

THE DIGITAL WORLD AND ATYPICAL WORK: PERCEPTIONS AND DIFFICULTIES OF TELEWORKING IN HUNGARY AND ROMANIA

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Abstract: *IT solutions have been transforming the world of work, albeit with varying intensity, for decades. They affect, among other things, the organisation of work, work structures, employment patterns and working time. Solutions such as artificial intelligence (AI), business intelligence (BI), robotic process automation (RPA), workflow, process mining, etc. are now a daily reality in the corporate sector, be it physical or mental work. However, the spread of digital solutions across organisations, spaces and sectors is uneven. Can the impact of this uneven spread be observed in employment, especially in atypical forms of employment? In our questionnaire research, we seek to establish how employees with tertiary education in two pairs of sectors (Hungarian and Romanian non-profit sectors and Hungarian non-profit and for-profit sectors) in two countries perceive some demographic characteristics of teleworking. In our research, we analysed the responses of Hungarian and Romanian working-age citizens with tertiary education who had been working in telework for at least one year at the time of completing the questionnaire. In addition to the deterioration of work relationships and the lack of personal contacts already shown by many studies, it is observed that the work-life balance is upset for single people and those without children, while the number of children does not influence opinions on teleworking. The differences observed and presented in the study are typically not gender-specific but largely based on globalised perspectives.*

Keywords: *digitalisation, telework, Hungary, Romania, for-profit sector, non-profit sector.*



INTRODUCTION

The COVID-19 pandemic has led to a global increase in online activities replacing face-to-face activities. Advances in information and communication technologies have enabled citizens in many parts of the world to perform at least some activities of daily life virtually rather than physically. Teleworking, telehealth, online learning, and online shopping (e-shopping) have become prominent substitutes for face-to-face work, healthcare, education and shopping (Gyenge et al., 2021; Kitukutha et al., 2021; Pierce et al., 2021; Ryadi, Kurniasari, & Sudiyono, 2021; Wijesooriya et al., 2020).

Globalisation and the coronavirus epidemic have led to an increasing transformation of the labour market, with a growing demand for non-traditional, i.e., atypical employment (Chernozhukov et al., 2021; Suhányi et al., 2022). Atypical employment is a specific form of employment that differs from traditional full-time employment in many ways in terms of location, time and schedule (Baruch, 2000; Gajendran, Harrison, 2007).

In today's advanced, globalised world, work in many non-manual jobs is no longer bound by time and space, and certain services can be provided from anywhere in the world thanks to info-communication technology (Abulibdeh, 2020; Raišienė et al., 2021). These factors have contributed to the spread of atypical employment. The coronavirus epidemic has brought teleworking to the fore as one of the most commonly used types of atypical employment (Kahn et al., 2021; Bonacini et al., 2021; Karácsony et al., 2021; Lipták, Musinszki, 2022). (Part-time work, temporary agency work, outsourcing and fixed-term contracts are also popular types of atypical employment.)

In their study, Belzunegui-Eraso and Erro-Garcés summarised the concept of telework and its most characteristic features. They highlighted the inadequate legal regulation of the field and the importance of cost reduction by employers, which is considered the most important (Belzunegui-Eraso, Erro-Garcés, 2020). They also discussed the difficulty of reconciling work and private life when working from home. Telework has many advantages and disadvantages at both organisational and individual levels. Among the advantages are that telework practices help productivity, profitability and flexibility. This is accompanied by a reduction in absenteeism and employee turnover (Frolick, 1993). For employees, the home office has offered greater flexibility in terms of work schedules and use of time and energy, contributing to better job satisfaction and quality of life. The home office also offers autonomy and greater concentration (Rupietta, 2016). In their study, Moretti and colleagues highlighted that workers perceived working from home as less productive and stressful. They particularly valued the travel time saved to work, but were not happy about the isolation from colleagues (Moretti et al., 2020). Some organisations have raised concerns about productivity loss, the maintenance of corporate culture, and health and safety at work as a result of the rise of home working, while workers were more concerned about social interaction, internet connectivity and increased workload (Marzban et al., 2021).

