

PERSONALITY AND GETTING OUT THE VOTE

A thesis presented to the faculty of the Graduate School of Western Carolina University
in partial fulfillment of the requirements for the degree of Master of Arts in Psychology.

By

Benjamin Ross Locklair

Director: Dr. David McCord
Professor of Psychology
Psychology Department

Committee Members: Dr. L. Alvin Malesky, Psychology
Dr. Christopher Cooper, Public Policy Institute

March 2011

ACKNOWLEDGEMENTS

I would like to extend my sincere thanks to my committee members and director for their invaluable insight and constructive feedback during the development of this thesis, to my parents for their unflagging support always, and to the University, which has for years now been the enabler of all my professional aspirations.

TABLE OF CONTENTS

	Page
List of Tables	3
Abstract	4
Introduction.....	7
Literature Review.....	9
Brief History of Personality Theory	9
Conceptual Explanation of Factor Analysis	11
History of the Five-Factor Model	11
Five-Factor Model Domains	14
Why Five Factors?	16
Voter Turnout in the U.S.	18
Brief Overview of GOTV Effectiveness by Campaign Modality	19
Does the Message Matter?	21
Intersection of Personality and Politics.....	24
Statement of the Problem.....	26
Hypotheses	27
Method	28
Participants.....	28
Measures	29
Procedure	30
Results.....	34
Tests of Hypotheses	34
Exploratory Analyses.....	39
Discussion.....	40
Limitations of the Present Study.....	43
Directions for Future Research	44
References.....	46
Appendices.....	52
Appendix A: M5:50 Personality Questionnaire and Instructions	52
Appendix B: “Get Out the Vote” Appeals	55
Appendix C: Informed Consent	57
Appendix D: Personality Feedback Paragraphs.....	59

LIST OF TABLES

Table	Page
1. Political affiliation of respondents	22
2. Means and standard deviations of appeal effectiveness ratings.....	28
3. Zero-order correlations of personality domains with effectiveness ratings of Civic Duty appeal	29
4. Zero-order correlations of personality domains with effectiveness ratings of Tradition appeal	30
5. Zero-order correlations of personality domains with effectiveness ratings of Hawthorne appeal	31
6. Zero-order correlations of personality domains with effectiveness ratings of Efficacy appeal	32
7. Zero-order correlations of personality domains with effectiveness ratings of Control appeal.....	33

ABSTRACT

PERSONALITY AND GETTING OUT THE VOTE

Benjamin R. Locklair, M. A.

Western Carolina University (March 2011)

Director: Dr. David McCord

Due in large part to the overlapping layers of federal, state, and local governments, the United States holds more elections than any other industrialized democracy in the world. Perhaps as a result, the U.S. also consistently has the lowest voter turnout of these countries. The importance of mobilizing supporters has long been recognized in conventional political wisdom, but until recently relatively little research had been done into which methods are actually effective at getting out the vote.

The extant research tends to focus on the methods used to reach voters (e.g., door-to-door canvassing, direct mail, telephone calls, etc.) and has dealt with the message of the GOTV appeals only as an afterthought. As such, while good information is available regarding the efficacy of different modalities, the research on the effect of the GOTV message is often inconclusive. Likewise, political research has only recently begun to consider the role of individual differences, especially personality, as a predictor of political behavior. Traditionally, individual differences have been treated as “noise” in the context of political research. There are indications, however, that far from being noise, individual differences in general, and personality in particular, are vital considerations and effective predictors of civic engagement (Mondak, Hibbing, Canache, Seligson, & Anderson, 2010), partisanship (Mondak & Halperin, 2008), and political orientation (Verhulst, Hatemi, & Martin, 2010) among potential voters.

The results of this study reveal that response to some types of GOTV messages can be modeled using variation in personality traits as a predictor. This is consistent with some earlier findings suggesting systematic variation in political behavior and affiliation associated with variation in personality traits. Furthermore, this study reveals that different types of appeal content do indeed differ significantly in their perceived effectiveness. The study has implications for how GOTV campaigns can be conducted in order to differentially benefit candidates of differing ideologies.

INTRODUCTION

Due in large part to the overlapping layers of federal, state, and local governments, the United States holds more elections than any other industrialized democracy in the world. Perhaps as a result, the U.S. also consistently has the lowest voter turnout of these countries. This is a longstanding trend, despite a considerable uptick in recent (i.e., 2008 and 2010) election turnout. One effect of low turnout is that local and state elections are often decided by a comparatively small number of votes, and are thus highly susceptible to Get Out the Vote (GOTV) campaigns. The importance of mobilizing supporters has long been recognized in conventional political wisdom, but until recently relatively little research had been done into which methods are actually effective at getting out the vote.

The extant research tends to focus on the methods used to reach voters (e.g., door-to-door canvassing, direct mail, telephone calls, etc.) and has dealt with the message of the GOTV appeals only as an afterthought. As such, while good information is available regarding the efficacy of different modalities, the research on the effect of the GOTV message is often inconclusive. In research which has focused on the message of the campaign, there are indications that the message does indeed matter.

Likewise, political research has only recently begun to consider the role of individual differences, especially personality, as a predictor of political behavior. Traditionally, individual differences have been treated as “noise” in the context of political research. There are indications, however, that far from being noise, individual differences in general, and personality in particular, are vital considerations and effective predictors of civic engagement (Mondak, Hibbing, Canache, Seligson, & Anderson, 2010), partisanship (Mondak & Halperin, 2008), and political orientation (Verhulst, Hatemi, & Martin, 2010) among potential voters. There are also

available brief instruments which assess for scores on the personality domains of the five-factor model, which is an exceptionally well validated and supported model of personality.

This study examines the effect that individual differences in personality have on the efficacy of GOTV appeals. Furthermore, this study reveals that, as is suggested by previous research, the message presented in GOTV campaigns does matter, and that variations in personality are able to predict effectiveness of certain types of GOTV messages. Finally, this study determines the relative contribution of each of the five-factor model personality domains to perceived effectiveness ratings on each of five GOTV appeals.

LITERATURE REVIEW

In order to orient the reader and contextualize the subject matter of this thesis, the following sections will provide an overview of its major conceptual areas. The first sections detail the history, foundations, and major features of the five-factor model of personality, as well as the rationale for its use in this study. Also, a brief account of the history of U.S. voter turnout in recent years is presented, together with a review of the extant research on GOTV interventions. Finally, research pertaining to the effects of message content and the role of individual differences in political behavior is reviewed.

Brief History of Personality Theory

The question of the nature and description of personality is quite literally age-old, as are many of the questions the science of psychology seeks to answer. The Greek philosopher Theophrastus, who lived more than 200 years before the Common Era, encapsulated the crux of the problem when he wrote in *Characters*, “Why is it that while all Greece lies under the same sky and all the Greeks are educated alike, nevertheless we are all different with respect to personality?” Hippocrates, and later the Roman physician Galen, attempted to answer this question with a personality model encompassing four basic types, which were derived from the humours of the body: choleric, melancholic, phlegmatic, and sanguine. While the idea of personality taking origin from bodily humours seems far-fetched to the modern researcher, this basic type theory formed a paradigm which guided and informed personality theory for nearly 2000 years, forming the ultimate basis of the early type theories of personality advanced by Jung and others (Eysenck & Eysenck, 1985).

The first problem to be solved in the study of personality was the question of how to describe the human attributes to be studied. In the face of the seemingly infinite number of traits

on which human beings can vary, there does not seem to be any logical point at which to begin. Sir Francis Galton was the first to propose a starting point: the language itself. According to Galton's reasoning, names will necessarily arise in the natural language to describe meaningful personality differences. A considerable number of personality researchers found this notion compelling, including Raymond Cattell, who described it thus: "The position we shall adopt is a very direct one... making only one assumption that all aspects of human personality which are or have been of importance, interest, or utility have already become recorded in the substance of language. For, throughout history, the most fascinating subject of general discourse, and also that in which it has been most vitally necessary to have adequate, representative symbols, has been human behavior" (1943, p. 483). This idea became known as the "lexical hypothesis," and it played a highly influential role in the progress of personality psychology in general and the five-factor model in general.

In 1936, Allport and Odbert undertook to turn the lexical hypothesis from an interesting idea into a basis for concrete, usable measures of personality traits. Together, they combed through the approximately 400,000 words in the 1925 edition of Webster's *New International Dictionary* to find those words which were relevant to human traits and tendencies. They found some 17,953 such words, comprising approximately 4.5% of the English language (Allport, 1937). Their list of thousands of adjectives was nearly ideal grist for the mill of factor analysis, and enabled subsequent factor analytic researchers such as Cattell to blaze the path toward the five-factor model of personality.

Conceptual Explanation of Factor Analysis

The five-factor model of personality is somewhat unique among concepts in psychology in that it is descriptive rather than explicative in nature. There is no underlying theory as to why

there are five factors, or why there are these five rather than some other five—the five-factor model simply asserts that these factors exist, whatever their origins or explanations. This is largely a result of the process by which the five-factor model was derived and from which it is inseparable: a statistical procedure called factor analysis.

