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The Consequences of Remote Work – a Comparison of Four Central European Countries

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Abstract

The article examines the similarities and differences in how employees across four Central European countries evaluate the consequences of remote work. The primary objective is to cluster these consequences into closely interrelated advantages and disadvantages that form directly unobservable factors. The research was carried out using a diagnostic survey method that comprised 1,022 respondents from four countries: Czechia, Poland, Slovakia, and Slovenia. The respondents evaluated the positive and negative outcomes of remote work. To achieve the research objective, principal component analysis was used. Six factors common to all the studied countries were identified. Two of these factors are positive, and four are negative, with respondents placing greater weight on the advantages than the disadvantages. Factors such as cost savings and the positive impact on work life, non-work life, and health were indicated as primary advantages. However, perceptions of some advantages varied across the four countries. The issue of exclusion was the most frequently cited disadvantage. The research provides reliable information concerning the comparative assessments of the consequences of remote work. Its significance lies in demonstrating that a broad spectrum of individual outcomes can be distilled into six underlying factors. They contribute to the existing literature on remote work and offer practical insights for both management and remote workers.

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Introduction

Although the idea of remote work (telework) dates back to the 1970s with research and development projects carried out by Nilles (1998), it appeared in most companies as late as the 1980s (Bailey and Kurland 2002). Its most rapid development occurred in the 1990s, along with the increasing access to the Internet (Graham, Hjorth, and Lehdonvirta 2017). The COVID-19 pandemic in 2020 subsequently accelerated the digital transformation of employment (Huňady et al. 2024). However, the scale of remote work in individual countries of the European Union (EU) varies significantly. The lowest rates of remote work are in Bulgaria and Romania (1.2% of the total workforce in each), while the highest is in Ireland (20.6%) (Eurostat 2024). A relatively small percentage of employees work remotely in Czechia (6.6%), Poland (5.5%), Slovakia (5.7%), and Slovenia (6.9%) (Eurostat 2024). These differences may be determined by, among other things, economic structures, demographic factors (Kapitsinis 2025), and national culture (Wang et al. 2025). They may also be affected by organisational culture (Caraiani et al. 2021), including management's attitude towards working off-site (Bailey and Kurland 2002), the level of digitisation (Huňady et al. 2024), and digital competence (Eurostat 2023), and employee attitudes.

Research on remote work intensified during the COVID-19 pandemic, when numerous companies, especially in knowledge-intensive sectors, switched to remote work. Interest in this issue remains high, even though the prevalence of remote work has since decreased (Eurostat 2023). A major unresolved issue is the impact of remote work on employee productivity (Awada et al. 2021; Ng, Lit, and Cheung 2022; Enaifoghe and Zenzile 2023; Lim et al. 2025). Another frequently raised issue is its impact on work–life balance (Shirmohammadi, Au, and Beigi 2022; de Laat 2023). The impact of remote work on health (Gorshkova and Lebedeva 2023; Mergener et al. 2025) and job satisfaction (Atobishi and Nosratabadi 2023; García-Salirrosas et al. 2023; Glavin and Schieman 2024) has also been studied.

Remote work is occasionally analysed in a broader context, such as national culture (Wang et al. 2025). Attempts have been made to analyse the consequences of remote work from both the employee (Żołnierczyk-Zreda et al. 2025) and the organisational perspective (Tahlyan et al. 2024; Korkeakunnas et al. 2025). However, such research is most frequently limited to a single country, thus lacking a comparative perspective. Therefore, this paper fills a research gap by providing new knowledge concerning the similarities and differences in how employees from Czechia, Poland, Slovakia, and Slovenia assess the consequences of remote work. This approach also allows us to better identify, describe, and compare the consequences of remote work in these countries by isolating directly unobservable factors.

Therefore, the purpose of the paper is to identify the similarities and differences in assessing the consequences of remote work from the perspective of employees in these four Central European countries. To achieve this, the research categorises the consequences of remote work into groups of interrelated advantages and disadvantages that represent directly unobservable factors.

The article is structured as follows. Section 2 reviews the literature on the consequences of remote work from the employee's perspective. Section 3 describes the research methodology.

