



THE INFLUENCE OF EDUCATION ON HUNGARIAN ATTITUDES TOWARDS IMMIGRATION

Attila NAGY and József DÚRÓ¹

In recent years, immigration has become a focal point in political science, prompting a substantial body of literature. This study seeks to contribute to the discourse by investigating the impact of education (X) – an influential socio-demographic factor – on attitudes towards immigration (Y) in Hungary. To qualify the results, the influence of political alignment and key socio-demographic factors – including gender, age and religiosity –, are analysed as control variables. The study also considers how political alignment, and age may interact with education to shape these attitudes. Results from multiple linear regression models indicate that higher educational level correlates with more positive attitudes toward immigration; however, the association is conditional by political alignment and age. The study employs data from the European Social Survey (ESS), with a particular focus on Hungary during 2020-2022 (ESS-Round 10), to contribute to the understanding of the relationship between educational levels and attitudes towards immigration.

Key words: migration; education; political polarization; generational gap; Hungary.

1 INTRODUCTION

The European migration crisis of 2015 marked a pivotal moment in shaping public discourse on immigration across the continent, particularly in Hungary, a country situated at the crossroads of migratory routes in the Western Balkans. As a transit country experiencing unprecedented levels of immigration, Hungary recorded over 177,000 asylum applications in 2015 alone, surpassing the population of one of her major cities, Szeged. This surge, coupled with over 400,000 irregular border crossings reported by the European Border and Coast Guard Agency (Frontex), exerted immense pressure on Hungary's borders and significantly influenced the nation's political and social landscape.

¹ Attila NAGY is PhD candidate at Corvinus University of Budapest. Contact: attila.nagy3@stud.uni-corvinus.hu. József DÚRÓ, PhD, Department of Political Science at the Corvinus University of Budapest. Contact: jozsef.duro@uni-corvinus.hu.

In response, the Hungarian government implemented a series of stringent measures, including the construction of a physical barrier on her southern borders and the introduction of legal frameworks that criminalized irregular border crossings. These measures, along with the controversial political rhetoric surrounding them, have sparked significant debate both domestically and internationally. The crisis, and the responses of the government to it, have brought immigration to the forefront of Hungarian political life, where it has remained a contentious issue ever since. This politicization of immigration has not only polarized public opinion but has also influenced how various socio-demographic groups, particularly those with different levels of education, perceive immigration.

This study examines the role of the level of education in shaping attitudes toward immigration in Hungary, drawing on data from the European Social Survey (ESS) conducted between 2020 and 2022². Previous research (e.g. Quinley and Glock 1979; Hainmueller and Hopkins 2014; Margaryan, Paul and Siedler 2018) indicates that education is a critical factor in forming attitudes towards immigrants, with higher educational attainment generally associated with more positive perceptions of immigration. However, in Hungary's polarized politics, where immigration has become a symbol of a broader ideological division, the relationship between education and attitudes towards immigration may be influenced by additional factors, including political polarization and socio-demographic variables such as age.

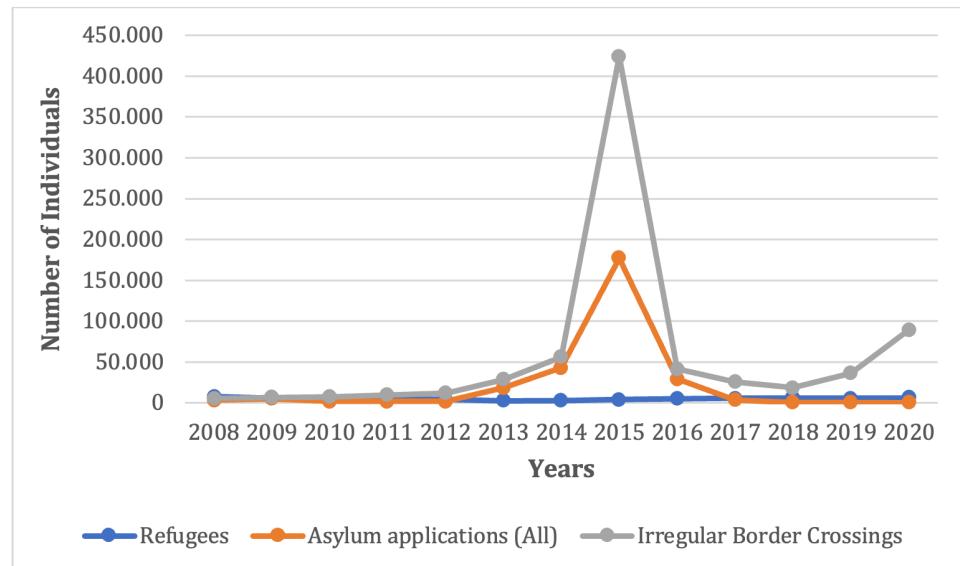
By examining the Hungarian context, this study aims to contribute to the broader literature on the socio-demographic determinants of immigration attitudes. It explores whether the general assumption that higher education correlates with more positive views on immigration is true in a country, where the political discourse around migration is particularly intense. Through this analysis, the research seeks to provide a nuanced understanding of the complexities surrounding immigration perceptions in Hungary, offering insights that could inform both academic discourse and policy development in this area.

2 THE EUROPEAN MIGRATION CRISIS IN 2015

Concurrently with the 2015 European immigration crisis, the issue of immigration became crucial in Hungary. Hungary as a transit country at the end of the Western Balkans migration route, experienced an extreme level of immigration. According to the United Nations, more than 177,000 asylum applications were registered in Hungary in 2015 alone. In addition, the European Border and Coast Guard Agency (Frontex) reported that more than 400,000 irregular border crossings were recorded this year, which is twice the second most populated Hungarian city, Debrecen (203,000 in 2015, KSH). Furthermore, Hungary was the second European country, behind Greece, to apprehend irregular migrants at her external borders (IOM 2024). The pressure on the Hungarian border increased significantly and the numbers of border crossing were skyrocketed.

² The data were collected between June and October of 2021. Authors would like to thank Gábor Sugatagi for his valuable comments on the methodology.

FIGURE 1: NUMBER OF REFUGEES, ASYLUM SEEKERS AND IRREGULAR BORDER CROSSINGS IN HUNGARY



Sources: Eurostat, Frontex, UNHCR.

In response to the crisis, the Hungarian government³ constructed a physical barrier on her southern border with Croatia and Serbia and later, Hungary designated Serbia as a safe third country, which allowed expedited asylum determination and limited procedural safeguards. Furthermore, amendments were made to the Criminal Code. In this sense, actions such as irregular border crossings, damaging the border fence and obstructing construction work have been classified as criminal offenses, which are punishable by imprisonment and may also lead to expulsion. Furthermore, during debates within the institutions of the European Union, the Hungarian government argues in favour of supporting local communities in third countries to limit mass emigration to the EU. A key example of this approach is the Hungary Helps initiative, which provides aid and assistance in developing countries and crisis areas worldwide.

