Report from the Central European Social Survey in 2021-2022
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Report from the Central European Social Survey in 2021-2022

This report summarizes the main results of the two waves of the first part of the Central European Social Survey in 2021-2022. The methodological report of the survey containing a description of the modules included in this report is available at the following link: https://inicjatywadoskonalosci.uw.edu.pl/en/actions/ii-3-5/

The main goal of the Central European Social Survey is to create a unique data resource on the societies of Central and Eastern Europe and the most important social processes taking place in this region. As part of the Central European Social Survey, two two-tiered panel studies were planned on comparable, nationwide and representative samples in Poland, Slovakia, the Czech Republic, Germany, Austria and Hungary. The study is scheduled for 2021-2025 (the first study took place in 2021-2022, and the second study is scheduled for 2025). The survey is cyclical, allowing for sequential comparisons between both surveys, as well as panel comparisons between the two waves of both surveys. The survey allows for a better understanding of regional transformations – it focuses on current social challenges (including migration, historical trauma, political radicalisation, changes in thinking about democracy, intergroup relations, forms of national identities, and attitudes toward vaccination against COVID-19). The survey is also a unique source of knowledge for researchers from many university disciplines and enables a better understanding of the processes taking place in the region. The survey is carried out in a participatory form, and contains modules selected in a competition from among proposals submitted by teams from various units of the University of Warsaw.
Attitudes toward immigration

Zuzanna Brunarska
Aneta Piekut
Sabina Toruńczyk-Ruiz

December 2023
With the growing immigration to and within Europe, examining attitudes toward people who move to our local communities is crucial to inform policies aiming to improve inter-group relations. While attitudes towards international migration and their determinants have been extensively studied, internal migration has received much less attention in Europe, and has been examined mostly in large Asian countries. In our analyses, we were interested in attitudes toward both immigrants from other areas in the same country – internal migration – and immigrants from other countries – international migration.

### Results

As we can see in Figure 1, the average attitudes toward both international and internal migration were generally positive – at the midpoint of the scale or higher. Interestingly, Poles scored the highest in attitudes to both types of migration, while Czechs scored the lowest in both measures of attitudes (though the difference in attitudes toward internal migrants between the Czechs and the Slovaks was not significant). Across the six countries, the attitudes toward internal migration were overall more positive than toward international migration. This pattern was visible in each country. However, this difference was the smallest in Poland and largest in Czechia.

An examination of the average levels of attitudes across the two waves allows us to test how attitudes toward immigration changed over the 1-year gap, during which Russia had invaded Ukraine. Data collection in Wave 2 took place around 9 months after the invasion started – so already when hundreds of thousands of Ukrainian refugees had fled Ukraine into neighboring countries, mostly Poland. We looked at attitudes among participants who remained in Wave 2 (N = 6,118). As we see in Figure 2, the overall pattern of results remained similar, indicating that the attitudes toward immigration did not change much over that time. However, there was a statistically significant, but weak worsening of attitudes among

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3 \( M = 6.12, SD = 2.10 \)

4 \( M = 5.68, SD = 2.39; t(11382) = 30.21, p < .001, \text{Cohen}'s\ d = 0.28 \)

5 \( t(1900) = 7.92, p < .001, \text{Cohen}'s\ d = 0.18 \)

6 \( t(1629) = 14.70, p < .001, \text{Cohen}'s\ d = 0.36 \)
Austrian participants towards both international\textsuperscript{7} and internal migrants\textsuperscript{8}. In addition, the Slovak participants became more negative toward international migrants\textsuperscript{9} and Hungarian participants became more negative toward internal migrants\textsuperscript{10} but these differences were very small. Meanwhile, the attitudes of Poles, Germans, and Czechs remained fairly stable between 2021 and 2022 – despite the fact that these countries hosted the largest numbers of refugees from Ukraine.

