trait ratings on participation measures constructed based on voting in the most recent general election, protesting or demonstrating, signing a petition, and attending a meeting or rally. It was possible to create such measures for the 2008 wave and for the 2004 wave. The measures correlate at .40 ($p<.01$). In 2008, 73 percent reported voting, 7 percent reported attending a meeting or rally, 2 percent reported protesting or demonstrating, and 32 percent reported signing a petition. The figures from the 2004 survey are similar, with 76 percent voting, 7 percent rallying, 2 percent protesting, and 28 percent signing a petition. In order

to construct measures of the breath of participation in 2008 and 2004, I used the same technique as above by constructing counts of the number of acts that respondents participated in.

Table 4.2 presents the results of several negative binomial models where the measures from 2008 and 2004 are used as dependent variables. The models include controls for respondent sex, union membership, social class of one's parents in 1958 (standard ordinal measure ranging from professional to unskilled), whether the respondent received additional education training beyond the minimum requirement (school until age 16), political interest, and income. Overall, the control variables perform largely as expected. For instance, those who were born into families of a higher social class participated in politics at higher rates in adulthood. This is consistent with a great deal of literature showing that family resources are an important determinant of political participation over the life cycle. Union membership is also a strong, positive predictor of political participation, as is one's level of interest in politics.

Turning to the personality variables, the models indicate that respondents who were rated as "withdrawn" by their teachers when they were age 16 participated in politics less intensely than those who were rated as "sociable" in both 2004 and 2008. The findings here mesh well with the performance of the Extraversion trait measures in the Add Health study. People who are not sociable are likely to be uncomfortable expressing their views, articulating their preferences, and being visible in a public or social setting. Thus, the political realm is unlikely to be an appealing place to expend time and resources.

Table 4.2: Influence of Personality Measures from 1974 (age 16) Wave of National Childhood Development Study (NCDS) on Later Political Participation

	2004	2008
	b/se	b/se
Schooling beyond min. requirement	.159* .026	.229* .030
Sex	.137* .023	.140* .025
Social Class	.020* .008	.014* .008
Union Member	.101* .024	.154* .026
Withdrawn, 1974	-.092* .021	-.064* .022
Income	.042 .021	.021 .023
Interest in Politics	.330* .014	.274* .015
Constant	1.69* .066	1.55* .069
N of Obs.	3797	3797
Pseudo R^2	.04	.03

Notes: * means statistically significant at $p<.05$ level (one-tailed tests).

The fact that the withdrawn/sociable measure is negatively related to participation makes a great deal of theoretical sense and is consistent with the findings above regarding the relevance of Extraversion and its associated traits to political participation and vote turnout. Impressively, the withdrawn trait is statistically significant even though it was measured 34 years before the 2008 survey asked about political engagement and 30 years before the 2004 survey was administered.

Examining the Effects of Personality on Joining Civic Groups Using the NCDS

Beyond the political participation measures, the 2004 and 2008 waves of the NCDS contained questions asking respondents about which civic groups or clubs, if any, they were involved with (aside from giving money and membership required due to one's job). Based on respondent's answers to each group (coded 1 if respondent participated

and 0 if not), I created count measures of the number of civic groups that respondents participated in for 2004 and 2008.[5] The measures correlate with each other at .40 ($p<.05$). In Table 4.3, I present two negative binomial models where the civic groups measures are used as dependent variables. Once again, the withdrawn trait should exert a negative influence on these measures of participation. Sociable people should enjoy the human interaction and social networking that comes with civic affiliations. I include a basic set of control variables in both models. I omit the union membership variable that was used in Table 4.2 simply because participation in union activities and trade groups is included in the civic participation dependent variable and people may have answered yes to both the question about union membership and to the civic groups question about participating in trade groups and union activities.

The models in Table 4.3 provide additional evidence supporting the general idea that early characteristics exert an influence on participatory choices over the life cycle. The coefficients on the personality trait measures in each model are statistically significant and correctly signed. Those respondents who were rated as being withdrawn by their teachers at age 16 participated less intensely in civic groups in 2004 and 2008. Given the social nature of civic groups, it makes strong theoretical sense that this trait is

[5] 2004 groups/clubs: Youth or children's activities, including school activities, Politics, human rights, or religious groups, Environmental or animal concerns, Other voluntary or charity groups, Local community or neighbourhood groups (including elderly, disabled, homeless), Hobbies, recreation, arts, social clubs, Trade Union activity, Other groups, clubs or organisations. 2008 groups/clubs: Political Party, Trade Union, Environmental group, Parents'/School association, Tenants/Residents Group or neighbourhood watch, Religious Group or Church Organisation, Voluntary Service Group, Other Community or civic group, Social club/ Working men's club, Sports club, Women's Institute/ Townswomen's Guild, Women's group/ Feminist Organisation, Professional organization, Pensioners group/ organization, Scouts/Guides organization, Any other organization.

related to joining groups. Since people have innate motives to form and sustain social bonds and since personality influences the appeal of social and interpersonal activities, traits associated with Extraversion should be related to the tendency to join with others in civic groups (Baumeister and Leary 1995).

Table 4.3: Influence of Personality Measures from 1974 (age 16) Wave of National Childhood Development Study (NCDS) on Joining Civic Groups/Clubs

	2004	2008
	b/se	b/se
Withdrawn, 1974	-.082* .018	-.062* .010
Social Class	.042* .012	.020* .009
Sex	-.019 .040	-.057* .027
Income, 2004	.064* .027	.053* .020
Stayed in school beyond minimum	.389* .040	.224* .029
Interest in Politics	.241* .022	.118* .017
Constant	.284* .010	.641* .073
N of Obs.	3943	3943
Pseudo R^2	.03	.02

Notes: * means statistically significant at the $p<.05$ level (one-tailed tests).

It appears that early personality measures not only influence the decision to get involved in political life but also shape the tendency to join with others in civic groups. The implication is that some people are less likely to engage in social capital building activities than others simply because of "what they are like." Of course, the converse is that some people also appear to be predisposed to enjoy social activities.

An Alternative Conceptualization of Participation Intensity

This far, I have argued that the number of political acts or civic groups that people participate in is a measure of their participatory intensity. This is certainly one way of

thinking about the breadth of individual participation, but one might also wonder if personality influences the extent to which people are engaged in each activity or group. While Extraverts participate in more activities than Introverts, do they participate in particular acts or groups with more vigor? Although it is not possible to assess this question using longitudinal data due to data limitations, the 2010 AmericasBarometer study, which employs a representative sample of the U.S. population, asked respondents how frequently they participated in a number of civic groups. The question read: "I am going to read a list of groups and organizations. Please tell me if you attend their meetings at least once a week, once or twice a month, once or twice a year, or never." The groups contained on the survey were as follows: meetings of any religious organization, meetings of parents' associations at school, meetings of a community improvement committee or association, meetings of an association of professional, merchants, manufacturers or farmers, meetings of a political party or political organization, and meetings of associations or groups of women or home makers (only asked of women). Each measure is coded as an ordinal variable where 4 corresponds to "once a week," 3 corresponds to "once or twice a month," 2 corresponds to "once or twice a year" and 1 corresponds to "never." The survey also included measures of Extraversion. I average together two questions that asked each respondent to rate how much they would describe themselves as a "sociable and active person" and a "quiet and shy person" (reverse coded). Responses were recoded using 7-point scales that ranged from strongly agree to strongly disagree.

In Table 4.4, I present the results of six ordered logit models of the frequency of participation in each civic association of group. I control for education, partisanship

strength, race, sex, income, age, and whether the respondent has children (in the parents' associations model).

Table 4.4: Influence of Personality on Frequency of Engagement in Different Civic Groups

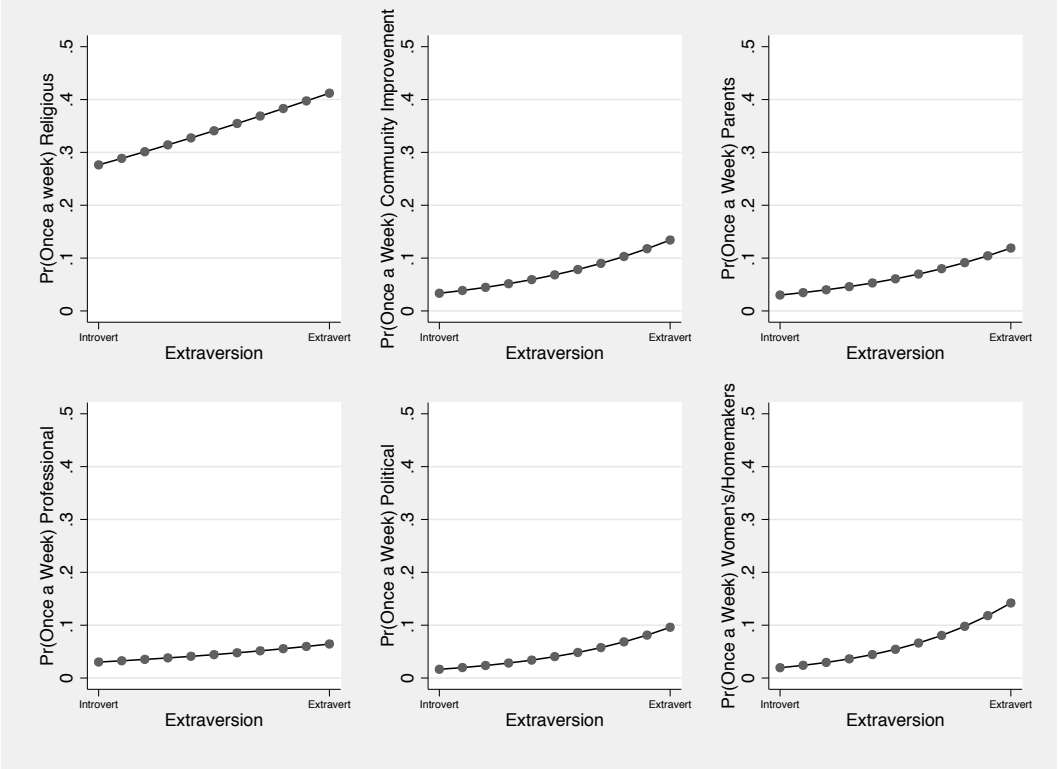
	Religious	Parents	Comm.	Profess.	Political	Women
	b/se	b/se	b/se	b/se	b/se	b/se
Extraversion	0.607* 0.222	1.470* 0.432	1.499* 0.268	0.791* 0.408	1.846* 0.373	2.117* 0.648
Education	0.102* 0.035	-0.105 0.076	0.240* 0.041	0.189* 0.065	0.098 0.058	-0.157 0.104
Partisanship Strength	0.163* 0.045	0.217* 0.092	0.027 0.052	0.072 0.086	0.301* 0.079	-0.038 0.123
White	-0.485* 0.211	0.098 0.452	-0.342 0.219	-0.505 0.375	-0.654* 0.330	-0.023 0.831
Black	-0.075 0.253	0.710 0.497	-0.297 0.279	-0.914* 0.481	-1.030* 0.418	0.514 0.877
Hispanic	-0.513* 0.251	0.203 0.490	-0.530* 0.280	-1.029* 0.499	-1.578* 0.447	0.142 0.893
Asian	-0.781 0.578	0.942 0.764	-0.261 0.577	0.034 0.672	-0.024 0.804	1.459 1.218
Age	0.009* 0.003	-0.050* 0.008	0.010* 0.004	0.009 0.006	-0.001 0.006	0.023* 0.010
Income	0.004 0.018	0.083* 0.035	0.003 0.021	0.055 0.034	0.007 0.030	-0.004 0.047
Sex (1=male)	-0.150 0.100	0.462* 0.197	0.162 0.118	0.691* 0.189	0.632* 0.169	---
Has Kids (1=yes)	---	2.400* 0.314	---	---	---	---
N of Obs.	1448	721	1447	719	720	394
Pseudo R^2	.020	.140	.040	.060	.070	.040

Notes: * means statistically significant at the $p<.05$ level (one-tailed tests).

The key thing worth noting about the results shown in Table 4.4 is that the measure of Extraversion is positively signed statistically significant at the $p<.05$ level across all of the models. In order to examine the substantive influence of Extraversion, in Figure 4.4 I plot the predicted probability of attending meetings at least once a week for each of the six civic groups or associations considered in Table 4.4. I hold all of the variables in the model at their mean levels and allow Extraversion to move from its minimum (Introverts)

to its maximum (Extraverts). The largest substantive effect can be seen in the graph showing the probability of attending the meetings of a religious organization. Across all of the different types of groups, the slope for Extraversion is always positive and statistically significant, even though some of the substantive effects are not quite as large as the effect for attending religious group meetings.

Figure 4.4: Effect of Extraversion on Probability of Attending Meetings At Least Once a Week



Conclusion

For decades, political scientists have been interested in identifying the determinants of political and civic participation. A variety of perspectives have been advanced, with the resources model (Brady et al. 1995; Verba, Schlozman, and Brady 1995) and the youth socialization perspective both providing useful insights into why some people participate at higher rates than others. One intuition that has been articulated by scholars but that has received little empirical attention is that there may be something beyond resources—

something *about* people—that predisposes them to enjoy participation. Brady et al. (1995) call this thing a "taste for participation," while La Due Lake and Huckfeldt (1998) and Walker (2008) call some people "joiners." Both terms seem to be appropriate descriptors of the deep-seated propensity that some people have to participate. Indeed, most of us probably know of people who, even at a young age, were heavily involved in an assortment of activities. Brady et al. (1995) use participation in high school government as a way of getting at early differences in the propensity to participate, but note that "Participation in high school governance might also measure a 'taste' for participation" (291).

In this paper, I have attempted to unpack the factors that might be behind the "taste for participation." I turned to personality traits as a potential explanation for why some people might participate at higher rates than others. Given the stability of personality over time and the fact that personality traits shape the appeal of objects and activities, it seems reasonable to think that personality traits might shape participatory decisions over the life cycle. My analysis differed from previous work in that I used *early* measures of personality traits to predict later political participation. Given the focus on early factors and experiences in the participation literature, it seemed worthwhile to examine whether early personality measures had predictive power over time. Overall, my analyses of several longitudinal datasets showed that early measures of personality do explain some of the variance in adult political and civic participation. I also used cross-sectional data to show that in addition to participating in more groups than their counterparts, Extraverts participate in group activities with more frequency than Introverts.

Beyond the longitudinal evidence, I also used alternative measurement batteries to capture individual differences in personality. The TIPI has been the primary measurement tool in political science, but my analysis reveals that other measurement batteries are also useful within the context of political behavior research. While self-reported measures of personality are predictive of political behaviors of interest, I also showed that external ratings have predictive power. Psychologists have shown that self and external personality ratings correlate quite well, but little political science research has used external personality ratings in the context of participation models. Finally, I showed that the link between personality and participation exists across cultural contexts. Psychologists have long been interested in showing that personality traits can be measured and used cross-nationally. It appears that personality traits are predictive of participatory habits in the United States and in Great Britain. Future studies should examine the association between personality and participation across cultures and contexts.

My analysis certainly does not represent the end of the road for personality and political behavior research. Quite the opposite, there is much more work to be done on the influence of personality on participation. In the future, it would be useful to gather more longitudinal data containing measures of personality and political behavior. Given that just a few longitudinal studies exist containing personality measures and participation measures, I relied on a limited number of personality trait measures. Even so, I viewed the ability to assess the impact of personality on political participation from a longitudinal perspective to be quite valuable relative to the limitations associated with the data. In the next chapter, I consider how personality traits above and beyond the Big

Five influence participation. My goal is to develop a more theoretically nuanced account of how personality influences participatory choices.

Chapter V.
Beyond the Big Five: Personality Traits, Psychological Dispositions, and Political and Civic Engagement

Introduction

Recently, there has been a renewed interest in the relationship between individual personality traits and mass political behavior. In fact, research on personality traits has been making impressive inroads in the study of political attitudes and participation. To date, most scholars interested in the role of personality in shaping the decision to participate in politics have relied on the Five-Factor Model of personality, which includes measures of Openness, Extraversion, Agreeableness, Conscientiousness, and Emotional Stability (Bekkers 2005; Mondak and Halperin 2008; Mondak 2010; Mondak, Hibbing, Canache, Seligson, and Anderson 2010; Gerber, Huber, Doherty, Dowling, Raso, and Ha 2011; Gerber, Huber, Doherty, Dowling 2011; Hibbing, Ritchie, and Anderson 2011; Ha, Kim, and Jo 2013). Although a number of the Big Five personality factors appear to matter to political participation to at least some degree (see Gerber et al. 2011; Mondak 2010), the time has come to integrate measures that go *above and beyond the Big Five* into models of political and civic engagement. To be clear, my argument is not based on the idea that there is anything necessarily incorrect about using the Big Five traits as a starting point in models of political behavior but simply that there are other personality traits and psychological dispositions that deserve serious attention from political scientists. Below, I outline a number of specific reasons why it is important for researchers to begin to think outside the bounds of the Big Five.