The data were obtained through a diagnostic survey of 1,022 respondents. The study uses principal component analysis (PCA), Pearson's linear correlation coefficient, and the Kruskal-Wallis test. Section 4 presents the results of the statistical analyses. Finally, the conclusion summarises the findings, discusses the research limitations, and offers suggestions for further research.

The article enriches the academic discourse on remote work by grouping consequences into directly unobservable factors and providing a comparative analysis of employee perceptions across four Central European countries.

Literature review

The digital transformation of work and the development of remote work have raised many questions concerning the consequences for both the organisation and the employee (Rodriguez-Lluesma, García-Ruiz, and Pinto-Garay 2021). Due to the research perspective of this paper, the following review focuses exclusively on the consequences experienced by the employees working remotely.

Remote work is defined as a form of work organisation where tasks are performed entirely or partially outside the organisation's premises using information and communication technologies (ICT) (Król 2023). This concept encompasses both fully remote arrangements and "hybrid work", where employees split their time between the office and off-site locations (Lauring and Jonasson 2025).

Remote work can provide a mix of benefits and challenges. For example, Šafránková and Šikýř (2024) found in a study of 480 Czech workers that the most common benefits include time and cost savings, improved work–life balance, and independence. Conversely, the primary difficulties identified were social isolation, conflicts between work and family life, unlimited work hours, and inadequate space to work at home. Similarly, Vayre et al. (2022) identified greater work autonomy, flexibility, and balancing work and non-work life as key advantages in a study of 28 French workers, while highlighting increased temporary workloads and negative impacts on physical and mental health as disadvantages. As Korkeakunnas et al. (2025) note, these consequences of remote work are not universal.

Autonomy is a central theme in this discourse. In a survey of 313 IT workers in India, Datta et al. (2025) identified four distinct dimensions of work autonomy: location, time, planning, and professional decision-making. Their findings suggest that these forms of autonomy directly influence the well-being and productivity of remote workers.

One of the most commonly cited drawbacks is isolation, also described as "digital ostracism" (Chen 2024). Spilker and Breaugh (2021) examined this phenomenon among 244 remote workers and their supervisors, finding that feelings of workplace loneliness are negatively correlated with an employee's level of choice regarding remote work, the duration of the employee–supervisor relationship, and overall job satisfaction and productivity. Furthermore, isolation is positively

related to a worker's need for affiliation, the extent of remote work, and the physical distance from the organisation's premises.

Marstand, Epitropaki, and Kapoutsis (2025) examined the psychological distance experienced by employees from their manager in the context of remote work. They noted that proper leadership behaviours may reduce remote workers' perceived psychological distance from their manager, and indirectly affect coping with work tasks. They also pointed to the key role of managers in helping remote workers overcome the challenges of physical distance. Remote workers' perceived sense of disconnection from the team was also noted by Korkeakunnas et al. (2025).

Remote work can affect employees' physical health and mental well-being, particularly regarding stress, although findings are inconsistent. For example, Vizcaíno et al. (2025) studied approximately 1,000 Latin American software developers who worked remotely and confirmed that stress negatively impacts their productivity. Orlandi et al. (2024) identified two groups of factors – individual (adequate resources necessary to perform remote work efficiently, e.g., a laptop, an ergonomic chair) and organisational (participative leadership, clearly formulated goals) – that facilitate effective stress management. In contrast, Korkeakunnas et al. (2025) found that remote work had a beneficial effect on employee well-being and stress reduction by eliminating or reducing the daily commute. They also noted that flexible work hours allow some remote workers to increase physical activity, which benefits their health. Similarly, Żołnierczyk-Zreda et al. (2025) noted that remote work contributes to better psychosocial work conditions and psychological well-being compared to office-based workers. Conversely, remote work can lead to musculoskeletal pain and sleep problems (Nowrouzi-Kia et al. 2024).

Xavier et al. (2024) surveyed 288 remote employees in the Brazilian education sector to examine how health problems and organisational support influence attitude towards work. They demonstrated that health problems negatively impact job satisfaction and engagement, which in turn increases staff turnover. In contrast, organisational support can positively impact remote workers' perceptions of their work environment, increasing job satisfaction and engagement, thereby reducing staff turnover.