In conceptual terms, factor analysis has the effect of grouping the variability of a large set of data into relatively fewer variable groups called factors. This is accomplished by comparing the correlation of every item with every other item—no mean feat before the age of microprocessors—and then separating them into groups of covarying items. Of note is that the process of factor analysis is utterly insensitive to the conceptual content of the data which it factors. If, for instance, the number of hamburgers one consumes is highly correlated with one's tendency to sunburn, then factor analysis will sort those two elements into a factor together, regardless of the lack of logical connection between those items. When performed properly with an appropriate data set, however, factor analysis often returns factors which have a conceptual internal consistency, as in the case of the five-factor model of personality.

History of the Five-Factor Model

Despite seeming to arise from nowhere in the 1980s, indications of the five-factor model of personality actually began to emerge nearly 80 years ago, when Louis Thurstone noted, as part of an address to a 1934 meeting of the American Psychological Association, that his factor analytic study of 60-adjective personality peer ratings revealed the operation of only five independent factors (Digman, 1995). Thurstone, however, failed to pursue this finding, and though it was published in the *Psychological Review*, so did everyone else (Digman, 1995). The five-factor model thus faded into obscurity, not to clearly show itself again until 1961. In the intervening period, further research by Thurstone (1951), Cattell (1943, 1944, 1947, 1948), and

Fiske (1947) showed the hallmarks of the five factors, but due largely to improper factor analysis methods, the authors and the psychological community at large failed to recognize them as such. Cattell's work in particular, which began by identifying four factors of the modern five, but due to factor overextraction ended up with 16 (Cattell's 16PF), unquestionably formed the basis of the research to come.

When Ernest Tupes and Raymond Christal, working for the U.S. Air Force in 1961, demonstrated that five-factor solution could not only account for the results of their own studies of personality ratings, but also for the results of Cattell (1947, 1948) and Fiske (1949), the foundations of the modern five-factor model were clearly laid out. It is ironic in retrospect that Tupes and Christal's studies, published as an obscure Air Force Technical Report, accomplished what Thurstone's address to the APA had failed to do—that is, to capture the attention of others in the psychological community and generate interest in the viability of the five-factor model of personality. Within a few years, studies had been published lending support to a five-factor solution by three other researchers: Norman (1963), Borgatta (1964), and Smith (1967).

In the 1960s, however, the *weltanschauung* of the psychological community was turning away, both from trait theories of psychology and from mental phenomena in general (Digman, 1995). The figure of behaviorism loomed large on the field of psychology, and for several years the study of personality and mental processes was relegated to a secondary tier and generally regarded as inferior to the “real science” of measuring and influencing behavior. Such was the derision for the study of personality in particular that the term “personality coefficient” was coined to describe trivial correlations (Digman, 1995). Once again, the five-factor model had failed to achieve any real measure of acceptance, interest, or support.

The five-factor model was not to emerge again until the 1980s, when a number of researchers attending a symposium on factor models of personality at a convention of the Western Psychological Association recognized a pattern in their own factor analytic studies—to wit, that “five-factor solutions were remarkably stable across studies, while more complex solutions were not.” (Digman, 1995) One of the attendees, Goldberg, conveyed this conclusion to another seminar in Baltimore, where he shared it with Paul Costa and Robert McCrae, who had already been working on a three-factor model of personality (the NEO model, encompassing neuroticism, extraversion, and openness). Goldberg convinced McCrae and Costa to add Conscientiousness and Agreeableness to their model, and the result was the first personality inventory based on the five-factor model (Digman, 1995).

McCrae and Costa, through a series of timely publications and conference presentations, soon spread the word of the five-factor model’s robustness and explicatory adequacy, and the model was rather enthusiastically and quickly adopted by other researchers, including John, Angleitner, Ostendorf, Borkenau, Wiggins, and Pincus (Digman, 1995). Over the next 20 years, the five-factor model rose to dominate the field of personality psychology, over the objections of researchers such as Eysenck (1992) that the data were better accounted for by his three-factor PEN (Psychoticism, Extraversion, Neuroticism) model. During the 1990s, publications referring to Eysenck’s PEN model and Cattell’s 16PF began to decrease in number, and publications dealing with the five-factor model began a rapid increase which has yet to level off (John et al., 2008).

Five Factor Model Domains

Though there has been and continues to be controversy over the exact composition and proper labels for each of the five factors (Block, 1995; Zuckerman, Kuhlman, Joireman, Teta, &

Kraft, 1993), researchers seem to have come to a general consensus, the objections of a few contrarians notwithstanding. The five domains are properly cited in the order in which they emerged from Tupes and Christal's (1961) groundbreaking factor analytic study, and are abbreviated EACNO: Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience.

Extraversion, originally called "surgency," may be thought of as a measure of an individual's tendency to affiliate with others (McCrae & John, 1992), but it also contains an element of interpersonal warmth and positive affect (Watson & Clark, 1997). Persons with high scores in Extraversion tend to be more comfortable in social situations, warm in their interpersonal relationships, and excitement seeking, while those with low scores in Extraversion may be described as shy, reserved, and dull. Lower-order facets of the Extraversion domain, as identified by Goldberg (1999) include: friendliness, gregariousness, assertiveness, activity level, excitement-seeking, and cheerfulness. Extraversion is assessed by questionnaire items such as "Make friends easily," "Keep in the background" (scored in reverse), and "Am skilled in handling social situations" (McCord, 2002).

Agreeableness, the second of the five factors, can be conceptualized as an individual's propensity to "get along" with others, and also their tendency to behave in conventionally moral ways (McCrae & Costa, 1992). Individuals with high Agreeableness scores tend to be trusting, compliant, forgiving, and modest. Conversely, those with low Agreeableness scores tend to be hostile, noncompliant/defiant, suspicious, and narcissistic (John, Naumann, & Soto, 2008). Lower level facets of the Agreeableness domain, as identified by Goldberg (1999) are: trust, morality, altruism, cooperation, modesty, and sympathy. Questionnaire items which assess for

Agreeableness include: “Have a good word for everyone,” “Have a sharp tongue” (scored in reverse), and “Believe that others have good intentions” (McCord, 2002).

The third of the five factors is Conscientiousness, which according to McCrae and John (1992) may be characterized as a measure of diligence, thoroughness, and dutifulness. Individuals with high Conscientiousness scores are described as having good impulse control, thinking before they act, following rules, and making and executing plans. On the low end of the Conscientiousness spectrum, individuals may be sloppy, careless, haphazard, disorganized, and dismissive of norms and rules (John et al., 2008). Goldberg (1999) identified the following terms and lower-level facets of the Conscientiousness domain: self-efficacy, orderliness, dutifulness, achievement-striving, self-discipline, and cautiousness. Conscientiousness is assessed using questionnaire items such as: “Get chores done right away,” “Waste my time” (scored in reverse), and “Carry out my plans” (McCord, 2002).

Neuroticism can be broadly described as a measure of the propensity of an individual to experience negative emotional states. McCrae and John (1992) described this domain as representing “individual differences in the tendency to experience distress, and in the cognitive and behavior styles that follow from this tendency.” Individuals who score highly on the Neuroticism domain are more likely to experience negative affect such as embarrassment, anger, depression, anxiety, tend to display higher rates of impulsive behaviors, and are more at risk for a variety of psychiatric disorders (McCrae & Costa, 1987). Those who score low in Neuroticism are not necessarily high in positive emotions, but rather tend to be calm, stable, and generally imperturbable (McCrae & John, 1992). Lower-order facets of the Neuroticism domain, as identified by Goldberg (1999) include: anxiety, anger, depression, self-consciousness, immoderation, and vulnerability. Questionnaire items which assess for Neuroticism include

statements such as: “Dislike myself,” “Seldom feel blue” (scored in reverse), and “Panic easily” (McCord, 2002).

The fifth and final factor is what McCrae and John (1992) referred to as Openness to Experience, but which has been labeled “intellect” by other researchers, which can be understood as a measure of inquiring intellect, culture, intelligence, intellect, intellectual interests, and intellectance (John & Srivastava, 1999). This is not to be confused, however, with the conventional understanding of intelligence, which correlates only modestly with this domain (John & Srivastava, 1999). Those with high scores in Openness to Experience are likely to take the time to learn new things, look for stimulating activities to break up their daily routine, affiliate with liberal political parties, and watch documentaries or educational television. On the low end of the Openness to Experience scale, individuals tend to be conservative, both in their values and their political affiliations (John et al., 2008). The lower order facets which Goldberg (1999) identified in the Openness to Experience domain are as follows: imagination, artistic interests, emotionality, adventurousness, intellect, and liberalism. Questionnaires assess for Openness to Experience using statements such as the following: “Have a vivid imagination,” “Tend to vote for conservative political candidates” (scored in reverse), and “Believe in the importance of art” (McCord, 2002).

Why Five Factors?

Though they has abated somewhat in recent years, the five-factor model has never been without its critics. Until the 1980s, it was largely taken for granted that a comprehensive system of personality would have no fewer than 16 dimensions, as Cattell’s 1944 study indicated (Digman, 1996). Eysenck (1992) continued to argue for his three-factor PEN model well into the 1990s, calling the reification of McCrae and Costa’s five factors the “premature crystallization of

a spurious orthodoxy” (p. 667). A transient sixth domain has also sometimes appeared in other psycholexical factor analytic studies of personality (Digman & Inouye, 1986).

