The Big Five Offers Only a Weak Prediction of Politics, Regardless of the Approach

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The present study examines the Big Five traits and socio-demographic factors as predictors of both traditional left-right and liberal-conservative positions of Slovak voters (N = 704). As shown in previous research, Open-Mindedness and Conscientiousness are significant but weak predictors of both political axes, while Agreeableness plays a surprising role in predicting left-right orientation. To overcome the limitations of traditional political axes, three latent variables of the Slovak political space were discovered by exploratory factor analysis (EFA) of political preferences: sympathy towards old/new government, socially conservative parties, and a non-populist coalition. The former is significantly predicted by Open-Mindedness, while the latter is predicted by Conscientiousness. Overall, the Big Five traits predict a small but significant variance in political variables.

Key words: Big Five, political psychology, conservatism, left-right orientation, political orientation

Introduction

Political orientation can be defined both as a set of values and beliefs related to politics and as a self-proclaimed position, which helps people fit into their preferred social group, which means that one accepts the same political orientation as the social group they wish to belong to (Smetáčková & Komárková, 2017). In research, the voters' position is often reduced to liberal-conservative or left-right axes. In comparison to variables such as values (Schwartz et al., 2010; Piruko et al., 2011), Right-Wing Authoritarianism (RWA), and Social Dominance Order (SDO) (e.g., Duriez, Van Hiel, & Kossowska, 2005), the Big Five traits seem to play a minor role in shaping the political orientation or voting behavior (Furnham & Chang, 2019; Jost, Glaser, Kruglanski, & Sollowey, 2003; Van Hiel, Kossowska, & Mervielde, 2000; Fatke, 2017). In our paper, we propose a dif-

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ferent approach to politics: using Exploratory Factor Analysis, we examine latent variables to uncover the political orientation of respondents (e.g., Costello 2017; Jaroš & Voda, 2018; Mölder, 2018). We also seek to determine whether these latent variables show a stronger association with the traditional Big Five traits. As a secondary objective, we aim to examine how the revealed political dimensions relate to the traditional political axes.

Liberal-Conservative and Left-Right Axes

Political psychology defines conservatism by two dominant characteristics: resistance to change and acceptance of inequality (Jost et al., 2003; Aspelund, Lindeman, & Verksalo, 2013). Some authors distinguish between economic conservatism and social conservatism. The concept of economic conservatism is closer to our understanding of the left-right axis. According to Curtice and Bryson (1998), there are two interrelated elements of the left-right orientation: the stance towards greater economic equality (egalitarianism) and the stance towards the government being involved in the national economy (interventionism). More generally, Bobbio (2003) sees the concept of equality as the essence of left-wing orientation. Similarly to Nilson et al. (2020, p. 453), we believe that "the political orientation of voters reflects a multitude of ideological conflicts between parties rather than just one general left–right (or liberal-conservative) divide", which is especially true in a multiparty system.

Political Cleavages and Latent Variables

The concept of political cleavages is a way of understanding a more holistic perception of political reality at a given state and time. According to Lipset and Rokkan's theory, political cleavages are historically and socially determined lines which divide society into groups of people with different political interests (Sitter, 2002). There are four original cleavages: center (core nation builder) vs. periphery (political, ethnic or cultural minorities); state (proponents of secularism) vs. church (proponents of religious values); rural interests vs. urban industry; and employers vs. workers. Researchers have explored recent cleavages such as: authoritarian populism and liberal pluralism (Norris & Inglehart, 2019) and the GAL-TAN dimension for Green-Alternative-Libertarian and Traditional-Authoritarian-Nationalist (e.g., Nilsson, 2020). The COVID-19 pandemic may also have created new cleavage lines or, more likely, deepened the existing ones (Taylor & Hall, 2020), and the same applies to the war in Ukraine.

In Czechia and Slovakia, cleavages such as attitudes towards the communist regime (Vlachová, 2002), paternalism vs. free market, authoritarianism vs. liberal values (Szabó & Tátrai, 2016), attitudes towards corruption (Gyarfášová, 2011), ethnic and urban-rural cleavages (Lysek, Zvada, & Škop, 2020) have all been found to play a significant role since the dissolution of Czechoslovakia in 1993. Most importantly, any discovered cleavage found in politics tends to manifest itself in the positioning of an individual – both in their own self-positioning ("I am a leftist/conservative/nationalist/green") and in the positioning of others – politicians, other voters, and even the media ("They are extremists/liberals"). According to Moghaddam (2010), this positioning is then followed by the attribution of rights and duties to oneself (e.g., "I have the right to vote for socialists/I have the duty to vote against authoritarians") or to other people ("Minorities have the right to be represented/Politicians have the duty to provide care for the disabled").

