

**POPULISM AND PERSONALITY:  
CITIZENS' ATTITUDES AND RESPONSES TO POPULIST RHETORIC BY  
PERSONALITY TRAITS**

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## **Abstract**

Populist rhetoric is often applied as a strategy to mobilize. This thesis aims to analyze whom it mobilizes the most; what are the psychological characteristics of the people most receptive to populist talk. Using an American sample consisting of nearly 700 individuals, a survey-embedded experiment was conducted to test, if there is an association between populism and personality traits. The analysis found evidence that there is a weak, negative correlation between openness and affinity to populism. Logistic models indicate that being less open to experiences increases the likeliness of having a populist attitude by 2.4%. The T-tests show inconsistent findings regarding openness, but reveal that more agreeable people react differently to political communication, than their non-agreeable fellows, however not exclusively to populist framing. The results of the statistical analyzes contradict previous findings that the level of income, education and knowledge could be associated with populism, but partially confirm the assumption that people do use their psychological traits in political decision-making.

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## **1. Introduction and justification of the research**

Populism has been present in politics for a very long time. However, the past years have brought rising waves of it. It appears in poor and rich countries, dictatorships and democracies, established and transitional, Eastern and Western democracies as well. One fundamental characteristic of populism is that it does not constitute a clear ideology in itself, but adopts its ideas, values and messages to the host environment and attacks the establishment. Its rhetoric is usually fighter, group-oriented, challenges the status quo but lacks substantive discussion. Often does not bother with the fact, that some of the arguments are contradicting, or if the chain of logic is questionable, and too simplistic.

The trouble with this kind of rhetoric is that it takes away the attention from important arguments as it selectively presents only those pieces of information which fit this fighter, anti-establishment, mobilizing worldview, even if it is farfetched from reality. This is problematic because information is essential for well-functioning democracies. The more precise, and the more extensive information citizens have, the more informed decisions they make. This is essential for maintaining healthy democracies in which citizens can express their real preferences.

Contrary to this, a common characteristic of all populist politicians and parties is the use of oversimplified communication panels which are abstract, vague and can be dropped into any kind of context, if they are adjusted a little bit to the environment. Their frequently used phrases like “the people”, “foreign powers”, “interest groups”, “evil forces”, “good vs. bad people” travel easily across countries and appeal to voters. One key element of the success of populist parties is probably this “instant rhetoric” which finds some supporters everywhere.

Lots of people have studied the rise and fall, and the success of populism. Often, these are associated with socio-economic, cultural or historical factors. Not disregarding such explanations, an interesting question comes up though. If populism can travel through context that easily, and similar framing and rhetoric can be successful across countries, is there a factor then in human nature which is receptive to it? Is there something in an individual's psychological build-up that makes the person more attracted to such talk even if socio-economic, cultural or historical factors would not necessarily imply it?

People usually project their experiences, feelings, rationale and personality on their environment and on their decisions. Why would politics be different in this regard? The assumption of this thesis is that people project their own personality on politics, especially as there is always a lack of information on this market. Moreover, politics define the frames of social relations, economic and public affairs, therefore people at least try to make beneficial decisions. If voters cannot comfort themselves by making fully-informed decisions, I hypothesize that they at least want to comfort their own psychological self by making "instinctive" decision based on their personality traits in order to reduce the doubts or possible contradictions about their decisions. The assumption of this thesis is that there must be something in an individual's personality that makes the person more likely to be attracted to populist rhetoric. On the one hand, more rebellious or more insecure people might find the anti-establishment and scapegoating rhetoric appealing to their worldviews and behavior. On the other hand, those with thirst for knowledge may be dissatisfied with such vague framing, while pro-social individuals might be attracted by the group-oriented rhetoric. The question I try to answer in this thesis is whether this logic is plausible, and if personality traits influence political decisions demonstrably.

The relationship of populist attitudes, voting behavior, and the affinity to populist discourse has been tested by a number of researchers (e.g. Stanley 2011, Hawkins 2012, Akkerman et al. 2013). Their findings show that affinity for populism is stronger among those with lower education, and associated with low income and identification with ideological radicalism. These pieces of research suggest taking a further step, and exploring who are the ones - regarding their personal characteristics – with the most affinity to populism and populist talk. This piece of research follows this line of inquiry into voting behavior and populism, and aims to see if personality, indeed, is such a powerful predictor of one's political behavior.

The thesis starts by reviewing the relevant literature first on populism, and the measurement of populist attitudes. Then it proceeds by giving a thematic overview of the research areas and findings of the application of personality traits in political science, namely in relation to ideologies, participation and political communication. These sections are followed by the hypotheses of the research and an extensive part describing the methodology and the variables. The analysis relies on the widely used Big Five personality trait model which is combined with a survey embedded experiment based on an American sample. The questions to be examined are whether the presence or the lack of some psychological traits predefine or influence an individual's political attitude, and if they make the person sensitive to populist framing. In order to reveal such associations, a logistic regression model is used in the first place, while the experimental data are tested with Welch Two-sample Tests.



## 2. Defining populism

The past few years have brought more and more public talk about populism, and one may see that this trend is gaining ground around the world. However, populism has been present in politics for a very long time. Following Taguieff's (1998, in: Jagers and Walgrave 2007) categorization there have been three successive ways of modern of populism: agrarian, Latin American and new-right populism. According to this typology agrarian populism would be found in some of the Russian intellectuals' views in the 19<sup>th</sup> century, or in the American People's Party, which pleaded against capitalism. Latin American populism prospered in the 1940s and 1950s in Argentina and Brazil. Finally, the 1970s brought about new-right populism focusing on immigration, taxation, crime and nationalism.

Since the 1990s there has also been a rise of populist parties. The populist radical right is the most successful new party family in post-war Europe (Mudde, 2007). The Tea Party has become an influential political force in the United States (Skocpol et al. 2011), and Latin American politics has witnessed several populist leaders (Remmer, 2012). In addition to the geographical diversity, there is an ideological diversity of populists well. Populist parties may appear either on the left or on the right of the political spectrum (Akkerman, et al. 2013; 2). Populist radical right parties include the National Front in France or One Nation in Austria. Berlusconi's party in Italy and Fujimori in Peru can be considered neoliberal populists, while Chávez in Venezuela and The Left in Germany belong to the left wing.

The term populism has been widely used, often in a loose sense, usually thrown at political opponents of the politician or of the political party. Populists do not call themselves populists, and usually reject the term when it is applied to them. As Albertazzi and MacDonnell (2008,

2) point out, when an adversary wants to decrease crime rate or preaches lower taxes and yet increases spending on public services, then this politician is often labelled a populist. But when one's own side does it, it is simply dealing with the problems of the country. Therefore, some kind of clarification of the term itself is essential for the better understanding of the topic and in order to avoid confusion about the use of the word.

Drake (1982) emphasizes three elements of a proper definition of populism which are: (1) political mobilization, recurrent rhetoric, and symbols designed to inspire the people; (2) building on a heterogeneous coalition aimed primarily at the working class, but including sectors from other strata; and (3) promoting development without explosive class conflict. Still, it is not easy to catch the essence of the term, however all approaches of populism rely to more or less extent on the elements of Drake's definition.

There are four main types of approaches of populism in political science. (1) The structural approach, which connects populism with certain stages of development and industrialization, also with peripheral countries and emphasizes its social origins (Cardoso & Faletto 1979; Germani 1978). (2) The economic, which is defined by Dornbusch and Edwards (1990, 247) as a

policy perspective on economic management that emphasizes economic growth and income redistribution and deemphasizes the risks of inflation and deficit finance, external constraints and the reaction of economic agents to aggressive non-market policies.

(3) The political-institutional which according to Weyland (2001, 11) is best described in political rather than economic terms and defines it as "a specific way of competing for and exercising political power. Populism first and foremost shapes patterns of political rule and not the allocation of socioeconomic benefits or losses." Simply, it is about domination and not

distribution. It is about the desire to win, grabbing every opportunity and making a sharp distinction between friends and enemies. This sharp distinction between good and evil leads to the fourth approach of populism, the discursive approach which is in the focal point of this research.

The discursive approach (Hawkins 2009; Canovan, 1999; Laclau, 2005; Mudde, 2004) emphasizes the ideas and the discourse when it comes to defining populism.

Populism in modern democratic societies is best seen as an appeal to the people against both the established structure of power and the dominant ideas and values of the society. This structural framework dictates populism's characteristic legitimating framework, political style and mood. (Canovan 1999, 3)

Canovan explains that populist movements can be captured as some kind of revolt against the established structure of power in the name of the people; furthermore it challenges the elite values, opinion-formers in the academy and the media (1999, 3). Due to this characteristic of populism, it is hard to define the term in an ideological sense as it is very much context-dependent. In countries with commitment to high taxation to fund the welfare state populists may support economic liberalism, while in countries with commitment to economic liberalism populists may demand protectionism and a paternalistic state (Canovan 1999, 4). Canovan (1999) emphasizes that this fact does not mean that populists are confused and populism is something unprincipled, rather it reflects the core of populism, which can be captured in its reaction to the structure of power. In Western democracies where the elite political culture strongly supports values like individualism, multiculturalism, internationalism and belief in progress, populism involves resistance to these. However, in a different context anti-elitist movements have to react to different ideas.

Hawkins (2009) argues that the first important characteristic of populism is that it translates everything into a moral dimension and even purely technical questions are presented as a struggle between good and evil. Usually the good equals to the will of the people, while the evil is associated with a conspiring elite. The second characteristic is what McGuire (1997) calls “anything goes” meaning that procedural rights such as minority rights are merely instruments and can be violated. Hawkins (2009) similarly to Canovan (1999) points out that populism as a set of ideas “lacks the precision of classic ideologies”. Hawkins (2009) argues that even though it has a set of fundamental beliefs about how the world works, it lacks a contrast with other discourses and has little to offer when it comes to specific policies.

This thesis focuses on the one hand on populist attitudes of people, on the other hand on the rhetorical part of populism – precisely the reaction to populist talk – therefore it relies on a definition which describes populism as rhetoric. Jagers and Walgrave (2007, 322) define populism as “a political communication style of political actors that refers to the people.” By their definition actors can be politicians, movement or interest group leaders or even journalists, the point is that they use a communication frame that pretends to speak on behalf of the people. Consequently, they use a language full of words such as ‘the people’, ‘the public’, ‘the taxpayers’, ‘the residents’. This definition of populism is stripped from ideological or authoritarian connotations and does not associate it with left or right, simply examines it as “a strategy to mobilize support, (...) a standard communication technique to reach out to the constituency” (Jagers & Walgrave 2007, 323).

### 3. Measuring populist attitudes

On the one hand, a large body of scientific literature is concerned with how populist the politicians and political parties are. Most of these studies try to measure populism by text analysis. Armony and Armony (2005) analyzed Argentinian Internet forums and presidential speeches so as to reveal populist patterns. Jagers and Walgrave (2007) performed a content analysis of Belgian parties' political broadcasts for the same purpose. Hawkins (2009) built a large cross-country dataset of elite-level populist discourse in more than forty current and past governments in order to perform content analysis. Rooduijn and Pauwels (2011) examined election manifestos in the Netherlands, the United Kingdom, Germany and Italy.

On the other hand, the political psychology literature has been focusing on analyzing the psychological roots of extreme, radical movements and ideologies (see e.g. Adorno et al. 1950; Altemeyer 1997; Lipset 1960; Van Hiel 2012) and examined the targets or recipients of populist messages. The first attempt in political science to measure populist attitudes at the individual level was published in 1967 by Robert Axelrod, who wanted to assess the structure of public opinion on policy issues. In the past few years, a growing number of studies has been published in this field (e.g. Stanley 2011; Hawkins et al. 2012; Akkerman et al. 2013) that are rather concerned with how to measure the voters' populist attitudes, or which personality traits can be linked to populism (Bakker et al. 2015).

Stanley (2011) tested a series of populist attitude questions to see the impact of populist attitudes on party preferences and voting behavior at the 2010 Slovak national election. His findings are mixed as nationalist and economic attitudes proved to be significant predictors of voting behavior, while populist attitudes turned out to be less influential. Stanley attributed

these findings to the post-communist context and to measurement errors, the fact that the populist parties were in government at that time.

Hawkins et al. (2012) also measure populist attitudes, precisely, affinity for populist discourse by surveys conducted in the United States at the 2008 national election. The authors found that populist attitudes are widespread across the whole country and affinity for populism is stronger among those with lower education, is weakly associated with low income, strongly linked to identification with third parties and ideological radicalism, and also correlates with anti-immigrant attitudes.

Akkerman et al. (2013) built their research design on the previously mentioned study by Hawkins et al. (2012). To strengthen the validity of the results and to avoid simply measuring anti-elitist attitudes, the authors define, operationalize and measure populism, pluralism and elitism. The empirical analysis of the Dutch survey data shows that it is possible to measure populist attitudes on an individual level, and furthermore these attitudes are significantly correlated with intentions to vote for populist political parties. The authors also found evidence that right-wing populism is more exclusionist, while left-wing populists are more willing to listen to others. For further research Akkerman et al. (2013) suggest taking a step towards exploring who are the populists, and what are their personal characteristics, socioeconomic status or personal traits.

A recent study by Bakker et al. (2015) followed this line of research and explored the association of personality traits with the support for populist political parties. Their study expands the elective affinity metaphor and hypothesizes that agreeableness – characterized by altruism, trust in other people, tolerance and cooperativeness – is related to populism

regardless of the context or the host country. The elective affinity theory states that “there is a functional match between the symbolic nature and the substance of a belief system and the psychological dispositions of their supporters” (Bakker et al. 2015, 5). The authors found evidence using three samples – Dutch, German, American – that being egoistic, intolerant and distrusting towards others implies distrust in politicians and resonance with populist, anti-establishment messages and substantively predict voting for populist parties.

This study aims to follow this line of research but take a further step to investigate the topic. First, I analyze whether some types of personalities are more likely to have populist attitudes than others or not. For this purpose I use a dataset (details in the following chapters) which builds on the items used by Akkerman et al. (2013) and Hawkins (2012), and combine it with the well-known Big Five personality trait questionnaire battery that has become popular in political science too. As a second step, based on the findings of Bakker et al. (2015) and using an experimental design, I also analyze if different personalities react differently to populist messages.

## 4. Personality traits in political science

### 4.1. *The Big Five model*

Most of the political science research focusing on voting behavior – communication, participation, and deliberation – is concerned with the general characteristics of people like age, ideology or gender; with their social status such as education, income level, and socio-economic position and with their level of interest in politics and public affairs. Obviously, these features are important and in many cases good predictors of political behavior. However, people by nature – even within quite narrow categories of these groups e.g.: forty years old, middle class, college graduate women who are interested in politics – are different from each other. People have very different types of personalities and it is plausible that these personal characteristics may influence one's behavior more than what could be predicted by the aforementioned features. Nevertheless, political science for a long time has neglected to examine the role of personality traits in politics. Analyzing the political impact of personality characteristics in experiments has only become a topic of inquiry recently. But only a small portion of studies deal with communication. In this research I focus on this latter field and make an attempt to examine if personality traits plausibly predispose different reaction from different personality types to populist framing.

Albeit there is no universally accepted definition of personality traits, according to Vecchione & Caprara (2009; 487) a way to describe them is to say that “traits are enduring dispositions to behave in habitual ways associated to consistent patterns of thought and feelings”. Mondak et al. (2010, 2) in turn define traits as “internal psychological structures that are relatively fixed and enduring, that are susceptible to observation and that predict behavior”.



Probably, it is needless to argue that people are different from each other and have different characteristics which to some extent influence their behavior. A more contentious issue is whether our personal characteristics can be put into more or less well-defined categories, and whether it is possible to identify personality types based on these categorizes. One of the first studies in this field was carried out by William McDougall (1932, 15) who came to the conclusion that

personality may to advantage be broadly analyzed into five distinguishable, but separate factors, namely, intellect, character, temperament, disposition, and temper (...) [but] each of these is highly complex (and) comprises many variables.

Later, in 1949, Fiske also identified five factors and interpreted them similarly to what are being used nowadays. In the 1950s the American Air Force wanted to predict the effectiveness of their officers so Tupes (1957) made an attempt to study their personality types, and later together with Christal (1961) reported the existence of five factors: *Surgency*, *Agreeableness*, *Dependability*, *Emotional Stability* and *Culture*. In 1963 Norman, and in 1964 Borgatta also found five stable factors: *Assertiveness*, *Likeability*, *Emotionality*, *Intelligence* and *Responsibility*.

Many later researchers made an attempt to identify more or less complex models. Some declared that there are only three key personality traits (Eysenck 1970) while others tried to prove the existence of six (Hogan 1983) or more factors (Birenbaum & Montag 1986). However, the conventionally most accepted categorization distinguishes between five key dimensions of personality (see Table 1.) even if the names of the categories are not always the same.