The initiatives, which were adopted by the Hungarian government have been the subject of considerable criticism. Contrary to the standpoint of the Hungarian government, the European Union qualified the migrants as people of refugees instead of economic immigrants. As a result, the European Union's primary aim has been to secure international protection for the refugees and to reduce the pressure on Italy and Greece (which, at that time, experienced the highest number of arrivals across the Mediterranean Sea) by an emergency relocation programme. Even though only a modest proportion of refugees were part of the programme, a temporary relocation mechanism (2019) and further voluntary relocation programmes were adopted (Voluntary Solidarity Mechanism in 2022). The European Commission (partly under the strong pressure of the European Parliament) initiated an infringement procedure against Hungary for the non-compliance of its asylum and return legislation with the EU law, which resulted that the European Court of Justice fined Hungary 200 million euro for breaking the EU's asylum laws (Starcevic 2024).

³ For a detailed discussion on the national policy discourse and government responses to the migration crisis in V4 countries (mid-2015 to the end of 2018), see Csanyi and Kucharčík (2023).

Besides the institutional bodies of the European Union, the left-liberal⁴ opposition in Hungary also criticised the government. The issue of the migration crisis has been a key topic not only in the 2018 and 2022 national parliamentary and the 2019 and 2024 European Parliament elections campaign but also at the municipal elections (Tóth 2024). Besides the regular elections, the government initiated a national referendum against European relocation mechanism, which probably functioned as a nudge than a real referendum. While the opposition called on its voters to boycott the participation, the governing parties campaigned in favour of active participation and against the acceptance of immigrants. The results show an overwhelming majority of voters reject the EU's migration quotas; the turnout was below the required 50%. Therefore, in legal sense, the results were not considered as valid, but the referendum served as 'political jackpot', because the Fidesz-KDNP coalition could mobilize their voters and strengthen its legitimacy on issue (Bíró-Nagy 2021).

It is obvious that the migration crisis has led to a comprehensive and far-reaching change in Hungarian politics. Consequently, various studies have been conducted on this subject, covering areas such as positions of political parties or the relevance of socio-demographics factors for the perception of migration (e.g. Simonovits 2020; Gessler, Tóth and Wachs 2022; Bíró-Nagy 2021). The paper does not deal with the changes of attitudes due to the heavy anti-immigration communication of the governing parties conducting for years because this area has already been researched (e.g. Barna and Koltai 2019; Simonovits 2020; Bajomi-Lázár 2019). This study aims to focus on a specific aspect, namely, examining the impact of educational level on attitudes toward immigration. Several international publications have been released since the European migration crisis (e.g. Gallai 2020), which allows the integration of domestic results into international disciplines, thereby contributing to the advancement of future scientific understanding and the development of public policy programmes. In the following section, the main theories related to education will be presented, distinguishing between models based on economic perspectives and those grounded in cognitive thinking.

3 THEORETICAL FRAMEWORK

The general statement of economic theories is that individuals with lower level of qualifications are more likely to have negative attitudes toward immigration. The logical reasoning of the theory seems sensible: lower-qualified citizens usually experience the need to compete with immigrants on the labour market (Finseraas, Skorge and Strøm 2018). Consequently, immigrants are perceived as a potential economic threat rather than as a source of economic benefit for less educated respondents. This chain of thought correlates with the theory of dual labour market migration (Piore 1979), which argues that the labour market is segmented. In the sense of the segmentation, the primary labour market generally provides well-paid jobs for high-educated natives. In parallel, the secondary labour market which consist unpleasant and low-wage jobs for lower-educated individuals (King 2012) are preferred by immigrants, jeopardising the livelihood of natives with lower levels of education. Scheve and Slaugther's (2001) experienced that less skilled respondents are more likely to perceive immigrants as an economic risk. Furthermore, using cross-country data from the

⁴ In Hungary, since 2010 there has been a divided opposition. On the left of Fidesz, one can find several opposition parties with either left-wing or liberal profile, hence, we call them left-liberal opposition and/or left-wing parties. On the right of the government, however, there has always been a radical right party.

International Social Survey Programme (ISSP), Mayda (2006) and O'Rouke and Sinnott (2006) confirmed that individuals with higher level of qualifications are less likely to show anti-immigrant sentiments. Further value of the analysis is that the association seems more robust in the developed countries, where natives are more skilled than immigrants, than in less developed destinations.

In addition to economic related factors, the cognitive theories emphasize the relevance of the association between the level of education and an individual's cognitive abilities. Their fundamental thesis posits that higher levels of education presuppose greater tolerance and lower levels of prejudice (Quinley and Glock 1979; Hainmueller and Hiscox 2007; Van der Waal et al. 2010; Margaryan, Paul and Siedler 2018). The main argumentation of these research seems logical: formal education able to provide more developed cognitive skills to detect, understand and reject prejudice (Quinley and Glock 1979). Furthermore, more educated people might identify and correct misperceptions and misinformation (Strabac 2011). Additionally, education may facilitate the development of egalitarian values (Lancee and Sarrasin 2015), including openness and tolerance (Hainmueller and Hopkings 2014), which increase the likelihood for positive attitudes toward immigration. Moreover, education can enhance cognitive and analytical, critical thinking to be less influenced by hate speeches (Mocan and Raschke 2016). In parallel, higher level educated respondents seem to be less racist and more likely to favour multicultural diversity (Scheve and Slaughter 2001; Hainmueller and Hiscox 2007). As Finseraas, Skorge and Strøm (2018) concluded, cognitive framework theorists suppose a positive association between education and liberal views of immigration.

Although the results indicate that the association between educational level and anti-immigrant sentiment is evident, some results have shown that the significance of education, as well as the underlying explanatory theories, are subject to debate. One of the remarkable findings that makes the associations questionable relates to the results of Dustmann and Preston (2007). The authors identified the welfare concerns, labour market concerns, and racial-cultural prejudices as factors that can influence attitudes toward immigration. The findings indicate that the consideration of welfare is the most significant factor in the formation of anti-immigration sentiments among those with higher levels of education. In contrast, racial and cultural prejudices appear to be the dominant influence among those with lower levels of education. These findings challenge the commonly held assumption that labour market concerns would be a more prominent factor among less educated respondents. Besides the already mentioned explanatory factors, d'Hombres and Nunziata (2016) highlighted the significance of spatial dimension. Using data from the ESS, they focused on 12 European countries⁵, and find that the positive effect of education on pro-immigration attitudes ranges from 6 to 11 percentage on average, which shows that the European countries differ significantly from each other. Based on the argumentation of spatial dimension, it seems logical to look at the level of education by country rather than in general terms. A similar conclusion was reached by Margaryan, Paul and Siedler (2018).