Another way to understand the political reality is to identify the factors underpinning

the voters' perceptions through statistical methods that identify "latent" variables, such as factor analysis of political attitudes and opinions. Various kinds of left-right or liberal-conservative attitudes were independently identified (e.g., Costello 2017; Jaroš & Voda, 2018), but new variables such as attitudes towards the communist regime (Jaroš & Voda, 2018), the perception of foreign affairs and democracy (Abduljaber, 2020) or the division of voters into the rural and urban electorate (Zarycky & Nowak, 2000) were also established in correspondence to the cleavage theory. This approach focuses on the respondents' assessment of political parties and uses factor analysis or multi-dimensional scaling to establish which parties are considered similar by the voters, and then interprets the dimensions of their views – a *dimensionality of political space*. Todosijevic (2002) identified dimensions such as response to nationalism, sympathies to the current government, and support for minorities, while Mölder (2018) found that voters perceive parties in terms of left-right split and observed the difference between mainstream and anti-establishment parties.

The Big Five Traits and Politics

Both political orientation and electoral behavior are related to several psychological variables, i.e., values (e.g., Schwartz, Caprara, & Vecchione (2010)), perceived position in society, groups (Sprague, 1989), identification with a political party or perception of a leader (e.g., Lukas & Šerek, 2007). Personality traits seem to play a rather minor role. Furnham and Chang (2019) summarized earlier research and claimed that personality traits account for approx. 10% of the variance in political beliefs. They cautioned that this was a very general statement, as both political and personality measures as well as the sample

size and quality and cross-cultural differences are unique to each study. We agree with Gerber et al. (2011) that the Big Five traits are not obviously associated with political attitudes and behaviors. Instead, they represent broad dispositions that are theorized to shape responses to a broader range of stimuli people encounter in the world

In meta-analyses and studies on individual or state/county levels among many countries, lower Openness to Experience and/or higher Conscientiousness have been associated with conservatism or right-leaning attitudes (Jost, Glaser, Kruglanski, & Sollowey, 2003; Van Hiel, Kossowska, & Mervielde, 2000; Fatke, 2017). Some authors have also reported a significant role of Neuroticism (McCann, 2014; Obschonka et al., 2018). In the Czech Republic, Linkov (2020) found only small differences in personality traits between Czech political party members and the general population. Results in Slovakia showed only a very weak negative correlation between right-wing self-placement and Negative Emotionality and an even weaker negative correlation between liberal self-placement and Agreeableness (Uhrovič, Halama, & Kohút, 2020).

Voting Behavior and the Big Five

Personality traits are not only related to ideological constructs such as conservatism, but also to actual voting behavior and attitudes towards particular political parties. In the United States, regions with higher Consciousness and Extraversion and lower Openness were more likely pro-Republican and less likely pro-Democratic (McCann, 2014). According to a state analysis by Obschonka et al. (2018), bringing populism into the debate can increase the role of Neuroticism. They claim that regions with low Openness and high Neuroticism were more likely to vote for Donald Trump, who was considered a pop-

ulist candidate. They even uncovered the "sleeper effect", since the role of Neuroticism increased in regions with swing voters.

In the United Kingdom sample, Aidt and Rauh (2018) found that supporters of the Conservative Party displayed low Agreeableness, Openness and Neuroticism and high Conscientiousness. The opposite results were found among people with a closer attachment to the Labour Party and Liberal Democrats, with the latter displaying low Extraversion. They even found low Openness, Extraversion, Neuroticism and high Conscientiousness among people with no party identification. An analysis of data collected in Slovakia in 2018 found that out of ten parties, only the voters of Progresívne Slovensko (Progressive Slovakia) scored significantly higher in Openness compared to other party supporters, with no significant evidence of differences in other traits (Uhrovič, Halama, & Kohút, 2020).

Aidt and Rauh (2018) distinguish between stable and dynamic party identification and stress the role of personality in the stable component. In reality, Slovak political parties lack a clear ideological basis and high volatility is also typical. Therefore, the traits most likely yield to factors such as the perception of the party leader or issues important to the party when it comes to voting behavior.