The availability of mobile devices and unrestricted Internet access has not only popularised remote work but also fuelled the "always on" phenomenon, where employees remain perpetually available to superiors, colleagues, and clients (Øvretveit 2019). A remote employee may find it difficult to disconnect, even during illness (Nowrouzi-Kia et al. 2024). Schmitz, Bauer, and Niehaus (2023), in a study of 233 employees in Germany, found that remote presenteeism – performing work while sick – is common in remote contexts. This is driven by a limited ability to detach from work and insufficient supervisor support. Notably, only nine of the 27 EU countries have regulations ensuring the right to disengage from work (Ropponen 2025).

The impact of remote work on work–life balance is also contested. For example, de Laat (2023) identified a "dual devotion" among 84 American IT workers, where respondents felt equally committed to both work and family. Research shows that work–life integration is facilitated by the flexibility inherent in remote work. However, gender-based differences in these assessments are noteworthy. While women often view remote work as a way to devote more time to work, men see it as

an opportunity to devote more time to childcare. Furthermore, scholars frequently point out that remote work can blur the boundaries between work and non-work time (Chen 2024) and an inability to distinguish between work and home environments (Nowrouzi-Kia et al. 2024).

Research on the consequences of remote work more often focuses on negative than positive aspects. However, the benefits of remote working are central to driving productivity and job satisfaction, serving as a motivation to maintain this work arrangement. Ziomek (2023), based on a survey of 450 remote workers from Poland, Czechia, and Hungary, showed that the motivators behind working remotely include a suitably equipped workplace, a quiet environment, a lack of stress, lower costs, and career development opportunities, as well as the acquisition of knowledge and skills. To this list may be added the ability to shape the workspace (Rymaniak et al. 2021), utilise flexible work schedules (Türkeş et al. 2024), and save time by eliminating the commute (Nowrouzi-Kia et al. 2024). Furthermore, remote work allows individuals to work for geographically distant organisations (Mieriņa and Šūpule 2024; Macias, Ravalet, and Rérat 2025). The lack of geographical barriers increases the spatial and inter-organisational mobility of workers without the need for physical migration (Bamieh and Ziegler 2022; Tsapenko and Grishin 2022).

Methodology

The study employed a diagnostic survey targeting respondents from Czechia, Poland, Slovakia, and Slovenia. The total sample comprised 2,052 individuals and was representative in terms of gender and age. Data collection was conducted by a specialised international research organisation using established consumer panels in each participating country. Respondents completed the survey in their native language between 29 November and 10 December 2024. The return rate of complete questionnaires varied by country from 8.1% to 11.9%.

For this analysis, the sample was limited to respondents who declared that they had performed remote or hybrid work within the last two years. This resulted in a final dataset of 1,022 respondents who provided information on the positive and negative consequences of remote work. Since the responses were expressed on a five-point Likert scale, PCA (Kim and Mueller 1978; Kline 2014; Hair Jr. et al. 2018) was applied to group these consequences and extract new variables as combinations of the original survey statements. The analysis was conducted in four stages:

1. The PCA was performed individually for each country to categorise the original variables into groups representing related consequences of working remotely. Due to the various socio-cultural backgrounds of the four populations, it was anticipated that the results of the analyses would not overlap uniformly across all countries.

2. This stage aimed to identify and group the variables to construct common factors applicable to all the countries studied. The inclusion criterion was that a primary variable must load on the same factor (derived from PCA) in at least three of the four countries. This approach led to the exclusion of variables that did not meet this condition

– for example, those with inconsistent loadings across countries, making it impossible to classify them unambiguously into a common group.

