Personality traits as determinants of political behavior: Ukrainian electoral and voting tendencies

Ivanchenko, Andreyanna; Ignatieva, Iryna; Lefterov, Vasiliy; Timchenko, Olexander

Veröffentlichungsversion / Published Version
Zeitschriftenartikel / journal article

Personality traits as determinants of political behavior: Ukrainian electoral and voting tendencies

ANDREYANNA IVANCHENKO*
(Kharkiv Institute "Interregional Academy of Personnel Management")

IRYNA IGNATIEVA**
(National University "Odessa Law Academy")

VASILIY LEFTEROV***
(National University "Odessa Law Academy")

OLEXANDER TIMCHENKO****
(Kharkiv National University of Civil Protection of Ukraine)

Abstract

Now there is a sharp increase of interest in politics, especially among young people. Meanwhile, the psychological mechanisms of the person's political behavior (its manifesting and regulating), as well as interaction of his cognitive, emotional, motivation and value factors with the political system remain insufficiently studied. The aim of this research is to study the influence of personality traits on political behavior in order to find out the connection between person's individual-psychological characteristics and the degree of his participation in political life within the territory of Ukraine. The Five-Factor NEO-PI-R (NEO Personality Inventory-Revised) model was used for analyzing the respondents' tendency to politically significant behavior. The survey was conducted in 2017 in Ukraine (n=1247, age: 15-50 years). A positive correlation of the political participation indicators with the personal indicator Conscientiousness and the negative correlation with the Agreeableness parameter were revealed. We have established that emotionally balanced respondents more often show a desire to run for office and rarely participate in voting. High results for Agreeableness and Neuroticism determine the low level of political ambitions. These findings constitute a new step forward in understanding how personality traits form responses in the people's political engagement while demonstrating the Ukrainian political tendencies.

Keywords: personality traits, political behavior, Five-Factor model, Big Five, NEO Personality Inventory-Revised.

Background and Research Hypothesis

At last decades, the people's activity in political life is an important aspect of their social interests, which has attracted a particular attention of researchers. Current personality researches base now upon an integrative view of the person, therefore both examining and explanation the human decision-making would be incomplete without putting a special focus on the personality traits in relation to formation of political attitudes, actions, interests, political behavior and citizens' engagement in the world of politics.[1] Political behavior usually depends on various factors: socio-cultural and geographical environment, socio-economic determinants, demographic indexes, ethnic indicators, and others. Meanwhile, the psychological mechanisms and factors that determine political behavior and particularities of cognitive, emotional, motivational interactions within political system remain insufficiently studied.

Herewith, a particular look should be dedicated for analyzing not only the personality traits (such human properties that a person acquires in the process of life) but the individual-psychological characteristics also (as the qualities given to a person with birth) which to a large extent affect both the people's everyday life and their political behavior. It is quite obvious that any individual feels natural striving to work in comfortable non-stressful conditions and with the most positive result of own activities; but the complexity of life, derived from various problems that have both a wide range of determinants and an extensive set of manifestations (cognitive, behavioral, emotional and physiological), does not permit to use effective means of dealing with a stress[2] in order a person might be capable to reveal own mobilization resources and recreational

* Andreyanna Ivanchenko is Professor, Doctor of Sciences in Psychology, Department of Psychology, Kharkiv Institute "Interregional Academy of Personnel Management" (andreyan@libero.it).

** Iryna Ignatieva is Ph.D in Political Sciences, Associate Professor, Department of Sociology and Psychology, National University "Odessa Law Academy" (irynaikuptsova@gmail.com).

*** Vasiliy Lefterov is Professor, Doctor of Sciences in Psychology, Head of the Department of Sociology and Psychology, National University "Odessa Law Academy" (lefterov.vasil@gmail.com).

**** Olexander Timchenko is Professor, Doctor of Sciences in Psychology, Leading researcher, Laboratory of Extreme and Crisis Psychology, Kharkiv National University of Civil Protection of Ukraine (timchenko.psy@gmail.com).

1 Matthew Cawvey, Matthew Hayes, Damarys Canache and Jeffery J. Mondak, *Personality and political behavior* (Politics: Oxford Research Encyclopedias, 2017), http://oxfordre.com/politics/view/10.1093/acrefore/9780190228637.001.0001/acrefore-9780190228637-e-221#.

2 Andreyanna Ivanchenko, Oleksandr Timchenko and Evgeniy Zaika, "How to get around the stress-traps in the students' life and avoid the stress acute angles," *Science and Education* 3 (2018): 12-19, http://scienceandeducation.pdpu.edu.ua/doc/2018/3_2018/2.pdf.

potential for increasing a proper productive-energetic outcome.[3] So, what stimulates and motivates people to any activity, including in politics? What does it depend on?

Political behavior includes different aspects: electoral participation (also called as voter turnout), right to vote, and information during voting, interest in politics, etc. The definition of political participation can include variety of activities. The popular in political science dichotomy of conventional and non-conventional behavior had a long way to go before it appeared in contemporary political discourse. Conventional political behavior is mostly comprised of traditional activities taking place via legally accepted institutions, such as voting and campaign activity, contacting politicians and governmental officials, party membership, discussion of politics, etc. The over-all averages of voting in elections and discussing politics are, not surprisingly, the most widespread forms of conventional political activity.

The range of political activities was broadened in the 1960s with protesting and petitioning, classified as unconventional.[4] Although such classification is widespread and well known, labeling petitions or demonstrations as "unconventional" acts remains controversial as those have become generally accepted. Nevertheless, the current study was designed upon traditional classification of conventional and non-conventional behavior due to recent massive protest activity in Ukraine that was not properly embedded in the political system. The analysis of political participation within Ukrainian context would contribute to the literature in general so as it provides psychological insides for on-going political transformation from relatively closed to more open political system. While open political systems find less need to resort to non-conventional movements, in closed systems conventional strategies fail to succeed.[5]

To our believe, transformations in modern Ukraine were triggered by citizens' desire to be heard, when conventional strategies were not likely to induce authorities to give into the movement demands. Our intention is to point out substantial and comprehensive results by giving particular detailed look at

---

[3] Andreyanna A. Ivanchenko, "The positive summarized effect of the creative life-orientation phenomenon," *Fundamental and Applied Researches in Practice of Leading Scientific Schools* 21, no. 3 (2017): 100-107, https://farplss.org/index.php/journal/issue/view/17.

[4] Samuel H. Barnes and Max Kaase, *Political action: Mass participation in five western democracies* (Beverly Hills, Calif.: Sage Publications, 1979).

[5] Rik Linssen, Hans Schmeets, Peer Scheepers and Manfred te Grotenhuis, "Trends in Conventional and Unconventional Political Participation in Europe, 1981-2008," in Christina Eder, Ingvill C. Mochmann, Markus Quandt (Eds.) *Political Trust and Disenchantment with Politics. International Perspectives. Series: International Studies in Sociology and Social Anthropology*, 125, chap. 2 (2014): 31-58, https://brill.com/view/title/24914.

personality traits and their role in conventional and non-conventional political behavior. It is necessary to underline that political engagement is a highly important indicator of political system and democracy level in the country. When the citizens' essential interests are affected, a wide, equal and effective participation in the decision-making process would ensure the fulfillment of their aspirations, self-expression and self-affirmation.