**Table 1: The five robust dimensions of personality**

Author	Year	I	II	III	IV	V
Fiske	1949	social adaptability	conformity	will to achieve <sup>1</sup>	emotional control	inquiring intellect
Cattell	1957	exvia	cortertia	superego strength	anxiety	intelligence
Guilford	1957	social activity	paranoid disposition	thinking introversion	emotional stability	-
Tupes & Christal	1961	surgency	agreeableness	dependability	emotionality	culture
Norman	1963	surgency	agreeableness	conscientiousness	emotional	culture
Borgatta	1964	assertiveness	likeability	task interest	emotionality	intelligence
Eysenck	1970	extraversion	psychoticism		neuroticism	-
Buss & Plomin	1984	activity	sociability	impulsivity	emotionality	-
Costa & McRae	1985	extraversion	agreeableness	conscientiousness	neuroticism	openness
Tellegen	1985	positive emotionality	-	constraint	negative emotionality	-
Hogan	1986	sociability, ambition	likeability	prudence	adjustment	intellectance
Lorr	1986	interpersonal involvement	level of socialization	self-control	emotional stability	independent
Digman	1988	extraversion	friendly compliance	will to achieve	neuroticism	intellect
Peabody & Goldberg	1989	power	love	work	affect	intellect

(Source: Digman 1990, 423)

<sup>1</sup> not in the original analysis

Albeit there are differences in how each researcher calls much the same factor, the meaning behind these dimensions is quite similar to each other. As Digman (1990, 425) notes probably Goldberg (1981, 159) called it first the ‘Big Five’ personality trait system and proposed self-report inventories. Despite the several names of the factors, their meaning seems to be conventionally accepted, and most of the political science studies use this five-factor model: (1) *openness to experience*, (2) *conscientiousness*, (3) *extraversion*, (4) *agreeableness*, (5) *neuroticism / emotional stability*. The content of these traits can be described as follows (see Atkinson et al. 2000, 437; Mondak et al. 2010, 2-3; Gerber et al. 2011, 267, John et al. 2008):

- *Openness to experience* – (inventive/curious vs. consistent/cautious). The breadth, depth, originality, and complexity of an individuals’ mental and experimental life. Appreciation for art, emotion, adventure, unusual ideas, curiosity, and variety of experience. Openness reflects the degree of intellectual curiosity, creativity and a preference for novelty and variety. People with high scores in this dimension seek information and engagement of virtually all sorts.
- *Conscientiousness* – (efficient/organized vs. easy-going/careless). It is the socially prescribed impulse control that facilitates task- and goal-directed behavior. A tendency to show self-discipline, act dutifully, and aim for achievement; planned rather than spontaneous behavior; organized, and dependable. A volitional component of it is captured by terms such as hard-working and industrious.
- *Extraversion* – (outgoing/energetic vs. solitary/reserved). Energy, positive emotions, assertiveness, sociability and the tendency to seek stimulation in the company of others, and talkativeness define an energetic approach toward the social and material world. Links to civic engagement are most easily hypothesized with this trait, because many aspects of it include social components.

- *Agreeableness* – (friendly/compassionate vs. cold/unkind). Contrasts a pro-social and communal orientation with antagonism. A tendency to be compassionate and cooperative rather than suspicious and antagonistic towards others. Often associated with terms such as warm, kind, sympathetic, generous, and altruistic.
- *Neuroticism/Emotional stability* – (sensitive/nervous vs. secure/confident). The tendency to experience unpleasant emotions easily, such as anger, anxiety, depression, or vulnerability. Neuroticism also refers to the degree of emotional stability and impulse control, and is sometimes referred to by its other pole – "emotional stability" – associated with words as *calm*, *relaxed*, *stable*.

**Table 2: Personality dimensions and the poles of the traits they form.**

Personality dimension	High level	Low level
openness to experience	inventive, curious, imaginative, broad interests	cautious, conservative, down-to-earth, practical, traditional
conscientiousness	efficient, well-organized, strive to achieve goals	easy-going, careless, prefer not to make plans
extraversion	outgoing, energetic, active, prefer to be around people	shy, withdrawn, reserved, prefer to be alone
agreeableness	friendly, compassionate, eager to cooperate, good-natured	competitive, outspoken, hardheaded, skeptical, proud
emotional stability	secure, confident, hardy, relaxed under stressful conditions	sensitive, emotional, prone to feelings that are upsetting

(Based on Heinström (2003, 6); Gerber et al. (2011); Costa & McCrae (1992; 14-16, 49))

This Big Five approach holds that by these five dimensions a comprehensive model of personality traits can be provided. However, there is no such claim that they capture the entire complexity of one's personality. The usefulness of the application of these traits was demonstrated in very different scientific fields by several researchers. Smith (1967) and N. Wiggins et al. (1969) found that educational achievement for undergraduate and graduate

students can be correlated with personality traits. De Fruyt & Mervielde (1999) found association between personality traits and occupational status, Ben-Ner et al. (2008) and Koole et al. (2001) found evidence for relationship with behavior in economic games. Moreover, public health researchers have identified association even with alcohol and tobacco consumption (McAdams & Donellan 2009; Mezquita et al. 2010; Paunonen & Ashton 2001), and with overall mental and physical health (Goodwin & Friedman 2006; Ozer & Benet-Martínez 2006). Unsurprisingly, political science research has also been successful to find evidence for association between personality traits and civic engagement, participation in politics, affinity for specific political ideologies, and framing effects.

#### ***4.2. Ideology and personality***

Some studies suggest (e.g. Bakker et al. 2015) that the effect of personality traits on political attitudes is sometimes mediated by ideological positions, therefore in the following I briefly assess what has been revealed about the association of ideologies and personality traits. Several previous studies focused on linking personality traits with political ideologies. Among others Mondak and Halperin (2008), Verhulst et al. (2010 and 2012), Carney et al. (2008) worked on connecting certain attitudes, personality traits and ideologies. They tested if common characteristics like ‘creativity, imagination, curiosity, enthusiasm, open-mindedness, tolerance, flexibility’ on the one hand, and ‘toughness, parsimony, obedience, conventional and moralistic traits’ on the other hand can be linked to personalities and ideologies as well. The authors found that self-declared liberals score significantly higher than people labeling themselves conservatives on *openness to experience*, at the same time they also found some evidence that conservatives scored somewhat higher on *conscientiousness* than liberals. However, both of these effects were stronger for social as opposed to economic attitudes. In addition they also found some association between *extraversion* and social conservatism.

Using a large sample containing of more than 12,000 individuals Gerber et al. (2010) saw that *openness to experience* is strongly associated with overall liberalism over a wide range of policy issues, while *conscientiousness* goes with overall conservatism. Furthermore, they found evidence for the association of *emotional stability* with conservatism, and *agreeableness* with economic liberalism and with social conservatism. Interestingly, their results show that the effect of the Big Five traits is often as large as that of education or income in predicting ideology. In a later study Gerber et al. (2011) also showed that *extraversion*, *agreeableness* and *openness* are significant predictors of identification with political parties in the US. Gerber et al. (2011) found association between *extraversion* and conservatism, namely with the activity facet of this trait, however they also saw that the assertiveness facet of this trait rather goes with social and overall liberalism.

Using a sample consisting of 20,559 individuals including 7,234 twins Verhulst et al. (2010) saw evidence that the trait they call *psychoticism* (in the big five terminology agreeableness and conscientiousness) and includes authoritarianism, risk-taking, practicality and tough-mindedness is related to conservative positions on punishment, religious and sex attitudes.

**Table 3: Association of personality traits with ideologies**

Big Five Traits	Ideology	Evidence
openness to experience	liberalism	Mondak and Halperin (2008), Verhulst et al. (2010 and 2012), Carney et al. (2008)
agreeableness	economic liberalism	Gerber et al. (2011)
conscientiousness	conservatism	Mondak and Halperin (2008), Verhulst et al. (2010 and 2012), Carney et al. (2008)
emotional stability	conservatism	Gerber et al. (2011)
extraversion	conservatism <sup>2</sup> (less evidence)	Gerber et al. (2011)

<sup>2</sup> less evidence

### 4.3. *Participation and personality*

An even bigger and more intensely studied question in political science is the association of the Big Five model with participation in politics, public affairs and civic engagement. One measure that this piece of research uses to examine if personality traits predispose individuals' reaction to populist rhetoric is whether they would support the candidate in any form or whether they would vote for him. Hence, I feel the need to give an overview of previous findings concerning participation and personal characteristics. In contrast with the evidence about ideologies, findings about participation are less consistent.

The most consistent findings stand for *extraversion*. Although it is not always a significant predictor, but when it is, it is associated with higher rates of participation (Mondak & Halperin 2008; Gerber et al. 2009; Vecchione & Caprara 2009; Mondak et al. 2010). Similarly, *openness to experience* also shows this pattern (Mondak & Halperin 2008; Gerber et al. 2009; Vecchione & Caprara 2009; Mondak et al. 2010). However, findings about other traits are inconsistent – see Table 4. One explanation for this may lie in the different methodologies used by different researchers regarding the method of data collection, the differences in measurement or how detailed a questionnaire is. Another issue is that civic engagement and participation has many faces ranging from voting on the general elections to signing a petition or attending a rally. Gerber et al. (2011, 698) found evidence to support the theory that *extraverts* are more involved in interpersonal components of political participation and the more *emotionally stable* are more confident and thus more willing to participate in elections. Based on the results of two surveys they saw evidence that a two-standard-deviation increase in *extraversion* leads to nearly 8% and 10% increase in the likelihood of a respondent being a high-turnout voter. The same increase in *emotional stability* was associated by approximately 14% and 9% raise in the likelihood of being a high-turnout voter. At the same

time, similar increase in *agreeableness* reduced the probability of over-reporting the turnout in elections by 10 percentage points. Depending on what exactly is meant by participation in a research, the results can be very different. Regarding the non-voting forms of participation *extraversion* is still a positive predictor, a two-standard-deviation increase in this trait leads to 45 percentage point increase in the likelihood of participating in some kind of campaign activity (Gerber et al. 2011).

Researchers of social movement theory also conducted investigations regarding personality traits. Duncan, Peterson & Winter (1977), Haddock and Zanna (1994), Sarup (1976) and Worell and Worell (1977) found that women opposed to feminist movements score higher on measures of authoritarianism, anxiety and harm avoidance than those women who supported the movement, while feminist movement activists were found broad-minded and imaginative (Mahoney 1975; Rozsnafszky & Hendel 1977). Agronick and Duncan (1998) had a similar research investigating the association of personality and participation in social movements. They found that openness to new ideas, ambition and dissatisfaction were significant predictors of finding feminists movements important, furthermore participation in such movements was associated with increased confidence, initiative and self-esteem, sophistication and empathy. The key findings of their research were that “individual differences do influence reciprocity to social movements and social movements do influence personality change” (pp 1553).

Finally, other aspects such as perceived self-efficacy and importance of an issue or event also alter this picture. For example Mondak et al. (2010) found a negative association between *conscientiousness* and participation among those who do not perceive the election to be important but not among those who think the election is important. Concerning all these



measurement issues, the fact that actually supports the relevance of trait research is that Vecchione and Caprara (2009) claim that personality traits contribute to political efficacy and participation beyond the predictive value of socio-demographic variables. Their results show that political self-efficacy beliefs (i.e. the perceived level of capability to influence the political process or public affairs) can be associated with *extraversion* and *openness to experience*. Nevertheless, the authors note that (pp. 491)

...these traits can predispose someone to political activity, but not necessarily result in actual political action, since one can be energetic and open-minded, but fail to be interested in politics or lack the sense of self-efficacy to influence the machinery of governmental and representative systems.

**Table 4: Association of personality traits with political participation**

Personality Trait	Effect	Evidence
openness to experience	increases civic engagement	Mondak & Halperin (2008), Gerber et al. (2009), Vecchione & Caprara (2009), Mondak et al. (2010)
extraversion	increases civic engagement	Mondak & Halperin (2008), Gerber et al. (2009), Mondak et. al (2010), Vecchione & Caprara (2009)
agreeableness	inconsistent results	Mondak & Halperin (2008), Gerber et al. (2009) <sup>3</sup> Gerber et al. (2011) <sup>4</sup> Mondak et al. (2010) <sup>5</sup>
conscientiousness	inconsistent or no effect	Gerber et al. (2009), Mondak & Halperin (2008), Vecchione & Caprara (2009), Mondak et al. (2010) <sup>6</sup>
emotional stability	inconsistent or no effect	Mondak et al. (2010) <sup>7</sup>

#### ***4.4. Political communication and personality***

So far I summarized the main lines of research regarding the application of personality traits in political science, and presented the findings as far as ideologies, attitudes and participation are concerned. In the following I turn to a subfield which has been less intensely studied, but is not less exciting. Analyzing the role of personality traits in the communicative process has only recently become a topic of research in political science; however the results so far show that this is a potentially fruitful field for future studies. There is evidence that the Big Five traits predict what sources of political information people select, as well as what type of political media they consume (Gerber et al. 2011). Some other traits relate to the frequency

<sup>3</sup> Mostly insignificant results.

<sup>4</sup> Lower levels of participation.

<sup>5</sup> Higher levels of participation.

<sup>6</sup> Only negative effects reach statistical significance.

<sup>7</sup> Only negative effects reach statistical significance.

with which people discuss politics and religion with friends and family (Hibbing et al. 2010). As far as the traits are concerned the following is known about them.

Research on personality traits found that individuals high on *openness to experience* are likely to be attracted to political information, including the exchange of ideas quite often (Gerber et al. 2011). Not only they are more attracted to politics, but also more knowledgeable about it (Mondak & Halperin 2008; Gerber et al. 2011). Mondak & Halperin (2008) claim, that openness is a very significant predictor of interest, knowledge and the number of opinions held by people. Openness is linked to critical thinking and as it includes curiosity and thus interest to learn new things, it motivates people to seek information, while those low on this trait find it difficult to distinguish relevant information from irrelevant (Heinström 2003). Therefore Anderson (2010) hypothesized that high level of openness makes one resistant to framing effects. Regarding news consumption patterns people high on this trait more often use the internet to look for news, and when it comes to TV watching they rather switch to news than other programs (Gerber et al. 2011).

People scoring low on *conscientiousness* (careless) find it difficult to distinguish relevant information from irrelevant and they also prefer to consume information which confirms previous knowledge (Heinström 2003). However, people scoring high on this trait are willing to put much more effort into information seeking (Heinström 2003) and report watching political talk shows too (Gerber et al. 2011). In addition to these findings Mondak & Halperin (2008) report that the number of opinions increase for those high on this trait, but interest in, information on and substantive knowledge of politics is lower (Gerber et al. 2011). In line with these findings Gastil et al. (2008) found evidence that discussion is less likely to result in

group attitude changes in groups with members who are on average more extraverted and conscientious.

Literature on *extraversion* finds that introverts tend to prefer information which does not contradict previous knowledge, and extravert people quite often come across new information by reading newspapers, watching political talk shows (Gerber et al. 2011), or by informal, personal sources (Heinström 2003). Mondak et al. (2010) show that extraverts substantially differ in their social communication networks from introverts. This difference is important because as the network grows, the likelihood that it will include at least one person with a differing point of view rises (Huckfeldt, Johnson and Sprague 2004). However, Mondak et al. (2010, 16-17) proposed that as the network size increases any tendency toward homogeneity or heterogeneity should not be assumed to be constant for all individuals. Instead, they hypothesized that a person's psychological traits may determine whether an individual prefers homogeneity in his/her networks or accepts heterogeneity. They found that extraverts are relatively indiscriminating in their political conversations. Personality moderates the effect of network size on a person's exposure to cross-cutting social communication. Extraverted individuals are more likely to attend political meetings and to vote (Mondak et al. 2010). They also have greater interest in politics; however this interest is driven by local, rather than national affairs (Gerber et al 2011). Mondak & Halperin (2008) found that people high on this trait have more opinions on things. These people also report greater levels of interest in politics, however at the same time this trait (along with conscientiousness) tends to be associated with lower levels of substantive knowledge.

Recent works have found connection between higher levels of *agreeableness* and lower levels of opinion, attention and discussion of politics (Mondak & Halperin 2008). Heinström (2003)

also reported difficulties to know whether the information is relevant or not for those who score low on this trait (competitive, outspoken), but found that these people try to engage more in critical thinking. Although the results may seem contradictory, they show that this trait generates difficulties in distinguishing valuable information from distorted, and the presence of it has an impact on accepting or rejecting low credibility information. Thus this personality trait puts people at risk when it comes to intentional or unintentional misinformation. However, the same trait is positively associated with the consumption of all types of news media (Gerber et al. 2011). Recently, Bakker et al. (2015) found evidence in three countries – US, Germany and the Netherlands – that populist anti-establishment messages resonate with the personality of those scoring low on agreeableness. Though the research examined voting intentions, the authors' theory was that it is the rhetoric of populists which makes intolerant, distrusting, uncooperative people vote for populist parties.

Finally, Mondak & Halperin (2008) found that *emotionally stable* individuals have less opinion, and knowledge, while Heinström (2003) reports that sensitive people have difficulties in judging the relevance of a piece of information. From a political communication perspective this could imply that possibly they are more vulnerable to framing and misinformation. Gerber et al (2010) find that people with high emotional stability are more likely to yield to social pressure.

Personality research in political communication mostly focuses on framing effects. Anderson (2010) used a US twin adult sample to test the effects of framing in general on personality. She used gain and loss frames in order to see if the different options cause preference change for different types of people. Although she found that personality does not explain preference change between the two conditions in general, the trait *agreeableness* had statistically

significant effects in both models she tested. “Those high on *agreeableness* are more likely to go from the gain to loss frame, and experiencing a change in options from the sure to risky or vice versa” (pp. 31-32). Although, she did not generate her own data and the sampling could be criticized, her results regarding agreeableness indicate that there is room for further research in this field. Another study analyzed a more nuanced aspect of framing and its impact on different types of people. Gamliel et al. (2013) examined attribute (distributive justice) framing scenarios and their interaction with personality traits. Based on an Israeli adult volunteer sample they found that framing bias is moderated by personality traits. “Attribute framing had a greater effect on the perceived fairness of the allocation criteria of participants scoring high on agreeableness or conscientiousness, compared to those scoring low, who were relatively immune to framing.” (pp. 5) By replicating the scenario with undergraduate students in a second experiment, the authors came to the same conclusion again. However, in case framing was unrelated to distributive justice, personality traits did not moderate its effect.