The integration of personality traits and psychological needs beyond the Big Five in to models of political behavior is justified for several reasons. First and foremost, the Big

Five represent personality at the *broadest level of abstraction* (Gosling, Rentfrow, Swann 2003). Indeed, the "Big Five" moniker was not selected as a proclamation of the inherent greatness of the factors but instead to emphasize that each of the five factors is extremely broad (John and Srivastava 1999). Given that each factor subsumes numerous facets and traits, measuring more specific elements of personality that are theoretically relevant to participatory acts has the potential to provide a more nuanced understanding of the individual level attributes that influence participatory decisions. Gerber et al. (2011) highlight the tension between using broad measures and developing a nuanced understanding of the role personality in shaping political behavior, noting that some personality traits such as "need for structure" or "altruism" are related to the Big Five (and may be related to political behaviors) but are not explicitly integrated into the Big Five measures.[6] Using one of the Big Five traits to capture multiple dimensions of personality, though, as some researchers have done (see Gerber et al. 2012), seems to be problematic on a number of different levels. For one thing, broad trait measures like the Big Five do not provide insight into the different dimensions of personality that are below the surface of a given personality factor. The Agreeableness trait, for instance, is related to generosity and conflict avoidance, which might be expected to exert different effects on political participation and joining groups. Pooling together such measures may mask interesting relationships between personality attributes and political participation. The use

[6] For instance, they note that "Prior research suggests that 'need for structure' (the appeal of simplified conceptual structures) is associated with the formation and use of stereotypes in decision making. Partisan identification is a similar decision-making heuristic because it provides a simplified framework for interpreting political events. Certain Big Five traits are related to this need for structure: Conscientiousness is positively correlated with need for structure, whereas Emotional Stability and Openness are negatively correlated with this characteristic. We therefore expect to find a pattern of relationships between dispositional traits and affiliating with a party that mirrors the relationships between these traits and need for structure" (Gerber et al. forthcoming).

of one measure to capture different aspects of personality, then, makes it difficult to theorize about the direction of the effect for a given Big Five trait.

Despite its popularity, it is worth noting that numerous psychologists have pointed out limitations of the Big Five (see Paunonen and Jackson 2000). Paunonen and Ashton (2001), for example, note that "there may be some personality traits that are largely independent of the Big Five factors and do not fit well into five-factor space" and go on to point out "Even if there are no other dimensions of personality lying beyond the sphere of influence of the five-factor model, there are other variables of personality that might contribute to the prediction and understanding of behavior beyond that achieved by the Big Five" (524). Because the Five-Factor Model is the most commonly used and researched model of personality, it has served as a useful starting point for assessing the influence of personality on political participation, but certainly does not represent the only approach to studying and measuring personality traits and psychological dispositions (Gosling, Rentfrow, and Swann 2003).

Beyond these limitations of the Big Five, it has been difficult to draw a theoretical connection between some of the Big Five factors and acts of political participation. Emotional Stability (or Neuroticism), for example, is perhaps the most difficult personality factor to link to political participation. Emotionally stable individuals tend to be calm, not anxious, tense, or easily upset. While Emotional Stability might influence participatory decisions via an interactive effect with some stimulus (e.g., a campaign message, news story, conversation) that fosters anxiety about a political issue or concern, it is hard to imagine how this trait would exert a direct influence when it comes to political or civic engagement. Gallego and Oberski (2012) echo this point, noting that

they "do not have specific expectations on how neuroticism affects turnout or protest" (431). In addition, Mondak et al. (2011) have noted that when it comes to Emotional Stability, they "have the weakest basis to project effects on political engagement" (216-217). Given the fairly weak theoretical link between this trait and participation, it is not surprising that "previous findings regarding the relationship between this trait and political participation have been mixed" (Gerber et al. 2011, 696). Indeed, Mondak et al. (2010) find that Emotional Stability exerts a *negative* and statistically significant effect on participation, while Gerber et al (2011) find that it exerts a *positive* and statistically significant influence on participation. It is unclear why divergent findings have emerged when it comes to this trait. Despite the widespread use of the Big Five traits, even proponents (see, e.g., Mondak 2010) recognize that the Five-Factor model is not a panacea. Until now, though, scholars have yet to move above and beyond the Big Five. Prior to the Big Five, some research had been done on the Need to Evaluate and Need for Cognition dispositions (Holbrook 2006; Bizer et al. 2004; Sides n.d.), but few political science studies have looked beyond these personality items.

In this paper, I introduce a series of new personality traits and psychological dispositions to the literature on political participation and civic engagement. If political scientists are interested in developing a comprehensive understanding of how individual differences influence political behavior, they need to consider a range of personality attributes (not just the Big Five) and work to develop an extensive research program. This paper represents the first step in that direction. My analysis unfolds in a straightforward manner. First, I provide a discussion of the psychological traits and dispositions that I propose should be examined in the context of models of political and civic engagement.

Along the way, I outline the theoretical connections between the traits and dispositions and participatory acts. Second, I provide an overview of the measurement of each trait or disposition and discuss the measurement properties of each item. In addition, I discuss the measures of political and civic engagement used within the analysis. Third, I analyze how the personality items influence the breadth of individual involvement in politics and groups. In order to put the effects in context, I compare the magnitude of personality trait effects to the effects of other commonly used variables in participation models. Fourth, I explore whether the effects of personality traits have different effects on participation depending on the act or acts under investigation. Finally, I conclude with a discussion of how individual personality attributes structure decisions about political life and of what the implications of my findings are.

Moving Beyond the Big Five

Although political science research that has integrated the Big Five personality traits into models of political participation and attitudes has shed much light on the link between deeply rooted personality attributes and mass political behavior, researchers should be open to moving above and beyond the Big Five when thinking about personality and political engagement. An exploration of traits that are not explicitly measured in the Big Five battery has the potential to provide a more complete understanding of how personality structures individuals' choices in the political realm. In this section, I provide descriptions of a number of personality traits, gleaned from the personality literature in psychology, that are theoretically relevant to political and civic engagement. Although many of these measures have received a great deal of attention from social and personality psychologists, political scientists have yet to integrate them into models of

political behavior.

Before moving forward, it is important to note that I am interested in examining the link between *general* personality traits, ones that do not explicitly mention politics, and participation. If personality items that do not reference politics are associated with participation, we can be more confident that underlying *individual differences* are driving the relationships. As just one example, the Openness personality trait from the Big Five contains a measure of liberalism, which is often measured with items such as "I tend to vote for liberal political candidates." Items such as this should not be used to predict political preferences or choices.

Conflict Avoidance Trait

One important dimension of personality where we can observe differences among individuals is in terms how much they shy away from conflict. Indeed, most of us can probably think of someone we know who tries to avoid conflict at all costs. At the same time, many of us can probably also name someone who seems to relish or even seek out conflict. Those who dislike conflict are likely to feel stress, discomfort, and unease when conflicts arise, while those who enjoy conflict may experience feelings of excitement or satisfaction during conflicting situations. Within the psychology literature on individual differences, there has been some attention to the measurement, causes, and effects of the conflict avoidant personality trait (see Bresnahan, Donahue, Shearman, and Guan 2009). Indeed, Bresnahan et al. (2009) have developed a conflict avoidance scale, which makes use of statements, such as "I usually avoid open discussion of my differences with others," "I think of conflict as something ugly," "Conflict is usually humiliating for me," "I want to see if a dispute will resolve itself before taking action," "I hate argument," "I

avoid conflict if at all possible," and "I feel upset after an argument." Ultimately, the scale is designed to understand the extent to which people tend to dislike and avoid conflictual situations. Importantly, the measures included in the conflict avoidance scale do not make reference to specific situations (e.g., politics, work, school), so they provide a *general* sense of an individual's predispositions toward conflict. Some political science research has focused on the influence of conflict on political engagement, but most of the measures have explicitly referenced politics. Ulig and Funk (1999), for example, measure conflict avoidance by asking respondents whether they "try to avoid getting into political discussions because they can be unpleasant, whether they *enjoy discussing politics* even though it sometimes leads to arguments, or whether they are somewhere in between" and then use this measure as a predictor of political participation (271-272). Blais and Labbe St-Vincent (2011) also use an item that explicitly references politics ("Certain topics like religion and *politics* are better left undiscussed") when trying to get at conflict avoidance. Finally, Mutz (2002) uses a question that asks respondents about their reluctance to *talk about politics*. Items such as these should not be used to predict political preferences or choices; personality questions that include references to politics are more likely to tap predispositions toward politics than general personality tendencies.

Overall, I expect individuals who dislike conflict to participate in political activities at lower rates than their counterparts. The logic here is fairly straightforward: because conflict is inherent in politics, people who don't like conflict (in general) should be less inclined to spend their time and resources on political activities. Although I expect a negative relationship between conflict avoidance and political participation, it may be the case that people who dislike conflict are actually more inclined to participate in civic

groups than their counterparts, because such groups are typically united around the pursuit of a common mission or goal and conflict is often quite low *within* groups. Indeed, the literature on social capital indicates that individuals often join with like-minded people in civic groups (Norris 2004). The "bridges" between individuals of different groups, backgrounds, ideologies, and beliefs are where conflicts are most likely to be observed when it comes to group interactions (Norris 2004).

Need for Belongingness

In addition to the conflict avoidance trait, personality psychologists have also devoted a great deal of attention to the intrinsic motivation that people have to affiliate and bond with each other (Bowlby 1969, 1973; Epstein 1991; Maslow 1968; McClelland 1951; Murray 1938). Forsyth (2009) asks "Why do people join with others in groups? In part, the motivation comes from *within the members themselves*, for people's personalities, preferences and other personal qualities predispose them to affiliate with others" (96). Perhaps the most well known discussion of this idea comes from Baumeister and Leary (1995), who have argued that the "need to belong" lies at the heart of many important social phenomena (Carvallo and Pelham 2006). According to Baumeister and Leary's seminal work,

> A need to belong is a fundamental human motivation…the need to belong can provide a point of departure for understanding and integrating a great deal of the existing literature regarding human interpersonal behavior. More precisely, the belongingness hypothesis is that human beings have a pervasive drive to form and maintain at least a minimum quantity of lasting, positive, and significant interpersonal relationships. Satisfying this drive involves two criteria: First, there is a need for frequent, affectively pleasant interactions with a few other people, and, second, these interactions must take place in the context of a temporally stable and enduring framework of affective concern for each other's welfare (1995, 497).

Although need to belong is correlated with sociability, as we would expect, it is a distinct psychological disposition (Leary and Hoyle 2009). Although political scientists (Olson 1965; Putnam 1995; Putnam 2000) have long been interested in determinants of joining groups and in participating, I am not aware of a single political science study on the influence of need to belong on the extent to which people join political/civic groups or participate in political life. Within the psychology literature, however, there has been some research on the impact of the need to belong disposition on individual behavior. A number of scholars, for instance, have shown that those with high scores on the need to belong trait have larger social networks, which makes a great deal of theoretical sense (Carton, Young and Kelly 2008; Kelly 2008).

For the need to belong, I expect that individuals with high needs to belong should participate in political activities at higher rates than their low-need counterparts. Since politics is a place where people can develop a sense of connection with others (e.g., fellow campaign volunteers, those who attend a community meeting, etc.), people with high scores may find that engaging in political activities is an important way to satisfy the need to belong. I expect that this disposition will be a stronger predictor of participation when political acts that are social in nature are compared to acts that are more reclusive. In addition, I expect that the need for belongingness will be positively related to joining civic groups. Groups, clubs, and associations are an ideal place for people to develop intimate connections with others and to feel a sense of inclusion. Because groups are highly social in nature, I expect that the link between need to belong and joining groups will be stronger than the link between need to belong and political engagement.

Need for Power and Need for Influence

In addition to aforementioned personality attributes, personality psychologists and political scientists interested in the personality attributes of presidents have also explored the extent to which people feel a need to have power and to feel influential (Preston 2001; Bennett 1988). O'Connell and Cuthbertson (2009) note that "We like to feel that we have the power to influence others, the ability to make our own decisions, and the authority to direct our own path" (17). Although power and influence are often used interchangeably, Bennett (1988) has noted that "Those motivated by power want a *position* in order to exercise power for its own sake; that is, for the satisfaction they derive from having others as subordinates" (363). On the other hand, "those motivated by influence needs…*desire to affect* events and individuals" (Bennett 1988, 363). Bennett (1988) has developed a need for power scale and a need for influence scale. The need for power scale focuses on striving for position and consists of items such as "I think I would enjoy having authority over others," "I do not particularly like having control over others," "It makes little difference to me whether I am a leader or not." On the other hand, the need for influence scale, which focuses more persuasion, includes items like, "I would like to be able to influence the actions of others," "I am really glad when my ideas and opinions have an impact on other people," "I would like feeling that I have had an impact on people's lives." In addition to the theoretical distinction between the dispositions, factor analyses indicate that the measures are empirically distinct (see Bennett 1988).

The need for influence disposition outlined above should be relevant to participation. I expect that individuals who have a strong need for influence will participate in politics at higher rates than those who do not feel a strong need for

influence. The logic behind this relationship is quite simple: politics represents an important place where people can try to influence others to adopt their opinions, values, and ideologies, and to influence outcomes of interest (e.g., elections, public policy, etc.). Although people may not be successful at exerting influence, the feelings that come from trying to influence others are likely to appeal to people with high scores on this attribute. When it comes to the influence of need for influence on participating in civic groups, it is not immediately clear whether those with high scores will be more or less inclined to participate than their counterparts. As I noted above, civic groups are often homogenous in nature, so they may represent a less viable place to try to exert interpersonal influence than other activities. Of course, many civic groups and clubs center on a common goal or cause (e.g., raising money, community improvement, etc.), so people who feel a strong need to exert influence may find civic groups to be an important venue to try to influence outcomes of interest.

When it comes to the need for power, it seems reasonable to think that people with high needs for power would participate in politics at higher rates than those with low needs. Because many elements of politics focus on struggles over power (e.g., elections, debates, public policy development, etc.), people who like the feelings that are associated with having power (or trying to attain power) should find politics an ideal place to spend their time and resources. Previous research on elite personalities has noted that politicians and presidents can be characterized by their needs for power, but this disposition also seems relevant to ordinary citizens (Winter 2005). When it comes to the link between power and participating in groups, O'Connell and Cuthbertson (2009) offer divergent theoretical expectations, noting that, on one hand, "Groups offer individuals the

opportunity to meet this need [the need for power] though the chance to control decision making, allocate resources, and take on other leadership roles." (17). They go on to point out that "Some people who join groups have lower needs than others. These people are usually the followers in the group" (O'Connell and Cuthbertson 2009, 17). In short, people with high and low needs for power may participate in groups at high rates but for very different reasons.

Need to Evaluate

One important personality disposition that has received some attention from political scientists, especially in the realm of knowledge and opinion about political candidates (see Holbrook 2006), is the need to evaluate. Need to evaluate describes individual differences in the propensity to engage in evaluation (Jarvis and Petty 1996). Holbrook (2006) notes that high need to evaluate individuals are "prone to forming opinions" (345). In short, we might think of need to evaluate as a measure of how opinionated individuals tend to be. The notion that some people are more naturally more opinionated than others is quite intuitive. Some people simply get more cognitive satisfaction from holding strong opinions than others (Jarvis and Petty 1996; Federico 2004). Indeed, most of us probably know some people who have strong opinions about nearly everything and some people who seem largely indifferent about a host of issues. The need to evaluate is typically measured using the 16-item battery developed by Jarvis and Petty (1996) or some subset of items from the battery. The items used in the scale tap not only how many opinions people tend to have but also how strongly they hold opinions. For instance, the Jarvis and Petty (1996) Need to Evaluate Scale includes the following items: "It is very important to me to hold strong opinions," "I like to have strong opinions even when I am not

personally involved," "I enjoy strongly liking and disliking new things," "There are many things for which I do not have a preference," "I only form strong opinions when I have to," and "I would rather have a strong opinion than no opinion at all." As was the case with the conflict avoidance measures outlined above, the items used here do not reference specific events or topics.

Overall, I expect the need to evaluate disposition to have a positive impact on participation. More specifically, I expect that individuals with a strong need to evaluate will participate in politics at higher rates than those with a low need to evaluate. After all, politics is *inherently evaluative* and is an ideal venue for opinion expression. People who tend to be opinionated should enjoy spending their time and energy in the realm of politics. In short, having a natural ability to form evaluations and opinions should reduce the information costs associated with politics, making it easier and perhaps more enjoyable to participate. The link between need to evaluate and joining civic groups is not quite as clear as the link between need to evaluate and political activities, although I would expect a positive relationship. Civic groups provide people with the chance to develop close interpersonal relationships, but they also tend to center on a concern, issue, or cause that people are likely to have strong opinions about (e.g., political party activities, charitable causes, hobbies, etc.). As such, people who tend to be opinionated may find it appealing to participate in groups that focus on things that are important to them.