Some researchers have employed a comparative approach to assess the impact of the education system by examining the periods before and after of educational reforms (Finseraas, Skorge and Strøm 2018). However, these studies find no evidence of the effect of the education reforms on attitudes toward immigration, but the authors point out a useful assumption by drawing our attention to the

⁵ Belgium, Denmark, Germany, Finland, France, Greece, Italy, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

effects that may vary according to the educational qualification. In methodological terms, the impact of education is gauged often by the number of years spent in formal education (e.g. Sík, Simonovits and Szeitl 2016; Margaryan, Paul and Siedler 2018). However, analysing the effect of educational level by qualifications seems more sensible than measuring it by years (Finseraas, Skorge and Strøm 2018). It can be reasonably assumed that years of education are an indicator of qualifications; however, they would serve as an extremely weak indicator. On the one hand, years in education can result in different qualifications from country to country – notwithstanding their efforts to harmonise their educational systems (see European education systems). On the other hand, qualifications are the real outcomes of education, whereas years are only the temporal dimension of the phenomena.

This research aims to answer the question of whether the educational level has an impact on attitudes toward immigration in Hungary. Based on the existing literature, we hypothesise that higher levels of education are associated with more positive attitudes, while lower levels are linked to more negative perceptions. However, given the different sociodemographic aspects and the high degree of political polarisation in Hungary, other explanatory variables may also moderate the effect of educational attainment. Furthermore, we assume that people with lower level of financial security will be less tolerant toward immigration, while financial stability assumes openness toward immigrants.

4 DATA AND RESEARCH DESIGN

To examine the effect of educational level, the research uses the most recent data from the European Social Survey (ESS), covering the period of 2020-2022 (Round 10). The sample size of the Hungarian respondents is 1849 (N). The analysis employs multiple linear regression to find answer to the research question. The dependent variable is a scale (immigration), which was constructed on responses to attitudes towards immigrants from outside Europe, as well as opinions on the economic, cultural, and general aspects of immigration⁶. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for the factor analysis is 0.799. According to Kaiser (1974), this value falls within the 'middling' range, indicating that the sample size and the partial correlations among variables are adequate for factor analysis. To measure the internal consistency of the scale variable, Cronbach's alpha was calculated, yielding a result of 0.834. A Cronbach's alpha of 0.834 indicates a high level of internal consistency, suggesting that the items comprising the scale variable are reliably measuring a single underlying construct (Taber 2017). The constructed scale is an approximately normally distributed variable (Mean: 0, Standard Deviation: 1, Skewness: 0,005, Kurtosis: -0,428). More positive values indicate more stronger acceptance.

The primary independent variable is the educational level. As we reflected in the literature review, we examine education not in terms of years spent in the educational system, but rather according to educational level. The ESS features a variable related to the highest educational level completed by the respondents (edlvdadu). The variable originally consists of 14 levels, however, to facilitate the

⁶ The scale is constructed from the following variables (ESS): (1) Should many or few immigrants of a different race/ethnic group from the majority be allowed (imdfetn)?; (2) Should many or few immigrants from poorer countries outside Europe be allowed (impcntr)?; (3) Is immigration bad or good for the country's economy (imbgeo)?; (4) Does immigration undermine or enrich the country's cultural life (imueclt)?; and (5) Do immigrants make the country a worse or better place to live (imwbcnt)?

analysis, it has been reduced to four main categories. In this sense, educational levels are categorized as follows: primary school up to 8th grade (1), vocational education (2), secondary education (3) and tertiary education (4). To test the theories of economic models, the analysis includes economic related variables. Considering that, economic and financial well-being can have different measure based on individual consumption and needs, the research uses the variable related to feeling about the household's income of the respondents (hincfel). Besides that, we categorized respondents by their occupation (isco08), following the categorization of the European Union (Eurofound 2024). In this sense the levels of the variables are the following: high skilled white collar (ISCO codes 1-3), low skilled white collar (ISCO codes 4-5), high skilled blue collar (ISCO codes 6-7) and low skilled blue collar (ISCO codes 8-9). Because of the Hungarian elite's political polarization relating to immigration, we analyse the relevance of the political left-right scale as well (lrscale) and the effect of political interest level (polintr). Beside the independent variables, the research considers the influence of general sociodemographic factors as well, as a result religiosity (scale⁷), gender, age and domicile area also included. Because Roma people are the most remarkable ethnic minority in Hungary (KSH 2022) and their social integration is a recurrent feature of political parties' communication and strategies, we examined whether being Roma in Hungary could lead different results.

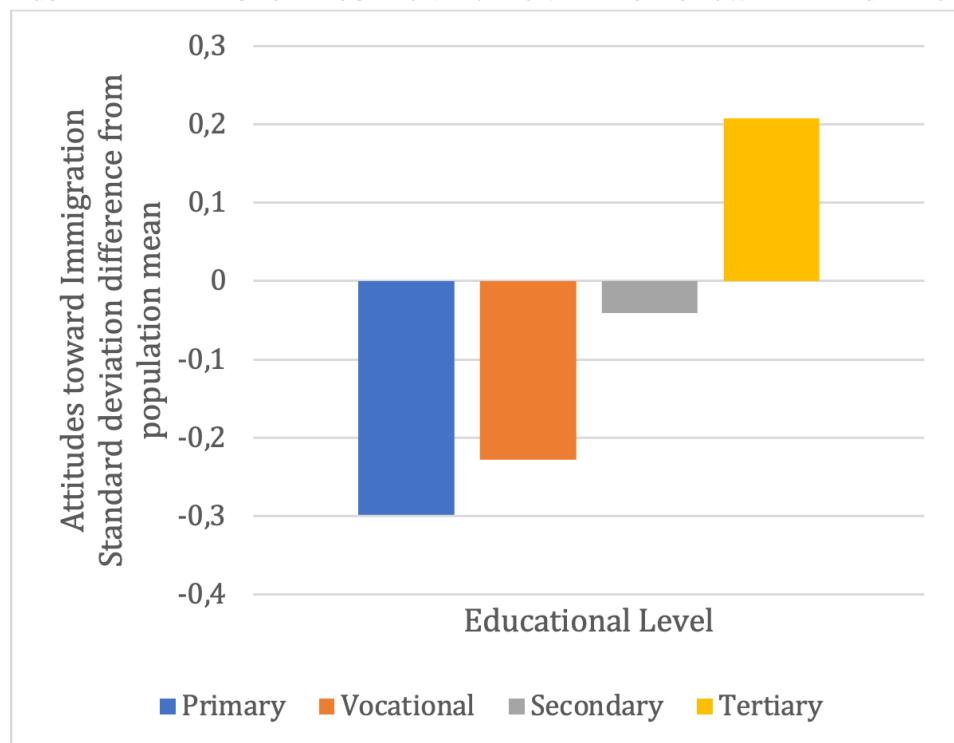
The current analysis is built up by three different explanatory models: the first model focuses on the explanatory effect of different educational level of respondents. However, we assume that the relevance of education level may moderated by the different level of political polarization and age. To capture the combined effects, the two further explanatory models are introduced. While the second model combines the effect of educational level and the political polarization (lrscale), the third one focuses on the interaction between educational level and age (agea). All the three models take general socio-demographic aspects into account. This approach helps to identify how the impact of educational attainment varies depending on political alignment and age, providing a more nuanced understanding of the data. Furthermore, during the evaluation, it is crucial to note that for ordinal variables (domicil, education and occupation), different references values were designated. In this sense the smallest domicile (village), the highest educational level (tertiary) and low-qualified blue-collar workers represents the reference values, so the results of the given variable effect must be interpreted by the deviations from these attributes. This is also applied to the interaction variables, where the reference value is the highest level of educational attainment.