What, then, is the evidence for five basic factors of personality? First, earlier factor analytic studies of personality, which tended to find far more than five factors, were almost certainly conducted erroneously. In 1947, Louis Thurstone published *Multiple Factor Analysis*, a text which became a guide for many factor analytic researchers, including Raymond Cattell (Digman, 1995). In it, Thurstone encourages researchers to “continue the factoring until one is sure the factoring has gone far enough. Too many factors can do no harm” (1947, p. 509). Unfortunately, this advice has been found to be flawed, and has led many a researcher to extract far more factors from their data than were meaningful. According to Digman (1995), the correlation matrices in Cattell’s studies, which led to the development of the 16PF, would have suggested perhaps “five or six factors to someone today, inasmuch as the eigenvalues become less than unity after the sixth and trivial ($<.70$) after the seventh” (p. 6).

Second, five factor solutions dependably appear regardless of the source of the rating data. The 1961 study by Tupes and Christal, in which the five factors made their first clear appearance, used peer ratings as the basis for their analysis. Since then, EACNO (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience) has been found in self reports (Saucier, 1997), expert ratings (Lanning, 1994), clusters of symptoms of personality disorders (Clark & Livesly, 2002), and in questionnaires measuring needs and motives (Costa & McCrae, 1988). Digman and Inouye wrote in 1986 that “if a large number of rating scales is used and the scope of the scales is very broad, the domain of personality descriptors is almost completely accounted for by five robust factors” (p. 116). The five-factor solution, then, persists regardless of the origin of the rating data.

Third and finally, there is evidence that the five factors have their basis in biology. They have been found across languages and cultures (McCrae & Costa, 2008) and show evidence of heritability (McCrae & Costa, 1992). Indications of the five factors have also been found in the behavior of animals other than humans (Gosling, 2001). In short, there is ample evidence to conclude, as did Costa and McCrae, that the five-factor model “is the Christmas tree on which the findings of stability, heritability, consensual validation, and predictive utility are hung like ornaments” (1993, p. 302).

The five-factor model, then, provides an adequate framework for describing individual differences in personality. The following sections will pertain to the history of voter turnout in the U.S., the extant research on factors which influence voter turnout, and the associations which have been demonstrated between personality, voter turnout, and other aspects of political behavior.

Voter Turnout in the U.S.

The United States has more elections each year than any other industrialized democracy. As Green and Gerber (2004) note, “Americans have more opportunities to vote each decade than Britons, Germans, or Japanese have in their lifetime” (p. 1). However, Americans consistently vote less than do the citizens of other democracies, with a mean turnout rate between 1960 and 2000 of 54.65% as opposed to 80.02% in all other industrialized democracies (Hill, 2006). Furthermore, by some measures voter turnout has been getting progressively lower rather than higher since 1960. “In the 1960 presidential election, voter turnout was 62.77 percent. From that election forward, however, turnout steadily declined, reaching a low of 50.15 percent in 1988. Following the 55.20 percent turnout in 1992 (the highest since 1972), turnout fell to 49.08 percent in 1996, which was the lowest voter turnout rate since 1924” (Hill, 2006, p. 3). Turnout

in the most recent elections (i.e. the 2008 presidential election, and the 2010 congressional elections) has been significantly higher, but it may be too soon to call this a trend-breaking phenomenon.

Since the earliest papers describing this decline, political scientists have been trying to explain why this is, in the face of factors which ought to increase voter turnout, such as increased education and removal of barriers to African-American participation in the South (Brody, 1978). Franklin (2004) provided a potential explanation when he wrote that cohorts of young people who reach voting age during times of intense political activity tend to remain active, while those who enter during times of low turnout do not learn to vote regularly, as it is not encouraged among their peers. This explanation was lent support by researchers such as Gerber and Rogers (2009) who found that potential voters who are told that voter turnout is expected to be high are more likely to vote than those who are told that turnout is anticipated to be low. More research, however, is needed in order to better understand this effect.

Brief Overview of GOTV Effectiveness by Campaign Modality

Most research conducted on the effectiveness of GOTV measures has focused upon the method of reaching voters, rather than the actual content of the message. Door-to-door canvassing has a long history as a GOTV method, as do leaflets, flyers, and mailers (Green & Gerber, 2004). In the last few decades, however, new methods have come into use, including large-scale phone operations, automated phone calls (the so-called “robo calls”), and e-mail campaigns. Understandably, politicians and campaigners have been eager to understand both the absolute effectiveness and cost effectiveness of each.

Door-to-door canvassing was once one of the most widely used method of mobilizing voters, particularly in ethnically homogeneous urban areas (Green & Gerber, 2004). Though it is

still widely used in local elections, state and national campaigns today tend to prefer methods which allow them more direct control over their message and how it is delivered (Green & Gerber, 2004). Canvassing campaigns require an immense amount of planning and supervision to ensure that they are properly executed. Still, Green and Gerber, summarizing a number of studies conducted on the effectiveness of different GOTV measures, concluded in 2004 that door-to-door canvassing is the most effective form of GOTV, both in terms of number of votes generated per contact (0.071) and in cost effectiveness, with each vote generated in this way costing the campaign about \$19.

Direct mail and leafleting are also long-standing traditions in the execution of GOTV campaigns. These measures allow a campaign to reach a far greater number of voters with the same amount of resources. Further, the standardized forms of the mailers or leaflets allow the campaign to precisely control the message they send to potential voters. The loss of the immediacy and human contact of a canvassing campaign, however, result in lower effectiveness per contact. Compared to door-to-door canvassing, direct mail and leafleting produce fewer votes per contact, both averaging approximately 0.005 votes per person contacted by the campaign (Green & Gerber, 2004). The cost of each additional vote, though largely dependent of printing costs, is also higher than in the case of canvassing, ranging between \$20 and \$60 per vote (Green & Gerber, 2004).

Phone banks, robo calls, and “push polls” (where campaigns convey negative information about an opponent under the guise of conducting a poll) have become more and more common in recent years. The actual structure of a GOTV phone call can vary widely, from a casual conversation to a highly scripted message to a fully pre-recorded robo call. Accordingly, the results of a GOTV phone campaign can vary dramatically. In any case, phone banks tend to

generate only small to negligible amounts of additional votes, at costs which are comparable to those of direct mail, depending on the type of campaign conducted (Green & Gerber, 2004).

E-mail campaigns are among the newest to the scene, and despite widespread usage there is little information about their effectiveness. Part of the difficulty in assessing the effectiveness of an email campaign comes from the inconsistent quality of the lists of email addresses used for the campaign. Email addresses are a traded commodity, and some lists are of higher quality than others. While a high-quality list may consist of the addresses of persons who have proactively opted in to being recipients of political information, these lists are both uncommon and expensive (Green & Gerber, 2004). Much more common are lists of addresses gathered from across the internet by software automatons, which consist largely of addresses of people who have not agreed to receive the campaign's messages, and in many cases addresses which are no longer valid. The advantage of these lists is their low cost; according to Green and Gerber "\$50 will buy millions of addresses" (2004, p. 83). Studies conducted thus far, however, have failed to show that email GOTV campaigns have any more than negligible effects (Green & Gerber, 2004).

Does the Message Matter?

Green and Gerber (2004), in their review of a considerable number of studies in increasing voter turnout, did not much address the question of whether the content of the message mattered as far as its effectiveness in increasing voter turnout. When they did address the issue of message content, the conclusion they reaching in every case was that the precise content of the message did not seem to matter "as long as it was not ridiculous" (Green & Gerber, 2004, p. 59). While it is true that in the studies they reviewed, only small or negligible effects were found for the content of the GOTV appeal, it is far from clear given the narrow

range of appeal content and the contexts in which they were applied that Green and Gerber's overall conclusion (i.e., that the message content does not matter) is warranted.

One of the studies upon which they based this conclusion was Melissa Michelson's 2003 article on door-to-door canvassing. This research, which was conducted in rural California and concentrated mainly on the Latino vote, was simply not designed to detect differences in the effectiveness of the appeal content. Michelson used two appeals—one which referred to civic duty, and one which emphasized Latino ethnic solidarity. Two-person canvassing teams were sent to homes which were identified by surname analysis to have Latino residents. The canvassers were instructed to deliver the appeals in a spontaneous and conversational way, rather than adhering closely to the script. This in itself threatens the validity of the findings, as it breaks the standardization of the appeals, but the most damning problem in Michelson's methodology was that if a voter assigned to the "ethnic solidarity" treatment group was perceived by the canvassers to not be Latino, the message was altered to remove references to ethnic solidarity. It is not surprising, therefore that differences between treatment groups were difficult to detect. It is true that when Michelson only considered the Latino voters, the difference in treatment effects was not significant, but given the low number of appeal types (two), the specificity of the "ethnic solidarity" appeal, and the narrowness of the target group (Latino voters in agricultural rural central California), it is not at all clear that these findings can be meaningfully generalized.

Green and Gerber cite as further evidence for their hypothesis that message does not matter one of their own studies, conducted in 2000, which compared the effects of canvassing, direct mail, and telephone contacts as methods to get out the vote. In this project, they used three types of mail appeals: one which referred to civic duty, one which emphasized neighborhood solidarity, and one which emphasized the potential effects of a given voter's voice. Among

participants who received only one mailer and no other contacts from the research group, there were no differences among groups who received the different appeals. However, in a subsequent unpublished study, they found that the efficacy appeal (the one that emphasized the potential effects of one vote) lost its effectiveness when the outcome of the election was not uncertain, while the other appeals retained their effectiveness in these circumstances (Green & Gerber, 2004).