Another area of political communication where personality matters and has large-scale implications is deliberation. In broad terms deliberation can be defined as a process of thoughtfully weighing options prior to decision-making. By giving more exact definitions the literature distinguishes between two ideal types. One is “rooted in the Habermasian logic of communicative action, and embodies the idea of rational discourse, focuses on deliberative intent, and the related distinction between communicative and strategic action, and has a strong procedural component” (Bächtiger et al. 2010, 33). The other is a more flexible form of discourse which puts emphasis on outcome versus process and includes “all activities that function as communicative influence under conditions of conflict” (Warren 2007). As deliberation focuses on discussion among people and the evaluation of arguments and frames,

it is obvious that personality plays an important role if one aims to analyze the behavior of the group, the opinion formation and change in such discussions. In a 2008 study Gastil et al. actually asks the question how the personality composition of a group influences the direction and degree of attitude change in political discussion groups. Based on a sample of undergraduate students' discussions the authors found that even after controlling for ideology, group size, issue, group gender balance and self-reported measure of democratic deliberation *extraversion* and *conscientiousness* can be associated with group attitude change. Precisely, "variation across the groups' average member personalities accounted for nearly one quarter of the variance in within-group attitude change" (pp. 37) and relatively extraverted and conscious groups had lower levels of variance in members attitude change.

#### ***4.5. The list of hypotheses tested in this research***

Based on the aforementioned evidences, my assumption is that personality traits matter not only in opinion formation and in framing, but also in giving immediate reactions to different types of messages:

H<sub>1</sub>: People have different personalities even if they were socialized in the same culture, or in the same environment. Although the context, the environment and the socialization process can influence an individual's behavior and attitudes, there are certain parts of a person's psychological nature which stay relatively stable over time and influence one's decisions and behavior in many aspects. I assume that politics is no exception from the issues in which people try to make decisions comforting their personality. Furthermore, as politics is one of the key elements which shapes the frames of public affairs both on local and macro scale, but the individuals never have full information about the offered alternatives, my hypothesis is

that people demonstrably rely on their psychological traits in decision-making in order to comfort their personality. Therefore, I expect to see differences among individuals possessing or lacking certain personality traits in how much they support, trust, identify and sympathize with a politician.

H<sub>2</sub>: By definition the trait openness to experience reflects how much an individual aims to broaden one's knowledge, how much the individual seeks information and originality and it reflects the degree of intellectual curiosity. Higher scores on this trait are associated with more knowledge, more attraction to information, interest in learning new things, critical thinking and resistance to framing effects. However, on the political market information is always asymmetric and voters can never have full knowledge of the politicians' ideas and intentions. The content of these ideas is even more concealed in case of populism, since one fundamental characteristic of populism is that rhetorically it oversimplifies complex information, and reduces most of the things into compact, vaguely defined frames such as good vs. evil, people vs. interest groups etc. My hypothesis is that open people are not satisfied with these oversimplified frames, as these do not provide them sufficient information to make comforting decisions. At the same time rather closed minds may find it comforting to be presented with simplistic terms which do not require wide knowledge or much effort to process. Therefore, I expect that the level of an individual's openness is a relevant factor in his/her fondness of populist talk, and that it is a predictor of having a populist attitude.

H<sub>3</sub>: Agreeableness is a measure of one's pro-social and communal orientation. The higher levels of agreeableness a person has – by definition of the trait – the friendlier, the more compassionate, the more cooperative and the more altruistic the person is. More agreeable individuals tend to think in terms of groups and communities rather than non-agreeable



individuals who are often deemed cold, unkind, competitive and non-altruistic at all. Previous research by Bakker et al. (2015) hypothesized that the distrust and antagonism that people scoring low on this trait have, and their affinity to conspiracy theories makes them receptive to populism. Contrary to these, I approach this trait from a different perspective. My theory is that the bridge that connects agreeableness with populism is the accentuation of thinking in terms of communities, rather than in terms of individuals. Populist talk often distinguishes between different groups such as ordinary vs. special citizens, or big businesses vs. average workers. My assumption is that people who tend to think in terms of communities find this kind of group-oriented rhetoric appealing, as they can identify themselves with this attitude easily. However, in those, who are distrusting and individualistic, this kind of rhetoric may generate suspicion or even anxiety therefore they find such talk unattractive and are not mobilized by it.

H<sub>4</sub>: The level of one's emotional stability expresses if the person is secure and confident or experiences anger, anxiety, depression or vulnerability easily and frequently. Emotionally stable people do not find it difficult to stay calm even in stressful situations while their neurotic fellows experience anxiety often, get upset easily and according to previous research are affected by framing and misinformation frequently. Populist rhetoric is not reluctant to use frames which are unclear and sound disturbing e.g. evil or mysterious interest groups, foreign powers; and often puts the blame on groups other than the audience addressed by the speech, using frames that generate anxiousness and suspicion easily e.g. big businesses, right and bad kind of people etc. Based on these, I assume that populist talk resonates with the anxiousness of neurotic individuals who are looking for justification for their nervousness and suspicion in external factors. On the contrary, emotionally stable people may not be attracted by these frames and do not find populism appealing.

H<sub>5</sub>: The trait conscientiousness depicts how the individual leads his/her lifestyle: in a planned, organized, cautious way or with an easy-going careless attitude. In terms of seeking and processing information conscientious people are similar to open people. They look for information more thoroughly than easy-going individuals and form a number of opinions concerning certain issues. As populist rhetoric reduces information into vague, not well-elaborated frames and occasionally promises contradicting policies and outcomes, I hypothesize that conscientious people who seek information more thoroughly do not find such oversimplified, shallow arguments satisfying at all. However, easy-going, careless individuals might find it comforting to be presented with simplified information which does not require organizing thoughts and arguments in order to be processed.

H<sub>6</sub>: The core meaning of the extraversion trait can be linked to politics easily. Extraverts are outgoing, active and prefer to be around people; hence they usually have higher levels of participation in politics. Previous studies also show that extraverts seek more information and consume more news, furthermore tend to have larger social networks and more interest in politics (Mondak & Halperin 2008; Mondak et al. 2010; Gerber et al. 2011). On the other hand, introverts are rather withdrawn from politics and not easily mobilized. Unless, the populist politician touches an issue which is extremely important for an introvert individual, I expect that introverts are not easily mobilized by populist rhetoric either. They “might feel too small to intervene” into the antagonism of different social groups or simply find such “fighter” rhetoric intimidating. However, due to the extraverts’ affinity to participation and their embeddedness in social networks, my assumption is that they are more easily mobilized even if the issue is not that extremely important to them.

## 5. Methodology

### *5.1. The research tool and the sample*

In order to test the proposed hypotheses a survey-based dataset will be used below. The survey was conducted online by the Central European University's Political Behavior Research Group (PolBeRG) in June 2014, through Amazon's Mechanical Turk (MTurk) with individuals who voluntarily chose to participate in it. MTurk is a web-based platform for recruiting and paying subjects to perform tasks and enables researchers to do surveys and survey-embedded experiments. The Mechanical Turk datasets are based on crowdsourcing and are not perfectly representative of the population. The highest academic standards require the use of representative sample to draw reliable conclusions for the whole population. The only accepted way to generalize the findings of a research is to use a subset of a population that accurately reflects the members of the entire population. A representative sample should be an unbiased indication of what the population is like. Nevertheless, obtaining such a sample is difficult and more importantly, quite expensive, therefore researchers often turn to other sampling methods to collect easily reproducible data for pilot experiments. The data used in this research is not a perfect representative sample of the US population, therefore any findings of this research should be treated cautiously, generalizations of the results should not be made automatically and further research should aim to confirm the relevant findings by using a representative sample.

The other important characteristic of the dataset is that MTurk datasets are based on crowdsourcing. Crowdsourcing can be defined as a job outsourced to an undefined pool of people in the form of an open call (Howe 2006). The key benefit of this method is that large pools of people – who are willing to participate in research – are available. This advantage

may also be a concern for the research itself since the question whether self-selected participants are different from participants selected randomly by the researcher always comes up. Like the use of representative samples, avoiding the self-selection of participants is also a requirement of complying with high academic standards. Self-selection always implies a number of questions, especially in behavioral and psychological research. Are self-selected individuals different from randomly selected participants/ respondents? If yes, in what ways are they different? Do they have more time or resources to dedicate to participation in experiments? If yes, is it due to such socio-economic characteristics which could have a serious influence on the research? Are they only more enthusiastic or more motivated? Is this motivation in correlation with some other characteristic that could have an impact on the findings? Is financial remuneration a factor which distorts or balances the composition of a sample? These questions are all important to judge the reliability of the research. Therefore, in research based on surveys scientists and experts usually try to avoid the self-selection of participants; however it is not always easy due to the lack of resources. Unfortunately self-selection is difficult to eliminate from sampling: even with the use of random sampling some selected individuals may refuse to participate or answer. Some studies have addressed this question, and examined the composition of MTurk samples and found that the behavior of subjects on Mechanical Turk is comparable to the behavior of laboratory subjects (Horton, Rand, & Zeckhauser, 2011; Paolacci, Chandler, & Ipeirotis, 2010). Further research has analyzed the effect of payroll on quantity and quality in experiments (Mason and Watts 2009) – as participants are paid –, while Eriksson and Simpson (2010) studied the tool in terms of the participants' gender, culture and risk preferences. All of these studies showed that Mechanical Turk is a valid research tool. One big advantage of MTurk is that it is inexpensive both in terms of time required to implement the studies and in cost of subjects. MTurk samples are less representative than subjects in Internet-based panels or national probability

samples, but still are often more representative of the U.S. population than convenience samples (Berinsky, Huber and Lenz, 2012).

Of course, surveys conducted online both have their advantages and disadvantages compared to personal interviews. The first and probably biggest drawback is that while personal interviewers can apply a basic reality check of the respondents – in terms of gender, age, race possibly even income in some cases – surveys conducted online lack this opportunity. Also, if something is not clear for the respondents, personal interviewers may help with some clarification within specific frames, however online tools – if not designed in a way to be able to address this problem – cannot clarify misunderstandings. Misunderstanding a question or asking questions of which the respondents have no opinion can threaten the validity of the results. However, a proper and clear questionnaire design, and conducting pilot interviews can help this problem.

Online surveys usually have the advantages of being cheaper than other ways of interviewing, reaching a wider pool of people, and being suitable for embedding an experimental design – with music, or videos – which would be very complicated with other tools, unless the experiment is done in a laboratory and not embedded only in a survey. Besides these, Mason and Suri (2012) see the key advantages of Mechanical Turk in 1) maintaining an existing pool of potential subject which remains relatively stable over time, 2) the pool of participants consists of a very wide range of subjects in terms of age, ethnicity, socio-economic status, language, country of origin, and 3) finally it has a low cost. They also list that having a pool of potential respondents facilitates the theory-experiment cycle. Mason and Suri (2012) acknowledge that other tools may be better in one of these characteristics, but as a whole Mechanical Turk offers a useful research tool. In terms of the respondents, Buhrmester (2011)

compared Mechanical Turk subjects with a large Internet sample with respect to several psychometric scales and found no meaningful differences between the populations, as well as high test–retest reliability in the Mechanical Turk population.

The questions and items examined in this research were asked among a lot of other questions. Since the length of the questionnaire and the experiments may have caused not paying attention carefully to all items – potentially leading to the decrease of the validity of the results – a planned missing data design was applied. This means that in each case a few, randomly selected questions or items were not presented to all of the respondents. In this particular research it affected the four questions about populist attitude but neither the populism experiment nor the other variables that are used to control for basic socio-economic characteristics. The total number of respondents is  $N = 694$ , all respondents are American residents of legal age who received a modest monetary compensation for taking part. In terms of gender 53% of the respondents in the sample are female, and 47% are male.

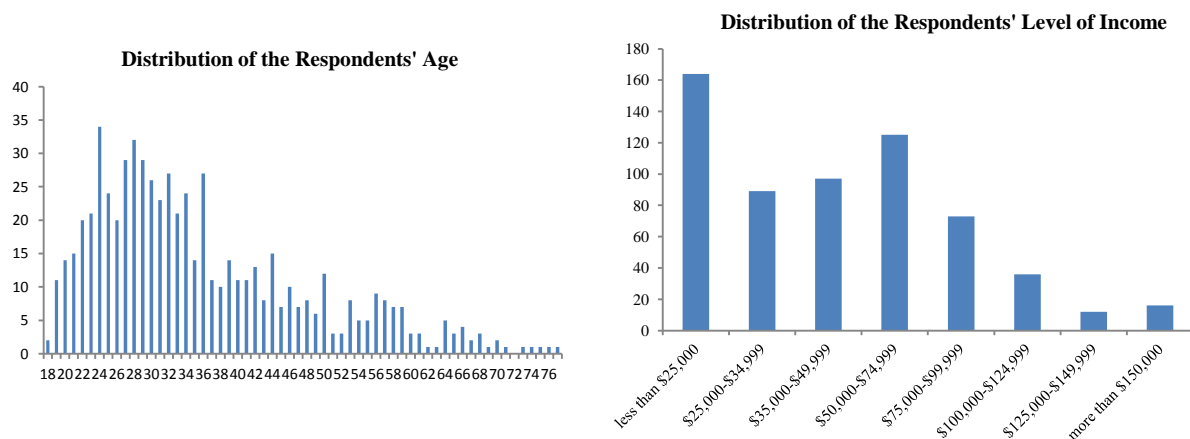
### ***5.2. Basic characteristics of the respondents***

The survey consists of several experiments and a series of batteries measuring psychological constructs, political preferences, ideologies, political activity, personality, cognitive measures and demographics. A planned missing data design was used (PMDD) in the collection in order to reduce the amount of time of completion. In the planned missing data design in some of the batteries not all statements were presented to participants, meaning that only a random subset of statements used for each construct was assigned to the individual. The PMDD ensures that missing data are completely random.

The average age of the respondents is 35, the majority of the participants are between 20 and 40 years old, however the youngest respondent is 18 and the oldest is 77. The distribution of the respondents' age is positively skewed (0.9863), a little biased towards the young but it does not exceed the critical value (2).

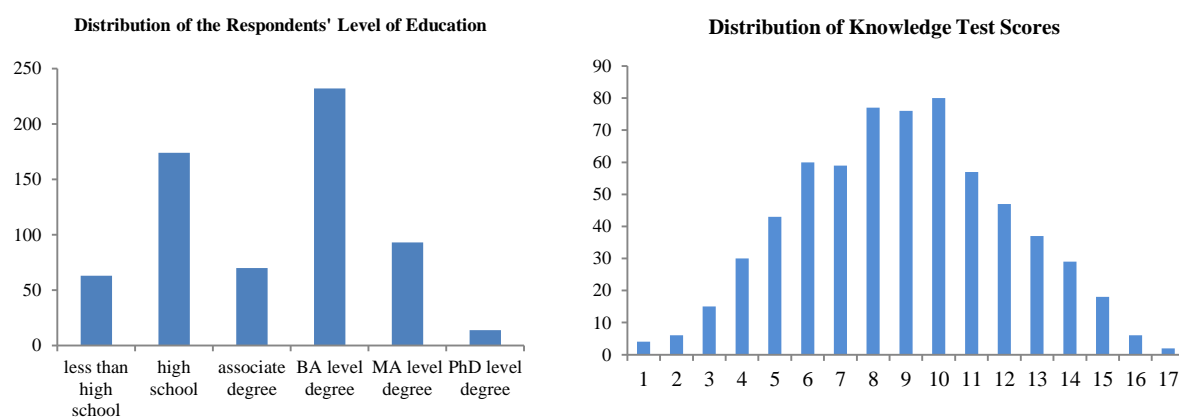
As far as the level of income is concerned, the original measurement distinguished eight categories ranging from less than \$ 25,000 per year to more than \$ 150,000 annually. Most of the respondents belong to the lower half of the income range. The mean income in the sample is between \$ 35,000 – 49,999. The distribution is a little bit positively skewed – towards lower income groups –, but it is between the critical values, thus it can be treated as a normal distribution. (See Figure 1.)

**Figure 1: Distribution of the respondents' age and income**



The variable education was originally measured by the questions if the respondent spent more or less than 12 years in school, if the person obtained a high school degree and what is the highest degree that s/he managed to obtain. The six categories distinguished here are no high school degree, high school degree, associate degree (less than 3 years long professional

degree), BA level degree, MA level degree and PhD level degree. Most of the respondents have completed BA level education.