Personality and Socio-Demographic Factors Related to Politics

The role of personality as a predictor of political orientation and voting behavior is often naturally accompanied by the role of socio-demographic factors such as age, gender, educational attainment and socio-economic status. It is clear that these factors play an important role in shaping political orientation and voting behavior. However, the role of personality can lead to higher explained variance when political orientation is used as a dependent variable in regression analysis (e.g., Furnham & Cheng, 2019; Obschonka et al., 2018).

In general, the role of gender in political preferences is steadily decreasing, while age and education are becoming stronger predictors of political orientation and voting behavior (Inglehart & Norris, 2000; Thuesen, 2020). In the US states with higher proportions of Caucasian population, people with lower levels of education and earnings were more likely to vote for Trump. Liberal orientation was also positively correlated with earnings and education (Obschonka et al., 2018). In the UK, adding the Big Five personality traits to socio-demographic factors (the parents' social class, gender, educational attainment, and occupational level) increased the explained variance of political interest from nearly 10% to 14.5% (Furnham & Cheng, 2019).

As for Slovakia, recent polls show that socio-demographic factors (education, age and occupation/unemployment) are increasingly predictive of voting for a particular party or group of parties. For example, having a university degree was a positive predictor of voting for center-right parties such as SaS, Za ľudí and PS-Spolu, and a negative predictor of voting for the former ruling party Smer-SD and the extremist ĽSNS (Bútorová, Gyarfášová, & Slosiarik, 2012; Gyarfášová & Slosiarik, 2020; Lysek, Zvada, & Škop, 2020). Similarly, younger voters tended to vote for parties such as the populist OĽaNO, the right-wing extremist ĽSNS, and the liberal coalition PS-Spolu, whereas the older electorate voted stably for parties such as the leftist Smer-SD and the Christian Democratic KDH (Lysek, Zvada, & Škop, 2020).

The Present Study

As demonstrated above, the role of traits and socio-demographic factors in politics is a subject of frequent discussion. However,

this discussion is rather complicated in multiparty democracies such as Slovakia, where political parties are unstable and often not clearly defined on the traditional left-right or liberal-conservative axes. In the present study, we propose to examine the personality and socio-demographic factors that influence both the traditional left-right and liberal-conservative positions of voters in Slovakia. Additionally, we study political latent variables using the exploratory factor analysis (EFA) of the dimensionality of the political space (similarly to Mölder who preferred the MDS method), which are better able to capture the real perception of politics. Furthermore, we also link these variables to personality and socio-demographic factors. Our intention is to use the regression model to find which socio-demographic factors and Big Five traits are related to political variables. In particular, we aim to find out whether the variables discovered by EFA can be more explicitly linked to the Big Five traits than to the traditional political axes.

Our hypothesis is that the older, less educated voters and those with lower social status will lean left and be more conservative. In terms of traits, we expect that Openness is going to be a significant but weak predictor of liberal orientation, and Conscientiousness will be a predictor of both conservative and right-wing orientation. As for the other traits, the results from other countries are not conclusive enough to predict the situation in Slovakia. In connection with latent variables produced by EFA, we expect that the result will include a left-right or liberal-conservative split in the detected dimensions. This is due to the growing public and political disputes over value issues such as the right to abortion and LGBT rights. We also expect some form of inclination to authoritarian or centrist populist parties to be revealed (Mölder, 2018; Norris & Inglehart, 2019; Obschonka et al., 2018).

Method

Sample

The research was conducted between July and August 2020. The total number of respondents was 704, including 378 men (53.8%, age M = 43.643, SD = 16.804) and 326 women (46.2%, age M = 43.055, SD = 16.531). Some respondents were approached by a polling agency (422, i.e., 59.9%), while the remaining responses were collected using snowball sampling with the help of political science students; some using paper questionnaires (N = 43, i.e., 6.1%) with the rest providing responses online (N = 239, i.e., 33.9%).