The influence of personality traits on different forms of political participation is reflected in a wide array of studies. Despite the studies' findings are often mixed or some non-significant effects are found, we extracted the main trends for conventional versus non-conventional participation. Several studies have identified significant relationships between conventional, as well as non-conventional, forms of political participation and Extraversion. Conscientiousness shows strong negative relationship to non-conventional and a positive relation to conventional participation, when individuals feel that their voice is heard.[6] Openness yieldes significant positive relationships with non-conventional activism and a lesser degree with conventional activism.[7] The results of Mondak and Halperin (2008)[8] revealed that all facets of personality, captured within the Big Five framework, significantly matter for citizens' operating in politics, and effect on virtually all aspects of political behavior.

Besides, a great number of researchers have analyzed different personality traits that could affect not only the level of civic duty or achievement striving but also the political propensity to participate in elections, in particular, as follows: personality traits are related to identification with different political parties and to the strength in party identification over time;[9] high Agreeableness and Openness were predictive of intention to vote in presidential elections;[10] different components of personality traits, as well as values, and self-beliefs, have impact on citizens' political preferences and

---

6 Jeffery J. Mondak, *Personality and the foundations of political behavior* (Cambridge, United Kingdom: Cambridge University Press, 2012), https://doi.org/10.1017/CBO9780511761515.

7 Arne Roets, Ilse Cornelis and Alain Van Hiel, "Openness as a predictor of political orientation and conventional and unconventional political activism in Western and Eastern Europe," *Journal of Personality Assessment* 96, no. 1 (2014): 53-63, https://www.tandfonline.com/doi/abs/10.1080/00223891.2013.809354.

8 Jeffery J. Mondak and Karen D. Halperin, "A framework for the study of personality and political behaviour," *British Journal of Political Science* 38, no. 2 (2008): 335-362, https://doi.org/10.1017/S0007123408000173.

9 Bert N. Bakker, David Nicolas Hopmann and Mikael Persson, "Personality traits and party identification over time," *European Journal of Political Research* 54, no. 2 (2015): 197-215, doi:10.1111/1475-6765.12070.

10 Claudio Barbaranelli, Gian Vittorio Caprara, Michele Vecchione and Chris R. Fraley, "Voters' personality traits in presidential elections," *Personality and Individual Differences* 42, no. 7 (2007): 1199-1208, http://dx.doi.org/10.1016/j.paid.2006.09.029.

participation;[11] party leaders' warm personality traits influence the people's voting behaviour;[12] Openness to experience promotes greater likelihood of strategic voting, whereas Agreeableness decreases that probability;[13] statistically significant relationships between Openness, Agreeableness, Conscientiousness and several nonelectoral modes of participation were found;[14] Agreeableness interacted with negativity to influence turnout intentions;[15] only Openness to experience and Extraversion have an effect on online political engagement;[16] higher levels of Extraversion, Conscientiousness and Умotional stability indirectly decrease the probability of voting during elections for a future president, whereas a higher level of Openness to experience indirectly increases the probability of voting;[17] personality traits influence on sense of civic duty.[18] Some scholars consider the link between openness to experience and protest participation is significantly moderated by direct democracy.[19] The other more specific findings show the indirect relationships between personality traits and voter turnout in South Korea and imply that the impacts of personality traits on voter participation vary by country or geographic region.[20]

---

[11] Gian Vittorio Caprara and Michele Vecchione, "Personality approaches to political behavior," in *The Oxford handbook of political psychology*, 2d ed., ed. L. Huddy, D. O. Sears, and J. S. Levy (New York: Oxford University Press, 2013): 23-58, doi:10.1093/oxfordhb/9780199760107.001.0001.

[12] Patrício Costa and Federico Ferreira da Silva, "The impact of voter evaluations of leaders' traits on voting behavior: Evidence from seven European countries," *West European Politics* 38, no. 6 (2015): 1226-1250, doi:10.1080/01402382.2015.1004231.

[13] Cengiz Erisen and André Blais, "Strategic voting and personality traits," in *Voting Experiments*, ed. A. Blais, J. F. Laslier, K. Van der Straeten (Switzerland: Springer International Publishing, 2016): 237-256, https://www.springer.com/gb/book/9783319405711.

[14] Sang E. Ha, Seokho Kim and Se Hee Jo, "Personality traits and political participation: Evidence from South Korea," *Journal of Social and Political Psychology* 34, no. 4 (2013): 511-532, https://doi.org/10.1111/pops.12008.

[15] Aaron C. Weinschenk and Costas Panagopoulos, "Personality, negativity, and political participation," *Journal of Social and Political Psychology* 2, no. 1 (2014): 164-182, doi:10.5964/jspp.v2i1.280.

[16] Ellen Quintelier and Yannis Theocharis, "Online political engagement, Facebook, and personality traits," *Social Science Computer Review* 31, no. 3 (2013): 280-290, https://doi.org/10.1177/0894439312462802.

[17] Ching-Hsing Wang, "Personality traits, political attitudes and vote choice: Evidence from the United States," *Electoral Studies* 44 (2016): 26-34, https://doi.org/10.1016/j.electstud.2016.07.004.

[18] Aaron C. Weinschenk, "Personality traits and the sense of civic duty," *American Politics Research* 42, no. 1 (2014): 90-113, https://doi.org/10.1177/1532673X13484172.

[19] Kathrin Ackermann, "Individual differences and political contexts – The role of personality traits and direct democracy in explaining political protest," *Swiss Political Science Review* 23, no. 1 (2017): 21-49, https://doi.org/10.1111/spsr.12227.

[20] Ching-Hsing Wang, Dennis Lu-Chung Weng and Hyun-Jin Cha, "Personality traits and voter turnout in South Korea: The mediation argument," *Japanese Journal of Political Science* 18, no. 3 (2017): 426-445. https://doi.org/10.1017/S146810991700010X.

Apart from these results, many other researches of the personality traits influence have shown the following: individual-psychological characteristics may predict and positively affect volunteerism;[21] two of the Big Five personality traits, Agreeableness and Conscientiousness, are positively related to favorable attitudes toward political compromise;[22] the Big Five contributes to political efficacy and participation and offers an excellent, efficient, workable means to incorporate attention to trait structure in researches on political behavior;[23] the effects of the Big Five on political and civic participation were confirmed but varied considerably across countries in a cross-national analysis, conducted in 24 countries with the aim to examine the influence of personality;[24] finally, in which way core personality traits shape responses to various aspects of the act of voting, in particular, that the Openness is associated with broad persuasibility and increased the likelihood of voting among those scoring high on Openness.[25]

The psychological characteristics of political participation are no less important than its objective parameters – number of people engaged, compliance with law, intensiveness, sustainability, and others.[26] Personal dimension of political participation is comprised of motivation, a sense of engagement and self-perception. The foundation for thorough analysis of political behavior as well as human behavior are consideration of personal factors alongside different types and forms of political actions. For instance, inactive citizens, who are not practically involved in politics, do not feel in control of the political situation and, thus, do not feel psychologically engaged. On the contrary, civil activists are highly engaged in political life on the

[21] Gustavo Carlo, Morris A. Okun and Maria Rosario T. de Guzman, "The interplay of traits and motives on volunteering: Agreeableness, extraversion and prosocial value motivation," *Personality and Individual Differences* 38, no. 6 (2005): 1293-1305, https://doi.org/10.1016/j.paid.2004.08.012.