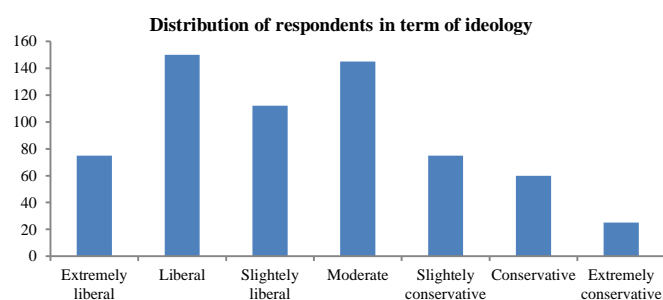


**Figure 2: Distribution of the respondents' level of education and knowledge**

The knowledge of public affairs and politics were measured by questions regarding 17 different issues. Questions regarding an issue were either 1) true or false items such *Is Jacob Lew the Secretary of Treasury?*, 2) open questions e.g. *“Please name the position currently held by Jacob Lew”*, or 3) multiple choice questions such as *“The office currently held by Jacob Lew is: a) Secretary of Defense b) Secretary of Treasury c) Speaker of the House of Representatives d) White House Chief of Staff”*. Regarding one issue the participants had to answer only one question, but during completing the knowledge batteries they were asked all three types of question. The range of the knowledge test scores is between 1 and 17, has an arithmetical mean 8.89 and shows an almost perfectly normal distribution.



**Figure 3: Distribution of the respondents in terms of ideology**



Ideology was measured by a 7-point scale ranging from 1-extremely liberal to 7 extremely conservative. The data is little bit skewed towards liberals (skewness = 0.32) but does not exceed

the critical threshold (2) so the variable can be treated as a normally distributed one. The following table gives an overview of the basic descriptives of the respondents in terms of age, income, education and knowledge.

**Table 5: Descriptive statistics of the basic characteristics of the respondents**

	Mean	St. Dev.	Median	Minimum	Maximum	Skew
<b>age</b>	35.68	12.40	32	18	77	0.986
<b>income</b>	\$35,000–49,999	-	\$35,000-49,999	less than \$25,000	more than \$150,000	0.564
<b>education</b>	tertiary level education (associate deg.)	-	BA level degree	less than high school	PhD level degree	-0.111
<b>knowledge</b>	8.89	3.17	9	1	17	0.037
<b>ideology</b>	slightly liberal	-	slightly liberal	extremely liberal	extremely conservative	0.327

### ***5.3. Personality Traits***

The Big Five personality traits: extraversion, agreeableness, conscientiousness, neuroticism and openness are captured by the items listed in the following tables. The traits were measured by a series of items on 7-point Likert scales. Such scaling is suitable to capture not

only the agreement or disagreement with a statement, but also the intensity of feelings, support or disapproval (1 = disagree strongly to 7 = strongly agree). The reliability of measurement was tested by two methods: obtaining the Cronbach alphas (Table 6) and checking the inter-item correlations (Table 7-11). Both the Cronbach alphas and the inter-item correlations validate the reliability of measurement, and allow merging the items into indices for analysis.

**Table 6: Cronbach alphas related to each personality trait**

Extraversion	0.88
Neuroticism	0.87
Agreeableness	0.83
Openness	0.84
Conscientiousness	0.86

**Table 7: Extraversion inter-item correlations<sup>8</sup>**

	talkative	reserved (R) <sup>9</sup>	is full of energy	generates a lot of enthusiasm	tends to be quiet (R)	has an assertive personality	sometimes shy, inhibited (R)	is outgoing, sociable
talkative	1	0.472 0.000	0.396 0.000	0.527 0.000	0.575 0.000	0.476 0.000	0.473 0.000	0.662 0.000
reserved (R)		1	0.213 0.000	0.355 0.000	0.723 0.000	0.305 0.000	0.635 0.000	0.487 0.000
is full of energy			1	0.605 0.000	0.305 0.000	0.366 0.000	0.345 0.000	0.504 0.000
generates a lot of enthusiasm				1	0.397 0.000	0.435 0.000	0.374 0.000	0.625 0.000
tends to be quiet (R)					1	0.336 0.000	0.686 0.000	0.546 0.000
has an assertive personality						1	0.392 0.000	0.473 0.000
sometimes shy, inhibited (R)							1	0.579 0.000
is sociable, outgoing								1
p<0.0001								

CEU eTD Collection

<sup>8</sup> Respondents had to indicate on a 1-7 scale if they agree or disagree with the statement: “I see myself as someone who is...”

<sup>9</sup> In case of reverse-scored items, the correlations presented in the table are the correlations of the transformed variables in all of the following tables.

**Table 8: Neuroticism inter-item correlations**

	depressed blue	relaxed, handles stress well (R)	can be tense	worries a lot	emotionally stable, not easily upset (R)	can be moody	remains calm in tense situations (R)	gets nervous easily	generally untrusting
depressed, blue	1	0.476 0.000	0.530 0.000	0.560 0.000	0.468 0.000	0.512 0.000	0.313 0.000	0.496 0.000	0.299 0.000
relaxed, handles stress well (R)		1	0.508 0.000	0.560 0.000	0.677 0.000	0.473 0.000	0.644 0.000	0.567 0.000	0.196 0.000
can be tense			1	0.568 0.000	0.413 0.000	0.568 0.000	0.312 0.000	0.553 0.000	0.291 0.000
worries a lot				1	0.486 0.000	0.501 0.000	0.342 0.000	0.660 0.000	0.213 0.000
emotionally stable, not easily upset (R)					1	0.476 0.000	0.527 0.000	0.490 0.000	0.213 0.000
can be moody						1	0.361 0.000	0.492 0.000	0.248 0.000
remains calm in tense situations (R)							1	0.470 0.000	0.166 0.000
gets nervous easily generally untrusting								1	0.228 0.000
p<0.0001									

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**Table 9: Agreeableness inter-item correlations**

	tends to find fault with others (R)	helpful and unselfish with others	starts quarrels with others (R)	has a forgiving nature	is generally trusting	can be cold and aloof (R)	considerate and kind to almost everyone	is sometimes rude to others (R)	likes to cooperate with others
tends to find fault with others (R)	1	0.178 0.000	0.458 0.000	0.282 0.000	0.225 0.000	0.465 0.000	0.238 0.000	0.490 0.000	0.282 0.000
helpful and unselfish with others		1	0.219 0.000	0.412 0.000	0.336 0.000	0.262 0.000	0.531 0.000	0.216 0.000	0.443 0.000
starts quarrels with others (R)			1	0.288 0.000	0.187 0.000	0.313 0.000	0.335 0.000	0.544 0.000	0.325 0.000
has a forgiving nature				1	0.497 0.000	0.279 0.000	0.515 0.000	0.285 0.000	0.448 0.000
is generally trusting					1	0.288 0.000	0.334 0.000	0.251 0.000	0.393 0.000
considerate and kind to almost everyone						1	0.335 0.000	0.460 0.000	0.356 0.000
considerate and kind to almost everyone							1	0.357 0.000	0.499 0.000
is sometimes rude to others (R)								1	0.332 0.000
likes to cooperate with others									1

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**Table 10: Openness to experience inter-item correlations**

	is original, comes up with new ideas	is curious about many different things	ingenious, a deep thinker	has an active imagination	inventive	values artistic, aesthetic experiences	prefers work that is routine (R)	like to reflect, play with ideas	has few artistic interests	sophisticated in art, music, or literature
is original, comes up with new ideas	1	0.456 0.000	0.558 0.000	0.548 0.000	0.643 0.000	0.401 0.000	0.275 0.000	0.531 0.000	0.251 0.000	0.404 0.000
is curious about many different things		1	0.468 0.000	0.426 0.000	0.421 0.000	0.412 0.000	0.200 0.000	0.548 0.000	0.200 0.000	0.304 0.000
ingenious, a deep thinker			1	0.476 0.000	0.516 0.000	0.339 0.000	0.170 0.000	0.534 0.000	0.158 0.000	0.404 0.000
has an active imagination				1	0.482 0.000	0.427 0.000	0.161 0.000	0.515 0.000	0.230 0.000	0.318 0.000
inventive					1	0.398 0.000	0.323 0.000	0.476 0.000	0.190 0.000	0.4027 0.000
values artistic, aesthetic experiences						1	0.150 0.000	0.406 0.000	0.429 0.000	0.639 0.000
prefers work that is routine (R)							1	0.203 0.000	0.120 0.000	0.140 0.000
like to reflect, play with ideas								1	0.171 0.000	0.325 0.000
has few artistic interests (R)									1	0.387 0.000
is sophisticated in art, music, or literature										1

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**Table 11: Conscientiousness inter-item correlations**

	does a thorough job	can be somewhat careless (R)	a reliable worker	tends to be disorganized (R)	tends to be lazy (R)	preserves until the task is finished	does things efficiently	makes plans and follows through with them	is easily distracted (R)
does a thorough job	1	0.303 0.000	0.615 0.000	0.338 0.000	0.356 0.000	0.658 0.000	0.538 0.000	0.581 0.000	0.291 0.000
can be somewhat careless (R)		1	0.277 0.000	0.559 0.000	0.554 0.000	0.310 0.000	0.337 0.000	0.294 0.000	0.549 0.000
a reliable worker			1	0.263 0.000	0.362 0.000	0.588 0.000	0.555 0.000	0.483 0.000	0.259 0.000
tends to be disorganized (R)				1	0.524 0.000	0.290 0.000	0.345 0.000	0.386 0.000	0.494 0.000
tends to be lazy (R)					1	0.389 0.000	0.324 0.000	0.387 0.000	0.485 0.000
preserves until the task is finished						1	0.537 0.000	0.537 0.000	0.299 0.000
does things efficiently							1	0.451 0.000	0.303 0.000
makes plans and follows through with them								1	0.276 0.000
is easily distracted (R)									1

p <0.0001

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The advantages of self-assessment according to Allen and van der Velden (2005, 11) are that 1) it is relatively easy to administer to large samples, 2) provide easily quantifiable and analyzable responses, 3) relatively inexpensive to produce, 4) can be produced in several ways ranging from personal interviews to telephone interviews or online questionnaires, and 5) requires significantly less time than testing. In addition to the practical advantages of self-assessment Allen and van der Velden (2005) highlight another important benefit, namely that individuals have access to information about themselves that outside observers may not be aware of. This fact implies that self-assessment is not a weak tool in itself, however it should be treated carefully since this self-knowledge is probably far from perfect and it is difficult to report it objectively. The authors warn that this may lead to problems regarding the validity and reliability of the results.

Self-assessment variables face the problem of measurement error which can be unintentional or intentional. Unintentional measurement error may occur due to the 1) misunderstanding of the question/ content, 2) limitation to the respondents' comprehension or memory, 3) anchor problem. The anchor problem refers to the fact that there is no universal scale on which skills, characteristics, opinions can be measured. Such scales use general terms like "very low", "extremely high". The burden is on the researcher to design a scale on which s/he understands the same thing as the respondents. In addition to the unintentional measurement errors, there are a number of reasons why the individual may alter his/her response intentionally. This may be due to 1) reporting socially desirable answers to appear more "normal", 2) reporting higher/ lower values to avoid being seen as a "geek" or to shine out from the crowd, 3) having concerns about the confidentiality of the data or 4) simply misleading the researcher (Allen & van der Velden, 2005, 11-12).



Even though self-assessment variables have their own disadvantages, they are widely used since they are easy and cheap to administer and can reveal information which may be unseen or unperceived by the individual's environment. The personality traits item in this research were collected by this method. Albeit, they must be treated with bearing in mind their aforementioned limitations, such variables are widely used in political behavior research.

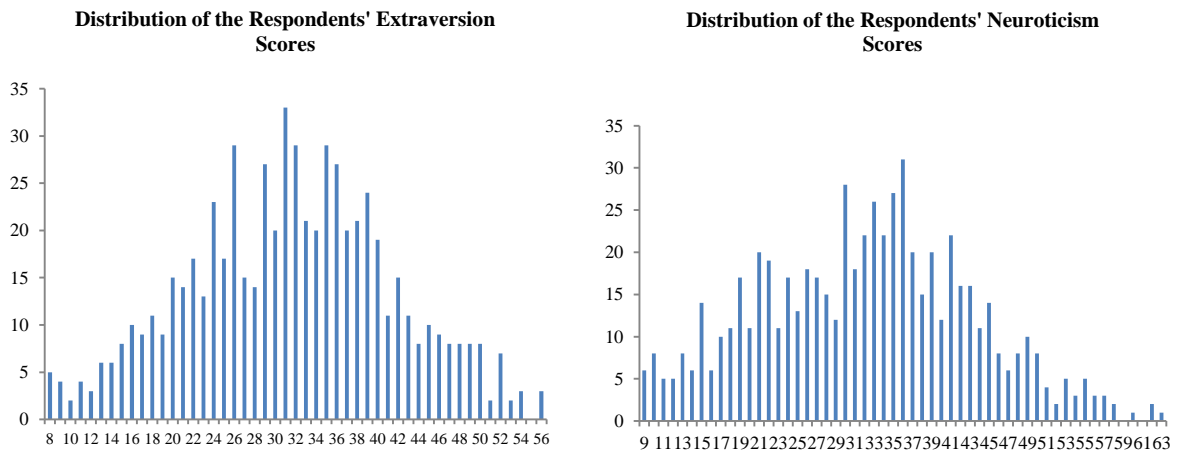
After testing the reliability of measurement, indices were composed of the items measuring each personality trait. In order to compose the indices, first the reverse-scaled items had to be recoded, and then in the next step an aggregate index was composed of the items for each trait. Extraversion was measured by 8 items therefore the minimum value of the extraversion index is 8 while the maximum value is 56. Agreeableness, conscientiousness, and neuroticism were measured by 9 items therefore the indices' range is between 9 and 63, while it took 10 items to captures openness, so the range of the aggregate index is between 10 and 70.

**Table 12: Descriptive statistics on personality trait scales**

	Mean	Standard Deviation	Median	Minimum	Maximum	Skew
Extraversion	31.53	9.99	32	8	56	-0.02
Agreeableness	45.58	8.96	46	12	63	-0.34
Conscientiousness	45.94	9.24	46	10	63	-0.22
Neuroticism	32.06	11.14	33	9	63	0.07
Openness	49.85	9.98	51	16	70	-0.34

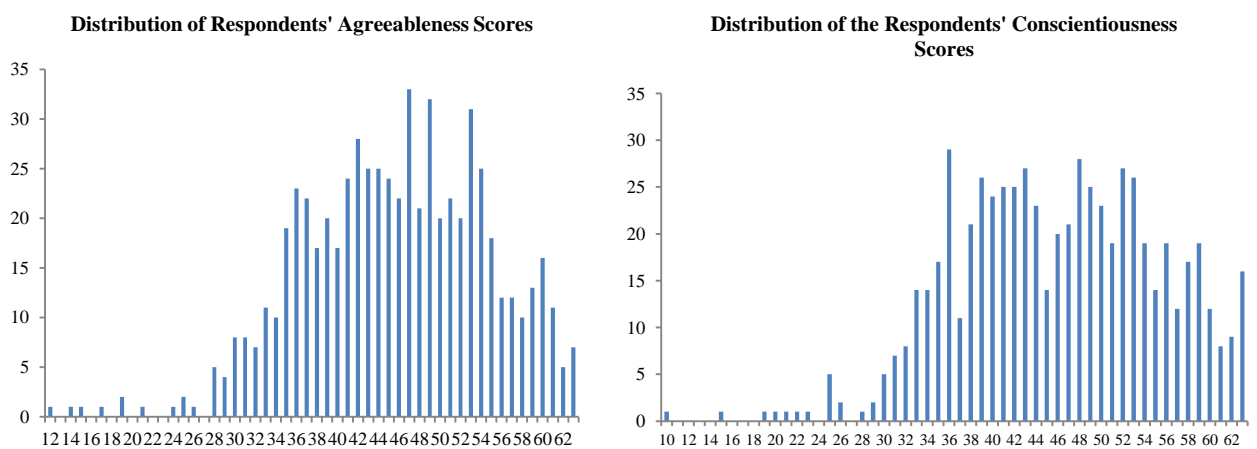
The following charts show the distribution of the respondents' scores on the different personality traits. The extroversion and neuroticism scores show a relatively normal distribution. The agreeableness scores are negatively skewed, but remain within the critical values (-2, 2). The same holds for the conscientiousness and openness scores.

**Figure 4: Distribution of extraversion and neuroticism scores**

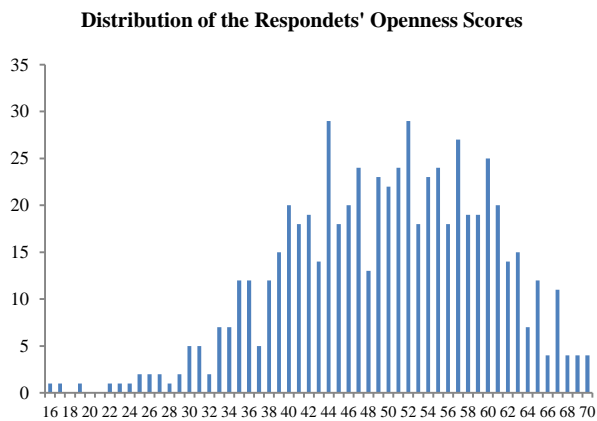


The distribution of extraversion and neuroticism scores is similar to each other and quite close to normal distribution. The presence of almost normal distributions may indicate that the items by which the traits are measured do not distort the subject of measurement. However, the similarity in shape might be caused by the fact that the items measure similar attitudes in a reverse way for example usually one who is depressed is not that talkative, being energetic and enthusiastic is somewhat the opposite of being tense and worrying a lot.

**Figure 5: Distribution of agreeableness and conscientiousness scores**



**Figure 6: Distribution of openness scores**



The distribution of agreeableness, conscientiousness and openness are also very similar to each other, and are all skewed in the same direction: respondents report higher levels of conscientiousness, agreeableness and openness. This may be caused by how the items measuring the traits are designed. All these three traits are seen as socially desirable therefore over-reporting the presence of such characteristics may be due to latent or experienced social pressure.