5 RESULTS AND ANALYSIS

The findings of the analysis indicate that responses of the Hungarian participants align with the international results. In this sense, people with higher level of education tend to have a more positive attitude towards immigration. While those with primary or vocational education were the most likely to reject immigration, respondents with a secondary education tended to hold neutral views, and those with higher education predominantly showed a positive stance. The results show a high level of significance (p -value < 0.001).

⁷ Chronbach's Alpha: ,807; KMO: ,729, Mean: 0, Standard Deviation: 1, Skewness, 0,404, Kurtosis: 0,117. Approximately normally distributed variable. The more religious the respondent, the higher the value.

FIGURE 2: THE IMPACT OF EDUCATION LEVEL ON ATTITUDES TOWARD IMMIGRATION



Source: Own calculations based on ESS10.

Regarding the general socio-demographic factors, religiosity, age and the type of domicile showed significance. The more religious the respondents claimed to be, the more likely they were less tolerant toward immigration. Similarly, older respondents tended to show less tolerance. Regarding the settlement type, those living in small rural areas and suburban regions exhibited a more negative attitude towards immigration, whereas respondents from small towns and larger cities had a more positive stance. The results presumably related to the fact that people living in larger cities are more likely to have experience with people from other cultures in their everyday lives.⁸ Moreover, voters of the anti-immigration Fidesz are overrepresented in rural and suburban regions compared to the national average. Furthermore, the analysis indicates that gender, ethnicity and feelings about household's financial stability do not show significance. Latter finding seems particularly interesting, because it does not support the theory that individuals who feel financially insecure their everyday life more likely to oppose immigration. Besides that, the control variable that includes occupations shows that high skilled white-collar workers are less tolerant toward immigration at all, than people with lower skilled occupation.

⁸ The analysis does not show significant interaction between place of residence, level of education and attitudes towards immigration.

TABLE 1: STANDARDIZED REGRESSION COEFFICIENTS ACROSS MODELS WITH INTERACTIONS FOR LEFT/RIGHT-WING ALIGNMENT, AGE, AND EDUCATIONAL LEVEL

	Model I.		Model II. (Interaction: Left/Right-wing alignment and Level of Education)		Model III. (Interaction: Age and Level of Education)	
	Standardized Coefficients, Beta	Sig.	Standardized Coefficients, Beta	Sig.	Standardized Coefficients, Beta	Sig.
(Constant)	1,728		1,887		2,274	
Religiosity	-0,124	***	-0,129	***	-0,125	***
Placement on left right scale	-0,186	***	-0,265	***	-0,184	***
How interested in politics	-0,092	***	-0,089	***	-0,095	***
Gender	0,021	-	0,017	-	0,017	-
Age	-0,399	**	-0,400	**	-0,620	***
Age^2	0,329	-	0,331	-	0,377	**
Big city (ref: village)	0,144	***	0,144	***	0,148	***
Suburbs or outskirts of big city (ref: village)	-0,036	-	-0,038	-	-0,036	-
Town or small city (ref: village)	0,112	***	0,112	***	0,113	***
Ethnicity (Roma)	-0,041	-	-0,041	-	-0,043	-
Educational Level: Primary (ref: tertiary)	-0,194	-	-0,340	***	-0,327	***
Educational Level: Vocational (ref: tertiary)	-0,216	***	-0,372	***	-0,539	***
Educational Level: Secondary (ref: tertiary)	-0,127	***	-0,164	-	-0,425	***
Financial stability	-0,041	-	-0,037	-	-0,044	-
Occupation: High-educated, white collar (ref: low-educated, blue collar)	-0,119	***	-0,120	***	-0,116	***
Occupation: Low-educated, white collar (ref: low-educated, blue collar)	-0,055	-	-0,054	-	-0,055	-
Occupation: High-educated, blue collar (ref: low-educated, blue collar)	-0,004	-	-0,006	-	-0,005	-
Interaction: primary school * Left/Right-wing alignment			0,159	-	-	
Interaction: vocational * Left/Right-wing alignment			0,176	*	-	
Interaction: secondary school* Left/Right alignment			0,042	-	-	
Interaction: primary school * Age			-		0,206	*
Interaction: vocational * Age			-		0,374	-
Interaction: secondary school* Age			-		0,327	-
p-value: * p < 0,1 ** p < 0,05 ***p < 0,01						

Source: Own calculations based on ESS10.

We do not argue that economic theories are failed in Hungary, but they seem less relevant than political identities and other socio-demographic factors. However, due to the strict governmental restrictions, the number of accepted asylum applications (refugee status) were relatively low in Hungary (see Figure 1), which indicates that most workers have not had any direct experience with the economic effects of immigration. The direct economic impact could not develop even by the undetected irregular border crossings, as most immigrants consider Hungary a transit country. Thus, workers did not experience any wage pressure or did not lose their job in wide range, which explains the lack of strong correlation between economic factors (financial security, occupation) and opinions about immigration.⁹