[22] Doo-Hun Choi and Don D. H. Shin, "Exploring political compromise in the new media environment: The interaction effects of social media use and the Big Five personality traits," *Personality and Individual Differences* 106 (2017): 163-171, doi:10.1016/j.paid.2016.11.022.

[23] Michele Vecchione and Gian Vittorio Caprara, "Personality determinants of political participation: The contribution of traits and self-efficacy beliefs," *Personality and Individual Differences* 46, no. 4 (2009): 487-492, https://doi.org/10.1016/j.paid.2008.11.021.

[24] Aaron C. Weinschenk, "Big Five personality traits, political participation, and civic engagement: Evidence from 24 Countries," *Social Science Quarterly* 98, no. 5 (2017): 1406-1421, https://doi.org/10.1111/ssqu.12380.

[25] Alan S. Gerber, Gregory A. Huber, David Doherty, Conor M. Dowling and Costas Panagopoulos, "Big Five personality traits and responses to persuasive appeals: Results from voter turnout experiments," *Political Behavior* 35, no. 4 (2013): 687-728, https://doi.org/10.1007/s11109-012-9216-y.

[26] Jeffery J. Mondak, Matthew V. Hibbing, Damarys Canache, Mitchell A. Seligson and Mary R. Anderson, "Personality and civic engagement: An integrative framework for the study of trait effects on political behavior," *American Political Science Review* 104, no. 1 (2010): 85-110, https://my.vanderbilt.edu/seligson/files/2013/12/APSR-published-article.pdf.

personal and psychological levels. So, it makes sense to look at personality as an important causal predictor of both voting behavior and relevant political attitudes.[27]

We have to mention several more findings on the personality traits and political acting in order to reveal additional details as to the relationship between them. Investigations as to voter turnout and political interest find that individuals with high comprehension ability and an aggressive personality are more likely to both turn out to vote and have an interest in politics.[28] Gallego and Oberski (2012)[29] confirm that the effects of personality traits on voter turnout and protest participation are sizeable but indirect, and mostly are mediated by attitudinal predictors. The other, more specific statistic data, concerning the protest activity in the samples of two nations – Uruguay and Venezuela, revealed that Conscientiousness emerges as a very strong deterrent, which fact ascertains the personality's influence on abovementioned political behavior and participation, both in Europe and in Latin America.[30]

However, there is a difference between being positive about any activity in principle and actually engaging in it, because Extraversion and Openness are positively linked to engagement in both participatory and deliberative activities, while Agreeableness and Emotional stability are negatively related; in any case, the impact of personality on political participation should be taken in consideration.[31] Parks-Leduc, Feldman, and Bardi[32] have carried out an important study revealing as follows: Openness to experience and Agreeableness are the most strongly and coherently related to personal values; Extraversion and Conscientiousness also have some meaningful relations to

---

27 Markus Steinbrecher, *The Big Five, party identification, and voting behavior in Germany*, Paper prepared for delivery at the ninth ECPR General Conference, Université de Montréal, Montreal, Canada, August 26-29, 2015, https://ecpr.eu/Filestore/PaperProposal/7199d2c9-51f7-408b-9fd2-de90e10ad566.pdf.

28 Kevin Denny and Orla Doyle, "Political interest, cognitive ability and personality: Determinants of voter turnout in Britain," *British Journal of Political Science* 32, no. 2 (2008): 291-310, doi:10.1017/S000712340800015X.

29 Aina Gallego and Daniel Oberski, "Personality and political participation: The mediation hypothesis," *Political Behavior* 34, no. 3 (2012): 425-451, http://dx.doi.org/10.1007/s11109-011-9168-7.

30 Jeffery J. Mondak, Damarys Canache, Mitchell A. Seligson and Matthew V. Hibbing, "The participatory personality: Evidence from Latin America," *British Journal of Political Science* 41, no. 1 (2011): 211-221, https://doi.org/10.1017/S000712341000027X.

31 Marina Lindell and Kim Stranberg, "A participatory personality? Examining the influence of personality traits on political participation," *Scandinavian Political Studies* 41, no. 3 (2018): 239-262, https://doi.org/10.1111/1467-9477.12118.

32 Laura Parks-Leduc, Gilad Feldman and Anat Bardi, "Personality traits and personal values: A meta-analysis," *Personality and Social Psychology Review* 19, no. 1 (2015): 3-29, https://doi.org/10.1177/1088868314538548.

values; Emotional stability is generally unrelated to values; traits and values are distinct constructs and their relationships show little variation cross-culturally.

For another thing, the analysis of personality traits in the Brazilian context demonstrated that citizens scored high in Extroversion and Openness to experience seek out an additional political information, which allows them to take the decision to engage in a protest activity; so, it seems that the personality represents a kind of substrate for the development of proper cognitive skills relating to politics.[33]

Personality traits indirectly affect partisan attitudes and voting behavior in Germany: Openness makes citizens more inclined to support parties endorsing social liberalism, Conscientiousness increases voting for parties subscribing to economic or social liberalism, high levels of Neuroticism promote support for parties that offer shelter against material or cultural challenges.[34]

Political behavior increasingly takes place on digital platforms. Online mobilization occurs at a faster pace and involves citizens that would otherwise not be inclined to participate. Rapidly changing digital environment is the new field for political engagement research. Among other forms, online petitions have recently gained popularity across the globe, giving citizens a chance to bring issues on the agenda of democratically selected assemblies. But the effects of personality traits on online forms of political engagement do not substantially differ from offline.

We should note some interesting data as to the gender influence on correlation voter turnout, namely: Conscientiousness and Emotional stability can significantly increase female turnout, but have no effect on male turnout; Openness to experience exerts opposite effects on male and female turnout; no dependence on gender was noted concerning the Extraversion and Agreeableness which are not associated with voter turnout.[35] Besides, recent results of Ching-Hsing Wang[36] confirmed that the Big Five personality traits have different effects on male and female party identification in the United States, namely: with the increase of Agreeableness, women tend to be

---

[33] Ednaldo Aparecido Ribeiro and Julian Borba, "Personality, political attitudes and participation in protests: The direct and mediated effects of psychological factors on political activism," *Brazilian Political Science Review* 10, no. 3 (2016,) on-line version Dec. 12, 2016, http://dx.doi.org/10.1590/1981-38212016000300003.

[34] Harald Schoen and Siegfried Schumann, "Personality traits, partisan attitudes, and voting behavior. Evidence from Germany," *Political Psychology* 28, no. 4 (2007): 471-498, https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-9221.2007.00582.x.

[35] Ching-Hsing Wang, "Gender differences in the effects of personality traits on voter turnout," *Electoral Studies* 34 (2014): 167-176, https://doi.org/10.1016/j.electstud. 2013.10.005.

[36] Ching-Hsing Wang, "Gender differences in the effects of personality traits on party identification in the United States," *Journal of Women, Politics & Policy* 38, no. 3 (2017): 335-362.

Republicans, but men tend to be Democrats; and furthermore, when Openness to experience increases, women are more likely to be strong partisans, but men are more likely to be independents or leaning partisans.