**Figure 1.** Attitudes toward immigration, Wave 1

![Figure 1](image_url)

*Note. N = 11,383. Data were weighted. Error bars represent standard errors.*

\textsuperscript{7} t(1028) = 4.15, \( p < .001 \), Cohen’s \( d = 0.13 \)

\textsuperscript{8} t(1028) = 2.90, \( p < .001 \), Cohen’s \( d = 0.09 \)

\textsuperscript{9} t(1020) = 2.20, \( p = .014 \), Cohen’s \( d = 0.07 \)

\textsuperscript{10} t(1010) = 2.18, \( p < .001 \), Cohen’s \( d = 0.07 \)
Summary

Altogether, these results show that in the six Central European countries the attitudes toward immigration were largely positive, and the recent large scale of immigration to these countries did not worsen these attitudes.
Antecedents of anti-Gypsyism in countries with high vs. low Roma population

Anna Kende
Hadi Sam Nariman
Barbara Lášticová
Mikołaj Winiewski

December 2023
Anti-Gypsyism is pervasive across Europe, with Roma people facing discrimination and prejudice in most countries. However, hostility towards them is most pronounced in countries with a high Roma population. Nevertheless, it is essential to recognize that the presence of Roma people within a country is not the sole explanation for elevated levels of anti-Gypsyism. These countries are often characterized by a high level of xenophobia and various other forms of prejudice. Additionally, they tend to have weaker egalitarian values and lower economic prosperity, which can exacerbate social welfare tensions.

In the two waves of our survey, we investigated the psychological factors underlying anti-Gypsyism while comparing countries with high and low Roma populations. Specifically, Germany, Austria, and Poland have relatively low Roma populations, accounting for less than 1% of their overall populations. In contrast, Hungary, Slovakia, and Czechia have relatively high Roma populations, estimated to be between 5% to 10% of the total population.

In Wave 1, we identified that anti-Roma prejudice is most closely associated with Right-Wing Authoritarianism (RWA).Interestingly, low levels of system-justification beliefs also predicted anti-Gypsyism. This means that a critical attitude towards the system, i.e., the idea that society needs radical transformation to function fairly and properly, was a predictor of anti-Gypsyism. Alongside right-wing authoritarianism and system-critical attitudes, a high degree of Social Dominance Orientation (SDO) was also an important predictor of anti-Gypsyism. We also found a weak but positive connection between national identity and anti-Gypsyism, suggesting that those who identify more strongly with their nation have a higher tendency to reject the Roma. This is most pronounced in societies with a high Roma population, where Roma are less likely to be considered part of the nation despite centuries of coexistence and citizenship. Taken together, these results support the idea that anti-Gypsyism is rooted in the belief that Roma people represent symbolic and tangible threats to society and that society is unable to properly address issues related to the Roma community.

In the second wave, we observed a similar pattern of, wherein Right-Wing Authoritarianism (RWA), System Justification, and Social Dominance Orientation (SDO) were linked to anti-Gypsyism across all countries. National identity remained a weak predictor of anti-Gypsyism, with significance observed only in Slovakia.

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Czechia, and Poland. Furthermore, individuals who had more frequent contact with the Roma exhibited higher levels of prejudice in all countries. However, it is worth noting that this issue was more pronounced in countries with a higher Roma population, where contact frequency was substantially greater compared to countries with a lower Roma population (refer to the figure). Importantly, the frequency of positive-quality contact had a significantly positive impact – predicting lower prejudice – but only in Hungary, Slovakia, and Czechia, the three countries with high Roma populations. This outcome validates prior research findings, suggesting that in these countries, mere contact frequency is ineffective, or it may even exacerbate prejudice. In contrast, fostering conditions for positive contact can be even more valuable, as its prejudice-reducing effect is more pronounced in these countries than elsewhere.\textsuperscript{13}

**Figure 1.** Descriptive statistics from Wave 2

![Descriptive statistics from Wave 2](image)

*Note.* National identity and Pro-Roma collective action were measured on 7-point scales, all other variables were measured on 5-point scales.

**Summary**

In summary, we identified a similar pattern across countries, suggesting that anti-Gypsyism fits a system-critical but inflexible worldview concerning social conventions and hierarchies. We also identified an important distinction in the psychological antecedents of anti-Gypsyism depending on the population ratio of Roma people. In countries with higher Roma populations and higher frequency of contact, positive contact experience may be scarce but more impactful when it comes to the psychological antecedents of anti-Gypsyism.

\textsuperscript{13} Kende A. et al. (under review): Challenging conditions for breaking the cycle of oppression of Roma people. Manuscript submitted to the European Review of Social Psychology.
Rape myth acceptance in the countries of Central Europe

Agnieszka Łyś

December 2023
Rape myths are stereotyped, prejudiced or false beliefs concerning rape, rape victims and rape perpetrators. McMahon and Farmer distinguish 5 kinds of contemporary rape myths:

- **She Asked For It**: myths related to the belief that a woman who has been raped is partially responsible for what has happened (e.g. When girls go to parties wearing slutty clothes, they are asking for trouble.)