Self-Efficacy

One final individual attribute that important to consider in the context of political and civic participation is the sense of self-efficacy. Political scientists have long been

interested in the concepts of internal and external political efficacy, but little research has considered how one's sense of self-efficacy might influence their propensity to participation in political activities or join groups. Although it may be inaccurate to call self-efficacy a personality trait, one's sense of self-efficacy certainly does reflect an important individual difference (Maddux 2000).[7] Self-efficacy refers to "people's beliefs in their capabilities to produce desired effects by their own actions" (Bandura 1997, vii). Bandura's theory about self-efficacy suggests that one's sense of efficacy is one of "the most important determinants of the behaviors people choose to engage in and how much they persevere in their efforts in the face of obstacles and challenges" (Maddux 2000, 2). Fernández-Ballesteros et al. (2007) nicely summarize the potential importance of feelings of self-efficacy, noting that "Unless people believe they can produce desired outcomes…they have little incentives to act" (107). The concept of self-efficacy differs from internal and external political efficacy in that both of those concepts offer explicitly political responses. For instance, the external efficacy measure that is commonly used in political science typically asks respondents the extent to which they feel that "public officials don't care what people like me think." Internal efficacy, on the other hand, typically measures agreement with statements like "Sometimes politics and government seem so complicated that people like me can't really understand what's going on." Although these measures are important determinants of voter turnout and political engagement, individual's feelings of self-efficacy, a more general measure, may also have predictive power in models of political participation and joining civic groups.

Self-efficacy should have an impact on both political and civic participation.

[7] Self-efficacy is defined and measured not as a trait but as beliefs about the ability to coordinate skills and abilities to attain desired goals in particular domains and circumstances.

Overall, individuals who feel a strong sense of self-efficacy should participate in politics (and civic groups) at higher rates than those who do not feel a strong sense of self-efficacy. Because self-efficacy represents an element of self-confidence, people with high scores should feel that they have the ability and skill to attain their desired goals and objectives across a wide range of dimensions, including school, work, politics, and civic affairs. If people feel that they cannot contribute effectively, they should be less inclined to try. Brady et al. (1995) have noted that people often gain the skills and confidence that they need to participate in politics through participation in voluntary associations, churches, organizations, and workplace activities. While this is certainly possible from a theoretical standpoint, it may be the case that some people are naturally more confident in their skills and abilities and, as such, are more inclined to participate.[8]

New Data on Personality and Participation

One of the most important barriers to doing research on personality and political behavior is that "datasets on political participation that include measures of personality remain rare" (Mondak et al. 2011, 211). To date, scholars have had to rely on the same two or three datasets to test hypotheses about personality and political behavior. In order to test hypotheses about the link between personality attributes above and beyond the Big Five and participation, I needed to field my own survey that contained personality measures and measures of political and civic engagement. From April 25, 2012 to May 10, 2012, I fielded a survey to a random sample of undergraduates at the University of Wisconsin, Milwaukee. The sampling frame was 8,337 randomly selected undergraduate students or about 40 percent of the total undergraduate population. A link to the survey was sent to

[8] The study of the process that leads people to participate is an area ripe for future research. Panel data would be especially useful in testing whether the causal process outlined by Brady et al. (1995) accurately reflects how people come to be involved in politics.

student e-mail addresses, and students received several e-mail reminders during the survey period. In total, 758 surveys were completed, which means that the response rate was about 10 percent. On average, the survey took respondents 12 minutes to complete. To be clear, this survey represents a pilot study (the sample used here is not representative of the United States and there are important limits to the generalizability of the findings). Importantly, though, this study provides us with an initial sense of what the relationships between the personality traits and dispositions discussed above and participation look like. Such a study provides a solid foundation upon which a more representative survey and more detailed measurement batteries might be built. When possible, I test the hypotheses presented above with representative national data (Youth Parent Socialization Study and American National Election Studies). In order to provide a sense of the attributes of the undergraduate sample, in Table 5.1 below I provide descriptive statistics. The full survey instrument is included in Appendix A.

Table 5.1: Descriptive Statistics for Sample

Variable	Mean	Standard Deviation	Minimum	Maximum
Sex (Male=1)	.35	.48	0	1
White	.82	.38	0	1
Black	.06	.23	0	1
Hispanic	.03	.18	0	1
Asian	.03	.17	0	1
Religiosity	2.03	1.51	1	6
Age (Years)	24	7.06	18	62

Measurement of Personality Traits and Psychological Needs

In order to measure respondent personality traits and psychological dispositions, the survey included a number of personality batteries, some containing two or three items and some containing as many as ten items. Most of the items were taken from much

longer measurement batteries. Because it is difficult to administer long surveys due to respondent fatigue, I had to develop a fairly short survey instrument. Thus, the personality items that I asked on the survey were those that have received the highest factor loadings in previous studies or that are viewed as "leading indicators" of the trait or disposition of interest. Table 5.2 below summarizes the survey items (and their sources) that were used for each personality measure and contains measures of reliability (Cronbach's alpha). In general, the personality items appear to be fairly reliable. In addition to the new personality measures, I also administered the TIPI (Ten Item Personality Inventory), one of the most commonly used batteries to measure the Big Five personality traits, which have become commonplace in the emerging personality and political behavior literature (see Gerber et al. 2011; Gerber et al. 2012; Gerber et al. 2012; Gerber et al. forthcoming; Mondak 2010; Ha et al. 2013). The TIPI contains 10 adjective pairs, with two adjectives measuring each of the five traits. The trait pairs are averaged together to obtain measures of the Big Five, as is commonly done in psychology and political science. The inclusion of the Big Five measurement battery provide an opportunity to assess how the new personality items correlate with the Big Five but also to examine whether additional personality traits and dispositions add explanatory power *above and beyond the Big Five* in models of participation.

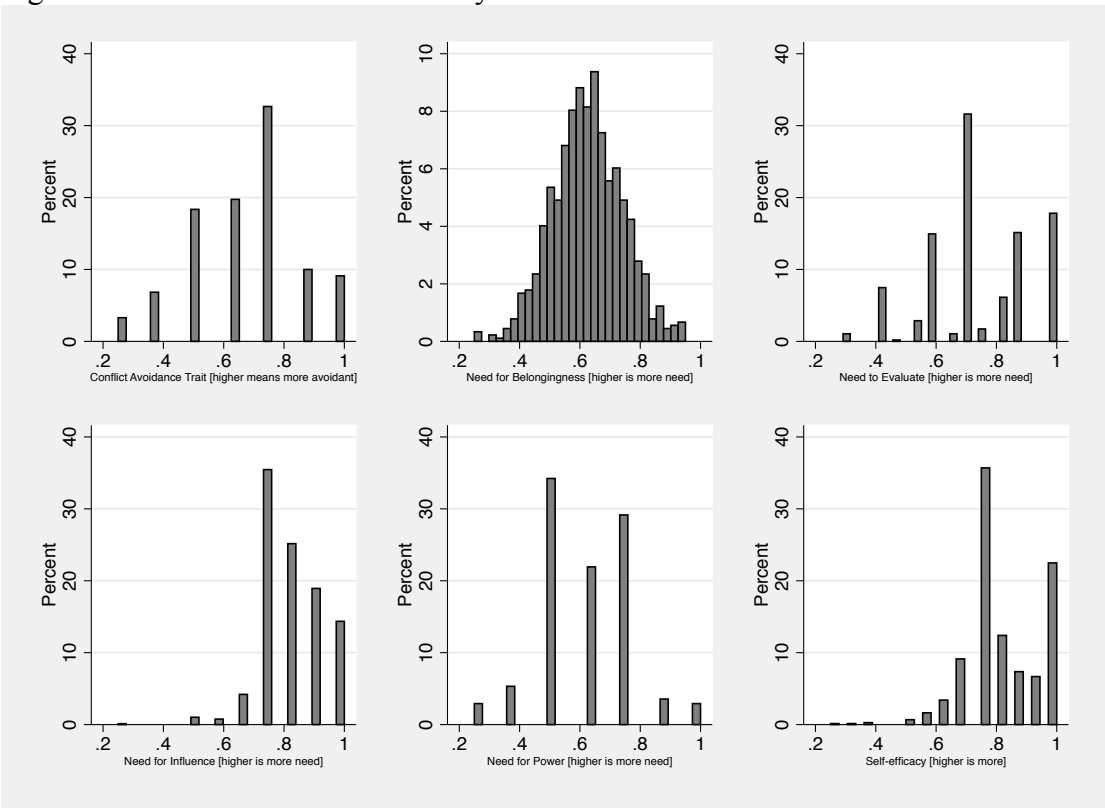
In addition to providing the reliabilities and question wordings for each personality trait or disposition, in Figure 5.1 I provide graphs showing the distribution of each item. All of the items are standardized to run on a 0 to 1 scale, where 1 represents the highest level of a given trait or disposition. The mean for the conflict avoidance measure is .67, the mean for need for belongingness is .63, the mean for need to evaluate

is .74, the mean for need for influence is .83, the mean for need for power is .61, and the mean for self-efficacy is .82. The need for influence and need for power are correlated at .50 (p<.05), which is high but not so high as to indicate that they are measuring identical concepts.

Table 5.2: Measurement of Personality Traits and Psychological Dispositions

Personality Trait	Wordings for survey items	Alpha score/r
Conflict Avoidance (Bresnahan, Donahue, Shearman, and Guan 2009)	I want to see a dispute resolve itself before taking action. I hate argument. I avoid conflict if at all possible.	.74
Need for Power (Bennett 1988)	I do not particularly like having power over others. It makes little difference to me if I am a leader or not. I think I usually enjoy having authority over others.	.71
Need for Influence (Bennett 1988)	I would like feeling that I had an impact on people's lives. It pleases me when people follow through with my suggestions. I am really glad when my ideas or opinions have an impact on other people.	.70
Need to Belong (Baumeister and Leary 1995)	If other people don't accept me, I don't let it bother me. I try hard not to do things that will make other people avoid or reject me. I seldom worry about whether other people care about me. I need to feel that there are people I can turn to in times of need. I want other people to accept me. I do not like being alone. Being apart from my friends for long periods of time does not bother me. I have a strong need to belong. It bothers me a great deal when I am not included in other people's plans. My feelings are easily hurt when I feel that others do not accept me.	.82
Need to Evaluate (Jarvis and Petty 1996)	Some people have opinions about almost everything; other people have opinions about just some things; and still other people have very few opinions. What about you? Compared to the average person do you have fewer opinions about whether things are good or bad, about the same number of opinions, or more opinions?	.70
Ten Item Big Five Battery (Extraversion, Agreeableness, Conscientiousness, Openness, Em. Stability) (Gosling et al. 2003)	Extroverted, enthusiastic. Critical, quarrelsome. Dependable, self-disciplined. Anxious, easily upset. Open to new experiences, complex. Reserved, quiet. Sympathetic, warm. Disorganized, careless. Calm, emotionally stable. Conventional, uncreative.	E: .55 A: .21 C: .41 O: .22 ES: .43
Self-efficacy (Chen, Gully, and Eden 2001)	I will be able to achieve most of the goals I have set for myself. When facing difficult tasks, I am certain that I will accomplish them. In general, I think I can obtain outcomes that are important to me. I am confident that I can perform effectively on many different tasks.	.87

Figure 5.1: Distribution of Personality Items



Correlations between Big Five Traits and "New" Measures

Although psychologists have noted that there are personality traits and dimensions distinct from the Big Five (Paunonen and Jackson 2000; Paunonen and Ashton 2001), it is important to confirm that the personality measures outlined above are not capturing the same elements of personality as the Big Five traits. If the proposed measures and Big Five traits are highly correlated, including the traits and dispositions I outlined above in models of political engagement along side the Big Five traits would likely not add much to our understanding of the psychological antecedents of political and civic engagement. Personality psychologists have shown that a number of traits appear to be capturing distinct elements of personality (not captured by the Big Five). For instance, Tuten and Bosnjak (2002) have examined the correlation between each of the Big Five factors and

the need to evaluate trait, finding statistically significant relationships between the need to evaluate and two of the Big Five traits, namely, Extraversion and Openness. The point is not that there should be no correlation between the Big Five and additional measures of personality (in many cases we would expect some relationship) but simply that the above measures should be distinct from the Big Five battery. In Table 5.3, I present a correlation matrix showing how the Big Five traits relate to the proposed personality measures.

Table 5.3: Correlation Matrix for Big Five and "New" Psychological Measures

Big Five	Conflict Avoidance	Need Power	Need Influence	Need Belong	Need Evaluate	Self-efficacy
Extraversion	-.09	.17	.17	.03	.23	.19
Agreeableness	.35	-.23	.06	.15	-.12	.07
Openness	.00	-.01	-.14	.04	-.12	-.20
Em. Stability	-.06	.06	.05	.28	.04	-.22
Conscientious	-.09	-.04	.01	.08	.05	-.34

Note: Cell entries are polychoric correlations, which do not assume that the variables are interval (as does, for example, a Pearson correlation coefficient) but rather only ordinal.

Overall, the correlations vary in magnitude, although none of the values exceed .35. Comfortingly, many of the correlations between the proposed psychological traits and dispositions correlate with the Big Five in ways that we would expect. For instance, the Agreeableness trait is correlated with conflict avoidance at .35 and the need to evaluate is correlated with Extraversion at .23, which is nearly identical to the correlated reported by Tuten and Bosnjak (2002). Table 5.3 provides comfort that the proposed personality items are not capturing the same personality dimensions as the Big Five.

Measuring Political Participation and Joining

The key dependent variables that I am interested in are political participation and civic engagement, specifically, the extent to which people join groups. The survey asked respondents a variety of questions about the extent to which they had participated in political acts over the past two years, including during the 2010 elections. In total, the survey asked about a number of separate acts of political participation, including whether or not they had worn a button, sticker, or put up a campaign sign, attended a political meeting or event, given money to a candidate or party, volunteered, tried to convince someone how to vote, contacted an elected official, signed a petition, attended a community meeting, participated in a protest or demonstration, discussed politics online, commented on a political blog or website, voted in the 2010 Wisconsin gubernatorial election, voted in the 2011 Wisconsin state Supreme Court election, or voted in the 2010 Wisconsin Senate election. Answers to the questions were coded as dummy variables where a 1 corresponded to participating in the act and a 0 corresponded to not participating. Overall, the measures have a Cronbach's alpha score of .83, indicating that they form a reliable measure of political participation. The average score was 4.72 acts.

In addition to asking questions about politics, the survey asked questions about the extent to which people participated in groups. Because the sample was comprised of undergraduate students, I choose to ask questions about the number and type of student groups that respondents participated in rather than civic groups or clubs like Lion's Club, Elks Lodge, or Knights of Columbus that have interested scholars of social capital like Putnam (1995, 2000). Such groups serve as a convenient measure of "joining." The survey asked about participation in 11 different types of groups, including cultural

identity groups, academic groups, fraternities or sororities, student government, honor societies, political or social action groups, professional groups or clubs, recreational groups, faith-based groups, and service, volunteer, or community groups, and "other" groups (in case a group did not fall into one of the categories). Overall, the measures have a Cronbach's alpha score of .70, which is lower than the alpha score for the participation measures but still reasonably high. The mean score out of 11 possible groups was 1.70. Although civic and political participation are related, political participation entails interactions with political institutions while civic engagement refers to "people's connections with the life of their community, not merely with politics" (Putnam 1995, 665).

Analysis of Personality and the Extent of Engagement

Because I am interested in the link between personality traits, psychological dispositions, and the breadth of participation and joining, I begin my analysis by using variables that measure the number of political acts and groups that respondents participated in. Because the measures are "counts" of acts, I use negative binomial models. Since the Five Factor Model (Big Five traits) of personality has been the most commonly used in the political behavior literature, I include the Big Five traits (as measured by the Ten Item Personality Inventory) in the models below. Gerber et al. (2011, 696-697) provide an overview of proposed hypotheses between the Big Five and participation indices. Including these traits as a "baseline" provides an opportunity to examine whether the proposed personality traits and psychological dispositions provide explanatory power above and beyond the Big Five traits. In the models below, I include a number of important control variables, including the extent of political discussion in the home when respondents were

growing up, respondent sex, race, internal political efficacy, and political knowledge. It is worth noting that the political discussion measure is a *retrospective* one, which is less than ideal. However, for most respondents, it measures the not-too-distant past and therefore seems like a reasonable measure of family political socialization. I also control for the religiosity of respondents, which has been shown to be an important antecedent of political and civic participation. Because respondents have nearly the same levels of education, I do not include education level. In the analyses below, I focus on the impact of the personality and psychological dispositions and pay very little attention to discussing the control variables. In order to put the personality findings in context, though, I do compare the substantive effects of personality variables to the effects of traditional predictors like political discussion in the home.