Furthermore, there are indications that message content does make a difference. In 2008, Gerber, Green, and Larimer conducted a study on the effect of GOTV direct mail in which they explored a new message content area— that of social pressure. In it, they compared the effects of four different mailings on voter turnout: one which emphasized civic duty, one which communicated that the receiving participant's voting behavior was being observed (the "Hawthorne effect" appeal), one which reminded participants that who votes is public information and listing the recipient's recent voting records, and one which reminded participants that their voting behavior was a matter of public record and that listed the recipient's voting record and the records of their neighbors, and threatened to publicize whether the recipient voted or not. The manipulated variable in this case was the amount of social pressure referred to in the GOTV appeal, and the resulting voter turnout among the groups showed a clear pattern of higher turnout as the social pressure was increased. Another study by Gerber and Rogers (2009) administered two GOTV appeal scripts to voters by telephone. One appeal emphasized how many citizens failed to vote, while the other emphasized how many had and were going to do so. Gerber and Rogers found that those who had received the "high turnout" message were more likely themselves to vote, and ascribe this effect to the establishment of a

“descriptive social norm” of voting (Gerber & Rogers, 2009). In light of these results, it seems premature to assert that the “message does not matter” in GOTV campaigns.

Intersection of Personality and Politics

While most research thus far on personality as it relates to politics have focused on the traits of political elites and leaders, there are reasons to believe that personality has an effect on mass politics as well (Cooper, Golden, & Socha, 2009). Specifically, Cooper et al. (2009) found that high scores in Openness to Experience are associated with liberal political affiliation, while high scores in Conscientiousness are associated with conservative political affiliation. This finding confirmed the research others, who have reported the same connection (Carney, Jost, Gosling, & Potter, 2008). Furthermore, Agreeableness was found to be a significant predictor of political efficacy (Cooper et al., 2009). Persons who score higher in Conscientiousness are significantly more likely both to be registered to vote and to actually vote (Cooper et al., 2009), though this effect was smaller than some of the others. Finally, persons scoring higher in Extraversion and Openness to Experience are more likely to talk to their friends about politics. The results of these studies strongly suggest that personality plays a critical role in mass politics, and one which has been largely overlooked. Furthermore, there have been shown to be geographic variations in scores on each of the five factors, which may partially explain some of the geographic variation in political affiliation and orientation (Rentfrow, Gosling, & Potter, 2008).

Mondak and Halperin (2008) found associations between five factor personality traits and a number of political behaviors, including partisanship, political ideology, support for leaders of differing ideologies (Bill Clinton and George Bush), and trust in political figures. While some behaviors failed to correlate with their personality measures, enough did for them to consider

their hypothesis that “some aspect of personality will matter in most cases” (p. 351) to be borne out. Notably, this study failed to find a direct connection between personality traits and voter turnout in general. In 2010, Mondak et al. expanded on these exploratory findings with a second study, which demonstrated that five-factor personality traits were significantly related to a number of behavioral measures of political involvement and civic engagement, such as displaying political signs and bumper stickers, or attempting to convince others to vote for or against a particular candidate. Mondak et al. (2010) also found voter turnout to be associated both with the Conscientiousness domain and with respondent age.

Verhulst et al. also explored this topic in a 2010 study, using Eysenck’s three-factor PEN model rather than the five-factor model. They found that gross political orientation (i.e. conservative versus liberal) was associated with the Psychoticism dimension of the PEN model as well as an additional measure of social desirability. This makes sense in light of the findings of Mondak and Halperin (2008), and Mondak et al. (2010), which states that political orientation was strongly associated with the conscientiousness and agreeableness domains of the five-factor model. The overlap in construct between a social desirability scale and agreeableness is not difficult to imagine, and the Psychoticism facet of Eysenck’s three-factor model incorporates the variance associated with conscientiousness and openness to experience in the five-factor model.

STATEMENT OF THE PROBLEM

A review of the psychological literature shows that the five-factor model of personality is a valid, reliable, and useful method of measuring differences in personality between individuals. The five-factor model has also been shown to be an adequate descriptive framework for the higher-order differences in temperament between individuals. Furthermore, the differences it measures are stable and durable. There are instruments available which are able to quickly assess for an individual's scores in each of the five domains. There is also clear evidence that differences in at least some of these personality domains can predict an individual's political orientation and attitudes toward politics. It is therefore reasonable to hypothesize that personality also affects how one responds to efforts to "Get Out the Vote."

A review of the political science literature reveals some disagreement over whether there has been a decline in voter turnout in relatively recent years, but there is no disagreement that mobilizing voters is one of the linchpins of electoral success. As such, the development of effective GOTV campaigns is an issue of nontrivial importance to political campaigns. Furthermore, despite assertions to the contrary, there is evidence that the type of message presented to potential voters by a GOTV campaign affects the overall effectiveness of the campaign. Given the results found by Cooper et al. (2009), Mondak and Halperin (2008), Mondak et al. (2010), and Verhulst et al. (2010), it is reasonable to hypothesize that individual differences, such as personality, account for some of this discrepancy. In these circumstances, highly targeted GOTV campaigns become possible given the geographic, political, and organizational variation in scores on the five factors of personality. This study, then, seeks to address the following primary question: how do differences in personality affect an individual's responsiveness to different types of message content in a GOTV appeal?

Hypotheses

1. In multiple regression of the effectiveness ratings of the “Civic Duty” appeal type, Conscientiousness will be a strong, significant positive predictor and Openness to Experience will be a strong, significant negative predictor.
2. In multiple regression of the effectiveness ratings of the “Tradition” appeal type, Conscientiousness will be a strong, significant positive predictor and Openness to Experience will be a strong, significant negative predictor.
3. In multiple regression of the effectiveness ratings of the “Social Pressure” appeal type, Conscientiousness and Agreeableness will be strong, significant positive predictors.
4. In multiple regression of the effectiveness ratings of the “Efficacy” appeal type, Agreeableness will be a strong, significant positive predictor.
5. In multiple regression of the effectiveness ratings of the “Control” appeal type, no personality facet will emerge as a significant predictor.

METHOD

Participants

Participants consisted of individuals recruited through the web service Mechanical Turk (N = 287). The sample was predominantly Caucasian (N = 227), and females outnumbered males among the respondents (N = 174 and N = 111, respectively). Respondents were older than the typical undergraduate population ($M = 36.48$), but there was considerable variability in participant age ($SD = 13.45$). Participants in the study leaned toward the liberal end of the liberal-conservative continuum ($M = 40.32$ on a scale where “0” denotes “Very Liberal” and “100” denotes “Very Conservative”), though again there was considerable variability in the responses ($SD = 28.80$). Political affiliation of the participants was as shown in Table 1. Participants were minimally compensated for their participation (\$0.20 per respondent).

Table 1

Political affiliation of respondents.

	N	Percentage
Republican	37	12.9%
Democrat	105	36.6%
Independent	59	20.6%
Libertarian	14	4.9%
Green Party	5	1.7%
Tea Party	8	2.8%
Unaffiliated	49	17.1%
Other	10	3.5%

Measures

Participants responded to relatively few demographic items as part of the study procedure. Information regarding participant age, sex, ethnicity, and political affiliation, and political orientation were gathered. In addition to these basic sample-descriptive items, participants responded to two other measures: measures of GOTV appeal effectiveness and a measure of five-factor model personality domains.

Participants were assessed for personality by means of the M5:50 questionnaire (McCord, 2002). The M5:50 is a brief personality measure, consisting of 50 short sentence predicates (“Have a vivid imagination,” “Believe in the importance of art,” etc.) derived from the much larger International Personality Item Pool (IPIP) developed by Goldberg (1999). Respondents answer each item using a 5-point Likert-type scale, which ranges from “Inaccurate” at the lower range to “Accurate” at the higher range. The questionnaire contains 10 items for each domain of personality, half of which are reverse-scored to minimize directional bias. When completed, the M5:50 returns five scores, one for each of the personality domains measured (Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience). Possible scores in each domain range from 10 to 50. The M5:50 has shown a high degree of internal reliability, with a Cronbach’s alpha of .863 for E, .759 for O, .849 for C, .864 for N, and .778 for O (Socha, Cooper, & McCord, 2010). Furthermore, recent studies have given clear indications of its construct validity and goodness of fit with the five-factor model (Socha et al, 2010.) A copy of the relevant portion of the M5:50 may be found in Appendix A.

GOTV appeal effectiveness was measured using a slider-bar in a computer interface (see Procedure section for more information). After being presented with a GOTV appeal, participants used their mouse pointers to move a slider along a continuum, with one side of the

continuum representing “Ineffective” and the other representing “Effective.” The full text of the GOTV appeals may be found in Appendix B.

Procedure

Participants were recruited through the web service Mechanical Turk. This is a website operated in association with the Amazon company, which advertises itself as a marketplace for human intelligence tasks (i.e., tasks which are simple in nature but which computers are currently unable to perform). Mechanical Turk operates on a micropayment basis, with each worker or participant being paid per task they complete. The task posted on the Mechanical Turk site was advertised as political research and compensated at \$0.20 per participant, but also offered (as enticement to participate) feedback regarding the results of the personality portion of the research. It was predicted that offering this feedback would both improve the response rate and reduce attrition among those who began the study. The posted task included a hyperlink to the actual study website, which was constructed and hosted on servers belonging to Qualtrics, a survey software company which is contracted with Western Carolina University. Many of the mechanics of the survey software are proprietary to Qualtrics; however, the Qualtrics interface was modified and augmented by the researchers in order to allow participants to receive feedback on their test results, rather than Qualtrics simply storing the data. All data collection occurred via internet, and as such access to a computer was a requirement to participate in the study. While this may have introduced some bias into the sample, research has shown that internet samples are roughly comparable with participants recruited through other means (Meyerson & Tryon, 2003).