The respondents were asked about their highest educational attainment (2% – primary school; 12.6% – secondary school without a high school diploma *(maturita)*; 50.1% – secondary school with a high school diploma; 7.8% – level 1 tertiary education; 25.4% – level 2 tertiary education; and 2% – level 3 tertiary education), as well as the size of the community in which they live – i.e., the settlement hierarchy (20.7% – municipality below 2,000 inhabitants; 22.2% – municipality from 2,000 to 10,000 inhabitants; 4.5% – major town (not a district capital) of over 10,000 inhabitants; 23.3% – district capital; 20.6% – regional capital, 8.7% – Bratislava).

Measures

The questionnaire included basic socio-demographic indicators (gender, age, settlement hierarchy, highest educational attainment, and social status self-placement). Respondents were also asked about their political orientation, more specifically where they would place themselves on a scale from "1 – left-wing" to "7 – right-wing"; or "1 – liberal" to "7 – conservative".

Voters' perceptions of the parties active on the political scene went beyond the simple question of whether or not they would vote for them ("party preference"); further data had to be collected regarding their views in relation to the individual parties. Respondents were asked to respond to the following question: "Can you imagine voting for party XY in the parliamentary elections?". They were asked to reply on a numerical scale ranging from "1 – definitely not" to "5 – definitely yes". Respondents were asked to reply to this question in relation to 10 political parties, which had the best chances of winning seats in the parliament according to polls released by members of the Slovak Association of Polling Agencies (Table 1). The answers to the questions then served as inputs for factor analysis. This technique was used to obtain not only the nominal variable (which party they would or they did pick) but also the strength of inclination towards the party, so the difference between no-go parties and the second-best choice party is not only visible but measurable. This intention was consistent with the actual voting behavior in the 2020 general election, with one logical exception – Smer-SD voters were slightly more inclined towards Hlas-SD (a party that split from Smer-SD) when measuring behavioral intention.

Conservatism Scale Questionnaire – The conservatism scale questionnaire was based on Everett's (2013) Social and Economic Conservatism Scale (SECS). For several reasons, only the social conservatism scale was used. Firstly, the economic conservatism scale is close to questions dealing with the left-right orientation; secondly, a previous unpublished survey

Table 1 *Review of relevant Slovak political parties*

	Percentage gained in 2020 general election	Description of party
OĽaNO (C)	25.02	Populist, rather conservative.
Smer-SD (O)	18.29	Left-wing nationalist, ruling party for 12 years until the 2020 election.
Sme rodina (C)	8.24	Conservative populist.
ĽSNS (O)	7.97	Extremist nationalist party
PS-Progresívne Slovensko (E-P)	6.96	New social-liberal movement. Previously in coalition with Spolu, it failed to reach the 7% electoral threshold.
SaS (C)	6.22	Libertarian center-right.
Za ľudí (C)	5.77	Liberal-conservative, center-right.
KDH (E-P)	4.65	Traditional Christian-Democratic Movement
MKS (E-P)	3.91	Party representing the Hungarian minority in Slovakia.
Hlas-SD (O)	-	Created shortly after the election due to a split within Smer-SD; similar profile as the parent party

Note. C – Coalition, O – opposition, E-P – Extra-parliamentary (Lysek, Zvada, & Škop, 2020; Mesežnikov, 2020).

on a smaller sample did not show sufficient internal consistency and several questions were considered incomprehensible for Slovak respondents. On a 10-point scale (the original version used a 100-point scale) ranging from 0 (negative) to 10 (positive), the respondents indicated how they perceived aspects such as "Religion", "Traditional Values" and "Family Cohesion". The original item called "Traditional Marriage" was not sufficiently predictive in previous research and was therefore replaced by the reversed item "Registered Partnerships of Same-Sex Couples". In our sample, the questionnaire was sufficiently internally consistent with McDonald's ω = 0.763 and showed a strong significant relationship with self-placement on the liberal-conservative scale (r_s = 0.676, p < 0.001). The names of the items were loosely translated from English into Slovak to make them as comprehensible as possible. The Slovak version was then given to an independent translator for back-translation into English. Inconsistencies between the back-translated version and the original consisted only of minor shifts in the items' meaning. The item "Immigration", originally left out by Everett from his final version because of its low contribution to reliability, was included in the questionnaire.