In Table 5.4, I present the results from several models of political participation. It is interesting to note that across all of the models, the Big Five (B5) traits are rarely statistically significant predictors of participation.[9] The first model contains the Big Five traits and a number of controls. A joint significance test of the Big Five indicates that they are collectively statistically significant (p=.03), although just one of the five traits reaches statistical significance. There have been inconsistencies in the performance of the Big Five within and across previous analyses (see Gerber et al. 2011; Mondak 2010), so the limited effects are not too surprising.[10] Indeed, Gerber et al. find that some traits (Conscientiousness and Emotional Stability) are statistically significant predictors of participation in one of their samples but not in another sample. In addition, while Mondak

[9] Only one of the coefficients (Openness) reaches statistical significance at conventional levels and the sign runs counter to the direction hypothesized by Gerber et al. (2011).
[10] Blais et al. (2011) note that "The findings [for the Big Five] are not very consistent across the various studies" (400).

(2010) finds statistically insignificant effects for some traits (Agreeableness), Gerber et al. (2011) find statistically significant effects. In some cases, scholars have found differing directional effects for the Big Five traits. For example, Gerber et al. (2011) find that Emotional Stability has a strong, positive effect on participation, while Mondak (2010) finds that Emotional Stability has a negative impact on participation. Further work needs to be done to identify why divergent findings have emerged within and across studies on the Big Five traits (e.g., question wording differences, differences in political context, measurement differences, etc.).

The second model in Table 5.4 includes the "new" personality items that I outline above, along with a number of controls (but omits the Big Five). Here, we see that a joint significance test of the personality items indicates that they improve the explanatory power of the model (p=.00) and three of the coefficients are statistically significant at p<.05. As expected, the need to evaluate disposition has a positive effect on the extent to which people get involved in political life. The coefficient indicates that people with a high need to evaluate participate in politics more intensely than people with low scores on need to evaluate. In addition to the need to evaluate measure, the conflict avoidant trait exerts a statistically significant and negative effect on political participation. Individuals with high scores on conflict avoidance—those who shy away from conflict—participate in politics with less intensity than those with low scores. The coefficient on the conflict avoidance trait is statistically significant at the p<.05 level.

Table 5.4: Influence of Personality Traits and Dispositions on Participation, Negative Binomial Models

	Controls and B5	Controls and New Traits	Controls, B5, New Traits	Controls, B5, New Traits, and Attitudinal Predictors
	b/se	b/se	b/se	b/se
Religiosity	-0.051* 0.024	-0.080* 0.025	-0.081* 0.025	-0.049* 0.023
White	-0.039 0.100	0.004 0.109	-0.013 0.109	-0.001 0.098
Black	0.152 0.165	0.290 0.179	0.264 0.178	0.195 0.160
Family Political Discussion	0.159* 0.032	0.200* 0.035	0.197* 0.035	0.127* 0.032
Extraversion	0.020 0.039	---	-0.074 0.043	-0.012 0.039
Agreeableness	0.056 0.043	---	0.093 0.050	0.057 0.045
Conscientiousness	0.030 0.038	---	0.030 0.043	0.019 0.039
Emotional Stability	0.039 0.039	---	0.016 0.045	0.021 0.040
Openness	-0.117* 0.044	---	-0.080 0.048	-0.090* 0.043
Internal Efficacy	---	---	---	0.099* 0.035
Male	-0.114 0.073	0.073 0.071	0.096 0.075	-0.118 0.071
Political Knowledge Index (0-4)	---	---	---	0.468* 0.051
Need to Evaluate	---	0.256* 0.046	0.265* 0.046	0.173* 0.043
Need for Influence	---	0.062 0.047	0.048 0.048	0.031 0.043
Need for Power	---	-0.124* 0.040	-0.098* 0.041	-0.097* 0.037
Self Efficacy	---	0.012 0.042	0.021 0.045	-0.003 0.040
Conflict Avoidance	---	-0.077* 0.042	-0.096* 0.044	-0.050* 0.020
Need to Belong	---	-0.024 0.058	-0.034 0.060	0.016 0.055
Constant	1.497* 0.170	1.122* 0.156	1.127* 0.155	1.469* 0.169
N of Obs.	535	535	535	535
Chi2	203.82	126.73	135.12	228.51
Pseudo R2	.07	.05	.06	.09
Big Five Joint Sig. Test [p-value]	p=.03	---	p=.13	p=.23
New Personality Joint Sig [p-value]	---	p=.00	p=.00	p=.00

Notes: * $p<.05$ level (one-tailed tests).

The third column in Table 5.4 adds the Big Five to the model. Once again, the Big Five traits do not have much explanatory power. None of the coefficients are statistically significant and a joint significance test reveals that the traits (collectively) do not improve the explanatory power of the model (p=.13). The "new" personality items, however, do improve the explanatory power of the model (p=.00). The direction and significance levels on the coefficients remain the same across columns two and three in Table 5.4. It is also worth pointing out that across the models in Table 5.4, the need for power trait is consistently statistically significant and negatively signed, indicating that those with high needs for power actually participate at lower levels than those with low needs. I expected a positive relationship between this disposition and participation. It is puzzling why a consistent negative relationship emerges.

The final column in Table 5.4 includes the demographic controls, Big Five traits, the new personality items, and a number of political attitudes (political efficacy and political knowledge). Again, a joint significance test of the Big Five indicates that they do not improve the explanatory power of the model (p=.23). The new personality measures, though, do improve the explanatory power of the model (p=.00). The need to evaluate and conflict avoidance measures are both statistically significant (p<.05). It is interesting that the magnitude of the effects of these traits diminish with the addition of the attitudinal predictors, which suggests that the effects of personality may "work through" political attitudes.

Table 5.5 examines the effects of personality on political knowledge and efficacy.[11] When political knowledge is used as a dependent variable, both need to

[11] Knowledge is measured as a count of the number of correct answers to factual questions about politics (range of 0-4). Complete survey instrument is included in Appendix A.

evaluate and conflict avoidance are statistically significant predictors, with those who have high scores on need to evaluate and who do not shy away from conflict having higher levels of political knowledge than their counterparts. These relationships make a great deal of sense. People who are predisposed toward opinionation are likely to enjoy keeping up politics and should be more informed than their counterparts (see Holbrook 2006 for analysis of the impact of need to evaluate on knowledge about candidates during the 2000 presidential election). In addition, people who dislike conflict are unlikely to enjoy keeping up with politics, which should lead to lower levels of political sophistication. The need to evaluate and conflict avoidance measures also influence levels of internal political efficacy. Those who have high scores on need to evaluate and who do not shy away from conflict have higher levels of political knowledge and efficacy than their counterparts. Interestingly, self-efficacy is not a statistically significant predictor of political efficacy, although the coefficient is positively signed. Given that personality influences political attitudes, it makes sense that the effects of personality on participation are reduced when attitudinal predictors were included in the statistical model in Table 5.4.[12]

[12] A Sobel-Goodman Mediation test indicates that about 35 percent of the effect of need to evaluate on participation is mediated by political knowledge and about 52 percent of the effect of conflict avoidance on participation is mediated by knowledge. In addition, about 13 percent of the effect of need to evaluate on participation is mediated by efficacy and about 30 percent of the effect of conflict avoidance on participation is mediated by efficacy.

Table 5.5: Exploring the Potential Mediating Effects of Political Attitudes

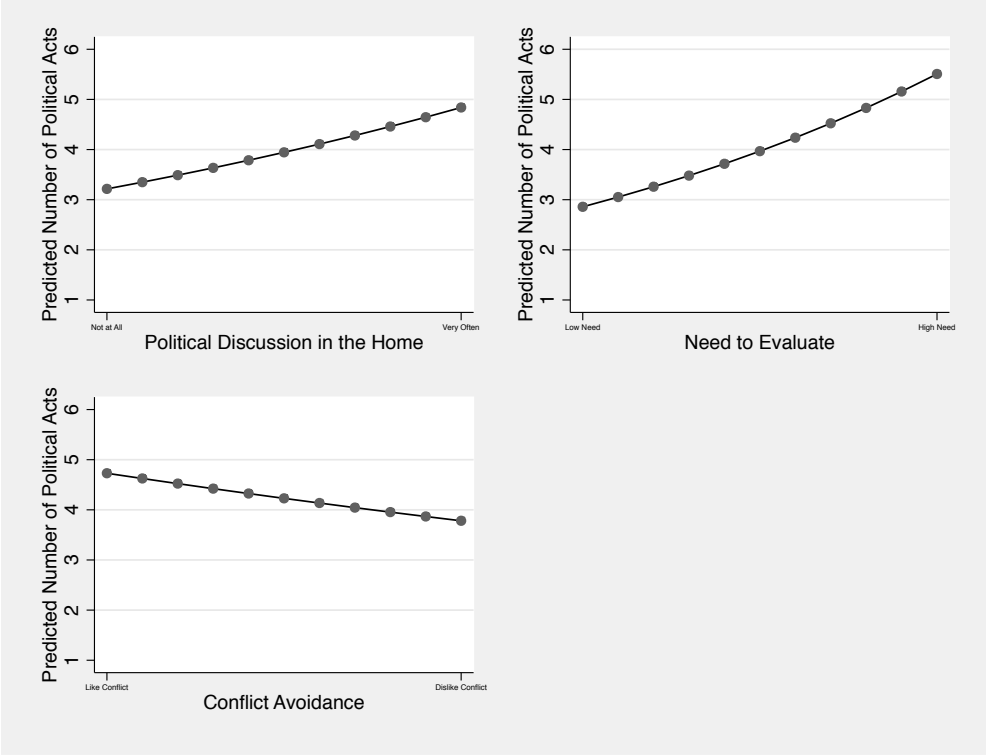
	Political Knowledge	Political Efficacy
	b/se	b/se
Need to Evaluate	0.138* 0.035	0.096* 0.048
Need for Influence	0.019 0.038	-0.065 0.052
Need for Power	-0.030 0.033	0.002 0.044
Self Efficacy	0.033 0.034	0.030 0.046
Conflict Avoidance	-0.060* 0.034	-0.138* 0.047
Need to Belong	-0.057 0.047	0.002 0.064
White	-0.045 0.090	-0.057 0.122
Black	-0.106 0.144	-0.166 0.195
Political Discussion	0.151* 0.028	0.132* 0.039
Male	0.460* 0.058	-0.270* 0.079
Constant	-0.457* 0.111	3.016* 0.150
N of Obs.	535	535
Pseudo R2	.24	.15

Notes: * $p<.05$ level (one-tailed tests).

Because the coefficients shown in Table 5.4 are not intuitive to interpret, in Figure 5.2 I plot the predicted effects (from the model in the fourth column) of conflict avoidance and need to evaluate as they move from their highest to lowest values. To be clear, these are the effects of personality on participation *after* taking into account the effects of political attitudes. I set all other variables in the model at their median values. For the sake of comparison, I also plot the effect of political discussion in the home, a variable aimed at measuring a key component of the political socialization experience. Previous accounts of political participation (Plutzer 2002) have demonstrated that

political socialization variables exert important effects on individual political engagement over the life cycle.

Figure 5.2: Substantive Effects of Personality Measures Compared to Political Socialization Measure (from Table 5.4)



The upper left panel in Figure 5.2 shows the effect of political discussion in the home on the extent to which people participate in politics. The substantive impact of this variable is quite large. While people who didn't spend any time discussing politics with their families growing up participate in about 3 political acts, those who discussed politics frequently participate in about 5 acts, all else being equal. Impressively, the need to evaluate measure has an even more pronounced effect than political discussion. Individuals with the lowest score on need to evaluate participate in about 3 political acts, while those with the highest score participate in almost 6 political acts, all else being equal. The conflict avoidance trait also exerts an important effect on political

engagement, although its effect is not quite as large as the effect of need to evaluate. Those individuals with the highest score on the conflict avoidance measure participate in about 5 political acts, while those with the lowest score participate in about 4 acts, all else being equal.

Although a number of the proposed personality traits and dispositions do have statistically and substantively important effects on political participation, personality also matters when it comes to group engagement. In Table 5.6, I present the results of a series of models where the number of groups that a respondent participates in is used as the dependent variable. The first column shows the effect of the Big Five and a number of demographic attributes. Although the Big Five are jointly significant (p=.03), the only coefficient that is statistically significant is Extraversion. The second column presents the results of a model where the new personality items and demographics are used to predict group participation. Here, the personality measures significantly improve the explanatory power (p=.00). The model results indicate that two personality dispositions—self-efficacy and need to belong—have statistically significant effects (p<.05) on the number of groups that individuals participate in.

Table 5.6: Influence of Personality Traits and Dispositions on Joining Groups, Negative Binomial Models

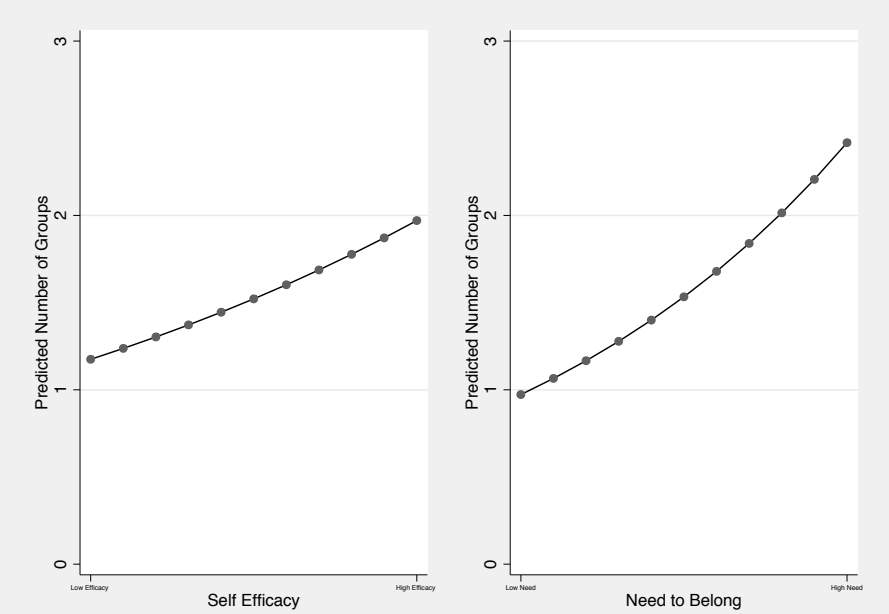
	B5 and Controls	Controls and New Traits	Controls, B5, New Traits
	b/se	b/se	b/se
Religiosity	0.040 0.033	0.027 0.033	0.027 0.033
White	0.017 0.139	-0.050 0.140	-0.054 0.140
Black	0.355 0.218	0.380 0.218	0.335 0.217
Family Political Discussion	0.140* 0.044	0.146* 0.045	0.139* 0.045
Extraversion	0.091* 0.032	---	0.066 0.054
Agreeableness	0.001 0.061	---	0.012 0.065
Conscientiousness	0.017 0.054	---	0.041 0.057
Emotional Stability	0.015 0.055	---	-0.026 0.057
Openness	-0.060 0.061	---	-0.142 0.061
Male	-0.154 0.098	-0.188 0.095	-0.170 0.098
Need to Evaluate	---	-0.017 0.057	-0.050 0.058
Need for Influence	---	0.050 0.058	0.024 0.059
Need for Power	---	0.044 0.053	0.052 0.055
Self Efficacy	---	0.119* 0.054	0.110* 0.059
Conflict Avoidance	---	-0.055 0.056	-0.050 0.057
Need to Belong	---	0.223* 0.075	0.229* 0.078
Constant	0.049 0.192	0.127 0.193	0.136 0.193
N of Obs.	696	696	696
Pseudo R2	.01	.02	.03
Big Five Joint Sig. Test	p=.03	---	p=.07
New Personality Joint Sig. Test	---	p=.00	p=.02

Notes: * $p<.05$ level (one-tailed tests).

The coefficients on both of these traits are positively signed, indicating that people with higher levels of each disposition participated in more groups than their counterparts. The final column in Table 5.6 adds the Big Five to the model presented in the second column. The results are similar across the two specifications. I do not include controls for political knowledge and efficacy, as I did in Table 5.5, because these are political attitudes and are not as relevant to joining university groups as they are to participating in political acts.

In order to get a sense of the substantive effects of these personality attributes, I plot (in Figure 5.3) the predicted number of groups as each personality variable ranges from its minimum to maximum value (from third model in Table 5.6). The other variables in the model are held constant at their median values. When it comes to the impact of need to belong, Figure 3 shows that individuals with low levels of need to belong are predicted to participate in 1 group, while those with the highest score are predicted to participate in just over 2 groups. Figure 5.3 also shows that there is some tendency for those with high scores on the self-efficacy measure to participate at higher rates than those with low scores, although the substantive effect is not quite as large as the effect of need to belong.