#### ***5.4. Populist attitudes***

Populist attitudes are measured with four questions, and just as personality traits, the items are scaled by Likert-scales (1 – strongly disagree, 7 – strongly agree):

*“Politics is ultimately a struggle between good and evil.”*

This item represents how populist talk is usually depicted in the relevant academic literature. As Hawkins (2009) argues one of the most important characteristics of populism is that it translates everything into a moral dimension and even purely technical questions are presented as a struggle between good and evil. Usually the good equals to the will of the people, while the evil is associated with a conspiring elite. It seems reasonable to say that

agreeing with this statement implies that the respondent may see politics and public affairs as black and white and has a tendency to think in oversimplified terms.

*“The politicians in Congress need to follow the will of the people.”*

This item aims to capture what Canovan (1999, 3) calls as the revolt against the established structure of power *in the name of the people*. The item was designed to measure this “will of the people” component of populist talk; however it is questionable if it functions well. Probably this is one of the components which are the most difficult to measure since representative, non-populist democratic politics also builds on following the will of the people hence politicians are elected by the people to represent their ideas and interest. So the criticism of this item could be that agreeing with the statement does not necessarily imply that the respondent is responsive to populism.

*“The people, not the politicians, should make the most important policy decisions.”*

Just as the previous items, this one faces the problem that agreeing with it not necessarily means that the individual has populist attitude or the individual is responsive to populist talk. Since for example thinking that the citizens themselves should choose between some policies via referendum would not imply populist attitude.

*“The power of a few special interests prevents our country from making progress.”*

The statement plays along the lines of the first item. It oversimplifies politics again, contrasting special interest groups with the people and evil with good.

These populism items are affected by the planned missing data design, therefore latent factor analysis was used to estimate the missing values based on the other responses of the

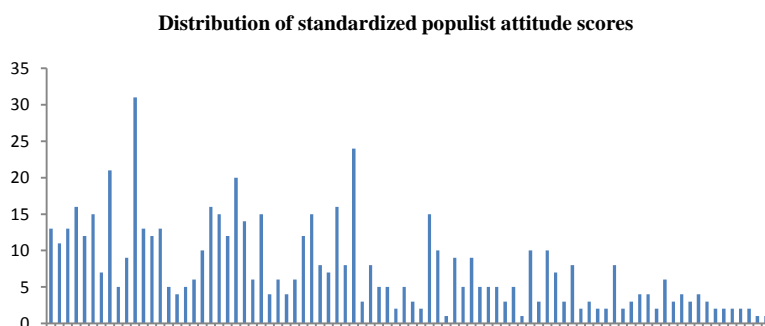
individuals. After the testing the inter-item correlations (Table 13) and the reliability of the measurement (Cronbach alpha 0.50) an aggregate index was composed of the items (Table 13, Figure7).

**Table 13: Correlations of the items measuring populism**

	Politics is ultimately a struggle between good and evil	The politicians in Congress need to follow the will of the people.	The people, not the politicians, should make the most important policy decisions	The power of a few special interests prevents our country from making progress.
Politics is ultimately a struggle between good and evil	1	0.257 0.000	0.258 0.000	0.326 0.000
The politicians in Congress need to follow the will of the people.		1	0.387 0.000	0.424 0.000
The people, not the politicians, should make the most important policy decisions			1	0.353 0.000
The power of a few special interests prevents our country from making progress.				1

p<0.0001

**Figure 7: Distribution of populist attitude scores**



### ***5.5. Description of the experiment***

The second part of the analysis is built on an experiment. Experiments explore the effect of things that can be manipulated. The unique strength of experimentation is in describing the consequences attributable to deliberately varying a treatment; therefore experiments can help detecting causality (Shadish et al. 2001). Shadish et al. (2001) emphasize four key reasons why experiments are useful and in what way they help researchers understand the target of their inquiry. First, many causal inferences consist of chains of causal links, and experiments help to test these links. Second, experiments help to test the different explanatory theories of an event, interaction, presence or lack of effects. Furthermore, experiments – if well-designed – also help to reveal the strength of an effect under different circumstances and conditions. And finally, experiments may show the presence of mediator variables in a causal chain.

Even though experiments allow researchers to test several things, causality, chains of causal links and to rule out alternative hypotheses, they also have their disadvantages. One key problem arising with experiments is whether the results or the detected links can be generalized for the whole population based on the sample, and whether for example a causal relationship holds over variations in people, settings, treatments and outcomes (Shadish et al. 2001). Simply, there is always a question of external validity. However, at the same time one has to pay attention to ensure the internal validity of the experiment too. The internal validity of an experiment means that the causal relation between two variables is properly demonstrated: (1) the “cause” precedes the “effect” in time – temporal precedence, (2) the “cause” and the “effect” are related (covariance), and if (3) there are no alternative explanations for the observed covariation (Shadish et al. 2001).

The second part of this analysis is based on an experiment done within the frames of the aforementioned PolBeRG survey. Participants of the experiment were asked to read a speech delivered by a fictional candidate Jim Smith arguing against the construction of a new stadium in his hometown. The stadium construction was chosen as it is not a partisan issue and does not have clearly predefined prejudices attached to it. The story told to the participants is that Jim and Bill are just after their party's primary and in the different scenarios either one of them or neither of them is supported by the party. The further variation of the speech is whether it is populist, or not.

In case of the non-populist speech Jim argues that constructing a new stadium instead of reconstructing the existing one is not necessarily better. His point is that construction jobs would be created both ways, what should be weighed is if the poorly designed plans for a new stadium should be approved, what happens with the turnover of the shops and restaurants next to the old stadium and what events and venues could both the new and old stadium host. In case of the populist speech Jim talks about the glorious history of the stadium and the communities attached to it. He forecasts extremely expensive ticket prices if a new stadium is constructed – which is in the interest of a few special interest groups who will design the stadium and set the prices in a way that it attracts only “the right kind of people”. Finally, he argues that history is not for sale and the people's voice should be heard in the issue. So the variations were the following (1) Jim is a candidate of the establishment or not and (2) the speech may have populist tone or not. (See the speeches in the Appendices.) After reading the speeches participants were asked to answer questions (Table 14) and indicate their responses on 7-point Likert scales (1 disagree/ does not support – 7 fully agree, support)

**Table 14: Populism experiment items**

- 
- 1) Just judging from the information provided, how likely would you support this candidate?
  - 2) How likely would you vote for this candidate?
  - 3) What is your general evaluation of the candidate?
  - 4) How much do you identify with this candidate?
  - 5) How competent do you think this candidate would be at defending your interests?
  - 6) This candidate, if elected, would work for the benefit of all people in his constituency.
  - 7) This candidate, if elected, would only look after the interest of a few.
  - 8) This candidate, if elected, would only look after the interest of the people who voted for him.
  - 9) This candidate, if elected, would look after the interest of big business?
  - 10) This candidate, if elected, would take common people's opinions into consideration if elected?
  - 11) This candidate sounded genuine.
  - 12) This candidate sounded honest.
  - 13) This candidate sounded dishonest.
  - 14) This candidate sounded like a politician.
  - 15) This candidate sounded fake.
-



## 6. Analysis

### *6.1. Correlation of personality traits, populist attitudes and demographics*

The analysis consists of two main parts. The first part examines the association between personality types and populist attitudes using the personality trait data and political attitude items. The second part of the analysis aims to examine an interaction and reveal the relationship between personality types and the responses given to a stimulus – in this case speeches of politicians – in order to see if people with certain personality types are more sensitive to populist rhetoric or not. The control variables include demographics such as education, knowledge and income.

Before performing statistical analysis, the possible correlations between personality traits and demographics are examined (Table 15). Regarding demographics education correlates with income (0.29) and knowledge (0.29). These relations are statistically significant, substantively less strong, but worth noting. In terms of the relationship between demographics and personality traits conscientiousness has a weak, statistically significant correlation with age (0.2), and even weaker correlation with income (0.1). Neuroticism shows statistically significant correlations with age (weak negative -0.2) and an even weaker correlation with gender (0.1). Albeit these are statistically significant values, substantially they are much less meaningful.

As far as the correlations of traits are concerned much stronger relations can be seen (Table 15). Extraversion negatively correlates with neuroticism (-0.4) which might be caused by the fact that the items measure similar attitudes in a reverse way. For example usually an individual who is depressed (neuroticism) is not that talkative (extraversion); being energetic

and enthusiastic (extraversion) is somewhat the opposite of being tense and worrying a lot (neuroticism) etc. Agreeableness and neuroticism also show a relatively strong correlation, and the explanation could be again that the items measuring the traits are “close to each other”. Agreeableness correlates with conscientiousness (0.4) as well, however, the cause of correlation in this case could rather be that both traits are socially desirable, therefore some level of over-reporting – as the distribution also suggests – is probable. Finally, conscientiousness and neuroticism also correlate in this dataset. Since the items do not seem to measure the same attitude in case of these two, and the shape of the distributions are also different, the reason might be that the aforementioned relationships cause the correlation in this case. Scientists in future research might reconsider the use of these measurement items for mapping these traits - unless they show smaller correlation on different data – hence there is a danger that it decreases the validity of the research.

**Table 15: Correlation between personality traits and control variables**

	Age	Education	Income	Knowledge	Open	Extrovert	Agreeable	Conscientious.	Neurotic	Ideology
<b>Age</b>	1	0.133*** 0.000	0.037 0.362	0.149*** 0.000	0.081* 0.0421	0.061 0.123	0.151*** 0.000	0.225 *** 0.000	-0.225 *** 0.000	-0.105** 0.007
<b>Education</b>		1	0.294*** 0.000	0.299*** 0.000	0.076 0.057	0.071 0.074	0.003 0.929	0.039 0.313	-0.069 0.081	-0.022 0.574
<b>Income</b>			1	0.144*** 0.000	-0.027 0.506	0.054 0.183	0.068 0.097	0.124 ** 0.002	-0.091 * 0.025	0.101* 0.012
<b>Knowledge</b>				1	0.075 0.059	-0.079 * 0.046	-0.068 0.088	-0.029 0.460	-0.095 ** 0.016	-0.005 0.896
<b>Open</b>					1	0.2618 *** 0.000	0.248 *** 0.000	0.241 *** 0.000	-0.108 ** 0.006	-0.103** 0.009
<b>Extrovert</b>						1	0.254*** 0.000	0.239 *** 0.000	-0.419*** 0.000	0.006 0.876
<b>Agreeable</b>							1	0.444 *** 0.000	-0.532*** 0.000	0.019 0.632
<b>Conscientious.</b>								1	-0.476*** 0.000	0.116** 0.003
<b>Neurotic</b>									1	-0.088* 0.024
<b>Ideology</b>										1

p < 0.05 \*, p < 0.01 \*\*, p < 0.001 \*\*\*

Before running the logistic model the correlation of personality traits and demographics with populist attitude was examined. The correlation between openness and populist attitude is statistically significant ( $p < 0.01$ ) and shows a weak negative association ( $r = -0.1$ ) meaning that being less open is associated with a tendency to be more populist. Even though the association is weak, this implies that there is something with regards to openness and populism that is worth paying attention to.

**Table 16: Correlation of personality traits and demographics with the populist attitude**

	Populist attitude	
	Pearson Correlation	P-value
<b>Openness</b>	-0.104	0.0085***
<b>Extraversion</b>	0.0106	0.7889
<b>Agreeableness</b>	-0.018	0.6524
<b>Conscientiousness</b>	-0.015	0.7074
<b>Neuroticism</b>	0.023	0.5613
<b>Income</b>	-0.015	0.7108
<b>Education</b>	-0.024	0.5502
<b>Knowledge</b>	-0.039	0.3155
<b>Ideology</b>	-0.003	0.9216

$p < 0.01$  \*\*\*

### ***6.2. The logistic model***

The first question of interest in this paper regarding populism and personality traits is whether any of the Big Five traits affects the probability of having populist attitudes and being more perceptive to populist rhetoric or worldviews. In order to test if personality traits have an influence on whether an individual has populist attitudes logistic regression was used. In order

to test the hypotheses indices are composed of the variables. The first group of indices is composed of the personality traits by adding up the Likert scale values for each individual in case of each trait. A second group of indices is composed of the populism attitude questions, similarly by merging the four items measuring populism into one. The variables included into the model are the following:

- education: six categories: 1) less than high school 2) high school 3) associate degree 4) BA/BSc or equivalent 5) MA/MSc or equivalent 6) PhD or equivalent
- income: eight categories as specified earlier
- knowledge: continuous index with seventeen possible variations
- personality traits: continuous aggregate indices composed for each of the traits
- The variable measuring populist attitude was transformed into a dichotomous one. Even though it leads to some information loss, from the perspective of interpreting the results this makes more sense here.

Regarding the assumptions of logistic regression models, the following tests were applied:

- The *no specification error* was reduced by excluding those potential control variables which are not necessarily reasonable to include into the model. This means that gender and age were excluded as previous research did not imply that these variables could be important in this model.
- The *distribution of the variables* was checked. As the histograms above show the skewness and the kurtosis are not problematic, do not exceed the critical threshold in any case. Consequently, the variables are treated as normally distributed variables.
- *Mean independence, variables are not correlated with errors*. The distribution of the residuals was approximately normal. The bivariate correlation of the residuals with the independent variables in the model never exceeded  $r = 0.02$ . (See the Appendices)

- The scale locations did not imply *heteroskedasticity* in the data.
- There were *no significant outliers*, as the Cook-distance remained under 0.007 for every single observation.
- Colinearity was controlled for by the variance inflation factor. The variance inflation factors are not problematic; all values are below the less strict threshold of five and even below the stricter threshold 2, indeed they range between 1.12 and 1.83.

**Table 17: Variance inflation factor values in the logistic model**

Openness	1.192	Ideology	1.041
Neuroticism	1.836	Knowledge	1.156
Agreeableness	1.564	Education	1.175
Extraversion	1.319	Income	1.129
Conscientiousness	1.418		

**Table 18: Factors influencing an individual's populist attitude**

	Estimate	Exponent	St. Error	Z-value	P-value
<b>Intercept</b>	0.386	1.471	1.028	0.375	0.7077
<b>Openness</b>	-0.024	0.976	0.009	-2.608	0.0091 **
<b>Extraversion</b>	0.008	1.008	0.009	0.849	0.3961
<b>Agreeableness</b>	0.007	1.007	0.011	0.683	0.4943
<b>Conscientiousness</b>	0.001	1.001	0.011	0.094	0.9253
<b>Neuroticism</b>	0.010	1.010	0.011	1.011	0.3117
<b>Education</b>	0.021	1.021	0.069	0.298	0.7653
<b>Income</b>	-0.013	0.987	0.048	-0.281	0.7788
<b>Knowledge</b>	-0.011	0.989	0.028	-0.412	0.6800
<b>Ideology</b>	-0.021	0.979	0.052	-0.396	0.6918

\*\*  $p < 0.01$

According to the table showing the results of the logistic model (Table 18), the level of an individual's openness is a statistically significant predictor of a person's chances to have populist attitude. Keeping all the other variables constant, if an individual has one point higher level of openness, it decreases the person's chances of having populist attitude by 0.02 points. Conversely, being one point less open increases the chance of having more affinity to populism by 0.02 points. The interpretation is much more meaningful by using the exponents. According to these, one point decrease in the level of openness to experiences increases the chance to have a populist attitude by 2.4%. Even though this finding may not be substantially very strong, statistically it is relevant, furthermore it is the only variable in the model which had a significant and somewhat meaningful influence in the model. By definition the trait openness reflects how much one aims to broaden one's knowledge how much the individual seeks information, and originality and reflects the degree of intellectual curiosity, critical thinking and resistance to framing effects. The hypothesis that more open people are therefore not satisfied with shallow arguments and oversimplified pieces of information is statistically confirmed. As the desire of an individual to gain in depth knowledge increases the person is 2.4% less likely to be attracted by populism. This finding also seems to confirm the hypothesis, that the impact of psychological predispositions can be stronger than the effect of contextual factors as none of the control variables have a statistically confirmed influence on having populist attitude. However, the logistic model did not confirm any other hypothesis regarding each specific personality trait.

The reason for having substantially weaker evidence might be that personality is not that closely related to politics, however the finding is not negligible in the sense that personality traits are more or less constant throughout one's life so according to the results being less open towards new experience predefines a little more affinity to populism.

### ***6.3.The reaction of different personalities to populist speech***

The following chapter examines the association of personality and populism from a different perspective, using an experiment. In the experiment fifteen questions were asked from the participants after reading either the populist or the non-populist speech. (See the list of the fifteen questions in the Methodology chapter.) Since some of the questions measured almost the same concepts, the fifteen dependent variables were reduced to five after some transformations.

The first dependent variable is the aggregate index measuring the support for the candidate. The variable is composed of the items: 1) how likely is one to vote for the candidate and 2) how likely is one to support the candidate. Theoretically, these questions both measure the support for the politician. Their correlation in this particular dataset is  $r = 0.8747$ , ( $p < 0.0000$ ), Cronbach alpha = 0.93, so merging the two items into one variable is reasonable.

The second dependent variable – how much do you identify with the candidate – was left in its original form, and was not merged into any other larger concept since it expresses a strong feeling towards the candidate in itself, which different from support and also different from the evaluation of the politician.

The third dependent variable is the aggregate index measuring the general evaluation of the candidate. The sub-variables of the index are 1) the general evaluation of the candidate and 2) one's opinion of the candidate. Theoretically, the two variables measure the same thing, and their correlation in the dataset is  $r = 0.7353$  ( $p < 0.0000$ ), Cronbach alpha = 0.85, which supports statistically the intention to group them together.