Age is a further variable affecting willingness to take an active role in politics. The comparative analysis from three largest European countries – Germany, France and the United Kingdom – revealed interesting findings on this matter. The younger generations are less likely to vote than their older counterparts and more inclined for participation in unconventional acivities. While some forms of political involvement are strongest among the elderly (that is voting), other types are more pronounced among individuals between the ages of 34 and 65 (that is signing petitions) or the young (that is participation in demonstrations).[37] In addition, age differences were found suggesting that mean levels of Neuroticism and Extraversion are negatively associated with age, whereas Agreeableness and Conscientiousness are positively associated.[38]

The study of Schoen and Steinbrecher (2013)[39] demonstrated that Agreeableness and Emotional stability considerably affects turnout, while Conscientiousness, Openness and Extraversion turned out to be ineffective. Concerning the links between individuals' personality traits and their propensity to vote at ages 36-50, the results show that Extraversion and Agreeableness are positively associated with voter turnout, but not at all ages; besides, the effect of Extraversion varies depending on the level of education: high-educated people are more prone to be habitual voters regardless of their Extraversion level.[40]

Conventional behavior analysis, if respondents have not attained the voting age, could be pursued by exploring young adults' attitudes toward political behavior and internal political efficacy beliefs. Drawing on the framework of the theory of planned behavior, the changes in young adults' intentions to participate in politics could be explained. Findings on this matter showed that young respondents' intentions to participate in politics and their internal political efficacy beliefs predicted changes in their actual behaviors.[41]

---

[37] Daniela F. Melo and Daniel Stockemer, "Age and political participation in Germany, France and the UK: A comparative analysis," *Comparative European Polotics* 12, no. 1 (2014): 33-53, https://doi.org/10.1057/cep.2012.31.

[38] Regula Lehmann, Jaap J. A. Dennison, Mathias Allemand and Lars Penke, "Age and gender differences in motivational manifestations of the Big Five from age 16 to 60," *Developmental Psychology* 49, no. 2 (2013): 365-383, doi:10.1037/a0028277.

[39] Harald Schoen and Markus Steinbrecher, "Beyond total effects: Exploring the interplay of personality and attitudes in affecting turnout in the 2009 German Federal election," *Political Psychology* 34, no. 4 (2017): 533-552. http://dx.doi.org/10.1111/pops.12168.

[40] Mikko Mattila, Hanna Wass, Peter Söderlund, Sami Fredriksson, Paivi Fadjukoff and Katja Kokko, "Personality and turnout: Results from the Finnish longitudinal studies," *Scandinavian Political Studies* 34, no. 4 (2011): 287-306, https://doi.org/10.1111/j.1467-9477.2011.00273.x.

[41] Katharina Eckstein, Peter Noack and Burkhard Gniewosz, "Predictors of intentions to participate in politics and actual political behaviors in young adulthood," *International*

Individual personality traits plays a significant role in nascent political ambitions regardless of age. Recent studies proved that individuals with higher levels of Extravertion and Openness are more likely to consider running for office, while Agreeable and Conscientious individuals are significantly less interested.[42] Another stream of research emphasizes the effect of civic associations on political participation. Existing literature depicts the relationship between civic associations and protesting behavior, proceeding from the idea that the ties formed in civic associations are more effective than other ties in recruiting protest participants.[43]

With all this, there are some opposite conclusions declaring the following: (1) the studying of relationship between personality traits and political behavior, held in 21 countries from all continents, showed that effects of personality traits cannot be generalized easily across the world as their effects vary considerably from country to country;[44] (2) the impact of personality traits and psychological characteristics (namely, altruism, shyness, efficacy and conflict avoidance) is evidenced like being an indirect one and mediated by interest and duty;[45] (3) and even moreover, that a purely causal relationship between personality traits and political attitudes does not exist.[46]

Summary of Expectations

The rapid rise of interest in politics, especially among young Ukrainians, unlocked a research potential related to measuring both personality traits and individual-psychological peculiarities and their effect on political participation. Investigation of the psychological determinants reveals a complicated system of links between the personality traits and political engagement and highlights the role of personality traits in the socialization and self-actualization in political

---

Journal of Behavioral Development 37, no. 5 (2013): 428-435, https://doi.org/10.1177/0165025413486419.

42 Adam M. Dynes, Hans J. G. Hassell and Matthew R. Miles, "The Personality of the Politically Ambitious," *Political Behavior*, online: 24 February 2018, 1-28, https://doi.org/10.1007/s11109-018-9452-x.

43 Chaeyoon Lim, "Social networks and political participation: How do networks matter?," *Social Forces* 87, no. 2 (2008): 961-982, https://www.jstor.org/stable/20430898.

44 Matthias Fatke, "Personality traits and political ideology: A first global assessment," *Political Psychology* 38, no. 5 (2017): 881-899, https://doi.org/10.1111/pops.12347.

45 André Blais and Simon Labbé St-Vincent, "Personality traits, political attitudes, and the propensity to vote," *European Journal of Political Research* 50, no. 3 (2011): 395-417, https://doi.org/10.1111/j.1475-6765.2010.01935.x.

46 Peter K. Hatemi and Brad Verhulst, "Political attitudes develop independently of personality traits", *PLoS ONE*, 10, no. 7 (2015): 1-24, https://doi.org/10.1371/journal.pone.0134072.

sphere. The aim of our study is to examine the effect of the personality traits and individual-psychological characteristics upon political behavior in Ukraine, based on empirical data across five core personality dimensions: Agreeableness, Neuroticism, Extraversion, Openness and Conscientiousness. We specified the aim in subsequent tasks:

Firstly, to reveal connection between the psychological determinants of personality and indicators of political activity.

Second task is to undertake comparative analysis of obtained data with the results of recent studies, concerning the relation between personal traits, individual-psychological characteristics and political behavior.

Finally, we tend to introduce the control variables (age, gender, membership) while analyzing psychological determinants of political participation.

Based on literature review we can now summarize our expectations embodied in tentative working hypotheses. Agreeableness and Conscientiousness are expected to have the strongest positive relationship with conventional political behavior and negative relationship with non-conventional activities. Voting behavior is coherently related to personal values of citizens. Thus, only if the persons believe their voice is matter, they would try to make a difference by voting. We assume that voting behavior for respondents scored high in Agreeableness and Conscientiousness would be highly affected by the weight, given for elections within their inner scale of values.

High levels of Neuroticism are associated with political behavior that could offer a psychological shelter. Building on this idea, we expect that being a member of political (civil) organization, as well as expressing political identity by voting, is favorable behavior for the persons scored high in Neuroticism.

In line with prior research, we predict that high levels of Extraversion and Openness would have the positive relation with political ambitions, while agreeable individuals are less likely to be interested in running for office. Extraversion and Openness are also expected to have the positive relationships with online forms of political participation.

The effect of personality traits on political behavior is mediated by sex and age. Consistent with prior research, for Conscientiousness and Emotional stability we expect a significant increase in voting turnout for female respondents. Our other suggestion is that a substantive difference of political participation could be found across various age groups.

This leads us for hypothesis that younger respondents are less likely to participate in conventional activities and, alternatively, are more likely to participate unconventionally. In line with this, we assume that Neuroticism and Extraversion would affect the group difference for unconventional behavior, whereas Agreeableness and Conscientiousness would work for conventional participation.