Figure 5.3: Substantive Effects of Personality Measures on Joining Groups (from Civic Groups Model in Table 5.6)



It is interesting to point out that the personality traits that are relevant to political participation and joining are quite different. In the political participation models, for instance, the key personality determinants were conflict avoidance and the need to evaluate, which I argued is basically a measure of the predisposition to be opinionated. Given that politics entails a great deal of conflict and presents numerous opportunities for the expression of one's ideas and values, it makes sense that people whose personalities predispose them toward conflict and opinionation would be more inclined to spend their time and resources in the political realm. When it comes to joining, the models showed that the need for belongingness and self-efficacy were the strongest personality predictors. In fact, measures like conflict avoidance and need to evaluate were not statistically significant in the civic participation model. Given that some people have strong psychological needs to be around other people, it makes sense that people with high scores on the need to belong disposition participate in more groups than their

counterparts. In addition, because self-efficacy is an element of self-confidence, it makes sense that participating in groups, which entails a great deal of interpersonal interaction, would appeal to people who are confident in themselves. It is interesting to note that Wang et al. (2011) found that self-efficacy was positively related to volunteering, one form of civic joining.

Breaking Down Participation Measures

Thus far, I have examined the influence that personality has on the extent to which people participate in politics and groups by using measures of the number of acts or groups that people engaged in. This is the typical way that political scientists gauge how "participatory" people tend to be. One interesting way of further exploring the link between personality and political participation is to characterize political acts along different dimensions and examine whether the effects of personality attributes vary across the different dimensions of participation. There are a number of clear differences that come to mind when thinking about participatory acts. Some acts, for example, are much more conflictual than others. While trying to convince someone how to vote and protesting entail direct conflict, other acts, like voting, don't entail much direct conflict at all. Above and beyond differences in the levels of conflict associated with different types of acts, some acts are much more social in nature than others. For instance, while talking politics or attending a community meeting entail a great deal of interpersonal interaction, acts such as donating money can be done without any social interaction. Further, some acts provide important opportunities for interpersonal influence, while others entail limited or no opportunities to try to exert influence on others. Below, I consider the impact of personality on these different dimensions of political acts.

Personality and Conflict

While conflict is inherent in politics, it is clear that some acts are much more conflictual in nature than others. Above, I showed that conflict avoidance was related to a general measure of political participation, but the use of an index that includes high and low conflict acts may dampen the effect of conflict avoidance. In order to examine whether the effect of the conflict avoidance trait is more pronounced when examining acts that have a entail a great degree of potential for conflict, I created a count of the number of potentially conflictual acts that people might participate in. The measure includes the following acts: trying to convince someone how to vote, protesting, attending a community meeting, discussing politics online, and wearing a political button. I consider wearing a political button to be a potentially conflictual act because it is public and draws attention to political differences. Wearing a button proclaiming one's political allegiance may attract discussion (or debate) about differing ideological, partisan, or candidate preferences. Presumably, a person who chooses to wear a button is aware of the potential for conflict. Overall, these items have an alpha score of .75, indicating that they form a fairly reliable measure. I expect the conflict avoidant trait to exert a strong impact on this measure of participation.

In Table 5.10, the first column shows a model where the conflictual count measure is used as the dependent variable. Although a number of the control variables are statistically significant predictors of conflictual participation, I am most interested in the effect of the conflict avoidance trait measure, which is statistically significant at the $p<.05$ level.

In addition to thinking about conflictual political acts, a number of the groups/clubs I considered above (in Table 5.6) are potentially conflictual. Of the possible groups, participating in a political/social action club and participating in student government seem like they would be more appealing to people who do not shy away from conflict. In Table 5.11, I use a count (range of 0-2) of the number of conflictual groups that respondents reported participating in. Again, conflict avoidance should have a significant impact on this measure of joining, since it focuses on groups that entail potential conflict. Interestingly, Table 5.11 provides evidence that the conflict avoidance trait is a statistically significant predictor of this measure of joining. It is worth pointing out that the need to belong measure is also related to this measure of joining, which indicates the general applicability of this psychological disposition to joining. In addition, the need to evaluate measure is also a statistically significant predictor of participating in potentially conflictual groups—ones centered on political concerns. Given that political groups represent an important venue for people to express their political viewpoints and work toward political goals, it makes sense that opinionated people would find political groups appealing.

Table 5.10: Influence of Personality on Different Dimensions of Participation, Negative Binomial Models

	Conflict Count	Social Count	Interpersonal Count	Voting Count
	b/se	b/se	b/se	b/se
Need to Evaluate	0.176* 0.049	0.180* 0.078	0.154* 0.049	0.085* 0.048
Need for Influence	0.104 0.050	0.056 0.077	0.091* 0.049	-0.036 0.049
Need for Power	-0.086* 0.043	-0.191* 0.067	-0.086* 0.042	-0.051 0.042
Self Efficacy	0.042 0.046	0.028 0.072	0.040 0.046	-0.021 0.046
Conflict Avoidance	-0.162* 0.047	-0.105 0.073	-0.124* 0.047	0.014 0.046
Need to Belong	0.156 0.100	0.127* 0.050	0.063 0.065	0.039 0.063
Religiosity	-0.096* 0.028	-0.138* 0.043	-0.055* 0.027	-0.012 0.026
White	-0.032 0.111	-0.169 0.171	0.020 0.111	-0.030 0.109
Black	0.218 0.186	0.070 0.289	0.294 0.181	-0.012 0.185
Family Political Discussion	0.185* 0.039	0.197* 0.060	0.163* 0.039	0.126* 0.038
Male	-0.227 0.083	-0.224 0.130	-0.112 0.081	-0.010 0.080
Openness	-0.145 0.050	-0.254 0.081	-0.114 0.049	-0.018 0.049
Conscientiousness	0.079 0.045	0.073 0.071	0.079 0.044	-0.015 0.044
Extraversion	-0.033 0.045	0.018 0.072	-0.009 0.045	0.043 0.045
Agreeableness	-0.005 0.052	0.009 0.081	0.025 0.051	0.061 0.052
Emotional Stability	-0.018 0.047	-0.065 0.074	-0.006 0.047	0.008 0.046
Internal Efficacy	0.090* 0.042	0.130* 0.066	0.090* 0.042	0.037 0.041
Political Knowledge Index	0.480* 0.060	0.525* 0.093	0.574* 0.060	0.429* 0.060
Constant	0.441* 0.198	-0.074 0.308	0.198 0.198	0.194 0.195
N of Obs.	535	535	535	535
Pseudo R2	.10	.08	.11	.07
Big Five Joint Sig. Test [p-value]	p=.04	p=.02	p=.10	p=.63
New Personality Joint Sig. Test [p-value]	p=.00	p=.00	p=.00	p=.42

Notes: * $p<.05$ (one-tailed tests)

Table 5.11: Personality and Conflictual Groups/Clubs

	Political Clubs/Groups Count
	b/se
Need to Evaluate	0.274* 0.141
Need for Influence	-0.129 0.140
Need for Power	-0.120 0.111
Self Efficacy	-0.137 0.122
Conflict Avoidance	-0.332* 0.131
Need to Belong	0.478* 0.179
Religiosity	-0.074 0.074
White	0.296 0.338
Black	0.416 0.535
Family Political Discussion	0.310* 0.109
Extraversion	-0.023 0.124
Agreeableness	0.142 0.147
Conscientiousness	0.082 0.118
Emotional Stability	0.020 0.128
Openness	-0.258* 0.147
Political Efficacy	-0.304* 0.118
Male	-0.220 0.227
Political Knowledge	0.368* 0.166
Constant	-2.259* 0.580
N of Obs.	717
Pseudo R2	.13
Big Five Joint Sig. Test [p-value]	.43
New Personality Joint Sig Test [p-value]	.00

Notes: * $p<.05$ (one-tailed tests)

Personality and Social Connectedness

Although it seems quite reasonable to characterize acts according to their levels of conflict, acts of participation can differ in how much social interaction they entail. While some acts obviously entail a great deal of interpersonal interaction and group connectedness, some political acts can be done without any interpersonal interaction or social connection at all. Although I found that the need to belong disposition was not statistically significant in the general political participation model above (Table 5.4), it was a statistically significant predictor in the group participation model. Put simply, those who have a strong need to belong are involved in more groups, clubs, and organizations than their counterparts. One interesting possibility worth exploring is whether the need to belong measure is related to acts of political participation that entail more social connectedness. As I noted above, the need to belong is related to a desire for social bonds, so the effects of this disposition may be limited to a specific set of acts. In thinking about political participation, it seems reasonable to think that some political acts may not satisfy people's needs to feel a sense of social connectedness or belonging compared to others. A number of the political acts that I asked respondents about seem particularly social (and group oriented) in nature—attending a political rally, volunteering for a candidate or party, protesting, and attending a community meeting. I develop a count of the number of these acts that respondents reported participating in. The alpha score for these 4 acts is .73, indicating a reliable measure. Overall, my expectation is that the need to belong measure will have a significant effect on this measure of participation. The second column in Table 5.10 above shows the effect of the need to belong measure on the social measure of participation. Unlike the general

political participation model (Table 5.4), which summed up all political acts, the need to belong measure is statistically significant at the $p<.05$ level in the social model of participation. It appears that the need to belong is related to participating in political acts that entail a sense of bonding or social connectedness.

Need for Influence and Opportunities for Interpersonal Impact

In addition to differences in their levels of conflict and social connectedness, acts of political participation also seem to differ in how much of an opportunity they provide to *exert influence on others*. Although the need for influence measure was not predictive of how "participatory" people were in Table 5.4, the need for influence may only be relevant to some acts of participation. To construct the need for influence measure, I used items like "I would like feeling that I had an impact on people's lives," "It pleases me when people follow through with my suggestions," and "I am really glad when my ideas or opinions have an impact on other people." The focus of this measure is clearly on the extent to which people like feeling as though they have exerted interpersonal influence, so it seems reasonable to think that the effect of need for influence will be greatest on acts where people feel like they can have an impact on other people. For example, trying to convince someone how to vote is something that should be appealing to someone who feels a strong need for influence. Even if a person doesn't successfully convince someone how to vote, the process of trying to exert influence or persuade someone may bring satisfaction. There are a number of political acts for which the need for influence disposition should be particularly relevant—discussing politics online, trying to convince someone how to vote, volunteering for a candidate or party, contacting a public official, and attending a community meeting. Once again, I create a count of the number of these

acts that respondents reported doing. The alpha score for these acts is .72, which is slightly lower than the alpha scores from the conflict and social measures but still fairly high. The third column in Table 5.10 shows the influence of the need for influence disposition on measure of political participation described above. The need for influence does have a statistically significant effect on this measure of participation ($p<.05$). Those who have higher needs for influence participate in more political acts—when the acts entail potential for interpersonal influence.

Personality and Turnout

Thus far, I have examined the effects of personality attributes on a number of different dimensions of participation. This is similar to the approach taken by Brady et al. (1995), who found that individual resources (e.g., time, money, civic skills, language abilities, etc.) had different effects on different types of participation. In addition to developing different political participation indices, Brady et al. develop a count of the number of times a respondent has voted. They consider voting a distinct act of participation because it is "seemingly the least demanding form of political activity" (283). Because voting is about opinion expression, I expect the need to evaluate measure to exert an important effect on voting. As I noted above, being predisposed toward opinionation should reduce the information costs associated with voting, making it more likely that opinionated people vote. The theoretical connections between the other elements of personality that I considered above and voting are not extremely clear. Voting does not entail clear potential for conflict, especially interpersonal conflict. It does not represent an important opportunity to try to influence other individuals. It does not provide an opportunity for social bonding in the same way that, say, rallying or protesting

does. In short, voting is largely about opinion expression. Personality traits related to opinionation should be strongly tied to voting.

The final column in Table 5.10 uses a count of the number of times a respondent has voted (range of 0-3) over the past 2 years as the dependent variable. Overall, the only personality measure that is a statistically significant predictor of voting is the need to evaluate disposition. Those with a high need to evaluate vote in elections more frequently than those with a low need to evaluate, all else being equal.

Additional Evidence on Need to Evaluate from Two Longitudinal Studies

Although the results presented above showcase the relevance of personality to political participation and joining, one thing that would help boost our confidence in the results is evidence from a longitudinal study. In Chapter 3, I argued that if personality does matter to political participation, measures that are collected very early in people's lives should have predictive power when it comes to their participatory habits over the life cycle. Although there are some longitudinal datasets in political science, very few of them contain measures of respondent personality. One of the most well known longitudinal studies in the political behavior literature is Youth-Parent Socialization Panel Study (YPSS) (Jennings 1972; Jennings and Niemi 1991), which tracks the same individuals for over 30 years. A national sample of high school seniors and their parents was initially surveyed in 1965. The original data collection was based on a national probability sample of high school seniors in 1965 distributed across 97 public and nonpublic schools. Subsequent surveys were conducted in 1973, 1982, and 1997 and were merged to create a four-wave panel of 935 individuals, for an overall, unadjusted retention rate of 56% (Jennings, Stoker, and Bowers 2001). Thus, the overall dataset contains information on

respondents when they are approximately 18, 26, 35, and 50 years old. The dataset contains many of the same measures in each survey wave, enabling an examination of how measures correlate over time and of how previous factors (e.g., socialization influences) influence subsequent attitudes and behaviors. Because the survey was designed to examine socialization influences, historical forces, and life events, it does not contain much information on the personality attributes of respondents. Fortunately, the students were asked one question about their tendency to hold strong opinions, which is a key component of the need to evaluate disposition. Although it would be ideal to have multiple indicators of this personality attribute, the fact that the survey contains a personality measure over time allows for an analysis of how personality influences political participation in high school (e.g., engagement in high school political activities) and acts of political participation over 30 years later.

Although Jarvis and Petty did not develop the Need to Evaluate Scale until 1996, the Youth-Parent Socialization Panel Study does contain a measure of personality that is particularly useful to the present analysis. More specifically, respondents were asked the following question: "Now here is something a little different. It helps us to know what kinds of people we have talked to if we find out how they feel about other things besides public affairs and politics. Some people have strong opinions about a good many things. Other people are more in the middle of the road. Which kind of person are you?" Although this question wording does not perfectly map onto any of the items from the Need to Evaluate Scale, it provides a useful measure of the tendency of people to hold strong opinions. It is worth pointing out that the item with the highest factor loading in the Need to Evaluate Scale is "It is very important for me to hold strong opinions,"

followed closely by "I like to have strong opinions even when I am not personally involved," and "I would rather have a strong opinion than no opinion at all" (Jarvis and Petty 1996). I code this measure as a dichotomous variable, where 1 corresponds to holding strong opinions and 0 corresponds to being a "more middle of the road" type person. This is an admittedly blunt measure of personality, but it does provide some sense of how differences in "what people are like" shape political participation over time.

I measure political participation when respondents are seniors in high school (1965) and when they are 26, 35, and 50. The high school measure of political participation is a count of respondents' answers to questions about their engagement in school political activities, namely, whether they had voted in school elections, run for school or public office, volunteered to help others run for office in the last three years, or served as an officer in a school organization during the last three years. This measure serves as a useful indicator of the participatory habits of respondents in early adulthood and approximates the types of political activities that one might consider engaging in later on in life. The political participation measures for the 1973, 1982, and 1997 waves are made up of the following acts: convincing someone how to vote, attending a political meeting or rally, volunteering to work for a candidate, wearing a political button, contacting a public official, writing a letter to the editor giving a political opinion, taking part in a demonstration, protest, march or sit-in, helping to solve a community problem, and voting in the most recent presidential election. I control for whether either of the respondent's parents voted in the 1964 presidential election, how frequently politics was discussed in the household (not a retrospective measure), respondent race, respondent sex, frequency of religious attendance, internal political efficacy, political interest,

strength of partisanship, and parental education. Table 5.7 shows the results of a negative binomial model where the personality measure from 1965 is used to predict high school political participation, controlling for socialization measures, respondent demographics, and political orientations.

Table 5.7: Impact of Personality on 1965 School Political Participation, Youth-Parent Socialization Study Data, Negative Binomial Model

	1965 School Political Participation
	b/se
R's Level of Opinionation	0.094* 0.043
R's Religiosity	0.066* 0.026
Freq. Pol Discussion in the Household	0.028 0.019
R's Political Interest	0.074* 0.032
Male	-0.196* 0.042
R's Political Efficacy	0.060* 0.021
Either Parent Voted in 1964 Election	0.072 0.101
R's Partisanship Strength	-0.014 0.022
White	-0.095 0.088
Mother Education Level	0.017* 0.009
Father Education Level	0.013* 0.007
Constant	0.219 0.195
N of Obs.	760
Pseudo R^2	.03

Notes: * $p<.05$ (one-tailed tests)

Overall, Table 5.7 provides important evidence that personality has an impact on political participation in early adulthood. The coefficient on need to evaluate measure (opinionation) is positively signed and statistically significant at the $p<.05$ level.