3. Using the variable assignments from the previous stage and specific formulas developed for this study, common factors were constructed for all the countries. These factors ($F^{(k)}$) constitute new variables calculated as a weighted average of the original variables (X_j):

$$\bigwedge_{k=1,\ldots,K} F^{(k)} = \sum_{j=1}^{J_k} \widehat{w}_{\mathrm{jk}} X_j. \tag{1}$$

It was assumed that the weights must reflect the influence of individual variables on the resulting factor created; consequently, the squares of the factor loadings (a^2_{jkm}) were used to construct the weights[1]. Furthermore, the impact was determined by aggregating the results from the four countries:

$$\bigwedge_{k=1,\ldots,K} \bigwedge_{j=1,\ldots,J_k} w_{\mathrm{jk}} = \frac{1}{4} \sum_{m=1}^{4} a^2_{\mathrm{jkm}}, \tag{2}$$

The weights were rescaled so that the sum within one factor equals 1:

$$\bigwedge_{k=1,\ldots,K} \bigwedge_{j=1,\ldots,J_k} \widehat{w}_{\mathrm{jk}} = \frac{w_{\mathrm{jk}}}{\sum_{j=1}^{J_k} w_{\mathrm{jk}}}. \tag{3}$$

In these equations, $\widehat{w}_{\mathrm{jk}}$ represents the final weights, while w_{jk} denotes the preliminary weights derived from the factor loadings a_{jkm}. The index k (for $k = 1, \ldots, K$) identifies the factor, j (for $j = 1, \ldots, J_k$) denotes the original variable, J_k is the number of variables included in factor $F^{(k)}$, and m (for $m = 1, \ldots, 4$) represents the country.

4. The analysis examined the distribution of the constructed factors, their correlations, and whether their values differed significantly based on respondent characteristics. The Kruskal-Wallis test (Kruskal 1952; Kruskal and Wallis 1952) was used to analyse these relationships. When independent variables – gender, age, education, place of residence, financial standing, or organisational sector – indicated significant differences in the perceived impact of remote work, Bonferroni post-hoc tests were applied (Dunn 1961).

Results

In line with the adopted research procedure, PCA was applied to each of the four countries to create directly unobservable factors that represent combinations of remote work consequences. In each case, the Kaiser-Mayer-Olkin (KMO) measure (Kaiser 1970; Kaiser and Rice 1974)

1 The factor loadings a_{jkm} derived from the PCA represent the correlation between variable j and factor k in country m. When squared, these loadings can be interpreted as coefficients of determination, representing the proportion of variance in factor k explained by variable j. The average of these coefficients across the four countries forms the preliminary weights w_{jk}.

exceeded 0.9, indicating that all the original variables could be used in the analysis. The number of factors was determined by the explained variance criterion, with the requirement that the extracted factors should account for at least 60% of the common variance. Six factors were extracted and subsequently analysed after applying the Promax rotation (Harman 1976; Mulaik 2009; Hair Jr. et al. 2018).

The factor loadings obtained via the PCA method for each country are shown in Table 1. They illustrate the strength of the correlation between the survey items and the extracted factors. Based on these loadings and in accordance with Equations (2) and (3), weights were calculated and used to determine the values of the six factors. New variables were thus constructed to reflect the unobservable direct effects of remote work.

Table 1. Results of the factor analysis – common factors across the four countries

		Factor loadings				Weights
		Czechia	Poland	Slovakia	Slovenia	
Factor 1	Saving time commuting to and from work	0.681	0.921	0.916	0.787	0.374
	Financial savings from reduced expenditure on means of transport	0.652	0.819	0.896	0.650	0.313
	Ability to work in a location so distant that daily commuting would be difficult or impossible	0.780	0.830	0.740	0.690	0.313
Factor 2	Positive impact on mental health	0.723	0.924	0.926	0.674	0.201
	Development of digital skills	0.818	0.746	0.683	0.754	0.169
	Increased job satisfaction	0.742	0.806	0.803	0.617	0.167
	Less physical fatigue	0.672	0.895	0.834	0.505	0.165
	More opportunity for an appropriate work–life balance	0.896	0.646	0.813	0.546	0.163
	Ability to combine work with other responsibilities (e.g., studying)	0.638	0.718	0.611	0.704	0.134
Factor 3	The need to independently provide work conditions at home or elsewhere	0.872	0.824	0.881	0.884	0.646
	Reduction in private space as a result of dedicated space for remote work	0.552	0.566	0.673	0.753	0.354
Factor 4	Extended work hours	0.911	0.975	0.770	0.667	0.442
	Imbalance between work and non-work time	0.762	0.653	0.725	0.786	0.337
	Family disagreements due to misunderstanding the characteristics of remote work	0.556	0.600	0.539	0.677	0.222
Factor 5	Limited contact with colleagues	0.914	0.780	0.972	0.895	0.318
	Decreased sense of belonging to a team	0.788	0.782	0.920	0.814	0.273
	Worse communication with colleagues	0.785	0.626	0.843	0.892	0.251
	Decrease in identification with the organisation	0.477	0.645	0.670	0.695	0.157