The other factor expected to have an impact on participation is membership in civic associations. In line with previous findings, we assume that membership would be positively associated with non-conventional behavior so as the members are more likely to be recruited in protest activities than nonmembers.

Method

Participants and procedure

The sample of our study comprised the responses of one thousand two hundred and forty-seven (1247) participants aged from 15 to 50. A reasonably balanced proportion of male (41%) and female (59%) respondents was included. We held the survey in autumn 2017 in several cities of the Ukraine: Odessa, Kiev and Kharkov. The data was gathered by means of a self-evaluation questionnaire. The decent part of respondents was the 1-5 year students (64%), among whom anonymous testing was conducted. Participants were contacted in lectures and seminars and asked to fill out a questionnaire. 36% of data was collected randomly online through the Facebook platform. The sample encompasses the respondents from South (60%), West (10%), East (10%), Center and North of Ukraine (20%). The mean age of participants was 25.76 years. Of the participants, 60% were affiliated to civil society organizations. But the spectrum of those groups is very diverse: 28% respondents are engaged with charitable organizations and civil association, advocating for human rights, diversity, sustainability, democracy or providing support for vulnerable groups (elders, kids, disable people, women, etc.); the members of associations, promoting culture or sports comprise 16% of a total; 10% of respondents are affiliated to trade unions, 6% are engaged with other professional or business groups.

Measures

The personality inventory in our survey is based on the Five-Factor model ("Big Five"). The conceptual foundations of this test were gradually identified by L. Goldberg, P. Costa, H. Eysenck, R. Cattell, R. McCrae, J. Guilford, who developed a hierarchical model of the questionnaire, which includes assessments of personality characteristics, but its final 5-factor

personality model was elaborated and published by L. Goldberg.[47] According to their studies, Neuroticism could be best described as *worrying*, *insecure*, *temperamental* and *self-conscious*. The individuals high in Neuroticism more frequently use inappropriate coping responses like hostile reactions and wishful thinking because they must deal more often with the disruptive emotions and stress. *Sociable*, *fun loving*, *active*, *persistent* and *emotional* are the highest loading variables on the Extraversion factor. High results on Openness indicate that a person loves to experience everything new and to follow the latest trends. Openness could be best characterized by such references as *original*, *imaginative*, *having a broad range of interests*, and *daring*. Agreeableness is labeled by *social adaptability*, *likability*, *friendly compliance* and *love*. Those scored high in Agreeableness are trustful and altruistic; they usually tend to cooperate with their colleagues. A conscientious person could be described as *scrupulous*, *hardworking*, *ambitious*, *energetic*, *with a constant striving for achievement*. An undirected individual may have a demanding conscience and a pervasive sense of guilt but be unable to live up to his or her own standards; the cause of such situation is the lack of self-discipline and energy.

The questionnaire in our study, in which the participants have completed test, measuring personal traits – Extraversion, Agreeableness, Conscientiousness, Openness to experience and Neuroticism, is built on the NEO Personality Inventory-Revised, NEO-PI-R.[48] The test consists of fifty items, each trait domain is represented by 10 descriptive phrases to which the respondents must rate their agreement on a five-point scale, where: 1 – "Strongly disagree", 2 – "Disagree", 3 – "Neither agree, nor disagree", 4 – "Agree", 5 – "Strongly Agree". In the present sample, the internal reliability coefficients were: 75 (Emotional stability), .85 (Extraversion), .78 (Openness to experience), .74 (Agreeableness), and .90 (Conscientiousness).

Apart from Big Five item pool, there are specific items that probe the respondents' age, sex, membership in civil organizations. We created 5 age groups (15 to 20 year olds, 21 to 26 year olds, 27 to 32 year olds, 33 to 40 year olds, 40 to 50 year olds) to examine broad age trends across the sample. Due to sparse number of participants at older ages, we expanded the age interval for the latter groups. As a result we achieved the even distribution of participants for about 20% for each group.

Seven items reflecting specifically the respondents' engagement in political activity measured political behavior. The complete list of items measuring political participation can be found in Table 1. These questions were

[47] Lewis R. Goldberg, "The development of markers for the Big-Five factor structure," *Psychological Assessment, 4*(1), 1992, 26-42, http://dx.doi.org/10.1037/1040-3590.4.1.26.

[48] Paul Costa Jr and Robert R. McCrae, *Revised NEO Personality Inventory (NEO PI-R™) and NEO Five-Factor Inventory (NEO-FFI) professional manual* (Odessa, Fla.: Psychological Assessment Resources, 1992), https://trove.nla.gov.au/version/13311561.

built around the voting turnout, intention to run for office, general evaluation of electoral process, participation through E-Petitions, participation in political protests and discussions. Except for the "Protests Activity (last 5 years)", "E-Petition (last 5 years)" and ("yes" = "1"; "no" = "0"), the response options ranged from "1" to "5". Political participation items offer a reliable scale of generalised trust with a Cronbach's α of 0.721 and, hence, an acceptable internal coherence. In addition, abovementioned items were factored into scales, indicating conventional and non-conventional political behavior. Four items were used to examine respondents' intentions to participate in conventional political activities ("Voting turnout", "Positive attitude towards elections", "Political Ambitions", "Discussion of Politics"; Cronbach's α of 0.684). Non-conventional political behavior was assessed with three items ("Protests Habits", "Protests Activity (last 5 years)", "E-Petition (last 5 years)"; Cronbach's α of 0.626).

The data sample used in this study was build upon self-reported evaluation of political engagement. Inconsistencies between self-reported and actual political behavior are confirmed by numerous empirical examinations, thus, we naturally questioned reliability of answers provided. The accuracy of respondents' self-reports could be challenged by: a) misreporting of respondents, tending to put themselves in the best light possible; b) misremembering the past behavior;[49] c) misunderstanding the question being asked.[50] The respondents tend to present themselves in a favorable manner, especially when it comes to voting or other socially desirable behavior. They are more likely to select the socially desirable answer due to memory failure, when there are no strong beliefs about true past events.[51]

In order to reduce the overreporting, we experimented with item construction. Questions about participation in protests were subjected to the "past five years" and "life-time" frames. As the approach of Andolina et al. (2003),[52] has proved helpful for dealing successfully with social desirability bias it is expected that the introduction of the reporting period frame would

[49] Robert F. Belli, Michael W. Traugott, Margaret Young and Katherine A. McGonagle, "Reducing vote overreporting in surveys: Social desirablity, memory failure, and source monitoring," *Public Opinion Quarterly* 63, no. 1 (1999): 90-108, https://nebraska.pure.elsevier.com/en/publications/reducing-vote-overreporting-in-surveys-social-desirability-memory.

[50] Molly Andolina, Scott Keeter, Cliff Zukin and Krista Jenkins, *A guide to the index of civic and political engagement* (College Park, MD, The Center for Information & Research on Civic Learning & Engagement, 2003), https://civicyouth.org/PopUps/IndexGuide.pdf.

[51] Volker Stocké and Tobias Stark. "Political involvement and memory failure as interdependent determinants of vote overreporting," *Applied Cognitive Psychology* 21 (2007): 239-257, https://deepblue.lib.umich.edu/bitstream/handle/2027.42/55955/1339_ftp.pdf?sequence=1&isAllowed=y.