After accessing the survey hyperlink, participants first saw a page which outlined the purpose of the study, what was expected from them, what they could expect to gain from

participating in the study, and which offered them the opportunity to input their email addresses if they wish to receive a copy of the results upon completion of the study. Informed consent was also addressed on this page. Those wishing to participate in the study affirmed their consent and selected an option to continue. Those who did not wish to participate were instructed to navigate away from the survey. A copy of the text of this page may be found in Appendix C.

Following informed consent, participants came to a page containing the M5:50. The brief instructions found at the beginning of Appendix A appeared at the top of the page, followed by the 50 items of the questionnaire. Participants responded to each item by selecting one of five “radio buttons” which appeared in a row extending from the item in question. If a participant selected a second button in a particular row, the software removed their first response. The labels for each of the buttons (“Inaccurate,” “Moderately Inaccurate,” “Neither,” “Moderately Accurate,” and “Accurate”) appeared at the top of the page and were repeated every 10 items, such that as the participant scrolled through the items, the value labels were always visible. Responses were required on each of these items, so that if a participant attempted to continue without responding to all items, a dialog box was displayed instructing them to answer all items before they could continue. When the questionnaire was completed, participants could select an option to continue to the next page.

The next page contained two GOTV appeals randomly selected from the entire set of five. A random selection of two appeals was chosen in order to maximize the variability between effectiveness scores. Participants were asked to read each appeal and then rate its effectiveness. Beneath each appeal, there was an input interface which consisted of a marker which the participant could move along a linear continuum. The left end of the continuum was labeled “Ineffective,” and the right end of the continuum was labeled “Effective.” There were no rulings

or intermediate markers along the continuum. Based on the position of the marker, the survey software assigned a value between 0 and 100 to the participant's response; however, the survey was programmed not to show this value to the participant. Having the instrument programmed in this way (having the appearance of an analog measure while returning digital data) was hoped to allow for natural responding while returning data which could be easily analyzed. Once the participant had rated each of the appeals, they could select an option to continue, bringing them to the final page of questions.

The third and final questionnaire page consisted of demographic items. Participants were asked to enter their year of birth from a drop-down menu, their sex by means of radio buttons, and their ethnicity from a drop-down menu. Participants entered their political affiliation (if any) from a drop down menu. Finally, participants rated their own political orientation using another analog-type slider bar, with "0" signifying "Very Liberal" and "100" representing "Very Conservative". Having done this, participants could again select the option to continue, moving on the final page.

The last page consisted of feedback from the M5:50. In all cases, participants received feedback in each domain in the form of two paragraphs. The first paragraph consisted of a general explanation of each domain and what it measures. The second paragraph varied depending on the score the participant received in that domain. The instrument was coded into the Qualtrics interface in such a way that the participant's domain scores were calculated "client-side"; that is, the actual results were calculated on the participant's computer rather than on the Qualtrics server. Code was written and implemented which reversed the scoring for the inverted items and created a total score between 10 and 50 for each domain.

Since this score in itself would likely mean little to the layperson, additional code was written to compare the participants' individual scores to those of the 760 individuals whose results were used for the confirmatory factor analysis of the M5:50 (Socha et al, 2010). Participants scoring at or below the 25th percentile in a given domain received a feedback paragraph which characterized their score as "Low" and described common characteristics of persons with a low score in that domain. Those scoring between the 25th and the 75th percentile received a feedback paragraph characterizing their score as "Average" and described characteristics of other with Average scores in that domain. Finally, participants scoring at or above the 75th percentile received a feedback paragraph which characterized their score as "High" and described characteristics of others with similarly high scores in that domain.

RESULTS

Descriptive statistics were computed for the effectiveness ratings of all appeals. These statistics appear in Table 2.

Table 2

Means and standard deviation of appeal effectiveness ratings.

Appeal	<i>n</i>	<i>M (SD)</i>
Civic Duty	114	54.41 (27.17)
Efficacy	108	49.02 (27.15)
Tradition	122	66.59 (27.56)
Hawthorne	114	41.12 (31.93)
Control	116	55.99 (32.35)

Tests of Hypotheses

Hypothesis 1. It was predicted that in ordinary least squares multiple regression of the effectiveness ratings of the Civic Duty appeal, Conscientiousness would emerge as a positive predictor and Openness to Experience would emerge as a negative predictor. An ordinary least squares multiple regression was performed on the effectiveness rating of this appeal using the five personality domain scores as predictors. The regression model accounted for a significant portion of the variability in effectiveness ratings [$F(5, 108) = 2.67, p = .03, R = .33$], and Conscientiousness did indeed emerge as a positive predictor of effectiveness ratings, though Openness to Experience did not. Thus, hypothesis 1 was only partially supported. Zero-order correlations between each of the five factors and the effectiveness ratings are shown in Table 3.

Table 3

Zero-order correlations of personality domains with effectiveness ratings of Civic Duty appeal.

Domain	<i>r</i>	<i>p</i>
Extraversion	.13	.31
Agreeableness	.19	.21
Conscientiousness	.28	.02
Neuroticism	-.19	.64
Openness to Experience	-.07	.11

Hypothesis 2. It was predicted that in ordinary least squares regression of effectiveness ratings of the Tradition appeal, Conscientiousness would emerge as a positive predictor and Openness to Experience as a negative predictor. An ordinary least squares multiple regression was performed on the effectiveness ratings of this appeal using the five personality domain scores as predictors. The model accounted for a significant portion of the variability in effectiveness ratings [$F(5, 116) = 2.92, p = .02, R = .33$]. Neither Conscientiousness nor Openness to Experience emerged as significant predictors of effectiveness ratings, but Agreeableness did. The hypothesis is therefore considered to be falsified. Zero-order correlations of each of the five personality domains with the effectiveness ratings are shown in Table 4.

Table 4

Zero-order correlations of personality domains with effectiveness ratings of Tradition appeal.

Domain	<i>r</i>	<i>p</i>
Extraversion	.06	.84
Agreeableness	.26	.02
Conscientiousness	.17	.26
Neuroticism	-.03	.41
Openness to Experience	.23	.10

Hypothesis 3. It was predicted that in ordinary least squares multiple regression of the effectiveness ratings of the Hawthorne Effect appeal, Conscientiousness and Agreeableness would emerge as positive predictors. An ordinary least squares multiple regression was performed on the effectiveness ratings of this appeal using the five personality domains as predictors. The model failed to account for a significant portion of the variability in the effectiveness ratings of this appeal [$F(5, 108) = 1.06, p = .39, R = .22$]. None of the five personality domains emerged as a significant predictor of effectiveness ratings. The hypothesis is therefore considered to be falsified. Zero-order correlations of each of the five personality domains with the effectiveness ratings are shown in Table 5.

Table 5

Zero-order correlations of personality domains with effectiveness ratings of Hawthorne appeal.

Domain	<i>r</i>	<i>p</i>
Extraversion	.13	.55
Agreeableness	.16	.27
Conscientiousness	.27	.17
Neuroticism	-.10	.72
Openness to Experience	-.01	.40

Hypothesis 4. It was predicted that in ordinary least squares multiple regression of the effectiveness ratings of the “Efficacy” appeal type, Agreeableness would emerge as a significant positive predictor of effectiveness ratings. An ordinary least squares multiple regression was performed on the effectiveness ratings of this appeal, using the five personality domains as predictors. The model failed to account for a significant portion of the variability in the effectiveness ratings of the appeal [$F(5, 102) = .773, p = .57, R = .19$]. The hypothesis is therefore considered to be falsified. Zero-order correlations between each of the five personality factors and the effectiveness ratings are shown in Table 6.

Table 6

Zero-order correlations of personality domains with effectiveness ratings of Efficacy appeal.

Domain	<i>r</i>	<i>p</i>
Extraversion	.09	.11
Agreeableness	-.04	.99
Conscientiousness	-.06	.64
Neuroticism	.01	.48
Openness to Experience	-.10	.17

Hypothesis 5. It was predicted that in ordinary least squares multiple regression of the effectiveness ratings of the Control appeal, no personality domain would emerge as a significant predictor, either positive or negative. An ordinary least squares multiple regression was conducted on the effectiveness ratings of the Control appeal, using the five personality domains as predictors. The model failed to account for a significant portion of the variability in the effectiveness ratings [$F(5, 110) = .44, p = .82, R = .14$]. As predicted, no personality domain emerged as a significant positive or negative predictor. Zero-order correlations between the personality domains and the effectiveness ratings are shown in Table 7.

Table 7.

Zero-order correlations of personality domains with effectiveness ratings of the Control appeal.

Domain	<i>r</i>	<i>p</i>
Extraversion	.05	.84
Agreeableness	.07	.87
Conscientiousness	.13	.31
Neuroticism	-.09	.65
Openness to Experience	.04	.86

Exploratory Analyses

A one-way ANOVA was conducted to assess for gross differences between the effectiveness ratings of the different GOTV appeals. The analysis revealed significant differences between ratings of the different appeals [$F(4, 569) = 12.44, p < .005$]. Post-hoc testing revealed that the Tradition appeal ($M = 66.59$) was significantly more effective than all of the others ($p < .05$), while the Hawthorne appeal ($M = 41.43$) was significantly less effective than all of the other appeals with the exception of the Efficacy appeal. There were no significant differences in effectiveness between the Civic Duty ($M = 54.41$), Efficacy ($M = 49.02$), and Control ($M = 55.99$) appeals.