- **She Lied**: myths related to the belief that women notoriously falsely accuse men of rape (e.g. A lot of times, girls who say they were raped often led the guy on and then had regrets.)

- **It Wasn’t Really Rape**: myths related to the belief that some forms of non-consensual sex are not rape (e.g. If a girl doesn’t physically fight back, you can’t really say it was rape.)

- **He Didn’t Mean To**: myths related to the belief that rape is a result of an uncontrolled sex drive on the part of a man (e.g. When guys rape, it is usually because of their strong desire for sex.)

- **He Didn’t Mean To (Alcohol)**: myths related to the belief that alcohol intoxication is a mitigating circumstance for a rape perpetrator (e.g. It shouldn’t be considered rape if a guy is drunk and didn’t realize what he was doing.)

In the first wave of Central European Social Survey it turned out that, similarly to the previous studies, men have a high level of rape myth acceptance than women. This difference is statistically significant.

It turned out also that people in the age group 25-34 have the highest level of rape myth acceptance. ANOVA and Bonferroni tests demonstrated that this result is significantly higher than in other age groups.

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17 men: $M = 11.96$, $SD = 4.05$, women: $M = 10.94$, $SD = 4.15$
18 $F = 175.576$, $p < .001$
19 $M = 11.96$, $SD = 4.54$
20 $F = 11.038$, $p < .001$
Moreover, it turned out that the level of rape myth acceptance differs significantly between countries\textsuperscript{21}:

\textbf{Table 1}

\begin{center}
\begin{tabular}{lcc}
\hline
 & \textit{M} & \textit{SD} \\
\hline
Slovakia & 13.23 & 4.01 \\
Czech Republic & 12.31 & 3.79 \\
Hungary & 11.86 & 4.10 \\
Poland & 11.39 & 4.27 \\
Germany & 10.72 & 4.10 \\
Austria & 9.95 & 3.68 \\
\hline
\end{tabular}
\end{center}

Bonferroni tests demonstrated that the means of all countries differ significantly between themselves.

\section*{Summary}

Data from the Central European Social Survey demonstrate that the level of rape myth acceptance may depend on gender, age and country.

\textsuperscript{21} F = 163.803, p < .001
Diverse, yet rather stable: Populist attitudes in Central Europe during times of crisis

Maciej Siemiątkowski

December 2023
The rise of populist parties in Central Europe marks a significant shift in the region's political landscape\textsuperscript{22}. The nationalist and exclusionist narratives have not only gained popularity but have become central to mainstream populist discourse. This phenomenon poses a unique and pressing challenge, underscoring the need for a deeper understanding of contemporary European sociopolitical dynamics. Populism is consistently defined as a 'thin-centered ideology,' meaning it has a set of principles but lacks the broader values, making it easily adaptable to align with other belief systems\textsuperscript{23}. At its core, populism divides society into two opposing factions: the 'virtuous common people' and the 'corrupt elites'\textsuperscript{24}. To delve into its spread from an individual-level approach, researchers developed the concept of 'populist attitudes', which reflect the personal beliefs in line with the populist narratives\textsuperscript{25}.

**Results**

The means for both waves (see Figure 1) suggested that the studied countries can be divided into two groups - first one consisting of post-communist countries (Czech Republic, Hungary, Poland & Slovakia) in which scores were higher than in established democracies (Germany and Austria). However, the analysis of variance uncovered more subtle differences. The citizens of Czech Republic obtained the lowest score of populist attitudes in the group of post-communist countries. In contrast, Slovakia was the country with the highest mean score. The aforementioned pattern of results was identical in the second wave of the survey. However, some subtle changes in between the waves were also observed: the level of populist attitudes was slightly lower in Slovakia and slightly higher in the two established democracies. Diving into the role of demographic factors in predicting populist sentiments, the regression analysis indicated the connection between populist attitudes and age, which was observed in all countries (see Figure 2). As respondents' age increased, a heightened inclination towards populist attitudes became apparent, while the role of years of education was more country-specific.

**Summary**

In concluding, the findings reveal that these sentiments are diversified across the region. The heightened prevalence of these attitudes in post-communist countries


likely reflect their historical and sociopolitical backgrounds\textsuperscript{26}. Despite recent crises, including the Russian invasion of Ukraine and the post-COVID recovery\textsuperscript{27}, the results obtained in both waves were rather similar. However, the slight uptick in established democracies cannot be overlooked.