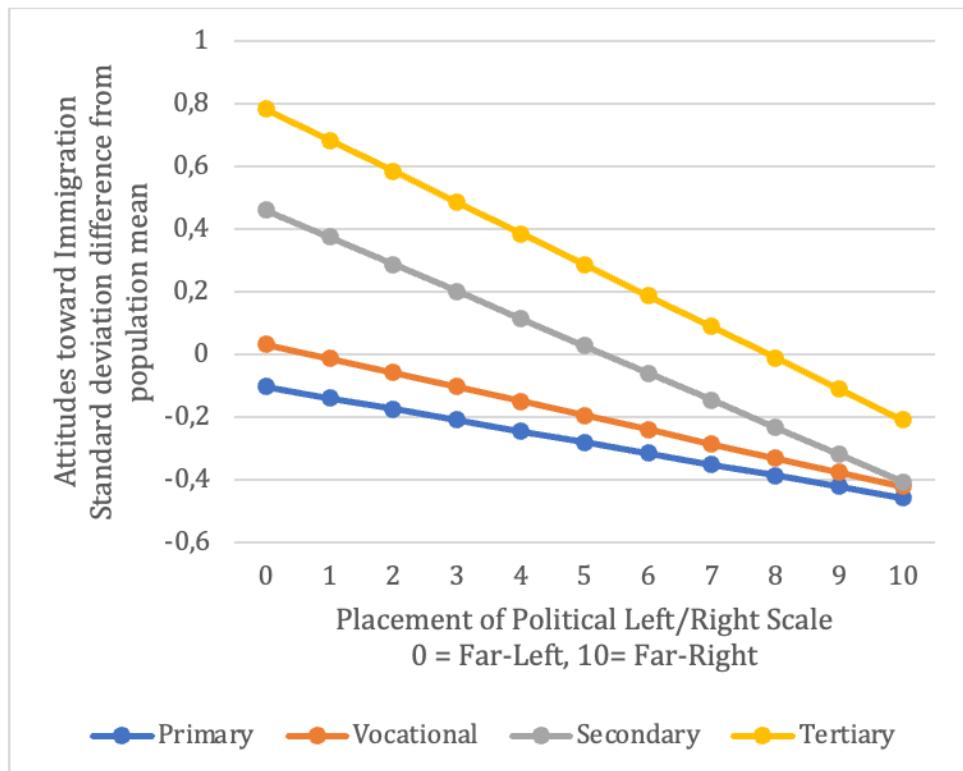
⁹ It is important to note that the presented data were collected between June and October of 2021. Since then, because of the increasing labour shortage, the Hungarian government has changed its immigration policy and signed strategic partnership with foreign governments, which caused that approximately 120 thousand (blue-collar) foreign workers had been registered primarily from the Western Balkan and the Far-East countries in Hungary that by early 2024. The new

The immigration-related political discourse has become a constant part of everyday life. As the Hungarian society is politically polarised (Enyedi 2016), we assume that the association between educational level and attitudes toward immigration is significantly influenced by political aspects, instead of economic considerations. Traditionally, the Hungarian political left symbolises the cultural openness and tolerance toward globalism, while political right emphasizes the relevance of national based paradigm. The political elite also demonstrates a clear divide on the issue. While the political left, led by the Democratic Coalition, advocates for joining the refugee quota system and urges to dismantling both legal and physical border barriers, the political right—including the right-wing opposition parties and movements — collectively rejects the acceptance of irregular, mass immigrants.

The division of political elite reflects on the respondents' attitudes as well. As the Table 1 shows, those who identify themselves on the political left shows higher level of acceptance toward immigration, while respondents on the political right reject more the immigration. However, the political polarization modifies the degree of explanatory effects. As Figure 3 shows, the previously presented association between educational level and attitudes toward immigration is conditional, as it is intersected by the political polarization (and the respondents' place on the left-right scale). In this context, belonging to the political left enhances the higher acceptance levels among those with higher educational level (secondary, tertiary), and reduces the degree of anti-immigrant sentiment among those with lower education (primary, vocational), nearly neutralizing the previously presented negative attitudes. Nevertheless, the results can be observed primarily among those with higher education levels, as the effect appears to be less pronounced among those with lower education levels, presumably because they interpret the left-right scale less consciously. However, as one moves toward the right end of the political spectrum, it becomes increasingly evident that anti-immigration sentiment intensifies. On the political spectrum, support for immigration decreases as one move from left to right. Notably, the reduction in support is the most significant among those with high education (tertiary), where a shift can be observed from a high level of support to strong rejection. Besides that, those who identify themselves as political right-wing and possess lower educational qualifications (vocational or at most primary education) exhibit the highest level of rejection. On the left end of the political spectrum, the highest level of support is observed among individuals with the highest education (tertiary), indicating that the most significant shifts in attitudes occur among the highly educated.

labour policy rose political tension, and the Hungarian radical right party, Our Homeland (Mi Hazánk) launched a campaign to 'protect' the Hungarians workplaces. These chains of changes could serve as steady base for increasing relevance of economic factors in the future, which might be observed in the following ESS rounds.

FIGURE 3: THE IMPACT OF THE LEFT-RIGHT SCALE AND LEVEL OF EDUCATION ON ATTITUDES TOWARD IMMIGRATION



Source: Own calculations based on ESS10.

By analysing party preferences¹⁰, a similar pattern can be observed at the voters' level. As illustrated in Table 2, there are notable differences among the supporters of various parties, particularly between those who align with right-wing parties (e.g., Fidesz-KDNP, Our Homeland) and those who are engaged to left-wing parties (e.g., DK, MSZP, Momentum). Respondents who identified with the political right primarily expressed support for right-wing parties, whereas those identifying with the left predominantly aligned with left-wing parties. Examining the responses it can be observed that Fidesz-KDNP has the most right-leaning voter base, followed by Our Homeland and Jobbik. In contrast, voters of the Democratic Coalition, the Hungarian Socialist Party and the Momentum identify themselves as more left-leaning. Meanwhile, the eco-political parties, such as the Dialogue for Hungary and the Politics Can Be Different, the communist Hungarian Workers' Party, and the Hungarian Two-Tailed Dog Party—which has been labelled a “joke party”—are positioned more towards the centre of the political spectrum.

¹⁰ Party affiliation is measured by ESS through participation in the most recent election (prtvtghu for Hungarian respondents, N=1034). However, this question in ESS10 refers to the parliamentary elections held in April 2018, while the survey was conducted between June and October 2021. Between the 2018 election and the survey period, party preferences may have shifted. Consequently, it seems logical to take into consideration an alternative variable that also captures respondents' party affiliation. In 2021, ESS measured party affiliation by asking the respondents, which party felt closest to (prtclhhu for Hungarian respondents, N=660). To increase the sample size and improve power, the analysis combined responses from both variable (N=1103). In this approach, the primary variable is measured by party proximity (prtclhhu). However, in cases of missing responses, the analysis assumes that party affiliation remained unchanged, and thus, votes in the last election (prtvtghu, 2018) became applied.