		Factor loadings				Weights
		Czechia	Poland	Slovakia	Slovenia	
Factor 6	Negative impact on mental health	0.843	0.742	0.879	0.829	0.389
	Negative impact on physical health	0.953	0.716	0.695	0.763	0.356
	Greater overall stress associated with work	0.539	0.780	0.560	0.751	0.255

Source: own calculation.

The first two factors are positive and represent perceived benefits of remote work. Respondents across all countries attributed time savings (weight: 0.37), financial savings (0.31) from not having to commute, and the ability to work from distant locations (0.31) to the first factor, titled *Savings associated with remote work*.

Factor 2, *Positive impact on work–life balance and health,* is strongly related to the development of digital skills (0.17) and increased job satisfaction (0.17). In addition, reduced physical fatigue (0.17) appears to contribute to a better work–life balance (0.16) and the ability to combine work with other professional responsibilities (0.13). Respondents from all countries – particularly those from Poland and Slovakia – indicated a positive impact on mental health (0.2), which is most closely related to these occupational and non-occupational benefits.

The remaining four factors represent negative consequences. Factor 3 is related to the *Need to prepare an off-site workplace*, specifically providing suitable conditions at home or elsewhere (0.65), which often results in a reduction of private space (0.35).

Factor 4, *Negative impact on non-professional and family life,* captures risks that largely mirror the advantages of remote work. These factors include extended working hours (0.44) – most prevalent among respondents in Poland and Czechia – an imbalance between work and non-work time (0.34), and family disagreements (0.22).

Factor 5, *Sense of exclusion from the organisation*, comprises concerns about reduced contact with colleagues (0.32), poorer communication with the team (0.25), and a decreased sense of belonging (0.27) and identification with the organisation (0.16).

Factor 6, *Negative impact on health,* incorporates mental (0.39) and physical health risks (0.36), as well as general work-related stress (0.25).

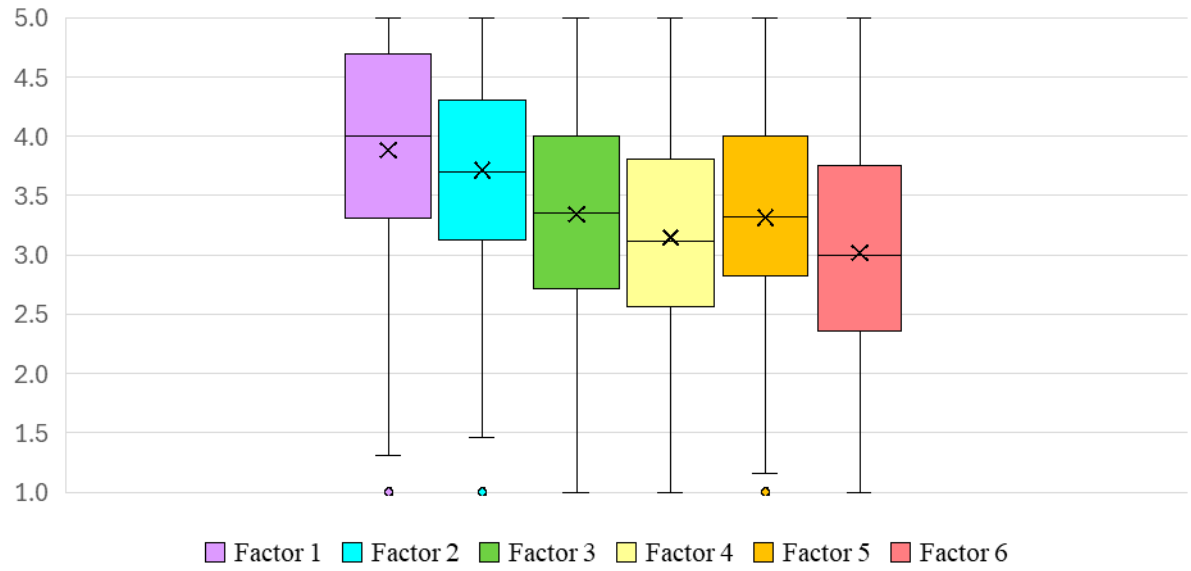

Figure 1. Distributions of factors
Source: own calculation.