\textbf{Figure 1.} Comparison of the mean scores for the responses on the scale of populist attitudes

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{Comparison of the mean scores for the responses on the scale of populist attitudes.}
\end{figure}

\textit{Note.} The error bars represent the 95\% Confidence Intervals.

\textbf{Figure 2.} Relationships between demographic variables and adoption of populist attitudes in the second wave

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{Relationships between demographic variables and adoption of populist attitudes in the second wave.}
\end{figure}

\textit{Note.} The graph presents the standardized regression coefficients (a longer bar indicates a stronger relationship). Gender was coded as a dichotomous variable with values of 0 - male and 1 - female. Asterisks indicate significance levels *** $p < .001$; * $p < .05$.


Attitudes toward vaccinations

Wiktor Soral

December 2023
Attitudes towards vaccinations can significantly influence the effectiveness of government programs aimed at combating infectious diseases. As recent studies have shown, the overall level of vaccine readiness is composed of several components, such as a sense of responsibility for others, trust in medical authorities, concerns about the side effects of vaccinations, and belief in anti-vaccine conspiracy theories. A comparison of the general level of vaccine readiness was conducted as part of the Central European Social Survey, using a scale that takes into account the diversity of these components.

The charts below illustrate how the level of vaccine readiness evolved in six Central European countries at the end of 2021 (Figure 1; percentage of people whose responses fell in the upper half of the response scale) and the change in readiness between the end of 2021 and the end of 2022 (right chart; percentage of people whose score in 2022 increased or decreased compared to 2021).

**Figure 1.** Vaccination readiness level at the end of 2021 in six Central European countries.
Figure 2. The change in vaccine readiness between the end of 2021 and the end of 2022 in six Central European countries

The highest level of vaccine readiness was noted in German-speaking countries (Germany and Austria), while the lowest was in Slovakia. Generally, in each of the surveyed countries in 2021, more than half of the respondents declared a high level of vaccine readiness. However, significantly, when comparing the responses (from the same individuals) from 2021 to 2022, in each country, more than half of the people experienced a decline in vaccine readiness. The largest decrease in readiness was observed in Austria – a country where the level of readiness was very high in 2021 – and the fewest decreases were noted in Poland and Germany. It is possible that the observed declines in vaccine readiness are a result of pandemic fatigue related to COVID-19.
Comparative study of readership in Central and Eastern European countries

Magdalena Paul
Małgorzata Kisilowska

December 2023
Reading is considered one of the key competences. It is one of the first things we learn at school and accompanies us in our daily lives, as well as at work. Is it possible not to read in today's world? And yet it happens that we hear that Poles read little or that reading levels are declining, or - at least - not increasing. Do Poles, and the inhabitants of Central and Eastern Europe more broadly, really read infrequently? Or, in a world of alternative forms of books (e-books, audiobooks) and an abundance of online resources, do they read differently?

Respondents were asked, on average, how often in the past three months they read paper books, e-books, listened to audiobooks, read traditional (paper) press, and read longer texts (e.g., articles, blogs) on the Internet. They gave answers on a scale: not once in the last 3 months, once a month, 2-3 times a month, once a week, several times a week, daily.

Results

Reading traditional books is one of the most widely used measures of readership. The largest percentage of Poles and Austrians reported reading paper books. They also read the most often, with 26.5% of people from Poland and 24.4% from Austria responding that they read at least several times a week during the survey period. The results of the first wave of the survey indicated that the percentage of people who did not reach for books, newspapers, or longer texts online at all, i.e., non-readers, was small - from 1.9% in Austria to 6.3% in Germany.