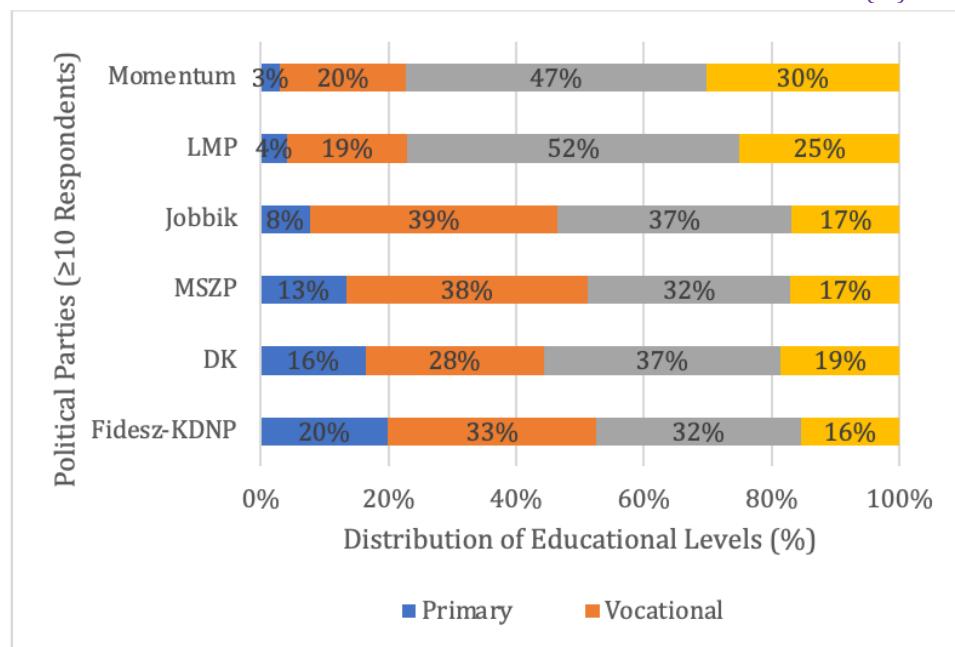
TABLE 2: ATTITUDES TOWARD IMMIGRATION BY PARTY AFFILIATION AND LEFT-RIGHT IDEOLOGICAL POSITION

Party	Mean	N	Std. Deviation	Left/Right Scale (0=Left, 10=Right)
Our Homeland	-0,2181	8	0,4859	7,00
Fidesz-KDNP	-0,1122	546	0,9520	7,40
Jobbik	-0,0586	137	1,0153	6,93
PM	0,0798	5	0,6578	6,00
LMP	0,1978	47	1,0108	3,90
DK	0,2693	130	0,8597	3,11
MSZP	0,3484	76	0,6542	2,60
Workers' Party	0,4074	4	0,7894	4,60
Momentum	0,4635	61	0,9081	3,53
MKKP	0,7770	5	0,3599	5,33
Other	0,2795	5	1,0623	3,40
Total	0,0345	1024	0,9445	5,99

Source: Own calculations based on ESS10.

Based on the mean values, respondents' party preferences show a correlation with their attitudes toward immigration. Those individuals who express sympathy for left-wing parties tend to exhibit a more positive stance towards immigration, whereas those who are aligned with right-wing parties generally adopt a more negative perspective. Nevertheless, the findings should be interpreted with caution for parties that have a low response rate. By focusing on parties with a minimum of 10 respondents, the association demonstrates more reliable findings. According to the average values, voters of Fidesz-KDNP assess immigration negatively (-0.1122). Controversially, voters from DK (+0,2693), MSZP (+0,3484) and Momentum (+0,4635) demonstrate greater support for immigration. Overall, based on the average values, it can be concluded that voters who sympathize with left-wing parties tend to support immigration, whereas individuals associated with right-wing parties are more likely to oppose it.

By examining the level of education of respondents, Figure 4 shows that the lowest educational level can be observed among those who preferred the governing Fidesz-KDNP. According to the analysis, one in five respondents, who are affiliated with Fidesz-KDNP stated that their highest educational level is primary school. However, most supporters of the party have completed either vocational (33%) or secondary (32%) education. In parallel, the proportion of individuals with tertiary education is relatively low (16%). Meanwhile, supporters of DK, MSZP and Jobbik are more likely to obtained vocational (28-39%) or secondary (32-37%) educational level. In their cases, comparing to the governing Fidesz-KDNP, the proportion of individuals with primary educational level is notably lower (8-16%), but the percentage of those with higher education is slightly higher (17-19%). In contrast, in the case of Momentum, the highest proportion of individuals with tertiary education can be observed (30%), while the percentage of those with at most a primary qualification is the lowest (only 3%). Beside Momentum, LMP also has a significantly higher support among individuals with tertiary educational level (25%). In the case of LMP, the proportion of respondents with only primary educational level is also low, (4%) while the numbers for those with vocational (19%) or secondary (52%) qualification are higher.

FIGURE 4: EDUCATIONAL DISTRIBUTION BY POLITICAL PARTY AFFILIATION (%)¹¹

Source: Own calculations based on ESS10.

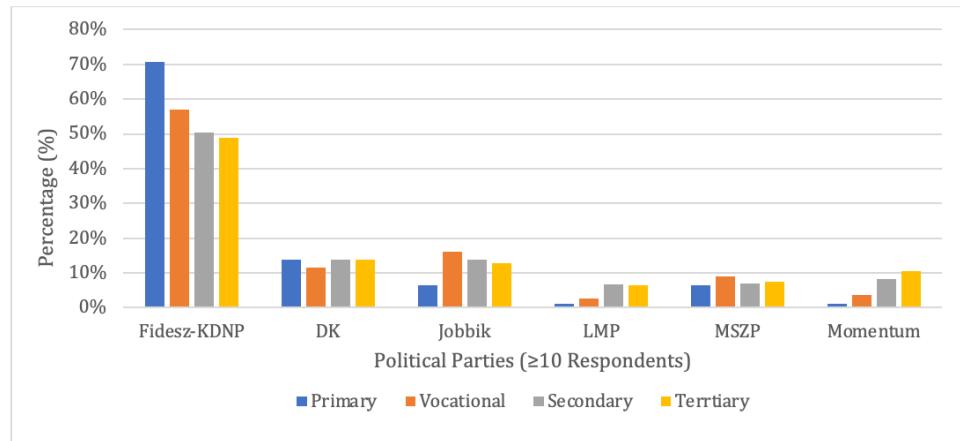
However, as Figure 5 shows, the distribution of educational levels by parties is asymmetric. It seems evident that regardless of educational level, the governing Fidesz-KDNP receives the highest support. The parties' popularity is most pronounced among individuals with lower educational qualifications: 71% of respondents with primary educational level indicate their support for Fidesz-KDNP. The extent of popularity for the governing parties within this subpopulation is further illustrated by the fact that the remaining 30% of support is distributed among the five other parties. Furthermore, a similar pattern can be observed among respondents with vocational (57%), secondary (50%) or tertiary qualification. Besides that, support for the other parties does not reach the 20% within any educational subgroup. However, the most balanced distribution is observed in the case of DK, while Momentum demonstrates a stronger inclination towards supporters with a tertiary educational level.