Analysis of the factor distribution values (Figure 1) reveals that respondents most frequently identified savings from remote work (Factor 1) as a positive impact. Conversely, they were least likely to perceive a negative impact on health (Factor 6) or on non-professional and family life (Factor 4). Factor 1 exhibits a significant and moderate positive correlation with Factor 2 (Table 2). This suggests that greater savings associated with remote work (e.g., time savings or the ability to work remotely without relocating) translate into greater satisfaction with both work life and family life. Similarly, the four remaining factors are significantly and moderately positively correlated. Therefore, the respondents were aware that, for example, the negative health impact of remote work (Factor 6) and the need to adapt family space to work (Factor 4) can also have undesirable professional and family consequences (Factor 5). Interestingly, the correlations between the positive (Factors 1 and 2) and negative effects (Factors 3–6) are either insignificant or very weak (Table 3). The advantages of remote work are perceived in relative isolation from its negative consequences, with respondents focusing more on the benefits (Figure 1).

Table 2. Matrix of correlation coefficients

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Factor 2	0.557**				
Factor 3	−0.040	−0.034			
Factor 4	−0.064*	−0.046	0.537**		
Factor 5	−0.012	−0.039	0.492**	0.580**	
Factor 6	−0.183**	−0.140**	0.483**	0.629**	0.599**

Note: * significant for $p \leq 0.05$; ** significant at $p \leq 0.01$.
Source: own calculation.

The final stage of the analysis uses a Kruskal-Wallis test to identify which respondent characteristics significantly influence their assessment of the impact of remote work. As shown in Table 3, the perception of *Savings associated with remote work* (Factor 1) depends on gender, age, education, place

of residence, and sector. *Post-hoc* analysis revealed that savings from remote work carry greater weight for women, individuals aged 35–44 and 55–69, respondents with higher education, those living in cities with more than 150,000 inhabitants, and workers in the private sector.

The perceived *Positive impact on work and non-work life* (Factor 2) is influenced by the place of residence and material standing. In this case, higher scores are reported by people from large cities (over 150,000 inhabitants) and those in favourable financial situations.

The assessment of *The need to prepare the workplace* (Factor 3) is influenced by age and education. Preparing a workplace is of greater importance, and therefore a more significant challenge, for those aged 18–24 and those with a general secondary education.

Similarly, age influences the perceived *Negative impact on non-professional and family life* (Factor 4). Younger workers are more likely to agree that remote work adversely affects aspects of their personal and family life.

Notably, *Feeling excluded from the organisation* (Factor 5) does not depend on any socio-demographic characteristic of a given respondent. This means that all respondents, regardless of individual characteristics, perceive this factor in the same way.

Significant differences in terms of perceiving *Negative health impact* (Factor 6) are observed based on age, education, and place of residence. In this case, greater health problems due to remote work are reported by younger individuals (18–34 years), those with secondary or post-secondary education, and residents of the largest cities (Table 3).