Individuals who reported having "strong opinions about a good many things" in 1965 did participate in school political activities at a higher level than those who were less opinionated. It is important to note that this measure of personality is unconnected from politics and measures a general tendency to be opinionated. Given that the realm of politics is one where people with strong opinions can express themselves, it makes theoretical sense that opinionation is related to political activism. Although the evidence provided in Table 5.7 is useful in establishing that "personality matters," a more robust test of the effect of personality is to use the measure of respondent personality collected in 1965 as a predictor of political participation in adulthood (1973, 1982, and 1997). Table 5.8 shows the results of three negative binomial models where the need to evaluate measure collected when respondents were in high school (1965) is used to explain their levels of political engagement in adulthood. Once again, the models control for a number of key socialization, background, and attitudinal variables. In each of the models, the religious attendance, political interest, partisanship strength, and income variables are measured in the same time as the participation measures (e.g., respondent political interest in 1973 is used to predict political participation in 1973).

Table 5.8: Impact of Early (1965) Personality Measure on Adult Political Participation, Youth-Parent Socialization Study Data, Negative Binomial Models

	1973 Political Participation	1982 Political Participation	1997 Political Participation
	b/se	b/se	b/se
R's Level of Opinionation, 1965	0.091* 0.050	0.094* 0.044	0.091* 0.035
R's Religiosity	0.021 0.018	0.025* 0.014	0.041* 0.011
Freq. Pol Discussion in the Household 1965	0.077* 0.021	0.012 0.018	0.026 0.015
R's Political Interest	0.202* 0.036	0.235* 0.034	0.202* 0.026
Male	0.045 0.050	-0.013 0.043	-0.024 0.035
R's Political Efficacy	0.155* 0.036	0.152* 0.031	0.108* 0.022
Either Parent Voted in 1964 Election	0.388* 0.130	0.185 0.114	0.097 0.087
R's Partisanship Strength	0.097* 0.027	0.118* 0.024	0.097* 0.019
White	-0.253* 0.094	-0.149* 0.083	-0.165* 0.068
Mother's Education Level	0.041* 0.010	0.012 0.009	0.006 0.007
Father's Education Level	0.014* 0.008	0.007 0.007	0.006 0.005
R's Family Income	0.011 0.007	0.003 0.006	0.015* 0.004
R Went to College	.308* .058	.169* .053	.088* .042
Constant	-1.074* 0.243	-0.324 0.206	0.034 0.161
N of Obs.	760	760	760
Pseudo R^2	.06	.07	.08

Notes: * $p<.05$ (one-tailed tests)

The models of political participation in Table 5.8 provide consistent evidence on the effect of personality: individuals who reported being opinionated in 1965 (those with high need to evaluate scores), participated in politics at higher rates than their counterparts in 1973, 1982, and 1997. Across all three models, the coefficient on the

personality measure is statistically significant ($p<.05$), positively signed, and roughly the same magnitude. The effect of personality persists even after accounting for a variety of factors that have long been shown to influence political participation. Perhaps more impressively, personality has predictive power even when it is measured more than 30 years prior to political participation.[13] In terms of the substantive effects of personality in the models, the predicted number of political acts (using 1997 model) ranges from 5.5 (when opinionation is set at its minimum level of 0) to 6.10 (when opinionation is set at its maximum level of 1). The substantive effects of personality on participation are similar across the 1973 and 1982 models.

As an additional way of examining the results above, I use data from a more recent longitudinal study—the 2000-2002-2004 ANES panel study—that contains measures of the need to evaluate. More specifically, the 2000 wave of the study asked respondents the two need to evaluate questions I employ in Table 5.2. Once again, the measures have a fairly high alpha score (.70), so I average them to form an additive scale. The ANES panel study contains the same political participation questions in all three waves of the survey, making it possible to examine the effect of need to evaluate (measured in 2000) on participation in 2000, 2002, and 2004. I create counts of the number of acts that each respondent participated in for each of the three years (vote, attend rally, donate to party, donate to candidate, donate to group, volunteer for a campaign, try to convince someone how to vote, display a button, sign, or sticker). Given the results from the YPSS dataset, which used an admittedly blunt measure of the need to evaluate, I expect the need to evaluate disposition to have predictive power across all

[13] Using personality measured in 1973 to predict participation in 1982 and 1997 also yields a positive, statistically significant effect. In addition, personality in 1982 has a positive and statistically significant effect on participation in 1997.

years in the survey. In Table 5.9, I present the results of three negative binomial models of participation in 2000, 2002, and 2004. In each model, I use the need to evaluate measure from 2000 as a predictor. I also control for sex, age, education, strength of partisanship, internal political efficacy, interest in politics, income, and race. Socialization measures were not available in the ANES panel study.

Table 5.9: Impact of Lagged (2000) Personality Measure on Later Political Participation, 2000-2002-2004 ANES Panel Study

	2000 Participation	2002 Participation	2004 Participation
	b/se	b/se	b/se
Need to Evaluate, 2000	0.105* 0.032	0.098* 0.034	0.060* 0.032
Male	0.087* 0.052	0.153* 0.056	0.020 0.052
Age	0.005* 0.002	0.009* 0.002	-0.001 0.002
Education	0.030* 0.012	0.020 0.013	0.050* 0.013
Partisanship Strength	0.095* 0.026	0.127* 0.028	0.125* 0.027
Political Efficacy	0.026 0.021	0.031 0.022	0.023 0.022
Income	0.050* 0.013	0.041* 0.014	0.020 0.014
White	0.096 0.083	-0.092 0.085	0.034 0.090
Black	0.129 0.119	0.074 0.125	0.093 0.134
Political Interest	-0.227* 0.033	-0.221* 0.036	-0.268* 0.042
Constant	-0.430* 0.250	-0.504* 0.268	-0.031 0.251
Pseudo R^2	0.07	0.07	0.06
N of Obs.	717	717	717

Notes: * $p<.05$ (one-tailed tests)

Across the three models shown in Table 5.9, the need to evaluate measure is always a statistically significant predictor of political engagement. The relationship holds even

after taking into account a number of key determinants of participation. Consistent with the evidence presented above, measures of the need to evaluate have predictive power even when they are measured years before acts of political participation. In order to get a sense of the substantive effects of personality in the ANES study, I generated the marginal effects based on the models shown in Table 5.9. In the 2000 participation model, the predicted number of political acts is 1.35 when need to evaluate is at its minimum and 1.93 when need to evaluate is at is maximum (holding all other variables in the model at their median values). In the 2002 participation model, the predicted number of political acts is 1.23 when need to evaluate is at its minimum and 1.70 when need to evaluate is at its maximum (holding all other variables in the model at their median values). Finally, in the 2004 participation model, the predicted number of political acts is 1.72 when need to evaluate is at its minimum and 2.11 when need to evaluate is at its maximum (holding all other variables in the model at their median values). These effects rival the magnitude of variables like income, which is a classic predictor of participation. In the 2002 model, for example, the predicted number of political acts when income takes on its lowest value is 1.25 and is 1.60 when income is at its highest.

Conclusion

In this chapter, I have examined the impact of personality traits on political and civic engagement. This is a fairly new area of research, although there have been a number of studies on the Big Five traits and political behavior. I argued that personality traits and dispositions above and beyond the Big Five would enhance our understanding of what drives people to get involved in or stay away from political and civic activities. In support of this argument, I introduced a number of personality attributes—gleaned from

psychology studies—that have received virtually no attention from political scientists. Using data from an original survey and two nationally-representative longitudinal studies, I showed that a number personality traits above and beyond the Big Five have important effects on the extent to which individuals get involved in different aspects of public life. Importantly, measures of personality that are collected long before measures of political participation have predictive power, which supports the evidence presented in Chapter 4. Previous scholars (Geber et al. 2013) have claimed that personality attributes are "causally prior" to attitudes and behaviors, but there has been very little longitudinal evidence on the association between personality and political behavior.

Although I have tested hypotheses about personality traits that are not included in the Five-Factor Model of personality, there is much more work to be done on the intersection between personality and politics. For instance, it will be important for future research to re-examine the hypotheses presented above using nationally representative survey data. In addition, it will be important for future researchers to continue to think about how the different personality traits that have been identified by psychologists might influence political behaviors. This study considered a handful of personality traits, but there are certainly other dimensions of personality not considered here that might have theoretical connections to political or civic participation.

Chapter VI.
Conclusion and Future Research

Introduction

At the start of this dissertation, I set out to understand why some people are more "participatory" than others. Many of us know people who seem to be natural participators—people who are always involved in activities, whether they be volunteer activities, social or political activities, or activities at school. What is it about a person that predisposes them to participation? In this dissertation, I have argued that political scientists should consider personality as a potential antecedent of participation. Despite calls by political scientists in the 1950s and 60s to study individual personality traits as a determinant of political behaviors and attitudes, for decades personality has gone ignored by scholars of political behavior. Indeed, much of the literature on political participation to date has focused on parental socialization, socioeconomic variables, like education and income, political mobilization, and political resources, attitudes and orientations. This dissertation represents an attempt to draw attention to the importance of individual personality traits and psychological dispositions as a determinant of political behavior. Below, I summarize what I see as the key contributions and findings of this project. I also sketch out a number of potential ideas for future data collection efforts and studies. In order to continue to understand how personality and other individual differences influence participation, scholars need to work to develop an extensive research program. This project represents the first step in that direction, but much work remains to be done.

Overview of Contributions and Findings

One of the key goals of this dissertation was to develop models of political and civic participation that accounted for individual differences in personality. In the first

empirical chapter, I discussed the measurement of personality from the standpoint of psychology. Personality psychologists have developed a number of interesting techniques for measuring personality traits and psychological attributes. The most common approach entails having people rate how well a given adjective or set of adjectives describes them (or a peer). Such measures provide valid and reliable measures of personality. I also showed that concerns over endogeneity, which are prominent in the literature on political attitudes and participation (e.g., participating increases political interest or efficacy), are not particularly important when using personality traits to explain political and civic participation. Previous levels of political participation do not influence personality traits.

In the second empirical chapter, I introduced several hypotheses about how personality traits influence citizen involvement in public affairs as life unfolds. I provided the first set of empirical tests of the impact of personality traits on participation. Here, I use data from several longitudinal studies—the National Longitudinal Study of Adolescent Health (Add Health) and the National Childhood Development Study (NCDS)—to show that personality measures collected at a fairly young age have predictive power when it comes to political behavior in adulthood. In some cases, the effects of personality on participation endure for more than 30 years. The results of this chapter provided the first longitudinal evidence on the importance of personality to political and civic participation in the United States. Previous studies have relied almost exclusively on cross-sectional data from one year. In addition to the longitudinal data, I used cross-sectional data from a nationally representative survey fielded in 2010 to show that personality influences the depth of engagement in civic groups and clubs. In short,

personality influences not just the number of acts or groups that people partake in, but also how frequently they participate.

In the third empirical chapter, I argued that political scientists should work to integrate measures of personality *above and beyond* the Big Five, the predominant model of personality, into models of political and civic engagement. In this chapter, I introduced a series of personality traits and psychological dispositions to the literature on political and civic engagement, most of which have received little attention from political scientists. My analysis focused on the conflict avoidance trait, need for power, need for influence, need to affiliate, need to belong, and self-efficacy. Using data collected from an original survey fielded in 2011, I showed that a number of these personality traits influence the extent to which people get involved in political activities and civic groups. Interestingly, different sets of personality attributes influence the appeal of different types of engagement. Participation in politics is driven by an enjoyment of conflict and by predispositions toward opinionation. On the other hand, participation in civic groups is driven primarily by a need for belongingness and self-efficacy. I found evidence that the effects of personality traits and dispositions on political and civic engagement rival and, in some cases, exceed the effects of classic predictors of participation, including political discussion in the home—a common measure of political socialization. The findings from this analysis justify future research on the association between personality and political behavior.

In the section below, I outline a number of ideas for future research. The ideas focus on both data collection efforts and substantive research questions.

Avenues for Future Research

- Researchers should work to develop longitudinal studies that contain measures of respondent personality, political attitudes, and participation. In this dissertation, I identified a number of longitudinal studies that contained measures of personality, but even the studies I used had very little personality content. There are numerous longitudinal studies in psychology that contain measures of personality but psychology studies often have little or no political content. Collaborative studies between political scientists and psychologists represent one possible way to improve upon existing datasets.
- Political scientists interested in the association between personality traits and political behavior should try to use more extensive personality measurement batteries when possible. Some of the personality measures that I used in this dissertation relied on one or two survey items. Although it is impressive that even very basic (and sometimes blunt) measures of personality have explanatory when it comes to political and civic engagement, it is typically better to have a large number of indicators that try to measure the same concept. Such measures provide a more detailed description of individual differences and should reduce measurement error.
- In addition to developing more extensive measures in political surveys, it will be important for political scientists to continue to identify personality traits and dispositions that might be relevant to politics. A close reading of psychology studies on individual differences may shed light on variables that psychologists have examined but that have not yet been considered by political scientists. I have

highlighted a number of traits and dispositions that have some relevance to political life, but there are certainly additional individual differences that may influence political behavior. The "need for structure," for example, is a psychological disposition that psychologists have examined but that has received virtually no attention in political science. People with a high need for structure may be more reliant on information cues or shortcuts in politics than their counterparts. In addition, people with a high need for structure may be more inclined to identify with political parties or ideologies, since both of these things help organize politics and make the political world more manageable.

- This dissertation focused mostly on the *direct relationship* between personality and participation. It may be fruitful for researchers to examine in more detail the extent to which the effects of personality are mediated by political attitudes or cognitive resources.
- Related to the potential indirect effects of personality mentioned above, it would also be interesting to examine the interaction between personality traits and political context. The effects of personality traits on political participation may be magnified in some contexts and diminished in others. In addition, it is possible that personality traits influence the way that potential voters respond to campaign messages (e.g., some personality types may be more open to attempts at persuasion) or attempts at mobilization. Political messages that showcase the conflictual nature of politics, for example, would likely not be effective at mobilizing people who dislike conflict, but might be very effective at mobilizing those who do not shy away from conflict. In short, there is a great deal of

potential for research on the interplay between political context and individual personality attributes.

- This dissertation focused primarily on political participation in the United States. A few recent studies by Bekkers (2005), Ha, Kim, and Jo (2013), Mondak, Canache, Seligson, and Hibbing (2011), and Mattila, Wass, Soderlund, Fredriksson, Fadjukoff, and Kokko (2011) have examined the relationship between personality traits and participation in the Netherlands, South Korea, Venezuela, Uruguay, and Finland but there have not yet been any large-scale cross-national analyses of personality and participation. Some of the data I used in Chapter 4 came from the AmericasBarometer Study. Although I used data from a 2010 AmericasBarometer survey in the U.S., the AmericasBarometer conducted nationally representative surveys in 24 countries in 2010. Each survey contains measures of the Big Five, participation, and civic affiliations. This dataset will serve as an important starting point for assessing the impact of personality on participation across different contexts.

In the end, researchers interested in the association between personality and political behavior would be well served by implementing the research ideas discussed above. Although some of them would require a large investment of time and resources, they have the potential to pay great dividends and to further our understanding of one of the most important and enduring questions in American politics—what drives people to participate in or avoid participating in public life.

References

Alford, John, Carolyn Funk, and John Hibbing. 2005. "Are Political Orientations Genetically Transmitted?" *American Political Science Review* 99 (2): 153–67.

Allport, G. W., and Odbert, H. S. 1936. "Trait-names: A psycho-lexical study." *Psychological Monographs*, 47, No. 211.

Andolina, M. W., Jenkins, K., Zukin, C., and Keeter, S. 2003. "Habits from Home, Lessons From School: Influences on Youth Civic Development. *PS: Political Science and Politics, 36,* 275-280.

Bartels, Larry. 2008. *Unequal Democracy: The Political Economy of the New Gilded Age.* New York: Russell Sage Foundation and Princeton University Press.

Baumeister, Roy and Mark Leary. 1995. "The Need to Belong: Desire for Interpersonal Attachments as a Fundamental Human Motivation." *Psychological Bulletin* 117(3): 497-529.

Beck, P. and Jennings, M. K. 1982. "Pathways to Participation." *American Political Science Review, 76,* 94-108.

Bekkers, Rene. 2005. "Participation in Voluntary Associations: Relations with Resources, Personality, and Political Values." *Political Psychology* 26(3): 439-454.

Bizer, George Y., Jon Krosnick, Allyson L. Holbrook, S. Christian Wheeler, Derek Rucker, and Richard E. Petty. 2004. "The Impact of Personality on Cognitive, Behavioral, and Affective Political Processes: The Effects of the Need to Evaluate." *Journal of Personality* 72: 995-1027.