The conditions of telework and its medium- to long-term effects on employees should be examined. Little is known about the impact of working from home on the management of work-life balance for teleworkers. Palumbo (2020) looked at working from home and work-life balance, finding that among public sector workers, work-life balance was disrupted, with teleworkers more worried and tired, which could even lead to burnout. Allen and his colleagues have shown that flexible working hours (especially part-time) can help to balance

family and work responsibilities, and are particularly useful for mothers with young children (Allan et al., 2013). Telework has different circumstances to flexible working and in many cases means working from home for more than 8 hours a day, so it was not necessarily the best option for mothers with young children during the COVID-19 pandemic. They often found it difficult to balance work and private life, family responsibilities and childcare. For many office workers, the transition from the familiar office space to working from home can be challenging, and often they have lost track of time and have not had enough time to do housework. Such challenges can be stressful and negatively affect the employee's workload and thus reduce productivity (Awada et al., 2021). An optimal work environment, proper ergonomics and necessary equipment are essential to creating an efficient workspace that enhances productivity and increases employee engagement in the workplace (Awada et al., 2021).

DIGITAL TECHNOLOGIES IN INTELLECTUAL WORK

One possible interpretation of digitalisation is that digitalisation is the use of digital technologies. This has an impact on many areas of business. In administrative, financial and decision support functions, digitisation is mainly manifested in the automation and robotisation of routine processes, the use of business intelligence and the use of data analytics (Möller et al. 2020). At the country level, it is an obvious dependency of digitalisation in financial services and economic development (Pakhnenko et al., 2021). The steep development of digital tools for business needs allows for increasing competitive advantages to a great extent (Roshchik et al., 2022). The AI-based technologies of business forecasting are helpful for business development and customer needs satisfaction (Kolková & Ključnikov, 2022; Angammana & Jayawardena, 2022).

The essence of Robotic Process Automation (RPA) is that when a process is robotised, the activities performed by humans are replaced by a software robot. The robot can even work continuously with a suitable schedule on several different processes. More and more companies are interested in RPA for business process automation (Sobczak, 2022). By operating robots beyond working hours, the load on some systems can be more balanced and the risk of error when processing data can be reduced compared to manual processing. (Bitó, 2018) RPA can replicate human behaviour to perform robotised activities faster and more efficiently than humans, but currently, it needs clear decision rules to do so. Typically, it is worth considering such a solution in areas where repetitions are very frequent, data are structured and well-standardised, and decision regularity can be established without human intervention (Isensee et al., 2018).

Business intelligence was defined by Dresner (cited in Power, 2002) in 1989 as an umbrella concept. According to his interpretation, business intelligence is a set of concepts and methods for improving business decision-making using fact-based support systems. According to one of the leading BI software companies, business intelligence combines business analytics, data mining, data visualization, data-related tools, infrastructure and best practices to empower organizations to make data-driven decisions. (<https://www.tableau.com/learn/articles/business-intelligence>) Today, business intelligence has entered its third generation. The latest generation of business intelligence software allows decision-makers in an organisation to quickly discover, create and

analyse data without the need to learn complex tools or become involved in IT. BI 3.0 is focused on collaboration, beneficial for workgroups (Eggert & Alberts, 2020)

Automation and digitalisation are also having an impact on today's global and national labour markets. In the literature, how innovation shakes up an industry or a social subsystem is referred to as 'digital transformation' or 'disruptive technology'. Digital transformation affects the whole enterprise, including those in intellectual jobs. This significantly affects the employability of labour force (Kovacs & Vamosi Zarandne, 2022) and influences the human mobility trend due to the impact of digital technologies development and intellectual employment consequently (Oliinyk et al., 2022). As a result, macroeconomic stability is affected by the digital transformation (Tiutiunyk et al., 2021). Peter Diamandis and Steven Kotler are responsible for the 6D model, which aims to show how digital technology is evolving and how this evolution is changing the environment around us (Diamandis & Kotler, 2016) The first stage is digitisation itself, where information becomes digital, i.e. it becomes computer processable. For example, in the accountancy profession, this means recording invoices in accounting software. The next stage (2D) describes the nature of the digital process, which is characterised by slow growth at first, imperceptible, and then after a point a surge in growth, at which point the familiar is destroyed and usually eliminated. After the destruction, there comes a phase (3D) where we can enjoy the positive effects of change and these digital technologies become free for everyone, everywhere and free. To continue with the example mentioned above, digitalisation is leading to a structural change in the focal points of the accounting service. Currently, data capture dominates. The service model based on data capture is now being transformed and the focus is shifting towards a more advisory-focused service. These changes in the environment, therefore, in-depth examination of the working conditions, competency expectations and responsibilities of employees in each functional area.