Table 1

<table>
<thead>
<tr>
<th></th>
<th>CZ</th>
<th>SK</th>
<th>HU</th>
<th>PL</th>
<th>DE</th>
<th>AT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paper books</td>
<td>58,0%</td>
<td>61,2%</td>
<td>65,1%</td>
<td>72,8%</td>
<td>68,9%</td>
<td>72,0%</td>
</tr>
<tr>
<td>E-books</td>
<td>21,1%</td>
<td>24,4%</td>
<td>33,8%</td>
<td>37,2%</td>
<td>36,7%</td>
<td>37,5%</td>
</tr>
<tr>
<td>Audiobooks</td>
<td>20,6%</td>
<td>20,3%</td>
<td>18,9%</td>
<td>29,0%</td>
<td>33,2%</td>
<td>24,2%</td>
</tr>
<tr>
<td>Traditional press</td>
<td>66,4%</td>
<td>69,3%</td>
<td>66,3%</td>
<td>66,2%</td>
<td>73,1%</td>
<td>81,9%</td>
</tr>
<tr>
<td>Longer texts online</td>
<td>89,4%</td>
<td>88,3%</td>
<td>91,3%</td>
<td>84,4%</td>
<td>77,9%</td>
<td>86,5%</td>
</tr>
<tr>
<td>% of people reading</td>
<td>95,6%</td>
<td>95,3%</td>
<td>96,1%</td>
<td>94,5%</td>
<td>93,7%</td>
<td>98,1%</td>
</tr>
<tr>
<td>(regardless of form)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The results of the second wave of the survey indicated that while overall the frequency of reading in the sample did not change significantly, we see that individual practices often did change. For example, 51.1% of newspaper readers did not change how often they read, but 25.9% read less often, and 23.1% read more often than they indicated in the first wave. We see the largest flows in the case of reading longer texts online - 38.1% of people read as often, 32.1% less often, and 29.8% more often.

Summary

Now that we have not only alternative forms of access to the written word but, more generally, alternative forms of access to information, reading is becoming an increasingly fluid and inclusive practice. A kaleidoscope of forms of reading facilitates access to the world of knowledge, education, culture, and entertainment for almost everyone.
Punitiveness of Society and criminal policy in six Central European countries

Paweł Ostaszewski

December 2023
Punitive attitudes of the society, opinions about crime and penalties have attracted criminological attention for many years. The most common analyses of this topic concern: condemnation of individual behaviours in violation of social norms, attitudes towards various types of penalties (e.g. death penalty, life without parole) and their increased severity.

The criminological module of the Central European Social Survey focuses on severity of penalties proposed by respondents from each of six countries for perpetrator of five selected crimes (assault of a stranger; physical domestic violence; rape of a stranger; partner's rape and non-payment of child maintenance). We compare survey results with complementary data on the severity of the penal codes and the penalties actually imposed in these countries for selected offences.

Almost 20 years after the last international victimisation survey, we can clearly see that punitive attitudes in Central Europe have slightly changed. Compared to the research conducted two decades ago, the low punitiveness of the Germans was certainly maintained. However, a certain surprise is a change in attitudes of the Austrians, who in 2004 were one of the least punitive nations. In our research, they do not differ so significantly from Poles and Hungarians, or Czechs and Slovaks. Instead, they are more punitive than the Germans.

Results

The analysis of the punitiveness of the respondents in relation to various crimes also gives us a new perspective. Physical domestic violence was assessed more severely than violence against strangers. This difference was most pronounced for Czechs and Poles, and least for Germans. Rape of a partner was seen as deserving more lenient punishment than rape by a stranger. The difference in the application of the most severe penalty of imprisonment in the cases of rape of a stranger and a partner was 10 percentage points.

However, participants from individual countries significantly varied in how severely they would handle rape by partner. The inhabitants of the Czechia, Poland and Slovakia assess such violence much more leniently than the inhabitants of Austria, Germany, and especially Hungary. Economic abuse in the form of child maintenance evasion is the least condemned of all listed offences. Here, the Czechs would judge the criminal most severely, followed by the Slovaks and the Poles. The Austrians and the Germans were the mildest in their assessments.

The punitiveness of respondents from the surveyed countries, understood as the willingness to impose a prison sentence also differed in the case of domestic
violence (the most punitive were Poles and Czechs, the most merciful were Germans).

Summary

It, therefore, appears that the punitiveness of a society is to some extent related to the severity of the country’s courts but not to the maximum penalty threat for these offences in the respective criminal codes.
Central Europe: who is afraid and who is hopeful?

Elżbieta Ciżewska-Martyńska
Bartłomiej Walczak

December 2023
We asked Austrians, Czechs, Germans, Poles, Slovaks and Hungarians what they feel when they think about the future. It turned out that their answers varied widely. While overall, Central Europeans felt hope rather than fear in 2021/2022, after months of pandemic (45.9% vs. 36.9%), individual societies differed greatly. Hope outweighed fear among Hungarians, Austrians and Germans, while fear outweighed hope among Czechs and Poles. Slovaks felt fear and hope in equal proportions. Indifference was usually declared by Austrians and Germans (29.7% and 34.3%, respectively). Indifference, on the other hand, was an infrequently chosen answer among the societies that joined the European Union in 2004. Hungarians were the most likely to declare hope about the future, while Slovaks were the least likely.