Table 3. Results of the Kruskal-Wallis test and post-hoc analysis

Respondent characteristics	Kruskal-Wallis statistics for characteristics significantly affecting the factors under study	Results of *post-hoc* analysis – groups significantly different, with additional indication of the relationship between medians
Factor 1. *Savings associated with remote work*		
Gender	$6.21; p = 0.013$	$\mathrm{Me(F)} > \mathrm{Me(M)}$
Age	$13.86; p = 0.008$	$\mathrm{Me}(35-44) > \mathrm{Me}(18-24)$
		$\mathrm{Me}(55-69) > \mathrm{Me}(18-24)$
Education	$42.57; p < 0.001$	$\mathrm{Me(higher\ edu.)} > \mathrm{Me(vocational\ edu.)}$
		$\mathrm{Me(higher\ edu.)} > \mathrm{Me(general\ secondary)}$
Place of residence	$17.23; p < 0.001$	$\mathrm{Me(over\ 150\ k)} > \mathrm{Me}(50-150\mathrm{k})$
		$\mathrm{Me(over\ 150\ k)} > \mathrm{Me(up\ to\ 50\ k)}$
		$\mathrm{Me(over\ 150k)} > \mathrm{Me(village)}$
Private or public sector	$9.69; p = 0.021$	$\mathrm{Me(private)} > \mathrm{Me(public)}$

Respondent characteristics	Kruskal-Wallis statistics for characteristics significantly affecting the factors under study	Results of *post-hoc* analysis – groups significantly different, with additional indication of the relationship between medians
Factor 2. *Positive impact on work life, non-work life, and health*		
Place of residence	$13.03; p = 0.005$	$\mathrm{Me}(\text{over } 150 \text{ k}) > \mathrm{Me}(50 - 150\text{k})$
		$\mathrm{Me}(\text{over } 150\text{k}) > \mathrm{Me}(\text{up to } 50\text{k})$
Material situation	$11.63; p = 0.020$	$\mathrm{Me}(\text{very good}) > \mathrm{Me}(\text{average})$
Factor 3. *Need to prepare an off-site workplace*		
Age	$10.42; p = 0.034$	$\mathrm{Me}(18 - 24) > \mathrm{Me}(55 - 69)$
Education	$12.80; p = 0.012$	$\mathrm{Me}(\text{general secondary}) > \mathrm{Me}(\text{higher})$
Factor 4. *Negative impact on non-professional and family life*		
Age	$14.75; p = 0.005$	$\mathrm{Me}(18 - 24) > \mathrm{Me}(25 - 34)$
		$\mathrm{Me}(18 - 24) > \mathrm{Me}(35 - 44)$
		$\mathrm{Me}(18 - 24) > \mathrm{Me}(55 - 69)$
Factor 5. *Negative impact on health*		
Age	$15.28; p = 0.004$	$\mathrm{Me}(18 - 24) > \mathrm{Me}(55 - 69)$
		$\mathrm{Me}(25 - 34) > \mathrm{Me}(55 - 69)$
Education	$23.28; p < 0.001$	$\mathrm{Me}(\text{general secondary}) > \mathrm{Me}(\text{higher edu. })$
		$\mathrm{Me}(\text{post} - \text{secondary}) > \mathrm{Me}(\text{higher edu. })$
Place of residence	$9.70; p = 0.021$	$\mathrm{Me}(\text{over } 150\text{k}) > \mathrm{Me}(50 - 150\text{k})$

Source: own calculation.

Conclusions

The study identified six categories of consequences of remote work common to all four countries surveyed. Savings associated with remote work were the most frequently indicated benefit, characterised by high factor loadings across four analyses particularly among respondents from Poland and Slovakia (Table 1). Assessments of these savings were influenced by five respondent characteristics: gender, age, education, place of residence, and private or public sector (Table 3).

In addition to savings, a second positive factor was identified regarding the impact of remote work on work–life balance and health. In contrast, two analogous but inverted factors emerged for negative consequences, reflecting the adverse impact of remote work on various aspects of the respondents' personal lives (Factor 4) and health (Factor 6). Nevertheless, respondents generally perceived the consequences of remote work as more positive than negative, as evidenced by distributions of these factors (Figure 1).

A factor indicating that remote work creates a sense of exclusion from the organisation was also identified. The distribution of this factor does not depend on any socio-demographic characteristics, suggesting that exclusion is experienced equally regardless of age, gender, or education. The PCA conducted among Poles yielded slightly lower factor loadings in this factor than in the other countries (Table 1), which may indicate that this problem is perceived less acutely in Poland.