The fourth dependent variable expresses whether the respondent feels that the candidate would stand for the voters' interests if elected. Just as the previous dependent variables, it is also an aggregate index of four sub-variables, which are the following: 1) the candidate, if elected, would work for the benefit of all people in his constituency, 2) the candidate, if elected, would only look after the interest of a few, 3) the candidate, if elected, would look after the interest of big business, and 4) the candidate, if elected, would take common people's opinions into consideration. The second and third variables were changed to their reverse, since they approach the concept of representation from a negative perspective. The correlations of the variables are strong enough to allow their merger, Cronbach alpha = 0.83.

**Table 19: Correlations of the items included into the Representation Index<sup>10</sup>**

	The candidate would work for the benefit of all people in his constituency	The candidate would only look after the interests of few (R)	The candidate would look after the interests of big business (R)	The candidate would take common people's opinions into consideration
The candidate would work for the benefit of all people in his constituency	1	0.555 0.000	0.419 0.000	0.724 0.000
The candidate would only look after the interests of few (R)		1	0.554 0.000	0.559 0.000
The candidate would look after the interests of big business (R)			1	0.498 0.000
The candidate would take common people's opinions into consideration				1

p<0.0001

<sup>10</sup> The correlations presented are the correlations received after transforming the reverse-scaled items.

The fifth dependent variable measures how much the respondent trusts the candidate after reading a speech delivered by him. This is expressed by an aggregate index composed of four sub-variables: 1) the candidate sounded genuine, 2) the candidate sounded honest, 3) the candidate sounded dishonest, 4) the candidate sounded fake. Again, two of the variables had to be recoded to their reverse, as they approached trust from a negative perspective. The Cronbach alpha = 0.93 and the inter-item correlations (Table 20) supports the intention to merge the items into one variable.

**Table 20: Correlations of the items included into the Trust Index<sup>11</sup>**

	The candidate sounded genuine.	The candidate sounded honest.	The candidate sounded dishonest. (R)	The candidate sounded fake. (R)
The candidate sounded genuine.	1	0.855 0.000	0.7295 0.0000	0.7072 0.0000
The candidate sounded honest.		1	0.7246 0.0000	0.729 0.0000
The candidate sounded dishonest. (R)			1	0.8146 0.0000
The candidate sounded fake. (R)				1
p<0.0001				

The personality trait indices were transformed into dichotomous variables depending on whether the value of the index was leaning towards one end of the scale or the other. This means that in case of openness a distinction between open and not open people, in case of agreeableness not agreeable and agreeable, in case of extraversion extravert and introvert, in

<sup>11</sup> The correlations presented in the table are the correlations received after the reverse-scaled items were transformed.

case of conscientiousness conscientious and not conscientious people and finally in case of neuroticism emotionally stable and neurotic people was made. This means that the independent variables are bivariate in the tests, while the dependent variables are continuous. The distributions of the variables are normal, and each observations are independent. The samples size (N = 694) is sufficiently large for testing even if tests are applied only subgroups. Based on all of these there are no obstacles to use Welch Two sample tests for hypothesis testing.

**Table 21: T-test results for the trait openness to experience in the treatment group**

Openness – Treatment group								
	Not open group mean	Open group mean	Diff. of Means	CI lower	CI upper	t	df	p-value
Support	9.64	9.79	-0.15	-0.80	0.50	-0.44	149.0	0.6559
Identification	4.43	4.62	-0.19	-0.55	0.19	-0.94	159.6	0.3440
Evaluation	9.75	9.82	-0.07	-0.71	0.57	-0.21	146.0	0.8327
Representation	19.07	19.62	-0.54	-1.68	0.58	-0.95	150.4	0.3431
Trust	19.53	20.16	-0.63	-1.92	0.67	-0.95	165.6	0.3432

**Table 22: T-test results for the trait openness to experience in the control group**

Openness – Control group								
	Not open group mean	Open group mean	Diff. of Means	CI lower	CI upper	t	df	p-value
Support	8.86	9.81	-0.95	-1.63	-0.26	-2.75	133.2	0.0066**
Identification	4.06	4.56	-0.50	-0.89	-0.10	-2.47	123.6	0.0145*
Evaluation	8.90	9.84	-0.94	-1.64	-0.24	-2.66	118.8	0.0088**
Representation	18.04	19.43	-1.39	-2.53	-0.24	-2.39	135.8	0.0179*
Trust	18.58	20.89	-2.31	-3.73	-0.89	-3.22	119.0	0.0016**

\*p < 0.05, \*\*p<0.01

The first interaction tested is the interaction of openness and populist/non-populist speech. The hypothesis regarding this trait was that the more open a person is, the less interested and more resistant s/he is in/to populist rhetoric since openness expresses the desire to broaden one's knowledge, reflects intellectual curiosity, and critical thinking therefore oversimplified frames do not satisfy open people. The previous analysis supported this hypothesis, but found the effect substantively very small. The correlation of openness and agreement with statements commonly used in populist rhetoric i.e. in this research populist attitude showed a weak, but statistically significant ( $r = -0.104$ ,  $p < 0.01$ ) negative association between the two variables. The results of the logistic regression also confirmed the existence of a negative association ( $-0.02$ ,  $p < 0.01$ ) meaning that everything kept constant, being less open increases the chance of being more receptive to populism.

However, contrary to the expectations, more open people had higher group means in all aspects of political support recorded in the experiment (Table 21). They expressed more support for the politician, higher level of trust in, and stronger identification with the candidate than less open respondents. Furthermore, the general evaluation of the politician was more positive and they felt more that the candidate would represent them. However, differences between open and not open people are marginal in size (mean differences  $< 1$ ,  $t$ -values close to zero) for all variables and are not significant neither statistically, nor meaningfully. The reason for the change of the direction of the association (compared to the correlation and the regression) and the lack of statistical significance might be the following:

- 1) The speech was not perceived sufficiently populist as the topic of construction works is not as frequently associated with populist talk as for example public safety, or taxation and social benefits.
- 2) It might be that the speech did not contain explicit distinctions between good and evil which is one of the commonly used populist frames. However, it did contain both the

implicit and a little more explicit mentioning of interest groups which try to influence politics, and the distinction between powerful business interest groups and ordinary people. 3) It might be that the respondents due to the aforementioned reasons did not associate the speech with populism, but due to the characteristics of this trait – being open for ideas and experiences and being curious – they felt to give a chance to the politician to show his abilities.

Unexpectedly, the control group shows much interesting interactions (Table 22). The respondents in this group read a non-populist speech. The open people were much more supportive of the candidate than those who are less open to experience. The differences between the groups are roughly one to two points in this case, and all interactions are statistically significant ( $p < 0.05$ ,  $p < 0.01$ ). This is line with the expectation from the perspective that open people do show more support for politics. What the findings of the control group suggest is that there is a difference in how open and not open people feel or think about politicians and politics. This is implied by the facts that open people – both in the treatment and in the control group – constantly show higher appreciation of the politician or politics in all analyzed aspects than their non-open fellows. Once populist rhetoric comes into the picture the difference between open and not open people decreases especially in case of trust (control group mean difference = 2.31, treatment group = 0.63). This implies that there is something in this association, and that populist talk does have an impact on how open people feel and think about the candidate. However this impact is not strong enough to change the direction, meaning that open people do not have worse opinion of the populist candidate than not open people.

In conclusion, the findings in this research about the trait openness to experience are mixed and inconsistent. This might be due to mistakes in the experimental design: 1) the omission of

the good-evil distinction of the wording of the politician's speech not making him sufficiently populist, 2) asking too many items leading to a drop in attention to the items, or 3) social desirability effects driving over-reporting on personality trait items. It might as well be possible that the level of openness to experience cannot be associated with sensitivity and receptiveness to populism in such a straightforward way, or its effect is mediated through other variables or context.

**Table 23: T-test results for the trait agreeableness in the treatment group**

Agreeableness – Treatment group								
	Not agreeable group mean	Agreeable group mean	Diff. of Means	CI lower	CI upper	t	df	p-value
Support	8.88	9.98	-1.10	-1.8	-0.3	-3.03	96.7	0.0030**
Identification	4.01	4.72	-0.71	-1.12	-0.29	-3.37	98.4	0.0010**
Evaluation	9.03	10.00	-0.97	-1.67	-0.27	-2.75	96.0	0.0069**
Representation	17.70	19.92	-2.22	-3.41	-1.02	-3.68	101	0.0003**
Trust	18.54	20.39	-1.85	-3.18	-0.50	-2.72	113	0.0074**

\*\*p < 0.01

**Table 24: T-test results for the trait agreeableness in the control group**

Agreeableness – Control group								
	Not agreeable group mean	Agreeable group mean	Diff. of Means	CI lower	CI upper	t	df	p-value
Support	9.03	9.74	-0.71	-1.46	0.035	-1.88	106.5	0.0615*
Identification	4.00	4.58	-0.58	-1.01	-0.15	-2.69	102.4	0.0081**
Evaluation	8.86	9.82	-0.96	-1.65	-0.27	-2.76	111.3	0.0067**
Representation	17.56	19.52	-1.96	-3.28	-0.63	-2.94	99.75	0.0040**
Trust	18.33	20.91	-2.58	-4.02	-1.13	-3.54	106.5	0.0005***

\*p < 0.05 \*\*p < 0.01 \*\*\*p < 0.001

The theory regarding agreeableness based on Bakker et al.'s (2015) assumptions was that low scores on the trait resonate with the anti-establishment content of populist messages. Scoring low on agreeableness means that the person is distrusting, not cooperative, quarrels with

others, egoistic, often rude and aloof. Furthermore, they are distrusting of politicians (Mondak & Halperin 2008) and politics (Dinesen et al. 2014). Bakker et al. (2015) found evidence on three samples – United States, Germany, the Netherlands – that people scoring low on the agreeableness scale tend to support populist parties, so based on this approach one expectation regarding this trait was that these people will be more sensitive to and receptive of populist speech than people scoring high on the trait. However, I, personally, expected to find that agreeable people are more receptive to populist messages as being agreeable means a high level of “community-awareness” and pro-social attitude which could easily resonate with the populist simplification of social structures to easily distinguishable groups such as good and bad, ordinary people and powerful interest groups.

The findings based on this particular dataset did not show statistically significant correlation between agreeableness and populist attitude, and the trait neither turned out to be a significant predictor of such attitude. However, testing the interaction of populist speech and agreeableness detected both statistically significant and substantively meaningful effects (Table 23). The direction of the association of the level of agreeableness and receptiveness of populist speech is contrary to Bakker et al.’s (2015) findings and are in line with the alternative hypothesis (pro-social, group-based orientation) that I proposed. In the treatment group (Table 24) agreeable people have consistently better (on average 1.4 point better) opinion of the politician than non-agreeable people ( $p < 0.01$ ). Pro-social, cooperative, community-oriented people show more support for the candidate, have a better opinion of him, trust him more, think that he would represent them better and identify with him more.

Most research in political science approached agreeableness from its negative side: that those scoring low on the trait are distrustful and not-cooperative. However, the positive approach of

the trait is that it expresses a pro-social, trusting attitude, a communal orientation. The higher the score on the trait is, the more cooperative and more altruistic the person is. This is the bridge that could connect agreeableness with populism: thinking in terms of communities and not in terms of individuals. This approach is more tangible in the speech in this research too. The politician speaks about communities, groups of people rather than about the evil vs. good distinction.

The plausibility of the findings is decreased by the fact that the control group shows equally significant results in the T-tests. Both the direction and the mean differences of the tests are the same, and all dependent variables are statistically significant as well. Albeit the test of correlation, and the logistic regression did not show agreeableness as a trait which has an association with populism, the experiment implies that it is worth conducting future research in this field. At least in order to confirm or reject the findings of this paper, which contradict previous research.

The fact that scoring high on agreeableness shows such permanence throughout the research made it reasonable to break down the trait into smaller components so as to see if it can contribute to explaining the findings or the alternative hypothesis. Psychological research breaks the trait into five facets: trust, straightforwardness, altruism, compliance, and modesty. However, Young et al. (2007) and Bakker et al. (2015) suggest an alternative approach, namely dividing the elements of the trait into two components: politeness and compassion. I follow this approach and break down the trait into two components for further analysis. Two groups were formed from the items measuring agreeableness: A politeness scale was based on the items asking if the respondent a) tends to find fault with others (reverse), b) starts quarrels with others (reverse), c) can be cold and aloof (reverse), d) considerate and kind to almost



everyone, e) is sometimes rude to others (reverse) and f) likes to cooperate with others. Meanwhile compassion is measured with the following items a) helpful and unselfish with others b) has a forgiving nature, c) is generally trusting. The correlations between these items after transforming the reverse items are sufficiently strong to make their merger reasonable.

**Table 25: Correlations of the items forming the group politeness within agreeableness<sup>12</sup>**

	tends to find fault with others (R)	starts quarrels with others	can be cold and aloof (R)	considerate and kind to almost everyone	is sometimes rude to others (R)	likes to cooperate with others
tends to find fault with others (R)	1	0.458	0.465	0.238	0.490	0.282
starts quarrels with others		1	0.313	0.335	0.544	0.325
can be cold and aloof (R)			1	0.335	0.460	0.356
considerate and kind to almost everyone				1	0.357	0.499
is sometimes rude to others (R)					1	0.332
likes to cooperate with others						1

<sup>12</sup> Correlation presented are the correlations obtained after transforming the reverse scored items.

**Table 26: Correlations of the items forming the group compassion within Agreeableness**

	helpful and unselfish with others	has a forgiving nature	is generally trusting
helpful and unselfish with others	1	0.412	0.336
has a forgiving nature		1	0.497
is generally trusting			1

T-tests were applied to these two groups as well to see if there are differences between them which could contribute to explaining the findings. The results of these tests are presented below (Table 27-30)

**Table 27: T-test results for the politeness subgroup of agreeableness in the treatment group**

Agreeableness – Politeness – Treatment group								
	Not polite group mean	Polite group mean	Diff. of Means	CI lower	CI upper	t	df	p-value
Support	9.92	9.09	0.83	0.05	1.58	2.14	90.2	0.0350*
Identification	4.67	4.14	0.53	0.07	0.98	2.31	89.3	0.0230*
Evaluation	9.95	9.20	0.75	-0.00	1.48	1.98	90.2	0.0502
Representation	19.90	17.75	2.15	0.84	3.44	3.28	91.2	0.0014*
Trust	20.40	18.40	2.00	0.57	3.42	2.77	102.2	0.0065*

\*p < 0.05

**Table 28: T-test results of the politeness subgroup of agreeableness in the control group**

Agreeableness – Politeness – Control group								
	Not polite group mean	Polite group mean	Diff. of Means	CI lower	CI upper	t	df	p-value
Support	9.76	8.87	0.89	0.05	1.73	2.12	87.1	0.0363*
Identification	4.57	3.98	0.59	0.13	1.05	2.56	88.7	0.0119*
Evaluation	9.81	8.85	0.96	0.16	1.75	2.39	87.9	0.0188*
Representation	19.38	18.01	1.37	0.03	2.70	2.03	93.4	0.0445*
Trust	20.85	18.40	2.45	0.87	4.03	3.08	89.7	0.0027*

\*p < 0.05

**Table 29: T-test results of the compassion subgroup of agreeableness in the treatment group**

Agreeableness – Compassion – Treatment group								
	Not polite group mean	Polite group mean	Diff. of Means	CI lower	CI upper	t	df	p- value
Support	9.27	9.86	-0.59	-1.42	0.24	-1.40	68.2	0.1646
Identification	4.25	4.64	-0.39	-0.87	0.09	-1.62	69.4	0.1094
Evaluation	9.47	9.87	-0.40	-1.21	0.41	-0.98	68.2	0.3258
Representation	18.88	19.59	-0.71	-2.20	0.77	-0.98	67.1	0.3444
Trust	20.12	19.98	-0.23	-1.35	1.82	-0.95	74.2	0.7731

\*p < 0.05

**Table 30: T-test results of the compassion subgroup of agreeableness in the control group**

Agreeableness – Compassion – Control group								
	Not polite group mean	Polite group mean	Diff. of Means	CI lower	CI upper	t	df	p-value
Support	9.15	9.71	-0.56	-1.44	0.33	-1.23	68.0	0.2202
Identification	4.17	4.52	-0.35	-0.84	0.14	-1.42	68.5	0.1598
Evaluation	9.09	9.75	-0.66	-1.47	0.15	-1.62	70.7	0.1106
Representation	17.92	19.38	-1.46	-3.03	0.11	-1.85	65.8	0.0685
Trust	18.76	20.73	-1.97	-3.66	-0.27	-2.31	69.2	0.0236*

\*p < 0.05

The subgroup politeness shows statistically significant differences between those scoring low and high on this sub-trait across the treatment and control groups. This is the sub-trait composed of the attitude towards others: cooperation, quarrel with others and attitude to human interactions. On the contrary, compassion - which includes trust - does not seem to relate significantly to support for the politician. These findings support the alternative hypothesis that I proposed that indeed the pro-social attitude matters and not the level of trust in others in explaining the differences between agreeable and not agreeable people regarding the support for, trust in, identification with, and evaluation of the candidate. However, as the findings not only hold for the treatment group but also the control group, inferences regarding

populism are not feasible. The only thing that can be claimed safely is that there is a meaningful difference between agreeable and non-agreeable people as far as their attitude towards politicians is concerned, and this difference implies that agreeable people are more supportive, more optimistic of and more trusting in politicians.