We repeated this question with a smaller sample nine months later, when countries in the region were touched by the dramatic events of the war in Ukraine and when they had already experienced an influx of refugees. This time we found that fear outweighed hope (41.20% to 40.50%, respectively). Fear orientation was the strongest among Czechs and Slovaks (57.60% and 50.80%, respectively), while it was the weakest among Austrians and Germans (21.50% and 28.40%, respectively). Germans and Austrians, however, were decidedly less optimistic about the future than they were nine months earlier. Residents of German-speaking countries were also, as in the previous wave, most likely to declare indifference to the future. Hungarians again declared most often hopeful about the future.

**Summary**

Why is it important to ask people about their feelings about the future? Because it says a lot about how they view their current situation. The future, in a sense, is already today. How we think about the future is an indication of how we measure up to the present. It can give us the strength to do so, or take it away. It may say something important about our sense of security and agency. It can also prove to be a self-fulfilling prophecy.
**Figure 1.** Comparison of the mean scores for the responses on the scale of populist attitudes
Private, public and social services in the context of sustainable transition in the transport sector

Beata Łopaciuk-Gonczaryk
Anna Nicińska

December 2023
The threats posed by ongoing climate change are particularly alarming in the context of ever-increasing air pollution emissions from the transport system, the growth of which continues unabated despite the efforts of numerous organizations, including international ones. In order to mitigate climate change, the desire to improve air quality and also to increase the quality of life in cities, particular attention is being paid to the need to replace transport using private cars in favor of transport services - public transport, shared transport modes or active mobility (e.g. urban bicycles).

We investigated car ownership and the use of transport services, analyzing the social factors relevant to these decisions. We considered the importance of perceptions of the quality of the public sector versus the private sector for the propensity to own a private car, as well as the belief that individual comfort is worth sacrificing for the good of the community when deciding to use mobility services. Both of these factors are historically conditioned and, in both cases, their intensity in society may be influenced by the experience of communist institutions and subsequent political transition.

Results

It appears that the belief that the private sector is superior to the public sector goes hand in hand with the tendency to own a car and a parking space, ceteris paribus. In contrast, the willingness to reduce one's own convenience to achieve common social goals is accompanied by the use of transport services. We have shown that the experience of communism (and its collapse) can condition social beliefs and attitudes.

People who have experienced communism, compared to their younger compatriots from post-communist countries and citizens of the other countries analysed (Austria and West Germany), tend to have a greater preference for the private over the public sphere, and at the same time a greater acceptance of the need to give up comfort for the social good, controlling for other relevant factors. This means that social policies to promote sustainable transportation should take into account the local context, both in the area of potential barriers and supporting factors.
### Table 1

<table>
<thead>
<tr>
<th></th>
<th>Private services better than public (% definitely yes and rather yes)</th>
<th>Readiness to reduce comfort (% definitely yes and rather yes)</th>
<th>Number of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>XII 2021-I 2022</td>
<td>XI 2022</td>
<td>XII 2021-I 2022</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>77%</td>
<td>72%</td>
<td>37%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>81%</td>
<td>78%</td>
<td>51%</td>
</tr>
<tr>
<td>Hungary</td>
<td>83%</td>
<td>84%</td>
<td>51%</td>
</tr>
<tr>
<td>Poland</td>
<td>83%</td>
<td>83%</td>
<td>54%</td>
</tr>
<tr>
<td>Germany</td>
<td>66%</td>
<td>67%</td>
<td>54%</td>
</tr>
<tr>
<td>Austria</td>
<td>63%</td>
<td>68%</td>
<td>45%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75%</strong></td>
<td><strong>75%</strong></td>
<td><strong>49%</strong></td>
</tr>
</tbody>
</table>