It is important to note not only the similarities in assessing the consequences of remote work but also the differences between the surveyed countries. The study considered a broad set of advantages, including greater autonomy, scheduling flexibility, increased efficiency, better work organisation, the ability to work at one's own pace, and workspace customisation. However, these factors loaded inconsistently across the national contexts aligning with Factor 1 in Poland and Slovakia, and with Factor 2 in Czechia and Slovenia. Therefore, these variables were excluded from the final extracted factors to maintain the statistical reliability of the model. This heterogeneous assessment of the consequences of remote work aligns with the findings of Korkeakunnas et al. (2025), who showed that perceptions of remote work are not universal.

Summary

The research provides a deeper understanding of how remote workers in Czechia, Poland, Slovakia, and Slovenia perceive the implications of this work arrangement. The findings show that while certain consequences are perceived similarly across national contexts, others vary significantly.

Respondents were fairly consistent in their assessments of the negative effects of remote work, as reflected in Factors 3–6. These factors are loaded by 12 variables relating to negative consequences, which were also the most frequently cited in each country. There was greater divergence in the assessment of the positive effects. The final procedure produced two factors that cover only nine of the 15 statements analysed. The lack of clear attribution for the remaining six positive consequences is evidence of differences between countries in the assessment of these effects.

The research provides reliable insights into the similarities and differences in perceptions of the consequences of remote work among employees from the four countries, extending the scope of comparative research in this field. The value of the research also lies in reducing the vast range of consequences into six meaningful latent factors. The results provide a significant contribution to the literature and offer practical value for both management and remote workers.

The limitations of this study result from the sampling method. The sample comprised employees voluntarily registered on a survey panel, which, despite the representativeness of the sample in terms of age and gender, may have influenced its structure and the results. However, anonymous participation and the lack of time pressure suggest that the answers were thoughtful and reliable.

Future research could extend the research to other EU countries to facilitate further comparative analyses and identify the reasons for the differing assessments of the consequences of remote work between countries.

Contribution of the authors

Conceptualisation M.K. and J.T.; literature review M.K.; methodology M.K. and J.T.; formal analysis J.T.; writing M.K. and J.T.; conclusions M.K. and J.T.

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Analiza konsekwencji pracy zdalnej – porównanie czterech krajów Europy Środkowej

Celem poznawczym artykułu jest identyfikacja podobieństw i różnic w ocenie konsekwencji pracy zdalnej z perspektywy pracobiorców w czterech krajach Europy Środkowej, a celem metodycznym – podział konsekwencji pracy zdalnej na takie grupy zalet i wad, które w ocenie respondentów są ze sobą ściśle powiązane i tworzą nieobserwowalne bezpośrednio czynniki. Badanie zrealizowano metodą sondażu diagnostycznego, którym objęto respondentów z czterech państw: Czech, Polski, Słowacji i Słowenii. Próba badawcza liczyła 1022 osoby, które zapytano o pozytywne i negatywne skutki pracy zdalnej. Do zrealizowania postawionych celów zastosowano analizę głównych składowych. Wśród konsekwencji pracy zdalnej wyodrębniono sześć czynników wspólnych dla wszystkich badanych krajów. Dwa z nich mają charakter pozytywny, a cztery negatywny, przy czym dla respondentów ważniejsze były zalety niż wady. Najczęściej wskazywane były oszczędności z tytułu pracy zdalnej oraz pozytywny wpływ na życie zawodowe, pozazawodowe i zdrowie. Jednak część zalet pracy zdalnej była odmiennie rozumiana przez respondentów z różnych krajów. Wśród wad najczęściej wskazywany był problem wyłączenia z organizacji. Badanie dostarczyło wiarygodnych informacji na temat podobieństw i różnic w ocenie konsekwencji pracy zdalnej przez pracowników z czterech krajów. Jego wartość polega też na wskazaniu możliwości zastąpienia licznej puli konsekwencji pracy zdalnej sześcioma czynnikami ukrytymi. Uzyskane wyniki wnoszą wkład do literatury na temat pracy zdalnej. Mogą być wartościowe zarówno dla kadry kierowniczej, jak i pracowników zdalnych.

Słowa kluczowe: praca zdalna, praca hybrydowa, pozytywne i negatywne konsekwencje pracy zdalnej, Europa Centralna, analiza głównych składowych