Changes in labour market demand and existing labour shortages further increase the demand for robots, as many production processes can be well-automated and do not necessarily require a live workforce (Jouhki, 2019; Sands, 2022). In Hungary, labour shortages have been highest in industrial production for many years, especially in manufacturing, motor vehicle production and warehousing. In the European Union, robots are used in warehousing in many countries (Royackers, van Est, 2015). In Hungary, the labour market is so empty that those who are unemployed today, due to their low employability, are left with the only option, the so-called Hungarian specificity of public employment. Public employment is a type of active employment policy instrument, whereby local governments provide work for the unemployed. Typically, they do not perform value-added work and thus do not contribute to the GDP of the country concerned, but are mostly engaged in park maintenance and mowing lawns in the municipality. Public employment was originally introduced as transit employment but has remained a permanent solution for the disadvantaged unemployed. In other words, many people are stuck in public employment and do not re-enter the primary labour market (Lipták, 2020). The needs of the labour market need to be met, so robots are needed for some jobs.

The robots work consistently at the right quality 24 hours a day, up to three shifts, they don't get tired, they don't need lunch breaks, they won't ask for payment and they only need electricity (Danaher, 2017). This greatly reduces production costs and the number of potential errors. Due to the impact of the coronavirus epidemic, the demand for robots has further increased (Shen et al., 2020). Due to high turnover and existing labour shortages, farm organisations have had to look for a cost-effective solution that has been available for years, namely robots (Suchacka et al.,

2021). Artificial intelligence still has many untapped potentials that could be well applied in the workplace. Collaborative robots, i.e. cobots, can take over dangerous and tedious jobs that are a burden for the live workforce. due to the generational shift in the labour market, younger age groups are more accepting of robots because they do not want to do tedious or dangerous assembly work (Bińczycki & Sławomir, 2022). Thus, shortly, we can expect to see robots and live workers working together in the labour market in several countries. 5D (dirty, dull, dangerous, domestic, dextrous), a generic term for dirty, dull, dangerous, degrading and manual work (such as packaging, quality control and assembly), is no longer so popular among the young generation. This further reinforces the demand for robots (Sandoval et al., 2022).

There is a common fear that robots will take jobs away from the live workforce (Smids et al., 2020). This is not true for several reasons, firstly they solve labour shortages and secondly, the freed workforce can be upgraded to perform higher-skilled tasks (Ford, 2015). Low-skilled and automatable tasks are performed by robots and it is not uncommon for robots and live workers to work together (Liang et al, 2016; Decker et al., 2017; Nishimura, et al., 2019). The European Union has a particularly high employment rate (197 million people) and a high demand for highly skilled workers. The future lies in knowledge-intensive sectors. And if some jobs were to disappear, new occupations would be created, as automation needs to be controlled, serviced and maintained. Production line jobs, machine operator jobs, driver jobs, cashier jobs, data entry jobs and customer service jobs could all fall victim to automation. But more and more analysts, process designers, programmers, engineers and researchers will be needed.

RESEARCH METHODOLOGY AND THE SAMPLE

Our research team deals with the changes in the labour market. Within the framework of that, we examine where and how the main trends and key events of our days (e.g. digitalization, generation Z, social innovation, coronavirus) can be pinpointed. We wish to present one section of our research in this study. We are looking for a reply to the question of how the employees with a higher education degree in the Hungarian and Romanian non-profit sectors and in the Hungarian non-profit and for-profit sectors consider telework (opinions and difficulties) relative to age, marital status and number of children. To understand approaches to telework we carried out primary research (questionnaire survey).

In order to determine the attitudes of Hungarian and Romanian workers towards teleworking, online surveys were conducted November 2021 in both countries using the snowball method. A 5-point Likert scale (1: least typical, 5: most typical) was used to measure the extent to which the advantages and disadvantages of telework are considered typical. It includes factors related to freedom and flexibility of work (freedom from daily working hours and fixed place of work; no need to look neat), isolation (deterioration of interpersonal relationships; missing face-to-face meetings with colleagues; isolation); family relationships (more time with family); work efficiency (you work more efficiently from home), increased workload (much more work than in the office); cost-related aspects (increased household expenses, reduced travel time and costs). Difficulties were measured using dichotomous (yes-no) questions. These include communication difficulties with superiors, colleagues, and business partners, the imbalance between working time and free time, raising a young child, deterioration of family relationships, etc.). For data collection

Google Forms, for data analysis SPSS Statistics Version 26 was used. After data cleaning, 247 responses were suitable for further analysis. The criterion for participation was at least some experience with telework in the last year. The sample composition can be seen in Table 1.