**Table 31: T-test results of the trait extraversion in the treatment group**

Extraversion – Treatment group								
	Introvert group mean	Extravert group mean	Diff. of Means	CI lower	CI upper	t	df	p- value
Support	9.89	9.60	0.29	-0.29	0.87	0.97	308.8	0.3323
Identification	4.51	4.64	-0.13	-0.47	0.21	-0.73	307.9	0.4627
Evaluation	9.95	9.68	0.27	-0.30	0.83	0.91	307.7	0.3632
Representation	19.62	19.38	0.24	-0.78	1.26	0.45	298.9	0.6461
Trust	20.16	19.92	0.24	-0.97	1.44	0.38	309.9	0.7030

**Table 32: T-test results of the trait extraversion in the control group**

Extraversion – Control group								
	Introvert group mean	Extravert group mean	Diff. of Means	CI lower	CI upper	t	df	p- value
Support	9.52	9.69	-0.17	-0.80	0.45	-0.55	321.1	0.5814
Identification	4.44	4.49	-0.05	-0.40	0.29	-0.30	320.3	0.7618
Evaluation	9.52	9.76	-0.24	-0.84	0.36	-0.79	320.5	0.4266
Representation	19.41	18.77	0.64	-0.42	1.70	1.19	320.8	0.2346
Trust	20.30	20.53	-0.32	-1.46	1.00	-0.36	319.7	0.7119

The hypothesis regarding this trait was that unless, the populist politician touches an issue which is extremely important for an introvert individual, introverts are not easily mobilized by populist rhetoric. They “might feel too small to intervene” into the antagonism of different social groups or simply find such “fighter” rhetoric intimidating. However, due to the extraverts’ affinity to participation and their embeddedness in social networks the assumption was that they are more easily mobilized even if the issue is not that extremely important to them.

The findings are contradicting regarding introverts. In the treatment group (Table 31), except for the variable identification with and trust in the candidate, they have higher scores than extraverts. Introverts showed more support for the politician, had better evaluation and felt that he would be a good representative. This changes a little bit in the control group, the only item on which introverts score higher is the representation index. Nonetheless, the differences between introverts and extraverts are negligible in all aspects of support for the populist candidate, and the p-values are not even close to the less strict threshold. These mean the lack of statistically or substantially relevant effects, thus the hypothesis concerning this personality trait is rejected.

The reason for not finding significant differences might be that – as aforementioned – the experiment was not suitable to provoke the expected reactions. Nevertheless, the control group shows very similar results, which implies that the reason for not finding substantial differences does not originate from problems with the experiment, but from the fact that indeed, extroverts and introverts do not react differently to political rhetoric, regardless of its type.

**Table 33: T-test results of the trait conscientiousness in the treatment group**

Conscientiousness – Treatment group								
	Not consci. group mean	Consci. group mean	Mean diff.	CI lower	CI upper	t	df	p-value
Support	9.62	9.81	-0.19	-0.89	0.52	-0.52	102	0.6031
Identification	4.51	4.60	-0.08	-0.51	0.34	-0.40	98.6	0.6896
Evaluation	9.67	9.85	-0.18	-0.86	0.49	-0.53	104	0.5925
Representation	18.98	19.62	-0.64	-1.86	0.58	-1.03	103	0.3031
Trust	19.57	20.18	-0.61	-2.00	0.78	-0.87	107	0.3857

**Table 34: T-test results of the trait conscientiousness in the control group**

Conscientiousness – Control group								
	Not conscientious group mean	Conscientious group mean	Diff. of Means	CI lower	CI upper	t	df	p-value
Support	9.00	9.71	-0.71	-1.47	0.03	-1.88	73.5	0.0627
Identification	4.14	4.51	-0.37	-0.81	0.07	-1.65	69.3	0.1025
Evaluation	9.34	9.70	-0.36	-1.17	0.44	-0.89	65.8	0.3756
Representation	18.23	19.30	-1.07	-2.47	0.33	-1.52	66.8	0.1326
Trust	19.70	20.55	-0.85	-2.49	0.79	-1.03	66.0	0.3041

The lack of significant findings also holds for conscientiousness. The differences between the two types of people are marginal regardless if they were part of the treatment group or the control group (Table 33-34). Furthermore, the differences between the two groups are contrary to the expectation: more conscientious individuals showed more support for the politician, had more trust in the candidate, and better evaluation of him and felt that he would be a better representative. Previous research found some weak association of this trait with populism if control variables were not included in the model (Bakker et al. 2015) In terms of information seeking, the trait was found similar to openness (Heinström 2003). But the current findings are not in line with the previous evidence. There might be some mistakes in the experiment – as outlined earlier -, or the another aspect of the trait, namely association with traditions and conservativeness dominates in this framing situation. The speech was also outlining a new versus old cleavage with the stadium construction issue (construction vs. reconstruction). The traditional, “conservative” approach of the candidate may have appealed to conscientious people thus leading to higher scores in the treatment. Nonetheless, this does not explain the higher scores in the control group. So alternatively it must be considered that the level of conscientiousness cannot be associated with populism and framing effects at all.

**Table 35: T-test results of the trait neuroticism in the treatment group**

Neuroticism – Treatment group								
	Emotionally stable group mean	Neurotics group mean	Mean Diff.	CI lower	CI upper	t	df	p-value
Support	9.88	9.53	0.35	-0.25	0.956	1.14	255	0.2534
Identification	4.65	4.40	0.25	-0.10	0.60	1.37	259	0.1705
Evaluation	9.83	9.70	0.13	-0.46	0.71	0.42	254	0.6720
Representation	19.68	19.00	0.68	-0.37	1.73	1.26	250	0.2079
Trust	20.23	19.56	0.67	-0.58	1.93	1.05	525	0.2916

**Table 36: T-test results of the trait neuroticism in the control group**

Neuroticism – Control group								
	Emotionally stable group mean	Neurotics group mean	Means Diff.	CI lower	CI upper	t	df	p-value
Support	9.61	9.63	-0.02	-0.67	0.64	-0.04	249	0.9615
Identification	4.38	4.62	-0.24	-0.60	0.11	-1.33	259	0.1816
Evaluation	9.67	9.62	0.05	-0.58	0.68	0.15	246	0.8770
Representation	19.38	18.87	0.51	-0.57	1.59	0.92	268	0.3578
Trust	20.59	20.22	0.37	-0.88	1.63	0.58	263	0.5561

The level of one's emotional stability expresses if the person is secure and confident or experiences anger, anxiety, depression or vulnerability easily and frequently. Due to the fact that neurotic people are prone to feelings that are upsetting and to the tendency that they become anxious more easily the hypothesis was that they are more sensitive to populist rhetoric mentioning the influence of mysterious interest groups and evil forces as these can easily generate anxiety and suspicion. Previous research also found evidence for vulnerability to framing effects; therefore the expectation was to see clear differences between emotionally stable and neurotic people when they read the populist speech.

The findings contradict this hypothesis (Table 35-36). Differences between emotionally stable and neurotic people are negligible both in case of the treatment group and the control group. The evaluation of the candidate, the trust in him, the support for him and the perceived level

of representation are almost the same. The lack of differences could be that the populist speech did not contain sufficiently explicit references to evil or mysterious interest groups in such a straightforward way that it could provoke anxiety among neurotic people. At the same time it may as well be concluded that there is no difference between neurotic and emotionally stable people concerning populist attitude and reaction to populist rhetoric.



## 7. Conclusion and limitations

This paper made an attempt to test whether political attitudes and reaction to political communication and populist framing are predefined by an individual's personal psychological traits. Using the Big Five personality typology to examine the differences among individuals, the hypothesis that individual personality traits do matter in voting behavior is supported by the findings. The results show that the level of a person's openness to experience has statistically significant but substantively weak, negative correlation (-0.1) with having affinity to populism. The effect of openness passed the predefined statistical threshold in the logistic regression, but it is substantively small: one point decrease in the level of openness to experience increases the chance to have a populist attitude by 2.4%. However, what makes the results worth of further inquiry is that no other commonly used variable – education, income, the level of political knowledge or even ideology – turned out to be correlated with populist attitude or a significant predictor of it in this particular dataset.

With regard to testing the reaction of open and not open people to populist rhetoric the difference between open and not open people faded. This might be the consequence of experimental design, as the differences between these two groups are significant in the control group which implies that there is indeed something worth looking for in the association of personality traits and framing. What the findings of the control group suggest is that there is a difference in how open and not open people feel or think about politicians and politics. This is implied by the facts that open people – both in the treatment and in the control group – constantly show higher appreciation of the politician in all analyzed aspects than their non-open fellows. Once populist rhetoric comes into the picture the difference between open and not open people decreases especially in case of trust (control group mean difference = 2.31,

treatment group = 0.63). This implies that there is something in this association, and that populist talk does have an impact on how open people feel and think about the candidate. However, this impact is not strong enough to change the direction, meaning that open people do not have worse opinion of the populist candidate than their non-open fellows.

While the logistic model did not suggest that the level of one's agreeableness matters when it comes to populist attitudes, it turned out to have significance in judging populist rhetoric. While previous research associated low levels of agreeableness – distrust and suspicion towards others, cold and uncooperative characteristics – with support for populist parties, the research presented in this paper found different linkage. The higher levels of agreeableness a person had, the more support, trust and better evaluation s/he reported for the “populist” candidate after reading the speech. The differences between low and high scoring individuals are roughly one to two points in terms of the feelings for the candidate. Yet it cannot be declared that “higher scoring agreeables” are definitely more receptive to populist messages, as the same differences hold for the control group too. My further tests supported the hypothesis that what makes the difference between agreeable and non-agreeable people is not the presence of distrust in others, but the presence of pro-social and cooperative, communal orientations. Therefore, the only thing that can be safely reported is that the level of agreeableness does have a role in judging politics and politicians, but not as expected specifically in relation to populist rhetoric. Rather, the agreeable people show higher support for non-populist politicians too.

The inconsistency of the findings might be caused by the research design. First of all, using self-reporting as a measurement for certain traits and characteristics is not hundred percent reliable as people may over- or underestimate their characteristics in comparison to others.

Furthermore in case of some of the variables, there might be a perceived social desirability of not reporting extreme values. This is especially true for variables like income or even personality traits. Second, reducing one's personality into answers to a few questions may be an oversimplification. If so, researchers have to find approaches which make it easier to measure personality. The Big Five typology is not perfect, but it turned out to be widely accepted and useful in certain applications.

Third, self-selecting, online samples are worse in quality – compared to academic standards – than representative samples surveyed by personal interviews. Within the frames of this research, using an MTurk sample was the most practical option. Previous tests showed that even though MTurk samples may be skewed in some aspects, they are suitable for conducting research and pilot tests (Eriksson and Simpson 2010). This particular sample was a little bit skewed towards the young, liberals and lower income people. But none of these variables was so skewed that it would have endangered the application of different tests in the research.

Finally, the inconsistencies of the findings – especially in the experiment – might have been caused by mistakes in the research design. It is possible that the treatment was not perceived as populist by the subjects as it was intended to have been. The topic of stadium construction was chosen to avoid the contamination of the experiment, so it tried to avoid the themes commonly associated with one or another political group or with very obvious populist key words. However, implicitly, and in some sentences even explicitly, it did contain commonly used distinctions between “the people” and “the interest groups”, and it also appealed on things that could have caused anxiety or suspicion to which some of the personality traits are sensitive.

The findings show that there is no strong direct link between populism and personality type. The findings about the impact of openness and agreeableness imply though that it is worth conducting further research in this field. First of all, research should try to replicate the results to see if inconsistencies disappear if the analysis is performed on another sample or with a somewhat different design. Second, the results about openness beg for other questions. If the impact of income, knowledge, education and ideology are as negligible as suggested by the logistic regression models in this research (and also by the additional T-tests – see the Appendices), then is it only one's openness that can at least to some extent predict populist attitude? Under what circumstances do open and agreeable people react differently to political rhetoric than their non-open and non-agreeable fellows, if populist rhetoric does not imply it directly?

This piece of research does not explain why populism flourishes in one context and not in another, nor does it explain its rise and decline over time. But it does identify that personality indeed matters in having populist attitudes, at least in rather generic modern context presented by the speeches in the stimulus of the experiment. If personality matters for populism, then it is likely that it matters for other political ideas, frames and conditions too.

The thesis aimed to dig a little bit deeper into the characteristics of those who find populism sympathetic and those who are quite resistant to such framing effects. The goal was to reveal if some psychological predispositions can be connected to populism. In this respect, the findings suggest that there is something in one's personality that makes an individual more receptive to it. Future research may ask, under which circumstances are these predisposition reinforced or vanished.

## 8. Appendices

### *8.1. Non-populist speech*

The old saying "You don't know what you've got until it's gone" was seldom so right. Some might not understand today, but future generations will certainly question our judgment and wonder how we could have failed to see the significance of this place. They will want to know what was wrong with "those people back then". And they will be right. If the demolition goes through, a large piece of our community's history will be gone forever.

This stadium could be used for a whole host of great things, from a sport museum to a space for kids to practice. Just imagine how incredible it would be: the chance of practicing on the same field where legends they all hear about made their names. However, instead of children dressed for sports, the area will be filled with parked cars and dollar stores. It will mark the disappearance of a community, of jobs that employ, directly or indirectly, hundreds of people in this region, and the disappearance of a large chunk of this side's economy.

Still, some might argue that many other jobs, construction jobs, could be created through the demolition, and that all this economic activity would just move to another part of town. Unfortunately, that is not the case. First, those construction jobs would also be created if we chose to update the existing structure. Second, it is highly questionable whether the city center needs such an investment to boost its economic activity that, today, thank you very much, is all well. On top of that, the project as it stands is poorly designed, and sadly captures the worst of two worlds. It is neither a remarkably original design destined to become a new landmark, nor does it live up to the old stadium's glorious past. Tens of millions of dollars

would be spent on building this new space, and the benefits for our community are all but clear. It is often repeated that the city will win. I still fail to see what.

No doubt, the construction may well end up bringing jobs and even more prosperity to the region where it will be set. But what about the area that will lose one of its most traditional sites? What about all those small shops and restaurants whose survival depends on the thousands of fans coming in? Sacrificing one part of the city is as bad a way as there is of developing another. If this becomes reality, our community has only to lose.

## **8.2. *Populist speech***

It was decades ago that, thanks to the grit and determination of our community, our stadium came off of the paper plans and came to life. Since then, championships were spectacularly won and sports legends have played their best here. But in fact, most fans who have been here these past decades, they don't think about the championship games when they're asked why this place is so meaningful. Instead, they recall the day their fathers first brought them to a game. The day, they first saw all those strangers hugging and celebrating and felt they belonged there. Or the day after that terrible week, when we were the clear underdogs and we crushed them, and, for only a moment, no problem in life seemed to matter anymore.

But now some people are seeking the dubious glory of being known as those who tore down this historical stadium. They want to pour incredible amounts of money into a suspiciously expensive replica of every new arena-slash-shopping-mall that can be found in all over. Actually want to spend much more money than would be needed to update our existing house to contemporary requirements - while keeping its age-old magic.

But keeping up a treasure of our city is a wish that only we, the fans, have. That is of no concern for those who make the calls. For them, the prohibitive ticket prices that will surely be applied in a new stadium are fine. It might help to attract “the right kind of people” to the skyboxes. They see no problem in separating us from our beloved stadium. Separating us from that unforgettable smell of barbecue, beer and fireworks smoke, when people pour from all over the country to cheer, sing, and celebrate - man, I've even seen a few couples getting married around there! But no, the city's priority is that some development company with good friends up there gets a multimillion dollars project.

These are the only beneficiaries. Money talks, history walks. The people's voice was never heard. Just as a terminal diagnosis of a loved one, the community is expected to prepare for the end. The thing is, that this fatal disease is not inevitable! Citizens have a right to say if they approve! And I have no doubts the answer is no! These guys might have power, but united we can show that messing with our dearest memories is not on the table. Generations to come will learn from our example. Our community's history is not for sale.