Equality Scale – a left-right orientation questionnaire – The Equality Scale questionnaire (Smetáčková & Komárková, 2017) was used to measure orientation on the left-right axis. The scale focuses on equality as the key metric at the core of political orientation and comprises seven items, with the first four constituting a subscale of equality (e.g., "The state should ensure that all people have equal opportunities"), while the remaining three form a subscale of maintaining inequality (e.g., "The state should support more talented and hard-working people, rather than below-average ones"). The scale as a whole shows a reasonable level of internal consistency (ω = 0.719). The rela-tionship with self-placement on the left-right continuum is significantly weak (r_s = 0.231, p < 0.001). The weak correlation is not surprising because of the weaker ability of individuals to assess their placement on this self-placement axis and thus self-placement is considered less valid (e.g., Smetáčková & Komárková, 2017; Curtice & Bryson, 1998).

The Big Five Inventory 2. In order to measure personality traits, we used *The Big Five Inventory-2* [BFI-2] developed by Soto and John (2017), which was translated and adapted to the Slovak language by Halama et al. (2020). The BFI-2 consists of 60 items, and each of the five domains (Extraversion, Agreeableness, Conscientiousness, Negative Emotionality, and Open-Mindedness) has 12 items. Each domain consists of three facets, but we did not use them in our study. The items were answered on a five-point scale: strongly disagree, somewhat disagree, neutral or no opinion, somewhat agree, strongly agree. The Slovak translation of the BFI2 retains the qualities of the original version (Halama, Kohút, Soto, & John, 2020) and also shows strong test-retest stability (Kohút, Kohútová, Žitný, & Halama, 2020). In our sample, the internal consistency of the factor domains estimated by McDonald omega ranged from 0.817 for Extraversion and Agreeableness to 0.871 for Conscientiousness.

Statistical Analysis

Statistical analyses were conducted using the JAMOVI, JASP and SPSS software tools.

Exploratory Factor Analysis was used to identify the latent variables of political orientation viewed as a perception of party placement in the Slovak political space. The input was provided by the respondents answering the question "Can you imagine voting for party XY in the parliamentary elections?" on a scale from "1 – Definitely not" to "5 – Defi-

nitely yes". We used principal axis factoring as an extraction method and varimax rotation. Parallel analysis was used to estimate the number of extracted factors. Pearson or Spearman correlation coefficients were used for subsequent analysis. The respondents' factor scores were used as input to establish the relationship between the party-evaluation factors and other variables. Regression analysis consisted of two steps. In the first step, the socio-demographic factors – age, settlement hierarchy, educational attainment, Slovak ethnicity and social status – were entered into the model. In the next step, the Big Five traits were added.

Results

Before conducting the exploratory factor analysis of voting preferences, we ran as-sumption tests, which showed that the data were suitable for factor analysis. The factor analysis extracted three factors (Table 2).

The first factor reflects the division of the government coalition parties at the time of the survey (OĽaNO, SaS, and Za ľudí), as well as PS (Progressive Slovakia), which did not reach the threshold for gaining seats in the parliament, but is close to the government parties in terms of values. On the other end of the spectrum, there are the current op-position parties: Smer-SD, Hlas-SD and ĽSNS. This factor is referred to as "sympathy for the new/old government" later in the article. The second factor is loaded by the support for OĽaNO, Sme rodina and KDH and is later called "inclination to social conservative (or populist) parties". The third factor comprises smaller parties which stood in opposition to the previous government, but are not con-

Table 2 *Exploratory factor analysis – factor loading, spread of original values in %, eigenvalues and descriptive data on party support*

	Factor 1 Sympathy for the new government	Factor 2 Social conservative parties	Factor 3 Non-populist coalition	Mean	Standard deviation
Smer-SD:	-.677			1.78	0.048
SaS:	.665		.343	2.44	0.055
PS:	.645		.429	2.10	0.051
Za ľudí:	.621		.541	2.02	0.045
Hlas-SD:	-.586			2.32	0.058
ĽSNS:	-.420			1.72	0.047
OĽaNO:	.484	.663		2.59	0.058
Sme rodina:		.543		2.16	0.049
MKO-MKS:			.385	1.18	0.023
KDH:		.324	.345	1.73	0.041
% of explained variance	33.76	14.178	11.740	-	-
Eigenvalues	3.376	1.418	1.174	-	-

sidered populist – SaS, PS, Za ľudí, MKO-MKS and KDH, further referred to as "preference for a non-populist coalition".