Table 1. Sample composition.

Description	Romanian non-profit	Hungarian non-profit	Hungarian for-profit
Age			
20-34	16	22	51
35-	49	57	52
Marital status			
in relationship	50	65	81
single	15	14	22
Children			
yes	37	45	37
no	28	34	66

For the qualitative and geographic attributes, the test of independence was performed using a chi-square test for independence. The test of independence was considered feasible if the frequencies expected for independence (Expected Count - f_{ij*}) were not less than 1 and the values of 1-5 could only be assumed by no more than 20% of the cells. The intercorrelation of the sample data was determined by Cramer's V coefficient.

In the analysis of variance, we tested for the presence of mixed correlations (quality-quantity attribute) using a hypothesis test. The prerequisite for an analysis of variance is equality of variances and normal distribution of all quantitative variables. Due to the Likert scale, the condition for normality was not met, but due to the robustness of the F-test, the tests of ANOVA were considered acceptable in the case of equality of variances. (Sajtos, Mitev, 2007) The equality of variances was tested using Levene's test.

Principal component analysis was performed to group respondents based on their opinions on teleworking. At first, the normality of the distribution of the variables was tested. Metric (not dummy) variables are used. We also used a homogeneous sample, of which size was above 100, therefore, after the necessary conditions were met, we considered it acceptable to conduct the principal component analysis. The Kaiser-Meyer-Olkin (KMO) criterion is one of the most important measures to assess how appropriate the variables are for factor analysis. If the measure is above 0.7, it is considered suitable (Sajtos, Mitev, 2007). The scree plot diagram showed that three-factor components can be distinguished. Varimax (variance maximization) rotation with Kaiser normalization was used. The value of the variance explained must be at least 60%. A variable is considered a member of a component if the weight of the component is at least 0.5.

RESULTS AND DISCUSSION

Comparison of the Hungarian and Romanian Non-profit Sectors

Perceptions of Teleworking

The opinions of people working in the non-profit sector on teleworking differ in the two countries. Hungarian employees gave the highest scores for reduced travel time (4.01), the lack of personal relationships (3.99), appearance (3.77), and greater freedom (3.67). In contrast, Romanian employees rated the deterioration of external relations (4.07), the lack of personal relations (4.06), the greater freedom (3.69) the reduction of travel time and costs (3.63) as the most important variables (Figure 1).