### 8.3. Additional statistics

**Table 35: Correlation of the independent variables with the residuals**

<b>Variables in the model</b>	<b>Residuals</b>
Openness	0.028
Agreeableness	0.003
Conscientiousness	-0.007
Neuroticism	0.009
Extraversion	-0.001
Education	-0.001
Income	-0.002
Knowledge	-0.009
Ideology	-0.014

**Table 36: T-test results for knowledge**

Knowledge – Treatment group								
	Low knowledge	High knowledge	Means Diff.	CI lower	CI upper	t	df	p-value
Support	9.85	9.68	0.17	-0.41	0.76	-0.59	298	0.5535
Identification	4.62	4.52	0.10	-0.24	0.45	0.58	300	0.5610
Evaluation	9.94	9.68	0.26	-0.31	0.82	0.88	298	0.3760
Representation	18.90	19.92	-1.02	-2.45	-0.0	-1.97	295	0.4878
Trust	19.77	20.18	-0.40	-1.62	0.81	-0.65	297	0.5146

**Table 37: T-test results for income**

Income – Treatment group								
	Low income	High income	Means Diff.	CI lower	CI upper	t	df	p-value
Support	9.85	9.45	0.40	-0.32	1.12	1.08	113	0.2799
Identification	4.63	4.42	0.21	-0.21	0.62	0.96	118	0.3377
Evaluation	9.78	9.80	-0.02	-0.71	0.67	-0.04	116	0.9619
Representation	19.49	19.41	0.08	-1.19	1.31	0.11	113	0.9047
Trust	20.00	19.94	0.06	-1.38	1.50	0.08	122	0.9329

**Table 38: T-test results for education**

Education – Treatment group								
	Low education	High education	Means Diff.	CI lower	CI upper	t	df	p-value
Support	9.88	9.68	0.20	-0.43	0.82	0.60	208	0.5448
Identification	4.55	4.58	-0.03	-0.40	0.34	-0.14	210	0.8838
Evaluation	9.77	9.81	-0.04	-0.64	0.57	-0.11	208	0.9079
Representation	19.91	19.22	0.69	-0.38	1.75	1.25	222	0.2098
Trust	19.92	20.04	-0.12	-1.41	1.18	-0.17	214	0.8598

## 9. References

- Adorno, T.W., Frenkel-Brunswick, E., Levinson, D. & Stanford, N. *The authoritarian personality*. New York: Harper and Row, 1950
- Agronick Gail S., Duncan Lauren E. "Personality and Social Change: Individual Differences, Life Path and Importance Attributed to the Women's Movement" *Journal of Personality and Social Psychology*, 1998: Vol. 74 No. 6. 1545-1555
- Akkerman, Agnes, Cas Mudde, Andrej Zaslove. "How Populist Are the People? Measuring Populist Attitudes in Voters" *Sage Journals Comparative Political Studies*, 2013
- Altemeyer, R.A. *The authoritarian specter*. Cambridge. Harvard University Press, 1997.
- Anderson, Kristen Diane. Framing Traits: The role of personality in framing effects. 2010 University of Nebraska,  
<http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1004&context=poliscitheses> (downloaded: 2014 November 5)
- Armony, Ariel C. Armony, Victor Armony. "Indictments, Myths, and Citizen Mobilization in Argentina: A Discourse Analysis" *Latin American Politics and Society*, 2005 Vol. 47, No. 4 (Winter): 27-54
- Axelrod, R. "The structure of public opinion on policy issues" *Public Opinion Quarterly*, 1967: 31, 51-60
- Bächtiger, André, Simon Niemeyer, Michael Neblo, Marco R. Steenbergen and Jürg Steiner "Symposium: Toward More Realistic Models of Deliberative Democracy Disentangling Diversity in Deliberative Democracy: Competing Theories, Their Blind Spots and Complementarities." *The Journal of Political Philosophy*, 2000: 18: 32-63
- Bakker, B.N., Rooduijn, M., & Schumacher, G. "The psychological roots of populist voting: Evidence from the United States, the Netherlands and Germany". Paper revised and resubmitted to the *European Journal of Political Research* 2015, available at: [http://www.bertbakker.com/wp-content/uploads/2015/01/Bakker\\_etal\\_March15.pdf](http://www.bertbakker.com/wp-content/uploads/2015/01/Bakker_etal_March15.pdf) (downloaded: May 28, 2015)
- Ben-Ner, Avner, Amit Kramera, Ori Levy. "Economic and hypothetical dictator game experiments: incentive effect at the individual level." *Journal of Socio-Economics*, 2008: 37:177-84
- Berinsky, Adam J., Gregory. A. Huber and Gabriel. S. Lenz. "Evaluating Online Labor Markets for Experimental Research: Amazon.com's Mechanical Turk." *Political Analysis* 2012.: 20(3):351-368
- Birenbaum, Menucha, Itzhak Montag. "On the location of the sensation seeking construct in the personality domain", *Multivariate Behavior Research* 1986: 21:357-73
- Borgotta, Edgar F. "The structure of personality characteristics." *Behavioral Science* 1964: 12:8-17
- Buhrmester, M. D., Kwang, T., & Gosling, S. D. "Amazon's Mechanical Turk: A new source of inexpensive, yet high-quality, data?" *Perspectives on Psychological Science*, 2011: 6(1), 3-5
- Canovan, Margaret. "Trust the People! Populism and the Two Faces of Democracy" *Political Studies*, 1999: XLVII, 2-16

- Caprara, G.V. Vecchione, M. Barbaranelli, C. & Fraley, C.R. "When likeness goes with liking: The case of political preference." *Political Psychology* 2007: 28(5) 609-632
- Cardoso, F. H., & Faletto, E. *Dependency and development in Latin America*. Berkeley: University of California Press. 1979
- Costa, Paul T., Robert R. McCrae. *NEO PI-R. Professional manual*. Odessa, FL: Psychological Assessment Resources, Inc. 1992
- Csonka, Anna, Alexander Bur, Paul Weith, Bruno de Paula Castanho e Silva, Levente Littvay, Federico Vegetti, Krisztián Pósch (2014). *Political Behavior Research Group Mechanical Turk Dataset*, 2014
- De Fruyt, Filip, Ivan Mervielde. "RIASEC types and Big Five traits as predictors of employment status and nature of employment." *Personnel Psychology* 1999: 29:807-40
- Digman, John M. "Personality structure: Emergence of the five-factor model." *Annual Review of Psychology* 1990: 41:417-40
- Dinesen, P.T., Nørgaard, A.S. & Klemmensen, R. "The civic personality: Personality and democratic citizenship." *Political Studies* 2014: 62: 134–152.
- Drake, P. Conclusion "Requiem for populism?" in: *Latin American populism in comparative perspective* ed: M.L. Conniff, Albuquerque, NM: University of New Mexico Press 1982
- Duncan, L.E., Peterson B. E. & Winter D.G. "Authoritarianism and gender roles: Toward a psychological analysis of hegemonic relationships." *Personality and Social Psychology Bulletin* 1977: 23: 41-49
- Eriksson, K., & Simpson, B. "Emotional reactions to losing explain gender differences in entering a risky lottery." *Judgment and Decision Making*, 2010:5: 159–163
- Eysenck, Hans J. *The Structure of Human Personality*, Hove: Merhuen & Co. Ltd., 1970.
- Fiske, Donald W. "Consistency of the factorial structures of personality ratings from different sources." *Journal of Abnormal and Social Psychology* 1949: 44: 329-344
- Gamliel, Eyal, Ada H. Zohar, Hamutal Kreiner. "Personality traits moderate attribute framing effects." *Social Psychological and Personality Science*. 2013: XX(X) 1-9.
- Gastil John., Laura Black, Kara Moscovitz. "Ideology, attitude change and deliberation in small face-to-face groups." *Political Communication* 2008: 25: 23-46
- Gerber Alan S., Gregory A. Huber, David Doherty, Connor M. Dowling. "Personality traits and the consumption of political information." *American Politics Research*, 2011: 39: 32-84
- Gerber Alan S., Gregory A. Huber, David Doherty, Conor M. Dowling, Costas Panagapoulos. "Big Five personality traits and responses to persuasive appeals." *Political Behavior*, (published as a working paper in 2010) 2013:35: 627-728
- Gerber Alan S., Gregory A. Huber, David Doherty, Conor M. Dowling, Connor Raso, Shang E. Ha. "Personality traits and participation in political process." *The Journal of Politics*, 2011:73: 692-706
- Gerber, Alan S., Gregory A. Huber, David Doherty, Conor M. Dowling. "The Big Five personality traits in the political arena." *Annual Review of Political Science* 2011:14: 265-87

- Gerber, Alan S., Gregory A. Huber, David Doherty, Conor M. Dowling, Shang E. Ha. "Personality and Political Attitudes: Relationships across Issue Domains and Political Contexts." *American Political Science Review*, 2010: 104: 111-133
- Gerber, Alan S., Gregory A. Huber, David Doherty, Conor M. Dowling. "Personality and the Strength and Direction of Partisan Identification." *Political Behavior* 2012: 34: 653–688
- Germani, G. *Authoritarianism, fascism, and national populism*. New Brunswick, NJ: Transaction Books, 1978.
- Goldberg, Lewis R. "Language and individual differences: the search for universals in personality lexicons." In: *Review of Personality and Social Psychology*, ed. L. Wheeler, 1981:2:141-165 Beverly Hills, CA: Sage
- Goodwin, Renee D., Howard S. Freidman. "Health status and the five factor personality traits in a nationally representative sample." *Journal of Health Psychology*, 2006:11: 643-54
- Haddock G., Zanna M.P. "Preferring "housewives" to "feminists": Categorization of the favorability of attitudes towards women." *Psychology of women quarterly* 1994:18: 25-52
- Hawkins, Kirk A. "Is Chávez Populist? Measuring Discourse in Comparative Perspective." *Comparative Political Studies*, SAGE 2009 available at: <http://cps.sagepub.com/content/early/2009/02/20/0010414009331721.full.pdf+html> (downloaded 2014, December 10)
- Hawkins, Kirk, Scott Riding, Cas Mudde. "Measuring Populist Attitudes." *Political Concepts*, Committee on Concepts and Methods Working Paper Series 2012 available at: [http://works.bepress.com/cgi/viewcontent.cgi?article=1118&context=cas\\_mudde](http://works.bepress.com/cgi/viewcontent.cgi?article=1118&context=cas_mudde) (downloaded: June 12, 2014)
- Heinström, Jannica. "Five Personality Dimensions and their Influence on Information Behavior." *Information Research*, 2003: 9(1) paper 165. available: <http://informationr.net/ir/9-1/paper165.html>. (downloaded September 23, 2014)
- Hibbing, Matthew V., Melinda Ritchie, Mary R. Anderson. "Personality and political discussion" Working Paper, Department of Political Science, University of Illinois 2010 and also in *Political Behavior*, 2011: 33: 601-624
- Hogan, Robert. "Socioanalytic theory of personality". In: *Nebraska Symposium on Motivation: Personality – Current Theory and Research* ed. M. M. pp. 55-89. Lincoln NE: Univ. Nebraska Press, 1982
- Horton, J. J., Rand, D. G., & Zeckhauser, R. J. "The online laboratory." *Experimental Economics*, 2011 available at: [http://www.hks.harvard.edu/fs/rzeckhau/horton\\_rand\\_zeckhauser.pdf](http://www.hks.harvard.edu/fs/rzeckhau/horton_rand_zeckhauser.pdf) (downloaded October 12, 2014)
- Howe, J. „The rise of crowdsourcing." *Wired Magazine*, 2006:14:1–4.
- Huckfeldt, Robert, Paul E. Johnson, John Sprague. *Political Disagreement: The Survival of Diverse Opinions within Communication Networks*. New York: Cambridge University Press, 2004.

- Jagers, J., & Walgrave, S. "Populism as political communication style: An empirical study of political parties' discourse in Belgium." *European Journal of Political Research*, 2007: 46: 319-345
- John, Oliver P., Donahue E. M., Soto Cristopher J. "Paradigm shift to the integrative Big Five trait taxonomy: history, measurement, and conceptual issues" In: *Handbook of Personality: Theory and Research*, ed.: John, Robin, Pervins, New York: Guilford 2008.
- Kanouse D, Hanson L Jr. "Negativity in Evaluations." In: *Perceiving the Causes of Behavior*, ed. EE Jones, DE Kanouse, HH Kelley, RE Nisbett, S Valins, B Weiner, pp. 47–62. Morristown, NJ: General Learning, 1971
- Koole, Sander L., Wander Jager, Agnes E. van den Berg. "On the social nature of personality effects of extraversion, agreeableness, and feedback about collective resource use on cooperation in a resource dilemma." *Personality and Social Psychology Bulletin*, 2001: 27:289-301
- Laclau, E. *On populist reason*. London: Verso, 2005.
- Lipset S.M. *Political man: The social bases of politics*. Garden City: Anchor Books, 1960.
- Mahoney, J. "An analysis of the axiological structures of traditional and proliferation men and women" *Journal of Psychology* 2001: 90: 31-39
- Mason, W. A., & Watts, D. J. "Financial incentives and the performance of crowds." In: *Proceedings of the ACM SIGKDD Workshop on Human Computation* pp. 77–85. New York: ACM, 2009
- Mason, Winter & Suri, Siddharti. "Conducting behavioral research on Amazon's Mechanical Turk", *Behavior Research Methods*, 2012:44(1)1-23
- McAdams, Kimberly K., Brent M. Donellan. "Facets of personality and drinking in first-year college students." *Personality and Individual Differences*, 2009:46:207-12
- McDougall, William. "Of the words character and personality." *Character and Personality*, 1932:1: 3-16
- McGuire, J. W. *Peronism without Perón: Unions, parties, and democracy in Argentina*. Palo Alto, CA: Stanford University Press, 1997.
- Mezquita, Laura, Sherry H. Stewart, Ángeles Ruipérez. "Big Five personality domains predict internal drinking motives in young adults." *Personality and Individual Differences* 2010:49: 240-45
- Mondak, Jeffery J., Matthew Hibbing, Damarys Canache, Mitchell A. Seligson, Mary R. Anderson. "Personality and Civic Engagement: An integrative Framework for the Study of Trait Effects on Political Behavior." *American Political Science Review*, 2010: 1-26
- Mondak, Jeffrey J., Karen D. Halperin. "A Framework for the Study of Personality and Political Behaviour." *British Journal of Political Science*, 2008:38: 335-362.
- Mudde, C. "The populist Zeitgeist." *Government and Opposition*, 2004:39: 541-563.
- Mudde, Cas. *Populist Radical Right Parties in Europe*. Cambridge UK: Cambridge University Press, 2007.

- Normann, Warren T. "Toward an adequate taxonomy of personality attributes: replicated factor structure in peer nomination personality ratings." *Journal of Abnormal and Social Psychology* 1963:66: 574-83
- Ozer, Daniel J., Verónica Benet-Martínez. "Personality and the prediction of consequential outcomes." *Annual Review of Psychology*, 2006:57: 401-21
- Paolacci, G., Chandler, J., & Ipeirotis, P. G. "Running experiments on Amazon Mechanical Turk." *Judgment and Decision Making*, 2010:5: 411–419
- Paunonen Sampo V., Michael C. Ashton. "Big Five factors and facets and the prediction of behavior." *Journal of Personality and Social Psychology*, 2001:81: 524-39
- Remmer, K. L. "The rise of leftist-populist governance in Latin America: The roots of electoral change." *Comparative Political Studies*, 2012:45: 947-972
- Roets, A. & Van Hiel, A. "The ideal politician: Impact of voters' ideology." *Personality and Individual Differences* 2009:46(1) 60-65
- Roodujin, Matthijs, Teun Pauwels. "Measuring Populism: Comparing Two Methods of Content Analysis" *West European Politics*, 2011:34(6) 1272-1283
- Rozsnafszky J. & Hendel D. D. "Relationship between ego development and attitudes toward women." *Psychological Reports*, 1977:41: 161-162
- Sarup, G. "Gender, authoritarianism and attitudes toward feminism." *Social Behavior and Personality* 1976:4: 57-64
- Shadish, William R., Thomas D. Cook, Doanld T. Campbell. *Experimental and Quasi-Experimental Designs for Generalized Causal Inference*, New York, Boston: Houghton Mifflin Company, 2001.
- Skocpol, Theda, Williamson Vanessa, Cugin John. "The tea party and the remaking of republican conservatism." available at: [http://scholar.harvard.edu/files/williamson/files/tea\\_party\\_pop.pdf](http://scholar.harvard.edu/files/williamson/files/tea_party_pop.pdf) (downloaded February 10, 2015)
- Smith, Gene M. "Usefulness of peer ratings of personality in educational research." *Educational and Psychological Measurement*, 1967:27:967-84
- Stanley, Ben. "Populism, nationalism, or national populism? An analysis of Slovak voting behavior at the 2010 parliamentary election." *Communist and Post-communist Studes*. 2011:44: 257-270
- Taguieff, P.A. "Populismes et antipopulismes: le choc des argumentations." *Mots – Les langages du Politique* 1998:55: 5–26.
- Tupes, Ernest C. "Personality traits related to effectiveness of junior and senior Air Force officers." *USAF Personal Training Res. Center Rep.* 1957: 57-125
- Van Hiel, A. "A psychopolitical profile of party activists and left-wing and right-wing extremists." *European Journal of Political Research* 2012:51(2) 166-203
- Vecchione, Michele, Gian Vittorio Caprara. "Personality determinants of political participation: The contribution of traits and self-efficacy beliefs." *Personality and Individual Differences*, 2009:46: 487-492
- Verhulst, Brad, Lindon J. Eaves, Peter K. Hatemi. "Correlation not causation: The relationship between personality traits and political ideologies." *American Journal of Political Science* 2012:56(1) 34-51

- Verhulst, Brad, Peter K. Hatemi, Nicholas G. Martin. "The nature of the relationship between personality traits and political attitudes." *Personality and Individual Differences* 2010:49: 306-316
- Warren, Mark E. "Institutionalizing deliberative democracy." In: *Deliberation, Participation and Democracy: Can the People Govern?* 272–288, Ed: Shawn Rosenberg, London: Palgrave-Macmillan, 2007.
- Weyland, K. "Economic voting reconsidered: Crisis and charisma in the election of Hugo Chávez." *Comparative Political Studies*, 2003:36: 822-848
- Weyland, Kurt. "Clarifying a Contested Concept: Populism in the Study of Latin American Politics." *Comparative Politics*, 2001:34(1) 1-22
- Wiggins, Nancy, Margaret Blackburn, Richard J. Hackman. "The prediction of first year success in psychology: peer ratings." *Journal of Educational Research* 1969:63: 81-85
- Worell J. & Worell L. "Support and opposition to the Women's Liberation Movement: Some personality and parental correlates." *Journal of Research in Personality* 1977:11:10-20