[52] Andolina, Keeter, Zukin and Jenkins, *A guide.*

bring results closer to reality. Within given sample, the variables indicating period and lifetime frames for protest activities correlated at a fairy high level (pearson's r = .152; p-value = .046). The reason, the respondents were asked about their protesting during the past five years, is that such frame fits into the chronology of key events in modern protest history of Ukraine, including Maidan Revolution in 2014. Similar approach was introduced for the measurement of online participation. "Electronic petition" question was build upon particular participation tool that had been launched for the first time in Ukraine in 2015.

Results and Discussion

Our analysis begins with assessment of the possible direct effects of the Big Five trait dimensions on various indicators of political engagement. We used the regression analysis as it enables to investigate multivariate relations between variables. This approach matches perfectly to the nature of political behavior measurement as well as enables us to find relationship that may not be obvious. Table 2 demonstrates how the Big Five traits performed alongside a number of predictors, used to reveal the level of political engagement. We used the linear regression measure for the political engagement variables with values ranging from (1) to (5) and binominal regression for dichotomous variables, if there are only two response options ("yes" or "no"). The political behavior indicators have been included as dependent variables, whose value depends upon personality indicators (independent variables). Positive coefficients indicate that the effect of political engagement is stronger for individuals high on the trait, while negative coefficients indicate that the effect is weaker for those high on the trait. The default setting for the statistically significant results is $p < .05$. This universally accepted approach to hypothesis testing has been adopted throughout the study. However, we considered the cases with $p < .10$ as suggestive of significant effect that warrants further study.

As it was expected, Conscientiousness showed the strongest significant positive relationship with conventional political behavior and negative relationship with non-conventional activities, although the latter demonstated insignificant results. For Agreeableness, our findings did not correspond with initial hypothesis. The highest significant relation reported is between Conscientiousness and voting turnout, positive attitude towards elections and intention to run for office (political ambitions). The actions of individuals with the high level of Conscientiousness are strongly shaped by a sense of the task's importance. Thus, high scores on Conscientiousness are significant predictors of political participation, if the respondents perceive a sense of duty while engaging in particular activities.

Based on this idea, we examined voting depending on their attitude for elections. Results of correlation analysis indicated positive trend for voting, when the respondents declair trust for democratic election institutes (pearson's *r* = .185; *p*-value = .022). The multiple regression test with «Voting Turnout» as depent variable demonstrated a substantial positive association of voting with both «Positive Attitude towards Elections» and Conscientiousness variables (for Conscientiousness: B = .203, SE = .081, Sig. = .013; for "Positive Attitude towards Elections": B = .143, SE = .080, Sig. = .043). Consistent with our hypothesis, there is a likelyhood for higher voting turnout among the respondents scored high in Conscientiousness, when they believe their voice is matter.

As could be seen from Table 2, only the persons scored high in Conscientiousness demonstrated a positive trend in both the political ambitions and positive attitude towards elections. Thus, political ambitions and confidence in the effectiveness of election procedures would not necessary coincide.

Our results of the regression analysis indicated a posititve, but nonsignificant, association of Extraversion and Openness with political ambitions. Meanwhile, the respondents scored high in Agreeableness demonstrated low intention to run for election, that comes in line with initial hypothesis. Running for office and holding office could be challenging for the people scored high in Agreeableness because of the threat of possible conflicts, herewith this type would usually avoid them.

The positive relation between emotional stability and political ambitions revealed within current study proves that emotionally stable people are more likely to manage stress and negative emotions related to running for office. As was expected, within our sample, the respondents scored high in Neuroticism demonstrate a positive tendency towards regular voting. There is an interesting assumption on this matter offered by Markus Steinbrecher in his aforementioned work (2015),[27] that the people low on emotional stability may find helpful a self-identification with political party, in order to reduce the complexity in the political world and restore the mental stress.

The rapid development of the Internet and social networks has led to the emergence of numerous online forms of political participation. Within current study, we have analyzed E-Petitions, which have gained popularity in recent years after the launch of the online service that enables the citizens to appeal to the President of Ukraine. Unlike previous reserachers, we were not able to find significant evidence, confirming the positive effect of Extraversion and Openness on signing E-Petitions.

The next step of our study is the estimation of results considering additional factors that can affect respondents' behavior (namely – age, gender, membership in civil organizations). We have introduced control variables into regression analysis in order to determine which factors may be helpful to gain the estimates as realistic as possible. The regression coefficients of models with

control variables are presented in Table 3. The models are built on the basis of relations between political behavior acts and personality traits transferred from Table 2. In order to have the opportunity to compare the influence of various factors on political behavior, we have introduced different sets of control variables that are believed to affect respondents' behavior. Experiments with control variables enable us to identify controls which may produce change in results and to reveal how models react to the addition of particular sets of control variables. Only those results from Table 2, that proved to be statistically significant (p <.05.) or at least considered as suggestive of significant effect (p < .10), were included for detailed examination and testing with control variables in Table 3.

The first model (M1) includes the same predictors as those used in Table 2. The second model (M2) adds the perceived importance of age and gender. In addition to those factors, the third model (M3) includes a control variable of membership in political or civil organizations. We entered the control variables into the regression models with the evaluation of Adjusted R Squire for each model. The adjusted R-squared indicates the explanatory power and reliability of presented models. Thus, within this study, only the models with the highest adjusted R-squared or Nagelkerke R Square (for binomial models) were considered.

The experiments with control variables demonstrate the minor shifting between the models when it comes to Conscientiousness. Introduction of the control variables for "Voting Turnout" and "Attitudes towards Elections" did not improve the explanatory power of the model 2 as well as of the model 3.

The coefficients reflecting the effects of "Emotional stability" on political ambitions, mediated by control variables, have been proved to be statistically significant (p < .05). The introduction of controls demonstrated upward trend throughout the models with the highest adjusted R-squared in model 3. Thus, the analysis with introduction of the control variables resulted in more accurate model structure and demonstrated statistically significant coefficients. The evidence shows that emotionally stable individuals are more likely to have political ambitions and factors of age and gender noticeably effect intention to run for office. Thus, we have reliably confirmed that social and biographical factors influence the relation between Neuroticism and political ambitions.

Further, we ran the detailed analysis of gender, age and membership variables in order to reveal the effect they exert on different types of political participation with mediation of personality characteristics. First, we used ANOVAs to determine whether there are significant gender, age and membership status differences in political behavior. As for the gender, we did not find any evidence confirming that a man or a woman is more likely to take part in conventional or non-conventional political activities. Despite an expected effect of Conscientiousness and Emotional stability on females voting,

ANOVA testing for gender demonstrated non-significant difference between the groups.

As a next step, we checked whether the political participation is affected by the age of respondents. We found significant difference between age groups for conventional participation (p = .002). The highest mean for conventional behavior was detected for the age group of 40-50 years. Consistent with initial hypothesis, there was general upward trend with the older people displaying stronger intentions for conventional political behavior, although we observed modest drop in mean scores for the respondents in their thirties (27-32 years old). In contrast, the age factor did not affect the non-conventional political behavior (p = .082).