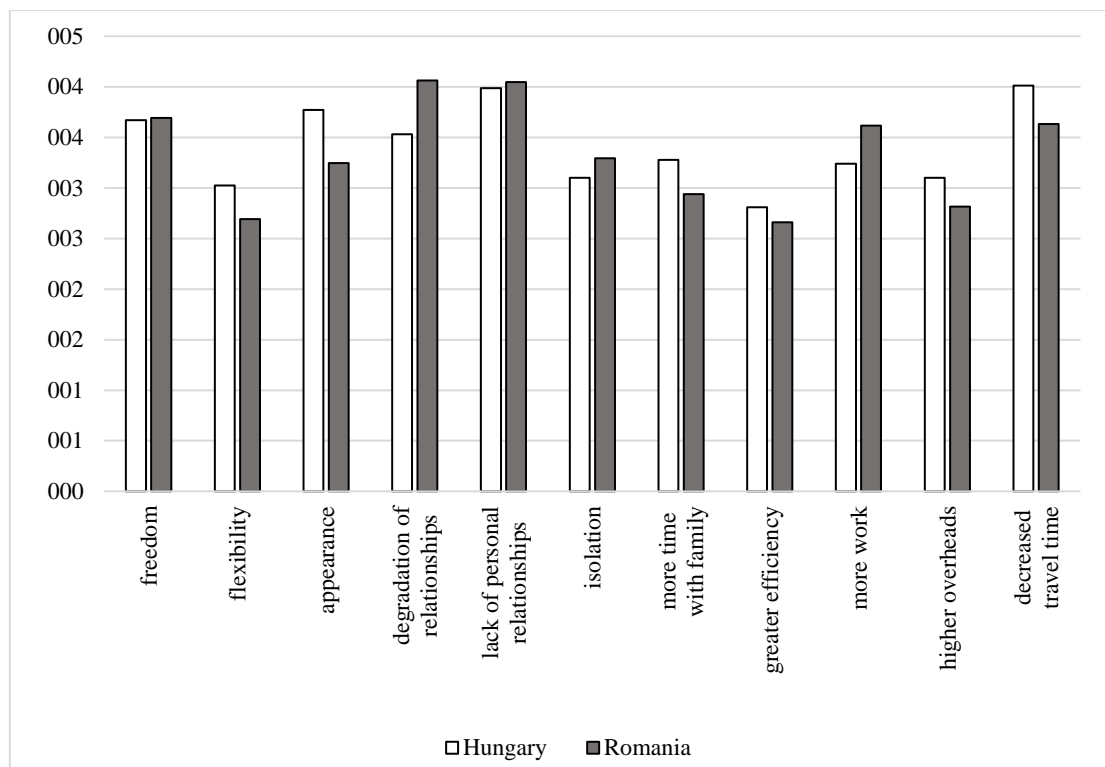


Figure 1. Opinions of employees in the non-profit sector.

It can be concluded that permanent teleworking leads to a deterioration of interpersonal relationships, and this is perceived as such by employees in both countries. Our research findings are consistent with the previous results of Tavares (2015) and Forgács (2011). The most frequently mentioned disadvantage of teleworking from the employees' point of view is the isolation caused by the fact that they usually work alone, the deterioration of interpersonal relations and the absence of face-to-face meetings, face-to-face conversations and group discussions (Tavares, 2015). Telecommuting has put an end to the separation of work and life, since in this situation most employees' workday did not start at the usual time, but according to a more flexible schedule (Forgács, 2011). It is not easy to find the right balance

between work and family, because in teleworking there is not always an exact time for starting work (Vrchota et al., 2019).

It was checked whether the test factors were uncorrelated pairwise using the Kaiser-Meyer-Olkin index (the closer its value is to 1, the more applicable the principal component analysis) and the Bartlett test (based on a simple hypothesis test). The Kaiser-Meyer-Olkin coefficient is 0.712, which is good (Table 2).

Table 2. KMO and Bartlett's Test (Hungary, non-profit sector).

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.712
Bartlett's Test of Sphericity	Approx. Chi-Square	284.243
	df	55
	Sig.	0.000

A scree plot was used to decide how many component groups to form in the procedure. A breakpoint was observed after the third component, so three components were tried. The rotation was performed using a varimax procedure with Kaiser normalisation. A variable is considered a member of a component if the component has a weight of at least 0.5 (Table 3). Principal Component Analysis results suggest that the opinions of Hungarian employees can be grouped into three components. The first component is *isolation and a lack of personal relationships*, the second one is *greater efficiency and family orientation*; and the third one is *freedom and flexibility*.

Table 3. Characteristics of teleworking according to the opinions of employees in the Hungarian non-profit sector, the rotated component matrix.

Variables	Component		
	1	2	3
Human relationships are broken down	0.853	0.012	-0.077
Loneliness	0.840	-0.140	0.101
Lack of personal contact with colleagues	0.792	-0.041	-0.009
Much higher household overheads	0.587	0.116	-0.010
The respondents work much more than before, in the traditional way	0.335	0.792	-0.203
Reduction in travel time and costs	-0.018	0.679	0.212
More efficient teleworking	-0.229	0.675	0.440
The respondents can spend more time with their families while teleworking	-0.183	0.597	0.508
It gives me more freedom	0.056	0.297	0.756
No need to look fit and dress nicely	0.027	-0.123	0.731
The freedom from daily working hours and being tied to a specific location	-0.005	0.373	0.672

Note: Groups of variables that can be defined by components are marked in different colours.

The calculations have also been made based on the answers from the Romanian non-profit sector (Table 4). In Romania, also three components were detected, which are *freedom and flexibility*; *isolation and degradation of relationships*; and finally *higher overheads* (Table 5).

Table 4. KMO and Bartlett's Test (Romania, non-profit sector).

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.736
Bartlett's Test of Sphericity	Approx. Chi-Square	143.194
	df	55
	Sig.	0.000

Table 5. Characteristics of teleworking according to the opinions of employees in the Romanian non-profit sector, the rotated component matrix.