Blais, Andre. 2000. *To Vote or Not to Vote*. Pittsburgh, PA: University of Pittsburgh Press.

Blais, Andre and Labbé-St-Vincent, S. 2011. Personality traits, political attitudes, and the propensity to vote. *European Journal of Political Research, 50,* 395–417.

Block, Jack and Jeanne Block. 2006. "Nursery School Personality and Political Orientation Two Decades Later." *Journal of Research in Personality* 40(5): 735-749.

Bouchard, Thomas J. Jr. 2004. "Genetic Influence on Human Psychology Traits: A Survey." *Current Directions in Psychological Science* 13(4): 148-151.

Bouchard, Thomas J. Jr. 1994. "Genes, Environment, and Personality." *Science* 264(5166): 1700-1701.

Brady, D., S. Verba, and K. L. Schlozman. 1995. "Beyond SES: A Resource Model of Political Participation." *American Political Science Review* 89(2): 271-94.

Bresnahan, Mary Jiang, William Donohue, Sachiyo Shearman, and Ziaowen Guan. 2009. "Two Measures of Conflict Orientation." *Conflict Resolution Quarterly* 26(3): 365-379.

Campbell, Angus, Philip Converse, Warren Miller, and Donald Stokes. 1960. *The American Voter*. New York: Wiley.

Carvallo, Mauricio, and Brett W. Pelham. 2006. "When Fiends Become Friends: The Need to Belong and Perceptions of Personal and Group Discrimination." *Journal of Personality and Social Psychology*, 90, 94-108.

Chapman, Benjamin, Paul Duberstein, Silvia Sorensen, And Jeffrey Lyness. 2007. "Gender Differences in Five Factor Model Personality Traits in an Elderly Cohort: Extension of Robust and Surprising Findings to an Older Generation." *Personality and Individual Differences* 43(06): 1594-1603.

Conway, M. Margaret. 1981. "Political Participation in Midterm Congressional Elections: Attitudinal and Social Characteristics During the 1970s." *American Politics Research* 9(2): 221-244.

Costa P., Terracciano A., McCrae R. 2001. "Gender Differences in Personality Traits Across Cultures: Robust and Surprising Findings. *Journal of Personality and Social Psychology*. 81: 322–331.

Cox, Gary and Michael Munger. 1989. "Closeness, Expenditures, and Turnout: The 1982 U.S. House Elections." *American Political Science Review* 83: 217-232.

Dahl, Robert. 1998. *On Democracy.* New Haven: Yale University Press.

Dawes, Christopher. 2010a. "COMT, Extraversion, and Partisan Attachment." Working paper.

Dawes, Christopher. 2010b. "Do Psychological Traits Mediate the Relationship Between Genes and Political Participation?" Working paper.

Dawes, Christopher and James Fowler. 2009. "Partisanship, Voting, and the Dopamine D2 Receptor Gene." *Journal of Politics, 71,* 1157–1171.

Delli Carpini, Michael, and Scott Keeter. 1996. *What Americans Know about Politics and Why It Matters*. New Haven, CT: Yale University Press.

Feist, Jess, and Gregory J. Feist. 2009. *Theories of Personality*, 7th ed. New York: McGraw Hill.

Finkel, Steven. 1985. "Reciprocal Effects of Participation and Political Efficacy: A Panel Analysis." *American Journal of Political Science* 29(4): 891-913.

Forsyth, Donelson R. 2009. *Group Dynamics*, 2nd edition. Cengage.

Fowler, James, Laura Baker, and Christopher Dawes. 2008. "Genetic Variation in Political Behavior. *American Political Science Review, 102,* 233–248.

Fowler, James, and Christopher Dawes. *Forthcoming*. "In Defense of Genopolitics." *American Political Science Review*.

Fowler, James, and Christopher Dawes. 2008. "Two Genes Predict Voter Turnout." *Journal of Politics* 70: 579-594.

Froman, Lewis A. 1961. "Personality and Political Socialization." *Journal of Politics* 23(2): 341-352.

Gallego, Aina and Daniel Oberski. 2012. "Personality and Political Participation: The Mediation Hypothesis." *Political Behavior* 43: 425-451.

Gerber, Alan S., and Donald P. Green. 2000. "The Effects of Canvassing, Telephone Calls, and Direct Mail on Voter Turnout: A Field Experiment." *American Political Science Review* 94 (September): 653–63.

Green, Donald P., and Alan S. Gerber. 2004. *Get Out the Vote: How to Increase Voter Turnout*. Washington, D.C.: Brookings Institution Press.

Gerber, Alan, Donald Green, and Christopher Larimer. 2008. "Social Pressure and Voter Turnout: Evidence from a Large-scale Field Experiment. *American Political Science Review* 102 (1): 33–48.

Gerber, Alan, Gregory Huber, David Doherty, and Conor Dowling. 2013. "Assessing the Stability of Psychological and Political Survey Measures." *American Politics Research* 41: 54-75.

Gerber, Alan S., Gregory A. Huber, David Doherty, and Conor M. Dowling. 2012. "Personality and the Strength and Direction of Partisan Identification." *Political Behavior* 34: 653-688.

Gerber, Alan S., Gregory A. Huber, David Doherty, Conor M. Dowling, and Shang E. Ha. 2010. "Personality and Political Attitudes: Relationships Across Issue Domains and Political Contexts." *American Political Science Review* 104: 111-133.

Gerber, Alan, Gregory Huber, David Doherty, Conor Dowling, and Costas Panagopoulos. *Forthcoming*. "Big Five Personality Traits and Responses to Persuasive Appeals: Results from Voter Turnout Experiments." *Political Behavior.*

Gerber, Alan, Gregory Huber, David Doherty, Conor Dowling, Connor Raso, and Shang Ha. 2011. "Personality and Participation in Political Processes." *Journal of Politics* 73: 692- 706.

Gosling, Samuel D., Peter J. Rentfrow, and William B. Swann, Jr. 2003. "A Very Brief Measure of the Big-Five Personality Domains." *Journal of Research in Personality* 37: 504–28.

Ha, Shang, Seokho Kim, and Se Hee Jo. *Forthcoming*. "Personality Traits and Political Participation: Evidence from South Korea." *Political Psychology*.

Hajnal, Zoltan. 2010. *America's Uneven Democracy: Turnout, Race, and Representation in City Politics.* Cambridge University Press.

Hajnal, Zoltan and Jessica Trounstine. 2005. "Where Turnout Matters: The Consequences of Uneven Turnout in City Politics." *Journal of Politics* 67(2): 515–35.

Hatemi, Peter, John Alford, John Hibbing, Nicholas Martin, and Lindon Eaves. "Is There a 'Party' in Your Genes?" *Political Research Quarterly* 62: 584-600.

Hibbing, Matthew, Melinda Richie, and Mary Anderson. 2011. "Personality and Political Discussion." *Political Behavior* 33(4): 601-624.

Holbrook, Thomas M. 2006. "Cognitive Style and Political Learning in the 2000 U.S. Presidential Campaign." *Political Research Quarterly* 59(3): 343-352.

Hoyle, R. H., and Leary, M. R. 2009. "Methods for the Study of Individual Differences in Social Behavior. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of Individual Differences in Social Behavior* (pp. 12- 23). New York: Guilford Press.

Hyman, H. 1959. *Political Socialization*. Glencoe, IL: Free Press.

Jennings, M. Kent and Richard G. Niemi. 1968. "The Transmission of Political Values from Parent to Child." *American Political Science Review* 62:169-184.

Jennings, M. Kent and Richard G Niemi. "The Division of Political Labor Between Mothers and Fathers." *American Political Science Review* 65(1): 69-82.

Jacobson, Gary, and Samuel Kernell. 1983. *Strategy and Choice in Congressional Elections,* 2nd edition. New haven CT: Yale University Press.

Jackson, Robert A. 1996. "The Mobilization of Congressional Electorates." *Legislative Studies Quarterly* 21: 425-45.

John, O. P., and Srivastava, S. 1999. "The Big Five trait taxonomy: History, measurement, and theoretical perspectives." In L. A. Pervin and O. P. John (Ed.), *Handbook of personality: Theory and research* (pp. 102-138). New York: Guilford.

Kasschau, Richard. 1985. *Psychology: Exploring Behavior*. Pearson/Prentice Hall.

Key, V.O. 1949. *Southern Politics in State and Nation*. New York: Knopf.

La Due Lake, Ronald and Robert Huckfeldt. 1998. "Social Capital, Social Networks, and Political Participation." *Political Psychology* 19(3): 567-584.

Levinson, Daniel J. 1958. "The Relevance of Personality for Political Participation." *Public Opinion Quarterly* 22(1): 3-10.

Lieberman, M. D., and Rosenthal, R. 2001. "Why Introverts Can't Always Tell Who Likes Them: Multitasking and Nonverbal Decoding. *Journal of Personality and Social Psychology*, 80(2), 294-310.

Loewen, Peter and Christopher Dawes. 2012. "The Heritability of Duty and Voter Turnout." *Political Psychology,* 33, 363-373.

McCrae, Robert R. and Paul T. Costa, Jr. 2006. *Personality in Adulthood: A Five-Factor Theory Perspective*, 2nd ed. New York: The Guilford Press.

McIntosh, Hugh, Daniel Hart, and James Youniss. 2007. "The Influence of Family Political Discussion on Youth Civic Development: Which Parent Qualities Matter?" *PS: Political Science and Politics,* July*,* 495-499.

Mondak, Jeffery J. 2010. *Personality and the Foundations of Political Behavior*. New York: Cambridge University Press.

Mondak, J. J., and Halperin, K. D. 2008. "A Framework for the Study of Personality and Political Behaviour." *British Journal of Political Science* 38: 335-362.

Mondak, J. J., Hibbing, M. V., Canache, D., Seligson, M. A., and Anderson, M. R. 2010. "Personality and Civic Engagement: An Integrative Framework for the Study of Trait Effects on Political Behavior." *American Political Science Review* 104: 85-110.

Mondak, Jeffery J., Damarys Canache, Mitchell A. Seligson, Matthew V. Hibbing. 2011. "The Participatory Personality: Evidence from Latin America." *British Journal of Political Science* 41(1): 211-221.

Murray, H. A. 1938. *Explorations in Personality*. New York: Oxford University Press.

Mutz, Diana. 2002. "The Consequences of Cross-Cutting Networks for Political Participation." *American Journal of Political Science* 46(4): 838-855.

Nie, Norman, Jane Junn, and Kenneth Stehlik-Barry. 1996. *Education and Democratic Citizenship in America.* University of Chicago Press.

Niemi, Richard G. and M. Kent Jennings. 1991. "Issues and Inheritance in the Formation of Party Identification. *American Journal of Political Science* 35: 970-88.

Panagopoulos, Costas. 2011. "Social Pressure, Surveillance, and Community Size: Evidence from Field Experiments on Voter Turnout." *Electoral Studies* 30: 353-357.

Paunonen, Sampo and Michael Ashton. 2001. "Big Five Factors and Facets and the Prediction of Behavior." *Journal of Personality and Social Psychology* 81(3): 524-539.

Plutzer, Eric. 2002. "Becoming a Habitual Voter: Inertia, Resources, and Growth in Young Adulthood." *American Political Science Review* 96 (1): 41-56.

Pullman, Helle, Liisa Raudsepp, and Juri Allik. 2006. "Stability and Change in Adolescents' Personality: A Longitudinal Study." *European Journal of Personality* 20: 447-459.

Putnam, Robert. 2000. *Bowling Alone: The Collapse and Revival of American Community.* New York: Simon and Schuster.

Putnam, Robert. 1995. "Tuning In, Tuning Out: The Strange Disappearance of Social Capital in America." *PS: Political Science & Politics* 664-683.

Putnam, Robert, Robert Leonardi, and Raffaella Nanetti. 1994. *Making Democracy Work: Civic Traditions in Modern Italy.* Princeton University Press.

Roccas, S., Sagiv, L., Schwartz, S. H., and Knafo, A. 2002. "Basic Values and the Five Factor Model of Personality Traits." *Personality and Social Psychology Bulletin, 28,* 789-801.

Rosenstone, Steven J. and John Mark Hansen. 1993. *Mobilization, Participation, and Democracy in America*. New York: Macmillan.

Settle, Jamie, Robert Bond, and Justin Levitt. 2011. "The Social Origins of Adult Political Behavior." *American Politics Research* 39(2): 239-263.

Settle, Jamie E., Christopher T. Dawes, and James H. Fowler. 2009. "The Heritability of Partisan Attachment." *Political Research Quarterly* 62 (3): 601–13.

Sides, John. N.d. "What's So Amazing about Really Deep Thoughts? Cognitive Style and Political Misperceptions." Working paper.

Sobel, Richard. 1993. "Occupational Involvement to Political Participation: An Exploratory Analysis." *Political Behavior* 15(4): 339-353.

Stelmack, Robert. 1991. "Advances in Personality Theory and Research." *Journal of Psychiatric Neuroscience* 16(3): 131-138.

Ulbig, Stacy and Carolyn Funk. 1999. "Conflict Avoidance and Political Participation." *Political Behavior* 21(3): 265-282.

Verba, Sidney, Kay Lehman Schlozman, and Henry E. Brady. 1995. *Voice and Equality: Civic Voluntarism in American Politics*. Cambridge: Harvard University Press.

Verba, Sidney, and Norman H. Nie. 1972. *Participation in America: Political Democracy and Social Equality*. New York Harper and Row.

Vecchione, M., and Caprara, G. V. 2009. "Personality Determinants of Political Participation: The Contribution of Traits and Self-efficacy Beliefs." *Personality and*

Individual Differences, 46, 487-492.

Walker, Edward. 2008. "Contingent Pathways from Joiner to Activist: The Indirect Effect of Participation in Voluntary Associations on Civic Engagement. *Sociological Forum* 23(1): 116-143.

Wilt, Joshua and William Revelle. 2008. "Extraversion." In *Handbook of Individual Differences in Social Behavior,* Ed*,* Mark Leary and Richard Hoyle, Guilford Press.

Appendix A: Survey Instrument

Political Science Survey

Greetings! My name is Aaron Weinschenk. I'm a PhD candidate in the Department of Political Science. I am conducting a brief survey of UWM undergraduates as a part of my dissertation research. I'd like to ask you to help out. Your participation in the survey is voluntary and will be greatly appreciated. The survey contains questions about a number of topics, including politics and current affairs. There are a couple of things you should know about the survey: *You can terminate this survey at any point by closing the window. *You don't have to answer any questions that you don't want to answer. *Risks to participants are considered minimal. There will be no costs for participating, nor will you benefit from participating other than to further research. *If you have any questions, please contact Aaron Weinschenk or Professor Thomas Holbrook at uwmpoliscisurvey@gmail.com. *Only Aaron Weinschenk and Professor Thomas Holbrook will have access to the data, which will be stored on a password protected computer. Your responses are completely confidential and no individual will ever be identified by his or her answers. *We will not store IP or e-mail addresses, so your input will be completely anonymous. *If you don't want to participate in this survey, please exit now. *For questions about your rights or complaints towards your treatment as a research subject contact the UWM IRB at 414-229-3173 or irbinfo@uwm.edu *By completing and submitting the attached survey, you are voluntarily agreeing to take part in this study. Completing the survey indicates that you have read this consent form and have had all of your questions answered, and that you are 18 years of age or older. *IRB# 12.344, exemption date 4/20/2012 Thanks for your help!

Q1 Are you currently enrolled as a UWM undergraduate student?

- ❍ Yes (1)
- ❍ No (2)

If No Is Selected, Then Skip To End of Survey

Q2 Here are a number of pairs of personality traits that may or may not apply to you. Please choose a point anywhere from “not at all like me” to “just like me” that indicates the extent to which each pair of traits applies to you. You should rate each pair of traits, even if one characteristic applies more strongly than the other.

	Not at all like me (1)	(2)	(3)	(4)	(5)	Just like me (6)
Extroverted, Enthusiastic (1)	❍	❍	❍	❍	❍	❍
Critical, Quarrelsome (2)	❍	❍	❍	❍	❍	❍
Dependable, Self-disciplined (3)	❍	❍	❍	❍	❍	❍
Anxious, Easily Upset (4)	❍	❍	❍	❍	❍	❍
Open to New Experiences, Complex (5)	❍	❍	❍	❍	❍	❍
Reserved, Quiet (6)	❍	❍	❍	❍	❍	❍
Sympathetic, Warm (7)	❍	❍	❍	❍	❍	❍
Disorganized, Careless (8)	❍	❍	❍	❍	❍	❍
Calm, Emotionally Stable (9)	❍	❍	❍	❍	❍	❍
Conventional, Uncreative (10)	❍	❍	❍	❍	❍	❍

Q3 Some people have opinions about almost everything; other people have opinions about just some things; and still other people have very few opinions. What about you? Would you say you have opinions about almost everything, about many things, about some things, or about very few things?