When taking into account the membership variable, our intention was to track the effect of social action group engagement on political participation. The difference between group means proved to be significant for non-conventional acts (p = .004) and non-significant for conventional behavior (p = .077). In line with study hypothesis, "members" displayed a stronger intention to engage in non-conventional activities (Mean difference = .94).

A second step of analysis was testing group difference for conventional political participation, controlling for age, with introduction of personality co-variances (ANCOVA). As it was expected, the test showed that personality did not affect greatly the significance of the difference in conventional political participation, except for the introduction of the Conscientiousness covariance (Table 4). The Conscientiousness effect analysis revealed a highly significant p-value of .0003, suggesting that the null hypothesis of no condition may be rejected.

But how big the evidence in favor of the effect? To answer this question, we analyzed the data with JASP software using the Bayesian ANCOVA methodology proposed by Rouder and his colleagues[53].[54] Bayesian hypothesis' testing presents attractive alternatives to classical inference. We believe, our study design would benefit from the introduction of Bayesian methodology as it could be used to quantify and monitor evidence both in favor and against the null hypothesis. It compares the perdictive adequacy of two competing statistical models, thereby quanifying the change in belief that the data bring about for two models under consideration.[55]

---

[53] Jeffrey N. Rouder, Richard D. Morey, Paul L. Speckman and Jordan M. Province, "Default Bayes factors for ANOVA designs," *Journal of Mathematical Psychology* 56, no. 5 (2012): 356–374, https://doi.org/10.1016/j.jmp.2012.08.001.

[54] Jeffrey N. Rouder and Richard D. Morey, "Default Bayes factors for model selection in regression," *Multivariate Behavioral Research* 47, no. 6 (2012): 877–903, https://www.researchgate.net/publication/272036475_Default_Bayes_Factors_for_Model_Selection_in_Regression.

[55] Eric-Jan Wagenmakers, Maarten Marsman, Tahira Jamil, Alexander Ly, Josine Verhagen, Jonathon Love, Ravi Selker, Quentin F.Gronau, Martin Šmíra, Sacha Epskamp et al., "Bayesian inference for psychology. Part I: Theoretical advantages and

Our analysis concerns to which extend the dependent variable "conventional political participation" is associated with age and covariates with Conscientiousness. As demonstrated in Table 5, all models receive overwhelming evidence in comparison with the null model. The model that outperforms the null model the most is the two main effects model "Age+Conscientiousness", which, by Lee and Wagenmakers's descriptive scale, could be defined as extreme evidence against the null hypothesis (BF10 = 2060.503).[56] Interestingly, the model of "Conscientiousness" demonstrated relatively high Bayes factor as well, that is especially visible in comparison with "age" model. Nevertheless, the data was ten times likely under two main effects model than under the model that adds only Conscientiousness.

As it is demonstrated in Table 6, the strongest trends within conventional participation framework appear for voting and positive attitude towards elections. In other words, the likelihood of voting and trust for democratic elections would increase with age, if respondents are scored high in Conscientiousness. The *"*extreme*"* evidence against null hypothesis (100<BF) was revealed for the effect of "Age+Conscientiousness", when evaluating attitude towards elections (BF10=121.707, B01=0.008).

Similar ANCOVA analysis was undertaken for the unconventional political participation with regard to membership factor and personality traits (as covariance variable). Table 7 shows that Big Five personality traits did not affect the difference in non-conventional behavior with regard to membership factor. Both classical and Bayesian analysis did not prove assumption of meaningful effect of personality on group differences. Nevertheless, the models with intervention of group and personality trait ("Membership + Personality traits") provided evidence for rejection of the null hypothesis. In this case Bayes factor for models with inclusion of Openness and Extraversion did not exceed the «anecdotal» range (1<BF<3) and models with Conscientiousness, Agreeableness, Neuroticism provided only «moderate» evidence in favor of rejection of the null hypothesis (3<BF<10). Although the effect is relatively low, the influence of personality on the difference between groups (members/not members) for non-conventional participation could be declared. In addition, the respondents engaged in civil associations are consistently higher in Neuroticism, that comes in line with initial hypothesis.

---

practical ramifications," *Psychonomic bulletin & review* 25, no. 1 (2018): 35-57, doi:10.3758/s13423-017-1343-3.

[56] Michael D. Lee and Eric-Jan Wagenmakers, *Bayesian cognitive modeling: A practical course* (New York, U.S.: Cambridge University Press, 2014), http://dx.doi.org/10.1017/CBO9781139087759.

Conclusions

Throughout this empirical research and analysis of personality traits, namely, Agreeableness, Neuroticism, Extraversion, Openness and Conscientiousness, we endeavored to depict the complexity of possible interactions between personality and politics. Within this article, we have opened a completely new line of considerations about pathways linking psychological dimension of personality and political participation.

With our first research question, we found that the people scored high in Conscientiousness are inclined to conventional political participation and, alternatively, are not likely to take part in non-conventional activities. We have found evidence that agreeable people are less likely to participate actively in politics; in particular, we have discovered a strong negative relation towards desire to run for office and participate in political discussions. In contrast, individuals with high scores on Conscientiousness are more likely to vote, show trust for political system and seek for office. Subsequently, a higher voting turnout is observed, when the respondents believe their voice is matter. Our findings on Neuroticism demonstrated, that emotionally stable respondents are more likely to report intention to run for office, and less likely to vote.

Although results on Extraversion and Openness did not demonstrate statistically significant relation to the activities under study, the obtained results within current study are largely consistent with those reported in prior studies of the Big Five and political participation. Nonetheless, the obtained results allowed revealing a number of psychological patterns in political behavior with regard to Agreeableness, Neuroticism and Conscientiousness that enabled us to confirm and expand previous findings.

Annexes

Table 1: ***List of items with scales used to measure political engagement***

	Name of category	Items	Scales
Conventional participation scale	**Voting Turnout**	Can you tell me how often you vote in local and national elections?	Always (5) / Very Frequently(4) / Occasionally (3) / Rarely (2) / Never (1)
	Positive attitude towards elections	When thinking about political elections in Ukraine, I believe, that my voice matters and my vote can make a difference.	Strongly Agree (5) / Agree (4) / Neither agree, nor disagree (3) / Disagree (2) / Strongly disagree (1)
	Political Ambitions	In terms of your ambitions, to what extent would you agree or disagree with the following statement: "I imagine myself running for office in future"?	Strongly Agree (5) / Agree (4) / Neither agree, nor disagree (3) / Disagree (2) / Strongly disagree (1)
	Discussion of Politics	Thinking about political and social issues, how often do you discuss latest news with your family and friends?	Always (5) / Very Frequently (4) / Occasionally (3) / Rarely (2) / Never (1)
Non-conventional participation scale	**Protests Habits**	How often you participate in protests, marches, or demonstrations?	Always (5) / Very Frequently(4) / Occasionally (3) / Rarely (2) / Never (1)
	Protests Activity (last 5 years)	During the past five years, have you taken part in a protest, march, or demonstration at least once?	Yes (1) / No (0)
	E–Petition (last 5 years)	Have you signed an online petition about social or political issues at least once in the last 5 years?	Yes (1) / No (0)

Table 2: ***Direct effect of personality characteristics on political / social activity***