Variables	Component		
	1	2	3
The freedom from daily working hours and being tied to a specific location	0.776	-0.094	-0.178
It gives me more freedom	0.737	-0.133	-0.305
More efficient teleworking	0.699	-0.302	-0.004
No need to look fit and dress nicely	0.678	0.077	0.146
The respondents can spend more time with their families while teleworking	0.571	-0.180	0.406
Reduction in travel time and costs	0.473	0.163	-0.358
Loneliness	-0.081	0.735	0.025
Human relationships are broken down	-0.087	0.726	-0.020
Lack of personal contact with colleagues	-0.112	0.663	0.299
The respondents work much more than before, in the traditional way	0.001	0.618	-0.021
Much higher household overheads	-0.079	0.201	0.824

Note: Groups of variables that can be defined by components are marked in different colours.

We also examined opinions about teleworking by demographic characteristics such as age group, marital status, and whether you have children. As for age, we formed groups of people under 35 or over 35. ANOVA test result suggests a weak significant relationship between age and the following variables: teleworking offers greater freedom, appearance and reduced travel time. There was no significant relationship between marital status and employees' perception of telework according to the ANOVA test results, therefore, the attitudes towards teleworking do not depend on marital status. The Hungarian employees with no children considered the reduced travel time (4.00) the most typical attribute of teleworking, followed by greater freedom (3.82). Employees with children considered the lack of personal relationships (4.04), the deterioration of relationships (3.74) as well as the reduced travel time (3.74) as the top three attributes of teleworking. In both groups, the lowest score was attributed to greater efficiency and flexibility. A very interesting result emerged when a specific number of children was investigated. In contradiction with earlier findings claiming that telework is particularly popular among people with three or more children, we found that the number of children does not influence the employees' opinion on teleworking. The result of the ANOVA test detected no significant relationship between them.

Difficulties During Teleworking

In examining difficulties, first, we focused on communication difficulties. Survey questions were related to communication difficulties with the respondent's boss, colleagues and business partners. Our research findings show that 25% of respondents experienced

communication difficulties with their superiors. The fewest problems were mentioned by employees under 35 years old (18.4%), while the most problems were experienced by employees in the Romanian non-profit sector (32.3%). Opinions do not differ significantly by age, marital status, number of children and country. Within an organisation, maintaining contact with colleagues caused much more difficulties than communicating with superiors. A spectacular deterioration is observed among employees under 35 years old (18.4% vs. 28.9%), single people (20.7% vs. 34.5%), people without children (21.0% vs. 33.9%) and in the Romanian non-profit sector (32.3% vs. 41.5%). Slight, but significant differences were found in the opinions of communication difficulties by countries ($\chi^2 = 5.838$, $p = 0.016$, $df = 1$, Cramer's $V = 0.201$). The lack of devices causes greater difficulty than communication with either the boss or colleagues. 35.4% of the respondents were concerned about a lack of devices during home working. It was a big difficulty for childless people (41.9%), single people (41.4%) and people aged over 35 (37.7%). Those for whom this was less difficult were under 35 (28.9%), people with at least one child (30.5%) and Romanian employees (33.8%).

We investigated the relationship between telework and personal life from three aspects: working time and free time balance, raising the underage child(ren) and change in family relationships. Striking a balance between working time and free time represented the greatest difficulty. An outstandingly high proportion of respondents (75.4%) answered that for the past year, it had been difficult for them to create a balance between working time and leisure. The lowest score was given by respondents with children. The majority of single employees (89.7%), childless employees (82.3%), and Romanian respondents (81.5%) reported difficulties. Only 18.1% of the respondents considered the degradation of family relationships as a key issue. However, Romanian non-profit sector, childless people (21.5%), single people (20.7%), people aged over 35 (19.8%) and respondents with children (18.5%) had more difficulties with it than others.

Raising children under 18 makes teleworking even more difficult. 47.2% of the respondents over 35, and 61.7% of the respondents with children answered that raising children when teleworking is very challenging. As opposed to that - due to obvious demographic reasons - only between 3 and 5% of the respondents below 35 and those without children experienced difficulties in this regard. In both cases, there are medium strong, significant relationships. (Age – difficulty: $\chi^2 = 21.293$, $p = 0.000$, $df = 1$, Cramer's $V = 0.385$; child – difficulty: $\chi^2 = 51.036$, $p = 0.000$, $df = 1$, Cramer's $V = 0.595$.)