DISCUSSION

Previous research has indicated that individual differences in general and personality in particular are relevant influences on the political behaviors of individuals (Carney et al., 2008; Cooper et al., 2009; Mondak & Halperin, 2008; Mondak et al., 2010; Verhulst et al., 2010). There are also indications that personality factors can serve as predictors of civic engagement, including the proclivity to vote in elections (Mondak et al., 2010). Since GOTV interventions play a crucial role in successful campaigns, particularly on the local and state levels (Green & Gerber, 2004), and since there are indications that the message content of GOTV appeals can have an effect on potential voters' responsiveness (Michelson, 2003), it is reasonable to infer that these individual differences might also result in differences in effectiveness between different types of appeals.

The purpose of this study was to investigate and describe the effect that individual differences in personality have on the perceived effectiveness of a given type of GOTV appeal. As an additional topic of interest, this study sought to describe the gross differences in effectiveness between five different types of GOTV appeal, both independent of and controlling for the effect of personality differences. Some significant results emerged in the course of this investigation.

The researcher first hypothesized that in an ordinary regression model of the effectiveness of the Civic Duty appeal type, Conscientiousness and Openness to Experience would be identified as positive and negative predictors, respectively. This hypothesis was informed by the inclusion of the construct of "dutifulness" under the rubric of Conscientiousness

in the five-factor model, though the connection between high Conscientiousness and civic engagement was called into question by the work of Mondak et al. (2010). Further, association between high conscientiousness and conservatism (Kossowska, 1999) together with the negative association between conservatism and Openness to Experience (Goldberg, 1999) led the researcher to hypothesize that Openness would be a negative predictor of response to the Civic Duty appeal type. The regression model revealed that Conscientiousness was a significant predictor as expected; however, Openness to Experience did not serve as a significantly effective predictor. While it is conceivable that a third variable is operating to obscure the effect of conservative-liberal variation, the more parsimonious explanation is that the effectiveness of appeals to civic duty is best predicted by Conscientiousness alone regardless of the political orientation of the respondent.

Second, the researchers hypothesized that in ordinary multiple regression of the effectiveness ratings of the Tradition appeal type, Conscientiousness and Openness to Experience would emerge as positive and negative predictors, respectively. The rationale for this second hypothesis was similar to that of the first. In the actual regression analysis, neither of these constructs proved to be effective predictors of perceived effectiveness. Agreeableness, however, proved to be an effective positive predictor of responsiveness to this particular appeal. Again, there is no indication that the conservatism-liberalism construct plays any direct role in responsiveness to this appeal. However, the association between Agreeableness and responsiveness to this appeal might be explained in terms of the role that Agreeableness could play in the willingness of an individual to break with tradition.

Third, the researchers hypothesized that in ordinary multiple regression of the Efficacy appeal type, Agreeableness would emerge as a positive predictor. The rationale for this

hypothesis is found in Goldberg's 1999 description of the five personality domains and their sub-facets, indicating that interpersonal trust is part of the construct of Agreeableness. In short, Agreeableness was expected to predict responsiveness to this appeal because at higher levels of Agreeableness, individuals are expected to be more likely to believe that a candidate shares values with them and that they will act on their campaign promises. This rationale was supported by Mondak et al. (2010), who found that higher agreeableness was associated with higher reported levels of trust in politicians. The actual regression model failed to account for any significant portion of the variance in the effectiveness ratings of this appeal type. Again, while this could possibly be the result of the operation of a third variable, the simpler explanation is that personality does not play a role in responsiveness to this appeal type.

Fourth, the researchers hypothesized that in ordinary multiple regression of the Hawthorne appeal type, that Conscientiousness and Agreeableness would emerge as positive predictors. The introduction of an element of implied attention from a researcher was expected to influence the behavior of respondents with high Agreeableness, while the appeal was expected to activate the "dutifulness" portion of the Conscientiousness domain in a similar manner to the Civic Duty appeal. The actual regression model, however, failed to account for a significant portion of the variability in the perceived effectiveness ratings. While it is not possible to interpret a null result with any confidence, there are logical reasons to suspect that the results for this appeal may not reflect its actual effectiveness. These considerations are discussed in the section on limitations of the present study.

Last, it was hypothesized that no personality domain would emerge as a predictor of the effectiveness ratings of the Control appeal, which pertained to the importance of recycling and which did not mention voting in any way. As there is no theoretical reason to suspect that

individual differences in personality would predict effectiveness ratings of an irrelevant appeal, a viable regression model for these ratings might have reflected a problem with the research design. The actual model, as expected, did not account for a significant portion of the variation in effectiveness ratings for this appeal type.

As a matter of exploratory analysis, the mean effectiveness ratings of the different appeal types were compared as independent rating. In this analysis, the Tradition appeal was shown to be clearly superior in effectiveness as compared to all other appeals, and the Hawthorne was revealed to be less effective than all other appeals, including the Control appeal. This indicates that a Tradition appeal might be a good choice for a campaign to use, particularly as its effects seem to be largely independent of political orientation.

Limitations of the present study

Probably the greatest limitation of the present study pertains to the potential disconnect between the rating of an appeal's hypothetical effectiveness using a slide-bar interface on a computer and the actual behaviors involved in the act of voting. Responding to the items in this study required very little effort and forethought as opposed to participating in an actual election, which at minimum requires planning and travel to a polling place, and ideally would involve effort to research the candidates and their positions. As such, it seems reasonable to suppose that the effectiveness ratings reported in this study may somewhat over-represent the proportion of respondents who would actually vote as a result of being exposed to one of more of these GOTV appeals.

The especially low effectiveness rating for the Hawthorne appeal seems anomalous when compared to the results found in the 2008 study of Gerber et al., in which the "social pressure" appeal type was by far the most effective. This may be due to the fact that Gerber, Green, and

Larimer's study was conducted in a more naturalistic environment than the present study, and the invocation of social pressure to vote may have been more pertinent to their respondents than to those in the current study. Simply put, the implied threat of social exposure of the respondent's failure to vote may have seemed empty or unconvincing to the respondents to the present study.

Likewise, the comparatively high effectiveness ratings of the Control appeal are also difficult to explain. The similarity of this sample's personality scores to those of the norm group seems to rule out the possibility that these participants were simply not responding attentively to the survey items; however, it is possible that the participants were less attentive to the GOTV appeals, as these were less relevant to their interests.

Directions for future research

A logical next step for research into this domain would be to conduct a similar study in a more naturalistic environment. For example, a research could procure local voter records, select a random sample for personality assessment, apply the different appeals and then examine the actual voter turnout. This would address most of the shortcomings of the present study. A similar method could also be applied on a smaller scale, however—for example, in a student election at a university.

Further research is necessary to determine the role, if any, that the conservatism-liberalism construct plays in the response to differing types of GOTV appeals, and whether it may mediate or moderate the relationship between personality and response to these measures. Additionally, more research on the gross effects of GOTV appeal content is needed in order to determine the effects of content and wording on responsiveness to these interventions. The application of psychological and individual differences research to questions of mass politics is still a relatively new phenomenon, and there remains much work to be done in order to fit these

and other findings into an integrative framework for understanding the role of individual differences in political behavior.

REFERENCES

- Allport, G. W., & Odbert, H.S. (1936). Trait-names: A psycho-lexical study. *Psychological Monographs*, 47(211), 171.
- Allport, G.W. (1937). *Personality: A Psychological Interpretation*. New York: Henry Holt and Company.
- Block, J. (1995). A contrarian view of the five-factor approach to personality description. *Psychological Bulletin*, 117(2), 187-215.
- Borgatta, E.F. (1964). The structure of personality characteristics. *Behavioral Science*, 9, 8-17.
- Carney, D.R., Jost, J.T., Gosling, S.D., & Potter, J. (2008). The secret lives of liberals and conservatives: Personality profiles, interaction styles, and the things they leave behind. *Political Psychology*, 29(6), 807-840.
- Cattell, R. B. (1948). The primary personality factors in women compared with those in men. *British Journal of Psychology*, 1, 114-130.
- Cattell, R.B. (1943). The description of personality: Basic traits resolved into clusters. *Journal of Abnormal and Social Psychology*, 38, 476-506.
- Cattell, R.B. (1944). Interpretation of the twelve primary personality factors. *Character and Personality*, 13, 55-91.
- Cattell, R.B. (1947). Confirmation and clarification of the primary personality factors. *Psychometrika*, 12, 197-220.
- Clark, L.A., & Livesly, W. J. (2002). Two approaches to identifying dimensions of personality disorder: Convergence on the five-factor model. In P. T. Costa & T. A. Widiger (Eds.),

- Personality disorders and the five-factor model of personality* (2nd ed., pp. 161-176).
Washington, DC: American Psychological Association.
- Cooper, C.A., Golden, L., & Socha, A. (2009) Personality and mass politics. Unpublished manuscript.
- Costa, P.T. & McCrae, R.R. (1988). From catalog to classification: Murray's needs and the five-factor model. *Journal of Personality and Social Psychology*, 55, 258-265.
- Costa, P.T. & McCrae, R.R. (1993) Bullish on personality psychology. *The Psychologist*, 6, 302-303.
- Costa, P.T. & McCrae, R.R. (2008). The five-factor theory of personality. In O. John, R. Robins, L. Pervin (Eds.), *Handbook of Personality: Theory and Research* (3rd Ed.), (pp. 159-181). New York: Guilford Press.
- Digman, J. M. (1996). The curious history of the five-factor model. In J. Wiggins (Ed.), *The Five-Factor Model of Personality*, (pp. 1-20). New York: Guilford.
- Eysenck, H.J. & Eysenck, M.W. (1985). *Personality and Individual Differences*. New York: Plenum.
- Eysenck, H.J. (1992). Four ways five factors are not basic. *Journal of Personality and Individual Differences*, 13(6), 667-673.
- Fiske, D.W. (1949). Consistency of the factorial structure of personality ratings from different sources. *Journal of Abnormal and Social Psychology*, 44, 329-344.
- Franklin, M. (2004). *Voter Turnout and the Dynamics of Electoral Competition in Established Democracies since 1945*. Cambridge: Cambridge University Press.