We correlated these factors with traditional political variables. As Table 3 shows, sympathy for the new government (Factor 1) statistically correlated with both left-right and liberal-conservative axes; inclination to social conservative parties (Factor 2) correlated with the liberal-conservative axis and preference for a non-populist coalition (Factor 3) correlated with both axes. We find our hypothesis that EFA confirms left-right split as refuted, as it yielded more important factors. However, the liberal-conservative axis was confirmed in Factor 2. Our second hypothesis regarding some form of populism as a factor is confirmed, as the support for the coalition is divided and is driven by Factors 2 and 3, which clearly splits the parties according to populistic rhetoric.

The results of the regression analysis of socio-demographic factors and personality traits as predictors and political variables as dependent variables are presented in Table 4. The table shows that about 10% of the variance in liberal-conservative orientation can be explained by socio-demographical factors, especially age (as we expected) and settlement hierarchy. Adding the Big Five traits increases the explained variance by almost 2.5%. According to our expectations, Conscientiousness positively predicts conservatism, whereas Open-mindedness predicts it negatively.

As for left-right orientation, socio-demographic variables explain almost 10% of the variance and adding the Big Five to the model increases this by a further 7.6%. Contrary to the liberal-conservative axis, the most important socio-demographic factors are education and social status with a minor role of age and gender, as was hypothesized. The amount of variance explained by Big Five traits is surprisingly high, with four out of five factors found to be statistically significant predictors. Agreeableness, Conscientiousness and Negative Emotionality negatively predict right-wing orientation, while Open-Mindedness predicts it positively – whereas our expectation was related solely to Conscientiousness and Open-Mindedness. As for the first of the three latent variables examined (sympathy for the new/old government), the socio-demographic factors explain 17.3% of the variance with another 3.1% being added by the Big Five model. Age, education level and social status are significant predictors. Of the Big Five factors, Conscientiousness and Open-Mindedness are again significant predictors.

The second factor (inclination to socially conservative parties) does not seem to be significantly predicted by socio-demographic or personality variables. Only the Slovak ethnici-

Table 3 *Pearson's correlations between traditional political orientation and latent variables obtained by EFA*

Variable	Liberal-Conservative	Left-right	Sympathy for the new government	Social conservative parties
1. Liberal-Conservative	—			
2. Left-right	-.183***	—		
3. Sympathy for the new government	-.523***	.299***	—	
4. Social conservative parties	.278***	-.002	.094*	—
5. Non-populist coalition	-.196***	.151***	.188***	.003

Table 4 *Regression analysis of socio-demographic factors and personality traits as predictors and political variables as dependent variables (Beta coefficients)*

Model	Predictors	Liberal – Conserv.	Left-Right	Sympathy towards new government	Social conserv. (populist)	Non-populist smaller parties
Model 1	Gender	-.059	-.091*	.028	.080*	.102**
	Age	.286***	-.074*	-.336***	-.083*	-.137***
	Settlement hierarchy	-.108**	.068	.090*	-.015*	-.015
	Educational attainment	-.041	.165***	.124***	.017	.071
	Slovak ethnicity	.009	-.033	-.041	-.101**	-.114**
	Social status	-.031	.158***	.115**	-.038	.074
	R^2	.101***	.096***	.173***	.023*	.056***
Model 2	Gender	-.073	-.013	.028	.062	.081*
	Age	.267***	-.028	-.314***	-.075	-.105**
	Settlement hierarchy	-.104**	.044	.085*	-.021	-.021
	Education level	-.032	.152***	.107**	.017	.071
	Slovak ethnicity	.007	-.021	-.039	-.095*	-.109**
	Social status	-.016	.137***	.107**	-.032	.082
	Extraversion	.018	-.038	-.061	.057	.078
	Agreeableness	.030	-.256***	-.027	-.006	.046
	Conscientiousness	.126**	-.123**	-.104*	.025	-.169***
	Negative Emotionality	.064	-.165***	-.024	.097*	.098*
	Open-Mindedness	-.145 ***	.158***	.194***	-.005	.103*
	ΔR^2	.024**	.076***	.031***	.007	.037***

Note. Gender coding: 1 = man, 2 = woman, Slovak ethnicity coding: 1 = Slovak, 0 = other. Reporting significance of Beta: * ≤ 0.05, ** ≤ 0.01, *** ≤ 0.001

ty and Negative Emotionality show significant prediction; however, the effect size is very minor. Finally, the third latent variable (preference for non-populist smaller parties) is very weakly connected to socio-demographic and personality variables. Only age and minority ethnicity predict a small amount of variance. Conscientiousness, Negative Emotionality and Open-Mindedness explain almost 4% more of the variance when added.