- ❍ Almost everything (1)
- ❍ Many things (2)
- ❍ Some things (3)
- ❍ Very few things (4)

Q4 Compared to the average person do you have fewer opinions about whether things are good or bad, about the same number of opinions, or more opinions?

- ❍ Fewer opinions (1)
- ❍ About the same (2)
- ❍ More opinions (3)

Q5 Please indicate which of the following political activities, if any, you participated in during the past two years, including during the 2010 midterm and gubernatorial election, 2011 Wisconsin Supreme Court election, and the 2011 Wisconsin recall elections.

	Yes (1)	No (2)
Worn a button, put a campaign sticker on your car, or placed a campaign sign in your window/in front of your residence (1)	❍	❍
Attended any political meetings, rallies, speeches, or similar events/activities (2)	❍	❍
Given money to a political candidate or party (3)	❍	❍
Worked or volunteered for a political party, group, or candidate (4)	❍	❍
Given money to a group that supported or opposed a political candidate (5)	❍	❍
Tried to convince someone how to vote (6)	❍	❍
Contacted an elected official (7)	❍	❍
Signed a petition (8)	❍	❍
Attended a community meeting (9)	❍	❍
Participated in a protest or demonstration (10)	❍	❍
Discussed politics online (11)	❍	❍
Commented on a political blog or political website (12)	❍	❍

Q6 For each of the statements below, indicate whether you agree or disagree that the statements apply to you. Choose any point from strongly disagree to strongly agree.

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
If other people don't seem to accept me, I don't let it bother me (1)	❍	❍	❍	❍
I try hard not to do things that will make other people avoid or reject me (2)	❍	❍	❍	❍
I seldom worry about whether other people care about me (3)	❍	❍	❍	❍
I need to feel that there are people I can turn to in times of need (4)	❍	❍	❍	❍
I want other people to accept me (5)	❍	❍	❍	❍
I do not like being alone (6)	❍	❍	❍	❍
Being apart from my friends for long periods of time does not bother me (7)	❍	❍	❍	❍
I have a strong need to belong (8)	❍	❍	❍	❍
It bothers me a great deal when I am not included in other people's plans (9)	❍	❍	❍	❍
My feelings are easily hurt when I feel that others do not accept me (10)	❍	❍	❍	❍

Q7 When you were growing up, how often would you say you had political discussions with your family?

- ❍ Not at all (1)
- ❍ Hardly ever (2)
- ❍ Sometimes (3)
- ❍ Very Often (4)

Q8 For each of the statements below, indicate whether you agree or disagree. Choose any point from strongly disagree to strongly agree.

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
Public officials don't care much about what people like me think (1)	❍	❍	❍	❍
Sometimes, politics and government are so complicated that people like me can't understand what is going on (2)	❍	❍	❍	❍
I pay a lot of attention to politics and public affairs (3)	❍	❍	❍	❍
Generally speaking, you can trust the government in Washington to do what is right (4)	❍	❍	❍	❍
It is every citizen's duty to vote in an election (5)	❍	❍	❍	❍

Q9 As you may know, there are a number of organized student groups on campus. Please indicate if you have ever participated in any of the types of organized student groups listed below

	Yes (1)	No (2)
Cultural Identity Groups (e.g., race, national identity, sexual identity) (1)	❍	❍
Departmental or Academic Groups (e.g., Biology Club) (2)	❍	❍
Fraternity or Sorority (3)	❍	❍
Student Government (4)	❍	❍
Honor Society (e.g., National Honor Society, Mortar Board) (5)	❍	❍
Political/Social Action Groups (e.g., Campus Democrats or Republicans, conservative or liberal groups, etc.) (6)	❍	❍
Professional Groups (e.g., Ad-Club, Club of Actuaries) (7)	❍	❍
Recreational or Athletic Groups (e.g., Chess Club, Cycling Club) (8)	❍	❍
Religious/Faith-based groups (9)	❍	❍
Service, Volunteer, or Community Groups (10)	❍	❍
Other Organized Groups (11)	❍	❍

Q10 Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?

- Most people can be trusted (1)
- Can't be too careful (2)

Q11 Do you think that most people would try to take advantage of you if they got the chance or would they try to be fair?

- Try to take advantage (1)
- Try to be fair (2)

Q12 For each of the statements below, indicate whether you agree or disagree that the statements apply to you. Choose any point from strongly disagree to strongly agree.

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
I do not particularly like having power over others (1)	❍	❍	❍	❍
I would like feeling that I had an impact on people's lives (2)	❍	❍	❍	❍
I want to see if a dispute will resolve itself before taking action (3)	❍	❍	❍	❍
I find that a consistent routine enables me to enjoy life more (4)	❍	❍	❍	❍
It pleases me when people follow through with my suggestions (5)	❍	❍	❍	❍
It makes little difference to me whether I am a leader or not (6)	❍	❍	❍	❍
I am really glad when my ideas or opinions have an impact on other people (7)	❍	❍	❍	❍
I enjoy having a clear and structured mode of life (8)	❍	❍	❍	❍
I hate argument (9)	❍	❍	❍	❍

I like to have a place for everything and everything in its place (10)	❍	❍	❍	❍
I avoid conflict if at all possible (11)	❍	❍	❍	❍
I think I usually enjoy having authority over others (12)	❍	❍	❍	❍

Q13 For each of the statements below, indicate whether you agree or disagree that the statements apply to you. Choose any point from strongly disagree to strongly agree.

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
I very much enjoy working with others (1)	❍	❍	❍	❍
I often have a strong need to be around people who are impressed with what I am like and what I do. (2)	❍	❍	❍	❍
I mainly like to be around others who think I am an important and exciting person (3)	❍	❍	❍	❍
I think being close to others, listening to them, and relating to them on a one-to-one level is one of my favorite and most satisfying pastimes (4)	❍	❍	❍	❍
Just being around others and finding out about them is one of the most interesting things I can think of doing (5)	❍	❍	❍	❍
When I am not certain about how well I am doing at something, I usually like to	❍	❍	❍	❍

be around others so I can compare myself to them (6)				
If I am uncertain of what is expected of me, I usually like to look around to certain others for cues (7)	❍	❍	❍	❍

Q14 Which of the following best describes your racial or ethnic background?

- White or Caucasian (1)
- Black or African American (2)
- Hispanic or Latino (3)
- Asian or Pacific Islander (4)
- Native American (5)
- More than one race/ethnicity (6)
- Other (7)

Q15 How often do you attend religious services at a local place of worship?

- Hardly ever or never (1)
- Less than once a month (2)
- Once a month (3)
- 2-3 times a month (4)
- Once a week (5)
- More than once a week (6)

Q16 Are you male or female?

- Male (1)
- Female (2)

Q17 What is your age?

Q18 Are you a United States citizen?

- Yes (1)
- No (2)

If No Is Selected, Then Skip To Please indicate the extent to which y...

Q19 Were you eligible to vote (at least 18 years old and a U.S. citizen) in the 2010 elections held on November 2nd, 2010?

- Yes (1)
- No (2)

Q20 Did you vote in the 2010 Wisconsin gubernatorial election where the candidates were Scott Walker and Tom Barrett?

- Yes (1)
- No (2)

Q21 Did you vote in the 2010 election for U.S. Senator of Wisconsin where the candidates were Russ Feingold and Ron Johnson?

- ❍ Yes (1)
- ❍ No (2)

Q22 Were you eligible to vote (at least 18 years old and a U.S. citizen) in the 2011 Wisconsin Supreme Court election held on April 5th, 2011?

- ❍ Yes (1)
- ❍ No (2)

Q23 Did you vote in the 2011 State Supreme Court election where the candidates were David Prosser and JoAnne Kolppenburg?

- ❍ Yes (1)
- ❍ No (2)

Q24 Please indicate the extent to which you agree with each of the following statements.

	Strongly Disagree (1)	Disagree (2)	Agree (3)	Strongly Agree (4)
I will be able to achieve most of the goals that I have set for myself (1)	❍	❍	❍	❍
When facing difficult tasks, I am certain that I will accomplish them (2)	❍	❍	❍	❍
In general, I think that I can obtain outcomes that are important to me (3)	❍	❍	❍	❍
I am confident that I can perform effectively on many different tasks (4)	❍	❍	❍	❍

Q25 We're interested in how good a job the media and schools are doing getting out information about politics. To help us, we'd like you to answer a few questions. Even if you're not completely sure you know the answer, we'd like you to take your best guess.

Q26 Which political office does John Boehner currently hold?

- Secretary of Education (1)
- U.S. Senator from Oregon (2)
- Speaker of the House of Representatives (3)
- Member of the U.S. Supreme Court (4)
- Don't Know (5)

Q27 Which political office does Mitch McConnell currently hold?

- Secretary of the Interior (1)
- U.S. Representative from Alabama (2)
- Chief Justice of the U.S. Supreme Court (3)
- Minority Leader of the U.S. Senate (4)
- Don't Know (5)

Q28 Which political party currently has the most members in the U.S. House of Representatives?

- The Democratic Party (1)
- The Republican Party (2)
- Another Party (3)
- Don't Know (4)

Q29 Who holds the responsibility for nominating justices to the Supreme Court?

- The President (1)
- The Chief Justice of the Supreme Court (2)
- The Speaker of the House of Representatives (3)
- The Minority Leader in the Senate (4)
- Don't Know (5)

Q30 Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or what?

- Republican (1)
- Democrat (2)
- Independent (3)
- Other (4) _____

Q31 Would you call yourself a strong Republican or a not very strong Republican?

- Strong (1)
- Not strong (2)

Q32 Would you call yourself a strong Democrat or a not very strong Democrat?

- Strong (1)
- Not strong (2)

Q33 Do you think of yourself as closer to the Republican or Democratic party?

- Closer to Republican (1)
- Closer to Democratic (2)

Q34 How important would you say religion is in your own life?

- Not at all Important (1)
- Very Unimportant (2)
- Neither Important nor Unimportant (3)
- Very Important (4)
- Extremely Important (5)

AARON C. WEINSCHENK

Curriculum Vitae

Research Interests: Campaigns and elections; mass political behavior; political and civic participation; public opinion; voting behavior; political partisanship; political psychology.

Teaching Interests: American government; political behavior; elections; public opinion; research methods; statistics; survey research; political psychology; public administration and public policy.

Education

Ph.D. Political Science, University of Wisconsin—Milwaukee (April 2013)
Exam Fields: American Politics and Public Administration & Policy
Dissertation: 'Cause You've Got (Personality): Understanding the Impact of Personality on Political Participation
Committee: Thomas M. Holbrook (chair), Kathleen Dolan, David A. Armstrong II, John Bohte, Erin Kaheny
Dissertation Awards: UWM Graduate School Dissertation Fellowship

M.A. Political Science, University of Wisconsin—Milwaukee (2009)
Thesis: Revisiting the Political Theory of Party Identification
Committee: Thomas M. Holbrook (chair), Kathleen Dolan, and Marcus Ethridge

B.A. and B.S. Political Science and Public Administration, University of Wisconsin—Green Bay (2007)
Summa Cum Laude (*with distinction in the major*)

Additional Education

Stanford University Summer Institute in Political Psychology, Stanford University, July 10-29, 2011

ICPSR Summer Program in Quantitative Methods of Social Research , University of Michigan, July 19-Aug. 13, 2010 *and* June 18-July 13, 2012

2010 Classes: Matrix Algebra, Regression II, Categorical Data Analysis
2012 Classes: Introduction to Applied Bayesian Modeling for the Social Sciences

Employment

Instructor, Department of Political Science, University of Wisconsin—Milwaukee, Sept. 2012-May 2013.

Teaching Assistant, ICPSR Summer Program in Quantitative Methods of Social Research, University of Michigan, Summer 2012.

Wilder Crane Research Assistant (for Thomas M. Holbrook), Department of Political Science, University of Wisconsin—Milwaukee, Sept. 2009-Sept. 2012.

Graduate Project Assistant, Undergraduate Laboratory for the Empirical Analysis of Politics, Department of Political Science, University of Wisconsin—Milwaukee, May 2008-Sept. 2009.

Graduate Teaching Assistant, Department of Political Science, University of Wisconsin—Milwaukee, Sept. 2007-May 2008.

Peer-Reviewed Publications

Weinschenk, Aaron C. *Forthcoming*. "Polarization, Ideology, and Vote Choice in U.S. Congressional Elections." *Journal of Elections, Public Opinion, and Parties*.

Weinschenk, Aaron C. *Forthcoming.* "Personality Traits and the Sense of Civic Duty." *American Politics Research.*

Weinschenk, Aaron C. 2012. "Partisan Pocketbooks: The Politics of Personal Financial Evaluations." *Social Science Quarterly* 93(4): 968-987.

Cera, Joseph and Aaron C. Weinschenk. 2012. "The Conditional Effects of Competing Messages During Presidential Nominating Conventions." *Presidential Studies Quarterly* 42(1): 161-175.

Cera, Joseph and Aaron C. Weinschenk. 2012. "The Individual-Level Effects of Presidential Conventions on Candidate Evaluations." *American Politics Research* 40(1): 3-28.

Holbrook, Thomas M., Clayton Clouse, and Aaron C. Weinschenk. 2012. "Bringing the President Back in: The Collapse of Lehman Brothers and the Evolution of Retrospective Voting in the 2008 Presidential Election." *Political Research Quarterly* 65: 263-274.

Weinschenk, Aaron C. 2010. "Revisiting the Political Theory of Party Identification." *Political Behavior* 32(4): 473-494.

Book Chapters

Holbrook, Thomas M., Terri Johnson, Clayton Clouse, and Aaron C. Weinschenk. 2013. "Elections and Political Parties in Wisconsin." In *Wisconsin Government and Politics*, 10th edition, editor Thomas M. Holbrook.

Working Papers and Papers Under Review

Holbrook, Thomas M. and Aaron C. Weinschenk. "Campaigns, Mobilization, and Turnout in Mayoral Elections" (revised and resubmitted at *Political Research Quarterly*).

Holbrook, Thomas M. and Aaron C. Weinschenk. "Money, Candidates, and Mayoral Elections" (under review at *Electoral Studies*).

Weinschenk, Aaron C. and Thomas M. Holbrook. "The Determinants of Campaign Spending in Mayoral Elections" (in preparation for journal submission).

Conference Presentations

"The Determinants of Campaign Spending in Mayoral Elections" (with Thomas M. Holbrook). Presented at the 2013 meeting of the Midwest Political Science Association, Chicago, IL.

"Measuring the Legitimacy of the U.S. Supreme Court" (with Sara Benesh and Shawn Fettig). Presented at the 2012 meeting of the Midwest Political Science Association, Chicago, IL.

"Candidates, Campaign Spending, and Urban Mayoral Elections" (with Thomas M. Holbrook). Presented at the 2011 meeting of the Midwest Political Science Association, Chicago, IL.

"The Individual-Level Effects of Presidential Conventions on Candidate Evaluations" (with Joseph Cera). Presented at the 2011 meeting of the Midwest Political Science Association, Chicago, IL.

"Measuring Contextual Influences on Voter Mobilization in U.S. House Elections" (with Clayton Clouse). Presented at the 2009 meeting of the Midwest Political Science Association, Chicago, IL.

Fellowships, Awards, and Grants

UWM Department of Political Science, Grant for ICPSR in 2012, $1,000.

UWM Graduate School Dissertation Fellowship, 2011-2012, $15,000.

UWM Department of Political Science, Grant to attend Stanford Summer Institute in Political Psychology in 2011, $2,000.

UWM Department of Political Science, Grant for ICPSR tuition in 2010, $2,500.

UWM Chancellor's Graduate Student Award, 2007, $4,000.

Discipline, Departmental, and University Service

Graduate Student Colloquium, Department of Political Science, founder and organizer, 2011-2012.

Appointed to the Graduate Course and Curriculum Subcommittee at UWM, 2010-2011.

President, Political Science Graduate Student Association, September 2010-2012.

Secretary, Political Science Graduate Student Association, September 2008-2010.

Helped organize and implement the Wisconsin Political Science Association Conference, March 2008.

Manuscript Referee: *Journal of Politics* (2013)*, American Journal of Political Science* (2012), *American Politics Research* (2011, 2012), *Political Behavior* (2011), *Political Research Quarterly* (2011*)*, *Social Science Research* (2012), *Social Science Quarterly* (2013).

Courses Taught

Instructor, Political Science 473: Public Opinion, Department of Political Science, University of Wisconsin–Milwaukee, Spring 2013 (face-to-face).

Instructor, Political Science 467: Elections and Voting Behavior, Department of Political Science, University of Wisconsin–Milwaukee, Fall 2012 (face-to-face).

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