- Gerber, A.S., & Green, D.P. (2000). The effects of canvassing, telephone calls, and direct mail on voter turnout: A field experiment. *The American Political Science Review*, 94(3), 653-663.
- Gerber, A.S., Green, D.P., & Larimer, C.W. (2008). Social pressure and voter turnout: Evidence from a large-scale field experiment. *The American Political Science Review*, 102(1), 33-48.
- Goldberg, L.R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In I. Mervielde, I. Deary, F. DeFruyt, & F. Ostendorf (Eds.), *Personality Psychology in Europe*, Vol. 7 (pp. 7-28). Tilburg, The Netherlands: Tilburg University Press.
- Gosling, S. (2001). From mice to men: What can we learn about personality from animal research? *Psychological Bulletin*, 127(1), 45-86.
- Green, D.P., & Gerber, A.S. (2004). *Get Out the Vote! How to Increase Voter Turnout*. Washington, DC: The Brookings Institution Press.
- Hill, D. (2006). *American Voter Turnout: An Institutional Perspective*. Boulder, CO: Westview.
- John, O. & Srivastava, S. (1999). The Big-Five trait taxonomy: History, measurement, and theoretical perspectives. In L. Pervin and O.P. John (Eds.), *Handbook of personality: Theory and research (2nd ed.)*. New York: Guilford Press.
- John, O., Naumann, L., & Soto, C. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. John, R. Robins, L. Pervin (Eds.), *Handbook of Personality: Theory and Research (3rd Ed.)*, (pp. 114-158). New York: Guilford Press.

Kossowska, M. (1999). Personality and current political beliefs: A comparative study on Polish and Belgian samples. *Polish Psychological Bulletin*, 30(2), 115-128.

Lanning, K. (1998). Dimensionality of observer ratings on the California Adult Q-Set. *Journal of Personality and Social Psychology*, 67, 151-160.

McCord, D. M. (2002). M5-50 Questionnaire [Administration and scoring materials]. Retrieved from <http://paws.wcu.edu/mccord/m5-50/>

McCrae, R., & Costa, P. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52(1), 81-90.

McCrae, R., & John, O. (1992). An Introduction to the Five-Factor Model and its Applications. *Journal of Personality*, 60(2), 175-215. Retrieved from Academic Search Premier database.

Meyerson, P., & Tryon, W. W. (2003). Validating internet research: A test of the psychometric equivalence of internet and in-person samples. *Behavior Research methods, Instruments, & Computers*, 35(4), 614-620.

Michelson, M.R. (2003). Getting out the Latino vote: How door-to-door canvassing influences voter turnout in rural central California. *Political Behavior*, 25(3), 247-263.

Mondak, J. J., & 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., & 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(1), 85-110.

- Norman, W.T. (1963). Toward an adequate taxonomy of personality attribute: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology, 66*, 574-583.
- Rentfrow, P.J., Gosling, S.D., & Potter, J. (2008). A theory of the emergence, persistence, and expression of geographic variation in psychological characteristics. *Perspectives on Psychological Science, 3*(5), 339-369.
- Saucier, G. (1997). Effects of variable selection on the factor structure of person descriptors. *Journal of Personality and Social Psychology, 73*, 1296-1312.
- Saucier, G., & Goldberg, L.R. (1995). The language of personality: Lexical perspectives on the Five-Factor Model. In J. Wiggins (Ed.), *The Five-Factor Model of Personality*, (pp. 21-51). New York: Guilford.
- Smith, G.M. (1967). Usefulness of peer ratings of personality in educational research. *Educational and Psychological Measurement, 27*, 967-984.
- Socha, A., Cooper, C., & McCord, D. (2010). Confirmatory factor analysis of the M5-50: An implementation of the International Personality Item Pool item set. *Psychological Assessment, 22*(1), 43-49.
- Thurstone, L.L. (1947). *Multiple Factor Analysis*. Chicago: University of Chicago Press.
- Thurstone, L.L. (1951) The dimensions of temperament. *Psychometrika, 16*, 11-20.
- Tupes, E.C., & Christal, R.E. (1961). *Recurrent personality factors based on trait ratings* (USAF ASD Tech. Rep. No. 61-97). Lackland Air Force Base, TX: U.S. Air Force.
- Verhulst, B., Hatemi, P. K., & Martin, N. G. (2010). The nature of the relationship between personality traits and political attitudes. *Personality and Individual Differences, 49*(4), 306-316.

- Watson, D., & Clark, L. A. (1997). Extraversion and its positive emotional core. In R. Hogan, J. Johnson, S. Briggs (Eds.), *Handbook of Personality Psychology*, (pp. 767-793). New York: Academic Press.
- Zuckerman, M., Kuhlman, D.M., Joireman, J., Teta, P., & Kraft, M. (1993). A comparison of three structural models for personality: The Big Three, the Big Five, and the Alternate Five. *Journal of Personality and Social Psychology*, 65(4), 757-768.

APPENDICES

Appendix A

M5:50 Personality Questionnaire and Instructions

Without spending too much time dwelling on any one item, just give the first reaction that comes to mind.

In order to score this test accurately, it is very important that you answer *every* item, without skipping any. You may change an answer if you wish.

It is ultimately in your best interest to respond as honestly as possible. Mark the response that best shows how you really feel or see yourself, not responses that you think might be desirable or ideal.

M5-50 Questionnaire						
		Innacurate	Moderately Innacurate	Neither	Moderately Accurate	Accurate
1	Have a vivid imagination	<input type="radio"/>				
2	Believe in the importance of art	<input type="radio"/>				
3	Seldom feel blue	<input type="radio"/>				
4	Have a sharp tongue	<input type="radio"/>				
5	Am not interested in abstract ideas	<input type="radio"/>				
6	Find it difficult to get down to work	<input type="radio"/>				
7	Panic easily	<input type="radio"/>				
8	Tend to vote for liberal political candidates	<input type="radio"/>				
9	Am not easily bothered by things	<input type="radio"/>				
10	Make friends easily	<input type="radio"/>				
11	Often feel blue	<input type="radio"/>				
12	Get chores done right away	<input type="radio"/>				
13	Suspect hidden motives in others	<input type="radio"/>				
14	Rarely get irritated	<input type="radio"/>				
15	Do not like art	<input type="radio"/>				
16	Dislike myself	<input type="radio"/>				
17	Keep in the background	<input type="radio"/>				
18	Do just enough work to get by	<input type="radio"/>				

19	Am always prepared	0	0	0	0	0
20	Tend to vote for conservative political candidates	0	0	0	0	0
21	Feel comfortable with myself	0	0	0	0	0
22	Avoid philosophical discussions	0	0	0	0	0
23	Waste my time	0	0	0	0	0
24	Believe that others have good intentions	0	0	0	0	0
25	Am very pleased with myself	0	0	0	0	0
26	Have little to say	0	0	0	0	0
27	Feel comfortable around other people	0	0	0	0	0
28	Am often down in the dumps	0	0	0	0	0
29	Do not enjoy going to art museums	0	0	0	0	0
30	Have frequent mood swings	0	0	0	0	0
31	Don't like to draw attention to myself	0	0	0	0	0
32	Insult people	0	0	0	0	0
33	Have a good word for everyone	0	0	0	0	0
34	Get back at others	0	0	0	0	0
35	Carry out my plans	0	0	0	0	0
36	Would describe my experiences as somewhat dull	0	0	0	0	0
37	Carry the conversation to a higher level	0	0	0	0	0
38	Don't see things through	0	0	0	0	0
39	Am skilled in handling social situations	0	0	0	0	0
40	Respect others	0	0	0	0	0
41	Pay attention to details	0	0	0	0	0
42	Am the life of the party	0	0	0	0	0
43	Enjoy hearing new ideas	0	0	0	0	0
44	Accept people as they are	0	0	0	0	0
45	Don't talk a lot	0	0	0	0	0
46	Cut others to pieces	0	0	0	0	0

47	Make plans and stick to them	o	o	o	o	o
48	Know how to captivate people	o	o	o	o	o
49	Make people feel at ease	o	o	o	o	o
50	Shirk my duties	o	o	o	o	o
		Innacurate	Moderately Innacurate	Neither	Moderately Accurate	Accurate

Appendix B
“Get Out the Vote” Appeals

“Civic Duty”

DO YOUR CIVIC DUTY AND VOTE!