Discussion

The analysis yielded several original results, both in traditional and new dimensions. Open-mindedness and Conscientiousness

confirmed their leading role when assessing political orientation. A surprise came in the form of the important role of Agreeableness on the left-right axis, as well as the large difference between the liberal-conservative and left-right axes.

Socio-Demographic Factors across the Left-Right & Liberal-Conservative Dimension

The significant role of age as a predictor of conservative orientation is not that surprising and confirms the results of previous research (e.g., Xu, Soto, & Plaks, 2020). While the authors of the measurement tool used, Smetáčková and Komárková (2017), report-

ed a negative relationship between age and right-wing orientation, no significant relationship was found between them in the present study. On the other hand, the important role of education is in line with previous research findings (Smetáčková & Komárková, 2017) and opinion poll analyses (more educated voters vote for the center-right parties according to Gyarfášová & Slosiarik, 2020; Lysek, Zvada, & Škop, 2020). Similarly, a lower social status (in the form of lower education and lower income) was observed among the voters of Donald Trump as both a conservative and a populist candidate (Obschonka et al., 2018).

Big Five Factors across the Left-Right and Liberal-Conservative Dimension

The importance of four out of five personality factors (with Extraversion being the usual exception) when explaining the variance in the left-right continuum was probably the most surprising finding. Weak but significant predictions of Open-Mindedness (negative) and Conscientiousness (positive), as well as Negative Emotionality (negative) with the left-right scale, were reported by Fatke (2017). However, the fact that Agreeableness is the strongest predictor of the Big Five is a surprising finding. The most likely explanation lies in the questionnaire used to measure the left-right orientation – Scale of Equality (Smetáčková & Komárková, 2017), which uses statements such as "Society should protect less capable people who lack the necessary skills to succeed". Such questions could indeed be close to how compassionate/agreeable the respondents rates themselves. This result suggests that having a more agreeable personality could be a factor contributing to left-wing attitudes, as represented in standard questionnaires.

As for the liberal-conservative scale, the negative relationship between conservatism and Open-Mindedness is logical and theoretically, but also empirically grounded as is the positive correlation of conservatism with Conscientiousness (Jost, Glaser, Kruglanski, & Sollowey, 2003; Sibley, Osborne, & Duckitt, 2012; McCann, 2014; Xu, Soto, & Plaks, 2020). These findings support the cross-cultural importance of these two domains. Furthermore, they confirm the differences in voters' views of the traditional left-right and liberal-conservative axes (Aspelund, Lindeman, & Verksalo, 2013; Kivikangas, Lönnqvist, & Ravaja, 2017), which are certainly related to different predictor variables.

Latent Variables and Their Predictors

In general, the correlations of factors obtained by EFA with the traditional axes (Table 3) correspond with the political reality in Slovakia. The new government (at the time of data collection) was formed by center-right parties. The second factor captures the more conservative parties, but the correlation of this factor with conservatism is not strong enough to be the only explanation. The correlation of the third factor (preference for a non-populist coalition) with traditional axes is very weak, as these parties do not share any specific values other than their opposition to Smer-SD as the long-standing ruling party and to the socially conservative parties in the new government.

Factor 1: Sympathy towards the New Government

The strongest factor elegantly divided parties according to whether they were part of the government coalition (without Sme Rodina, but with PS as a party without parliamentary representation) or were in the opposition. Although the Covid-19 pandemic and the war in Ukraine occurred after the data collection,

they further highlighted the power of this factor. The government parties and PS leaned towards vaccination and support for Ukraine, while the opposition parties questioned both the importance of anti-pandemic measures and the support for the defense of Ukraine.

A similar result can be seen in the analysis by Todosijević (2002) in former Yugoslavia. At certain times in the short history of independent Slovakia, a strong attitude against a hegemonic ruling party emerged. Vladimír Mečiar's HZDS at the end of the 1990s was an example of this sentiment (Szabó & Tátrai, 2016), while a more recent manifestation was Robert Fico with his Smer-SD until the 2020 election. From a broader perspective, this factor can be explained as a split between those in favor of social change versus those in favor of maintaining the status quo. One should also bear in mind that the political attitudes of individuals are strongly linked to the attitudes of their close friends and relatives (Facciani & Brashears, 2019). These are often people of a similar age, social status, educational attainment or Open-Mindedness.