As the results show, an association between educational level and party identification can also be observed at the level of party affiliation. Although not the primary focus of this research, it is important to emphasize that the causal relationship between party preferences and attitudes toward immigration is a widely debated topic. Based on the presented findings, the question arises as to whether education has a direct effect on both party affiliation and attitudes toward immigration independently, or whether education influences party affiliation, which indirectly shapes respondent's view on immigration. While the current findings confirm former research, which argues that the support for anti-immigrant Fidesz-KDNP is strongly associated with individuals of lower educational level, the causal link between party preferences and attitudes toward immigration across educational levels cannot be examined based on the survey utilized.¹²

¹¹ Figures might not equal 100% due to rounding.

¹² Besides educational level, party affiliation and attitudes toward immigration, content consumption may also serve as a further explanatory factor. Although ESS examines respondents' political content consumption in terms of extent (nwspol), it does not address the question of what specific news content is consumed by the respondents for political information purposes. To conduct a reliable analysis of the causal relationship among party preferences, media

FIGURE 5: DISTRIBUTION OF EDUCATIONAL LEVELS AMONG POLITICAL PARTY AFFILIATES¹³



Source: Own calculations based on ESS10.

Besides the intersecting effect of political polarization, we observed a non-linear, U-shaped association between age and attitudes toward immigration. The results confirmed the key role of educational levels in shaping attitudes toward immigration: higher qualifications generally correlating with more positive attitudes. However, as the Figure 6. shows, this is mostly evident in younger age groups, where the disparity between tertiary education individuals and other is most observed. As age increases, the influence of educational level diminishes, but attitudes converging across different educational levels. In parallel, individuals with primary education show the most negative attitudes, and this sentiment intensifies with age, reaching the lowest point around 60. Those whose highest qualification is vocational or secondary are relatively neutral compared to the primary and tertiary groups. The positive attitudes decline with age, although the decline is less steep compared to the tertiary group. Notably, the trend changes and vocational education tends to show a small uptick in positive attitudes after 60, suggesting an age-related shift in perspectives¹⁴. Among other factors, this can be explained by retirement: respondents may perceive immigrants less as a labour market risk, which could lead to an improvement in attitudes toward them.

The effect of age can be explained by several factors. Different generations may have received varying levels of education, which could influence their views. According to Eurostat (2024), working-age people have sharply different educational qualifications. As Figure 7. shows there is a clear generational shift in educational attainment. In this sense, younger groups more likely to achieve higher levels of education, while older age groups predominantly possess vocational one. For instance, 18% of individuals of aged 25-34 have tertiary qualification, compared to only 8.3% of those aged 55-64. In contrast, vocational attainment is the highest in the oldest group (52.7%). This difference might be explained by changes in educational policies, economic demands, or technological developments that have increased the relevance of higher education in recent decades. In general, older people have lower educational level, which can be explained by the changes in social norms: while vocational

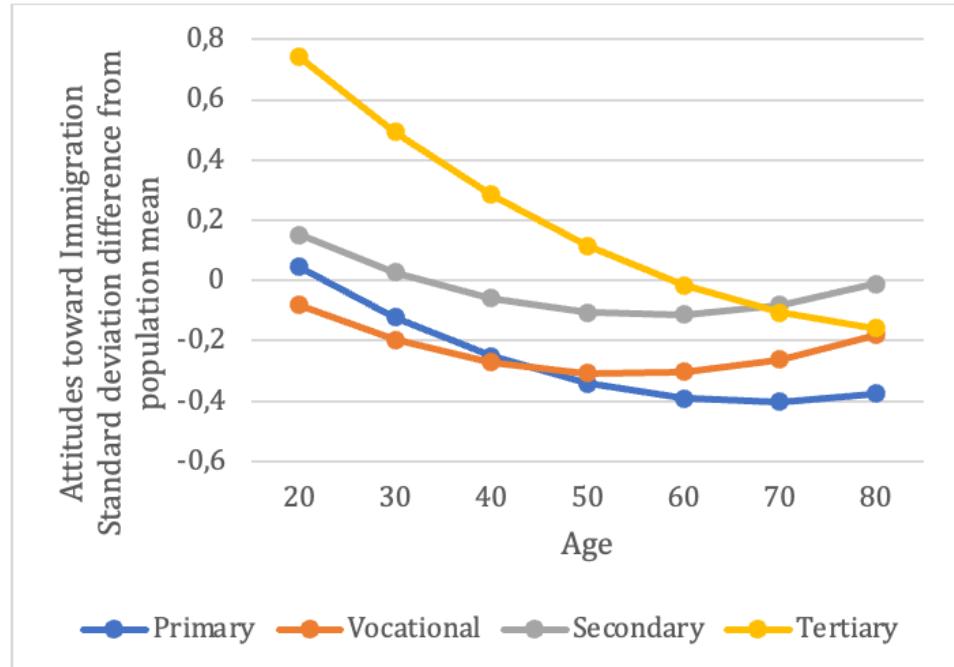
consumption, socio-demographic factors and attitudes toward immigration, a more topic specific survey would be required.

¹³ Figures might not equal 100% due to rounding.

¹⁴ For comparison, the healthy life expectancy in Hungary was 62.5 years in 2021 (male: 61.6; female: 63.5). The retirement age in Hungary is 65 years.

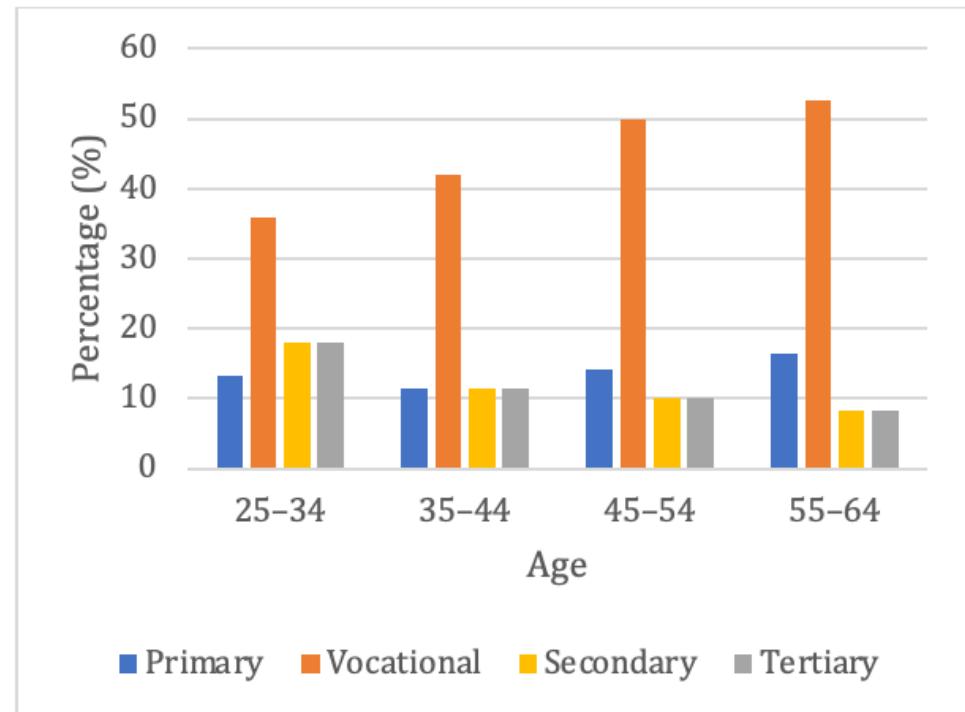
education lost its relevance for decades, initially secondary education, then tertiary one became the dominant.