Political activity		**Agreeableness**	**Neuroticism**	**Extraversion**	**Openness**	**Conscientiousness**
Conventional	**Voting Turnout**	.030 (.019)	.043* (.021)	.006 (.016)	-.004 (.018)	.069** (.020)

participation	**Positive Attitude towards Elections**	.011 (.017)	.006 (.019)	-.007 (.014)	.011 (.016)	.042* (.018)
	Political Ambitions	-.071** (.021)	-.043# (.023)	.010 (.017)	.002 (.020)	.044# (.023)
	Discussion of Politics	-.033# (.019)	.002 (.022)	.012 (.016)	.022 (.019)	.002 (.021)
	Conventional participation index	-.222 (.192)	.099 (.206)	.119 (.191)	.117 (.188)	.733** (.213)
Non-conventional participation	**Protests Habits**	-.013 (.020)	.005 (.022)	.006 (.017)	.010 (.019)	-.015 (.022)
	Protests Activity (last 5 years)	-.064# (.036)	-.034 (.039)	.025 (.029)	.003 (.034)	-.006 (.040)
	E–Petition (last 5 years)	.000 (.030)	.046 (.033)	.006 (.025)	.027 (.029)	-.023 (.032)
	Non-conventional participation Index	-.203 (.160)	.069 (.176)	.122 (.163)	.128 (.160)	-.141 (.179)

Note. Each row reports the results from a separate model; the first entry in each row is the dependent variable. The cell entries are the linear regression coefficients with the exception of those for protests activity (last 5 years), E-Petition (last 5 years) – here a binomial logistic regression is applied. Standard errors are in parentheses. Statistically significant results are marked as follows: *** p < .001; ** p < .01; * p < .05; # p < .1.

Table 3: ***Effect of the Big Five on political engagement: experiments with control variables***

Relation between political behavior and personality traits	**Regression coefficients**			**Adjusted R Square**		
	M 1 *(base line)*	**M 2** *(age, gender)*	**M 3** *(age, gender, membership)*	**M 1** *(base line)*	**M 2** *(age, gender)*	**M 3** *(age, gender, membership)*
Voting Turnout*Neuroticism	.043*	.049*	.051*	.060	.054	.053
Voting Turnout*Conscientiousness	.069**	.070**	.068**			
Positive Attitude towards Elections*Conscien	.042*	.042*	.040*	.014	.017	.14

tiousness						
Protests Activity (last 5 years)*Agreeable ness	-.064#	-.056	-.063	.47	.059	.105
Political Ambitions*Agreeableness	-.071**	-.068**	-.070**	.106	.108	.112
Political Ambitions*Neuroticism	-.043#	-.049*	-.046*			
Political Ambitions*Conscientiousness	.044#	.041#	.038#			
Discussion of Politics*Agreeable ness	-.033#	-.043*	-.043*	.002	.045	.039

Note. This table provides exclusively statistically significant results. Each row reports the results from a separate model. The first entry in each row is the regression model from the Table 2, tested with control variables (only models demonstrated statistically significant or suggestive of significant effect results are included). The cell entries are the linear regression coefficients, with the exception of those for protest activity (last 5 years) – here a binomial logistic regression is applied. M1, M2, M3 are the regression models. M1 does not contain any control variables. M2 is built with the consideration of age and sex, M3=M2+control variable of membership. Statistically significant results are marked as follows: *** p < .001; ** p < .01; * p < .05; # p < .1.

Table 4: ***ANCOVA test results for the effect of age on conventional political participation with regard to Big Five personality traits***

	Openness	**Conscientiousness**	**Extraversion**	**Agreeableness**	**Neuroticism**
Effect of Age (p)	,001	,003	,001	,001	,002
Effect of Big Five Personality traits (p)	,072	,0003	,057	,158	,252
Effect of Big Five Personality traits (BF10)	0,50	201,5	0,59	0,27	0,29
Age+ Personality traits effect (BF10)	13,04	2056,48	14,33	7,40	6,1

Note. The first and second rows provide *p*-value indicators for ANCOVA test (SPSS output). The analysis was conducted with "conventional political participation" as dependent variable, "age" (5

groups) as fixed factor; the Big Five traits were introduced as covariance variables. The homogeneity assumption for ANCOVA was hold throughout all models. The third and fourth rows demonstrate results of Bayesian ANCOVA analysis (JASP output). The Bayes factor for "age" in all models stands at 19,78.

Table 5: ***Model Comparison for the effect of age on conventional political participation with Conscientiousness covariance (ANCOVA)***

Models	P(M)	P(M|data)	BF_M	BF_{10}	error %
Null model	0.250	4.381e -4	0.001	1.000	
Agegroup	0.250	0.009	0.026	19.782	0.004
Conscientiousness	0.250	0.088	0.290	201.519	0.010
Agegroup + Conscientiousness	0.250	0.903	27.807	2060.503	0.857

Note. The JASP output table for the Bayesian ANCOVA. The analysis was conducted with «conventional political participation» as dependent variable, "age" (5 groups) as fixed factor, the "Conscientiousness" variable was introduced as covariance. The Bayes factor expressed as BF10 (and its inverse BF01 = 1/BF10), grading the intensity of the evidence that the data provide for H1 versus H.

Table 6: ***Bayesian ANCOVA test results for the effect of age on specified political participation acts (conventional scale) with regard to Big Five personality traits***

Dependent variable	Models' elements	BF10	BF01
Voting Turnout	Age	2.081	0.481
	Conscientiousness	8.479	0.118
	Age + Conscientiousness	11.470	0.093
Positive Attitude towards Elections	Age	46.522	0.021
	Conscientiousness	3.332	0.300
	Age + Conscientiousness	121.707	0.008
Political Ambitions	Age	0.947	1.056
	Conscientiousness	7.657	0.131
	Age + Conscientiousness	4.729	0.208
Discussion of Politics	Age	0.261	3.839
	Conscientiousness	0.231	4.332
	Age + Conscientiousness	0.056	17.771

Note. The JASP output for the Bayesian ANCOVA. The analysis was conducted with the different types of conventional behavior as dependent variables, "age" as fixed factor, the "Conscientiousness" variable was introduced as covariance. The Bayes factor expressed as BF10 (and its inverse BF01 = 1/BF10), grading the intensity of the evidence that the data provide for H1 versus H.

Table 7: ***ANCOVA test results for the effect of membership on non-conventional political participation with regard to Big Five personality traits***

	Openness	**Conscien Tiousness**	**Extraversion**	**Agreeable ness**	**Neuroticism**
Effect of membership(p)	,005	,002	,005	,003	,002
Effect of Big Five Personality traits (p)	,805	,145	,939	,079	,136
Effect of Big Five Personality traits (BF10)	0,23	0,23	0,20	0,48	0,23
Membership+ Personality traits effect (BF10)	1,42	3,42	1,40	5,56	3,69

Note. The first and second row provide p-value indicators for ANCOVA test (SPSS output). The analysis was conducted with «non-conventional political participation» as dependent variable, «membership» (0;1) as fixed factor; the Big Five traits were introduced as covariance variables. The homogeneity assumption for ANCOVA was hold throughout all models. The third and fourth rows demonstrate results of Bayesian ANCOVA analysis (JASP output). The Bayes factor for "membership" in all models stands at 7.92.