### Table 2

<table>
<thead>
<tr>
<th>XII 2021-I 2022 / XI 2022</th>
<th>Own car</th>
<th>Own parking space</th>
<th>Public transport</th>
<th>Rented bike/scooter</th>
<th>Rented car</th>
<th>Taxi/Uber</th>
<th>Blablacar</th>
<th>Sharing a car</th>
</tr>
</thead>
<tbody>
<tr>
<td>Czech Republic</td>
<td>61%</td>
<td>60%</td>
<td>23%</td>
<td>25%</td>
<td>67%</td>
<td>67%</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Slovakia</td>
<td>47%</td>
<td>49%</td>
<td>13%</td>
<td>15%</td>
<td>54%</td>
<td>57%</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Hungary</td>
<td>52%</td>
<td>53%</td>
<td>18%</td>
<td>20%</td>
<td>52%</td>
<td>55%</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>Poland</td>
<td>61%</td>
<td>62%</td>
<td>22%</td>
<td>23%</td>
<td>51%</td>
<td>51%</td>
<td>11%</td>
<td>12%</td>
</tr>
<tr>
<td>Germany</td>
<td>60%</td>
<td>71%</td>
<td>43%</td>
<td>47%</td>
<td>22%</td>
<td>22%</td>
<td>9%</td>
<td>10%</td>
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<tr>
<td>Austria</td>
<td>75%</td>
<td>77%</td>
<td>57%</td>
<td>56%</td>
<td>33%</td>
<td>34%</td>
<td>8%</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>62%</strong></td>
<td><strong>62%</strong></td>
<td><strong>31%</strong></td>
<td><strong>31%</strong></td>
<td><strong>45%</strong></td>
<td><strong>48%</strong></td>
<td><strong>8%</strong></td>
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Automation and future on labour markets - workers' perceptions

Satia Rożynek
Katarzyna Śledziewska
Renata Włoch

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The development and implementation of labour-automating technologies is reverberating through science and media. From robots to software, and up to the latest achievements in Artificial Intelligence, the number of questions regarding the consequences of these technologies for workers is growing. Research shows that automation, otherwise known as the substitution effect of technology, most often affects people with medium skills, performing repetitive work. For the highly skilled, technology remains complementary, meaning it supports them in performing their job tasks. Currently, with the rapid development of AI, the risk of task automation concerns new groups of workers, including those with high competencies. How do employees in six Central European countries perceive the impact of new technologies on the future on labour markets? What are their experiences?

In the study, we examined workers ($N = 6634$), asking about the social consequences of the implementation of technologies (Information Systems, Specialised Software, Algorithms, Robots), the perceptions of their job tasks’ automation potential, fear of job loss, and the current impact of technology on their work. We also investigated how these perceptions relate to retraining intentions.

Results

While anticipating negative consequences of automation for society as a whole, employees are less likely to perceive a threat to themselves. While one-third foresee mass technological unemployment within the next 10 years, only one in five believes that automation will affect their own professional tasks. An even smaller percentage fears losing their job in their profession (17%).

The proportion of people with a negative view of social consequences decreases with age. The same is true when it comes to assessing the potential of their own job task automation. It is the GenZ and Millennials who are most concerned about mass technological unemployment, job loss and believe that their tasks could be automated. At the same time, it is these groups that have the most exposure to technology at work. While as many as 57% of GenX and Baby Boomers do not feel any impact of technology on their work, the percentage drops to 53% among the younger generations.

Among those who have experienced the impact of technology on their work, complementarity is more often declared - technology supports the performance of job tasks, especially among highly educated people. Experiencing the substitution effect of technology was declared by 12% of respondents, with the highest percentages characterising younger generations and medium and highly skilled workers.
Interest in acquiring skills to maintain employability in labour markets is high – two-thirds of the respondents express willingness to participate in further training. This interest is particularly strong among younger individuals who are also more likely to foresee a significant impact of new technologies on the future of labour markets. The desire for further training is linked to experiencing any impact of technology on their work – whether complementary or substitutionary. Similarly, those anticipating automation of their own professional tasks are keen to participate in further training.

Figure 1

<table>
<thead>
<tr>
<th>Mass tech unemployment in the next 10 years:</th>
<th>32%</th>
<th>37%</th>
<th>31%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task automation in the next 10 years:</td>
<td>26%</td>
<td>33%</td>
<td>41%</td>
</tr>
<tr>
<td>Fear of losing job in the next 10 years:</td>
<td>17%</td>
<td>28%</td>
<td>55%</td>
</tr>
<tr>
<td>Current impact of technology on work:</td>
<td>12%</td>
<td>55%</td>
<td>33%</td>
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</tbody>
</table>
The Central European Social Survey is financed by the Excellence Initiative Research University.