FIGURE 6: THE IMPACT OF AGE AND LEVEL OF EDUCATION ON ATTITUDES TOWARD IMMIGRATION



Source: Own calculations based on ESS10.

FIGURE 7: LEVEL OF EDUCATION BY AGE GROUPS



Source: Own calculations based on ESS10.

If this is a valid assumption, it would provide support for cognitive theories, which highlight the association between the level of education and higher

cognitive skills, which may contribute to the development of egalitarian values (Lancee and Sarrasin 2015), including openness and tolerance (Hainmueller and Hopkins 2014) and anti-racist attitudes (Scheve and Slaughter 2001). Beside the educational factor, generational differences could emerge as well, due to the different experiences of various generations. Besides the educational effect, the impact of age could be explained by Inglehart's theory (1977) as well, which highlights a value-based difference between generations. Following the line of reasoning of Inglehart, younger generations, who grew up in an era with relative economic security and peace, tend to prioritize post-materialist values, like openness and tolerance. In contrast, those who were socialized in decades of shortage and conflicts, often emphasize the relevance of materialist values, such as economic and physical security. This kind of generational gap might influence attitudes toward social, political and cultural issues – even attitudes toward immigration, where low-educated older-generation are more against immigration, but higher-educated younger generation are more tolerant. Although the association is U-shaped, and positive attitudes are rising again after certain years, which is questioning the materialist/post-materialist theory's exclusive explanatory power.

Presumably, we are observing a triple effect. On the one hand, there may be a value-based generational shift which has led to a re-evaluation of the relevance of post-materialist values, as Inglehart argues. Secondly, a generational shift has occurred in the education system, whereby the demand for higher-value-added knowledge has been accompanied by an increase in the proportion of secondary and tertiary qualifications, which may contribute to greater tolerance among younger generations. Additionally, different life stage experiences (including career building, starting a family, and retirement) may also influence the judgement of immigration.¹⁵ However, based on the data presented, it is evident that there is a strong association between educational level and age, which also influences attitudes toward immigration.

6 CONCLUSION

The research confirmed the initial hypothesis that educational level can influence attitudes toward immigration: respondents with higher educational attainment tend to have a more positive attitude towards immigration, while those with only primary or vocational qualifications generally have a negative one. In parallel, individuals with a secondary education typically have more neutral attitudes. However, the explanatory power of educational level is conditional. It may vary depending on other factors such as political orientation and age.

Since in the case of Hungary, workers had only a low level of experience with foreign guest workers, economic factors seem less significant. Concurrently, the European migration crisis has increasingly evolved into a political issue in Hungary, which divided the political elite into two groups with fundamentally opposing viewpoints: while the liberal-left opposition rather supports the relocation mechanism and considers immigration as a positive factor of the European societies, the conservative right (both the governing parties and the right-wing opposition) more likely consider irregular migrations as a threat for national states. Based on the analyses, the political orientation and party influences attitudes toward immigration on the level of respondents as well: those who identified themselves as political right-wing, probably show more

¹⁵ This question requires a multi-decade longitudinal study to reach a conclusive result.

anti-immigrant sentiments than individuals on the political left-wing. Similar association can be observed regarding to political party affiliation. Fidesz being in government since 2010 politicised the issue in 2015 and has had a harsh anti-migration rhetoric since then. Hence, its voters might form their attitude towards immigration based on their party's opinion. The socio-economic factors (age, residence, etc.) of the voters of Fidesz also show similarities with those who generally have a more negative view on migration. However, analysing this question requires further.

According to the results, political alignment effects on the association of educational level and attitudes toward immigration. In this context, the more left-oriented an individual is, and the higher their educational attainment, the more positive their attitude toward immigration. In contrast, right wing-orientation shows that only those with tertiary educated have slightly negative, while others have strongly opponent attitude. Furthermore, age indicates a U-shaped association with attitudes toward immigration: younger generation of active workers have higher rate of tertiary qualifications and have more positive attitudes toward immigration, but moving toward older generations the positive attitude is decreasing, which ends with improvement of attitudes in a positive way.

Overall, we can assume that younger, higher-educated, left-wing respondents are more likely support immigration in Hungary, than older, lower-educated, right-wing respondents. Although economic considerations appeared less relevant compared to other explanatory variables, changes in the labour market conditions, as increasing blue-collar foreign workers, may intensify the significance of economic factors in the future. Furthermore, the association between education, age, party affiliation and attitudes toward immigration is probably only one component of a multi-factorial research framework, which requires multi-decade longitudinal surveying.

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VPLIV IZOBRAŽEVANJA NA MADŽARSKI ODнос DO PRISELJEVANJA

V zadnjih letih je priseljevanje postalо osrednja tema raziskovanja v politični znanosti, kar je spodbudilo obsežno in raznoliko znanstveno produkcijo. Namen prispevka je obogatiti obstoječi diskurz z analizo vpliva izobrazbe (X) – enega ključnih socialno-demografskih dejavnikov – na odnos do priseljevanja (Y) na Madžarskem. Za natančnejšo interpretacijo rezultatov so kot kontrolne spremenljivke vključeni politična usmerjenost ter izbrani socialno-demografski dejavniki, med katerimi so spol, starost in veroizpoved. Študija dodatno preučuje, v kolikšni meri politična usmerjenost in starost vplivata na raven izobrazbe. Rezultati več linearnih regresijskih modelov kažejo, da je višja raven izobrazbe statistično povezana s pozitivnejšim odnosom do priseljevanja, pri čemer pa se ta povezava pomembno razlikuje glede na politično opredeljenost in starost anketirancev. Analiza temelji na podatkih iz Evropske socialne raziskave (ESS), s posebnim poudarkom na Madžarski v obdobju 2020–2022 (deseti krog ESS), in si prizadeva prispevati k boljšemu razumevanju povezave med stopnjo izobrazbe in odnosom do priseljevanja.

Ključne besede: migracije; izobraževanje; politična polarizacija; generacijski prepad; Madžarska.