Why do so many people fail to vote? We’ve been talking about this problem for years, but it only seems to get worse.

The whole point of democracy is that citizens are active participants in government; that we have a voice in government. Your voice starts with your vote. On August 8, remember your rights and responsibilities as a citizen. Remember to vote.

DO YOUR CIVIC DUTY—VOTE!

“Tradition”

“We the people, in order to form a more perfect union...”

Women waited 144 years for the right to vote.

African-Americans waited 94 years for the right to vote and another 94 years to make that right meaningful.

All you had to do was turn 18.

Make your voice heard.

Vote Tuesday, September 10th.

“Efficacy”

Politicians listen to the people who vote. You can determine what decisions they make by voting for elected officials who care about the same things that you do. You can make your vote the most powerful one in America.

“Hawthorne Effect”

WHO VOTES IS PUBLIC INFORMATION

Why do so many people fail to vote? We’ve been talking about the problem for years, but it only seems to get worse.

This year, we’re taking a different approach. We are reminding people that who votes is a matter of public record.

The chart shows your name from the list of registered voters, showing past votes, as well as an empty box which we will fill in to show whether you vote in the August 8 primary election. We intend to mail you an updated chart when we have that information.

We will leave the box blank if you do not vote.

DO YOUR CIVIC DUTY—VOTE!

Your name and voting history would appear here.

Control

Think Recycling Doesn't Matter?

One million tons of aluminum containers are thrown away each year.

Americans throw away enough aluminum every three months to rebuild our entire commercial air fleet.

Making new aluminum cans from used cans takes 95 percent less energy and 20 recycled cans can be made with the energy needed to produce one can using virgin ore.

The energy required to replace the aluminum cans thrown away in 2001 is roughly the equivalent of 16 million gallons of crude oil: enough to meet the electricity needs of all the homes in Chicago, Dallas, Detroit, San Francisco, and Seattle combined.

Please do your part and recycle.

Appendix C Informed Consent

What is the purpose of this research?

The purpose of this research is to explore how differences in personality affect how people rate the effectiveness of different types of “Get Out the Vote” appeals.

What will be expected of me?

You will be asked to complete a personality inventory, rate the effectiveness of two “Get Out the Vote” appeals, and give some basic demographic information about yourself (age, sex, ethnicity, political affiliation, and political orientation).

How long with the research take?

Participation in this study should take about 20 minutes.

Will my answers be anonymous?

Yes. Your name will not be collected at any point, and your answers will be identified only by a serial number. There is no way that your responses can ever be connected to you.

Can I withdraw from the study if I decide to?

Yes, you may withdraw at any point during the study for any reason.

Is there any harm that I might experience from taking part in the study?

There is no inherent risk of harm during this research participation.

How will I benefit from taking part in the research?

You will receive a personalized report about your personality at the end of your participation in the study. Additionally, you may be able to redeem your participation in this study for credit in a class that requires experiment participation.

Who should I contact if I have questions or concerns about the research?

Contact me (Benjamin Locklair) at the Department of Psychology Western Carolina University, Cullowhee, NC 28723 (828-227-3365) or by email at brlocklair1@catamount.wcu.edu. You can also contact the IRB Chair at (828) 227-3177.

- I have read the preceding and consent to participate in this study.

Click here to continue.

Appendix D

Personality Feedback Paragraphs

Opening

The personality test you completed as a part of this study is based on the leading theory of human personality, known as the Five Factor Theory, or the “Big Five.” We measured your score on each of the five broad personality factors and compared it our sample of 763 individuals. The interpretive statements provided below are based on statistical probabilities and should be generally accurate about you. Naturally, there may be some statements that do not fit you exactly.

Extraversion

The first factor we measure is Extraversion. People with high scores on this scale are typically described as gregarious, talkative, energetic, and assertive. Low scorers are described as introverted, socially avoidant, and relatively passive interpersonally.

(Low) Your score on this factor fell in the lower quarter of our sample. This suggests that you are fairly reserved and quiet and enjoy being by yourself. Others with scores in this range usually prefer to remain in the background and let others do the talking.

(Medium) Your score on this factor fell in the middle half of our sample. This suggests that you are not the most outgoing person in the room, but neither can you be described as a wall-flower. It is likely that you exhibit a mid-range physical pace and energy level, and a generally balanced approach to social activity.

(High) Your score on this factor fell in the upper quarter of our sample. This suggests that you are outgoing and gregarious, and that you enjoy being around other people. Others with scores in this range are described as warm, affectionate, and friendly.

Agreeableness

The next factor is named Agreeableness. People with high scores on this factor are described as warm, empathic, compassionate, and kind. Low scorers are irritable, argumentative, competitive, and antagonistic.

(Low) Your score on this factor fell in the lower quarter of our sample. Others with similar scores are often described as cynical, untrusting, and suspicious. They usually assume that others may not be telling the truth, and in most situations they take a competitive, rather than a cooperative, approach.

(Medium) Your score on this scale fell in the middle half of our sample. This suggests that you are neither uniformly trusting, nor do you distrust most people. You may not seek out ways to help others, but nor do you shy away from such opportunities. Similarly, you may be cooperative and team-oriented in some situations, but in other situations you take a more competitive approach.

(High) Your score on this factor fell in the upper quarter of our sample. People with similar scores are often described as good-natured, trusting and helpful. In approaching group situations, they usually take a cooperative rather than a competitive stance. They tend to be warm, soft-hearted, and compassionate toward others.

Conscientiousness

This is in some ways a measure of self-control and self-discipline, though achievement motivation is also involved. People with high scores on the Conscientiousness factor tend to be good planners and organizers, and they may be described as purposeful, strong-willed, and determined. Low scorers tend to be disorganized, careless, and less focused in working toward goals.

(Low) Your score on this factor fell in the lower quarter of our sample. Others with similar scores are often described as careless and unreliable. Often these people have a low opinion of their own abilities and report that they have a lot of trouble getting organized.

(Medium) Your score on this scale fell in the middle half of our sample. It is likely that you are not obsessively neat and organized, nor overly rigid in your time management, but neither are you a total slacker. Others with mid-range C scores are generally reliable and punctual, reasonably organized in terms of managing their tasks and lives, and they usually know where to find things even if their possessions are not in meticulously neat order.

(High) Your score on this factor fell in the upper quarter of our sample. People with similar scores are often described as highly reliable, punctual, careful, neat and organized. Employers love to hire people with high C scores. This is a great characteristic to have, as long as you don't over-do it.

Neuroticism

This factor has to do with emotional factors such as moodiness, worry, tension, anxiety, and general emotional distress. A better name for the overall factor is "dysfunctional negative emotionality." People with high scores tend to worry excessively, they may be nervous and insecure, and they may be prone to conditions such as depression. Low scorers are calm, self-

secure, easy-going, relaxed, and laid-back. This is a dimension of **normal** personality, reflecting traits that all of us have to some degree. The N scale is not a formal measure of clinical or abnormal characteristics.

(Low) Your score on this factor fell in the lower quarter of our sample. Others with similar scores are often described as calm, relaxed and satisfied. They are easy-going and slow to anger, and they rarely express negative or depressed feelings. They perceive themselves as capable of solving problems and successfully facing the challenges of their daily lives.

(Medium) Your score on this scale fell in the middle half of our sample. This is by definition the normal range where most people fall. Thus, it is likely that you can experience some feelings of anxiety or even depression at times, but these things pass, and you don't get stuck in them. While you likely to experience a range of emotions, from sadness to happiness, from tense to relaxed, these are all within normal limits. Your friends probably do not describe you as particularly "moody" and would more likely see you as emotionally stable.

(High) Your score on this factor fell in the upper quarter of our sample. People with similar scores are often described as nervous, insecure and on-edge. They often struggle with feelings of tension, and they may worry excessively. Indeed, friends and family members may often describe them as "worriers."

Openness to Experience

This factor covers many characteristics that may be roughly grouped under the label of "open-mindedness." These include imagination and creativity, sensitivity, aesthetic and artistic

interests, intellectual curiosity, and preference for variety and change. High scorers tend to be politically liberal and unconventional. They are curious and tend to seek out new experiences. Low scorers are more conventional and prefer routine and sameness. They are usually more politically and socially conservative, and they often have a narrower scope of interests.

(Low) Your score on this factor fell in the lower quarter of our sample. Others with similar scores are often described as unartistic, down-to-earth and conventional. They prefer the familiar to the novel, and they may show a more restrained range of emotional expressiveness.

(Medium) Your score on this scale fell in the middle half of our sample. You are not among the most imaginative people around, nor are you devoid of imagination. You may not seek out new experiences with relish, but you do not avoid them either. You may be open to the ideas of other people but are not the first to endorse new fads and fashions.

(High) Your score on this factor fell in the upper quarter of our sample. People with similar scores are often described as curious, creative and imaginative. Open people question authority and tend to be very open to new political and social ideas. They also tend to be sensitive people who are in touch with their own emotions.

Summary

Thank you for participating in this research project. We hope that you have found this brief personality summary to be useful and thought-provoking. It is important to remember that our innate personality traits certainly have some influence on us, but they do not by themselves determine our choices and our actions. We can choose to override our traits in situations where that is warranted. Indeed, a greater awareness of our personality trait structure can actually help us make better choices in attaining our life goals.