Factor 2: Inclination to Social Conservative (Populist) Parties

The second factor integrates the socially conservative parties that were in opposition to the previous government – OĽaNO, Sme Rodina and KDH. The first two are considered to be populist (Chytilek, 2019; Lysek, Zvada, & Škop, 2020) and Alojz Hlina, the leader of the Christian Democrats in the 2020 election campaign, also used more populist rhetoric than is typical for this traditional party. The absence of strong demographic predictors is in line with the analysis by Lysek, Zvada, and Škop (2020), who spoke of a form of "centrist populism" in OĽaNO and Sme Rodina. Centrist populism is not aimed at specific voters, but appeals to all dissatisfied voters.

Obschonka et al. (2018) stressed the role of Negative Emotionality when populism comes to the fore. The strength of this factor in our analysis is too small to confirm this in Slovakia, although it is the only significant predictor among the Big Five traits. This factor may seem rather indistinctive. We believe that OĽaNO and Sme Rodina could be conceptualized as being halfway between the previous and the new government, but votes for them were not a clear vote for a change in social values and the style of politics. Many similarities became apparent after only a few months in government. Ultimately, sympathies for these parties are not connected to any particular feature, since some voters were attracted more by the promise of a general change, some by conservative tendencies and some by the populist narrative. Therefore, the typical socio-demographic and personal profile of these voters is hard to define.

Factor 3: Preference for Non-Populist Smaller Parties

The third factor – "Preference for a non-populist coalition" – brings together smaller parties around the center of the left-right political spectrum (SaS, Za ľudí, PS, KDH, & MKO-MKS), both conservative and liberal. Again, the opposition to the long-ruling Smer-SD is what they have in common, this time without the populist rhetoric as seen in the previous factor. Gender, age, and ethnicity only present weak predictors; other demographic factors do not seem to matter at all, contrary to the analysis by Gyarfášová and Slosiarik (2020) and Lysek, Zvada and Škop (2020), who saw a higher level of education in the voters of these parties. Conscientiousness, Negative Emotionality and Open-Mindedness are weak but significant predictors. This corresponds to McCann's (2014) conclusions on these factors as the main difference between Democratic

and Republican candidates. Indeed, we see a similarity between the Democratic Party in the US and the imaginary coalition that might be built from the aforementioned Slovak parties: they show a relative lack of populist rhetoric, acceptance of ethnic minorities and preference for pragmatic solutions. Unlike conservatism, neither the association with populist attitudes and traits nor the definitions of populism itself are conclusive across different countries (Kenny & Bizumic, 2020). Therefore, the direct use of the measure of populist attitudes and sympathy for populist parties should be considered to shed light on these factors.

The main limitations of this study are the large differences between self-placement on the left-right axis and its measured rate in relation to the Big Five traits. Additionally, the sample quality was somewhat weakened by the partial use of a snowball recruitment technique, which meant that the representation of the voters of the individual parties did not correspond to the situation at the time of the research – especially with regard to the lower proportion of Smer-SD or ĽSNS voters.

Conclusion

In the present paper, we aimed to investigate whether the use of a different approach to the measurement of political dimensions can provide new insights into the relationship between personality traits and political orientation among Slovak voters. Alongside the two standard political dimensions used in the study, we identified three latent political dimensions: sympathy towards the new government, inclination toward socially conservative populism, and preference for non-populist smaller parties. Depending on the dimension, the Big Five were able to predict from 0 to almost 8% of political orientation dimensions. We confirmed the key role of Conscientious-

ness and especially of Open-Mindedness, which was the significant predictor in four of the five political dimensions and the strongest in two of them. Agreeableness also showed an unexpected association with left-right orientation. However, both the standard and latent political dimensions were only weakly explained by the Big Five personality traits. The main conclusion of our study is that this way of approaching political variables (either the traditional dimensions or the latent variable approach) did not yield a stronger relationship between political orientation and the Big Five model.

The future direction of research on the relationship between personality and political orientation should focus not only on general personality models, as was the case in our study, but also on special models of socially relevant traits such as the dark triad and others. In addition, Schwartz's concept of values (Schwartz et al., 2010) seems to be more appropriate as regards the perception of politics compared to the general trait model.

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