Differences in the Hungarian For-profit and Non-profit Sectors

Opinions on Teleworking

There is a discrepancy between the opinions of employees of for-profit and non-profit organisations on teleworking. Figure 2 shows that the highest mean score (4.11) was given by employees in the for-profit sector for freedom, followed by a reduction in travel time (4.04), which substantiates previous findings in the literature that teleworking offers a higher level of freedom and frees the employee from the routine of travelling to work every day (de Abreu e Silva & Melo, 2018). Being isolated (2.73) and higher overhead costs (2.91) were ranked as the least important factors. In contrast, non-profit sector employees considered reduced travel

time (4.01) and lack of personal relationships (3.99) as the most important factors. The least important factors to them were efficiency (2.81) and flexibility (3.03). The current study does not support previous research in this area, because according to Raišienė et al. (2020) (no sector-specific analysis), the performance of teleworkers can increase by up to 30% compared to traditionally employed workers.

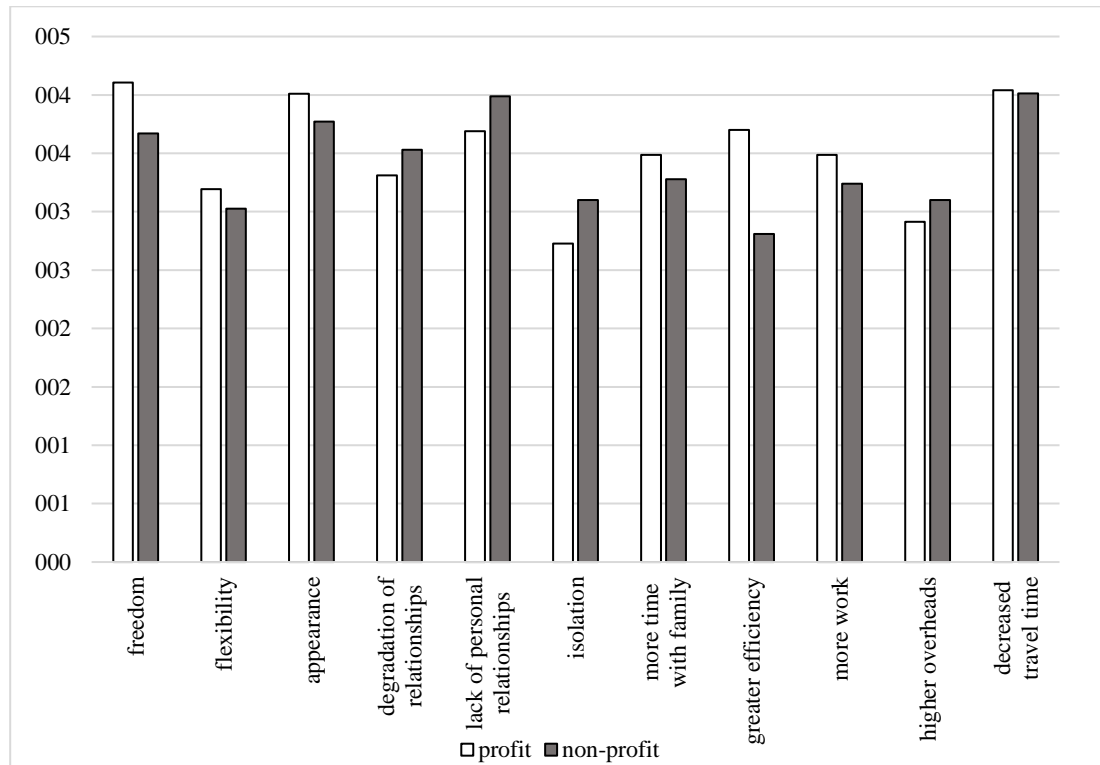


Figure 2. The opinion of the Hungarian employees in the for-profit and non-profit sectors.

It was made again a principal component analysis and compared the results between only the Hungarian for-profit and non-profit sectors. The Kaiser-Meyer-Olkin coefficient is 0.651, which is good (Table 6).

Table 6. KMO and Bartlett's Test (Hungary, for-profit sector).

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.651
Bartlett's Test of Sphericity	Approx. Chi-Square	281.966
	df	55
	Sig.	0.000

Table 7. Characteristics of teleworking according to the opinions of employees in the Hungarian for-profit sector, the rotated component matrix.

Variables	Component		
	1	2	3
More efficient teleworking	0.819	-0.119	0.104
Reduction in travel time and costs	0.708	0.015	0.056
It gives me more freedom	0.665	0.043	-0.535
The respondents can spend more time with their families while teleworking	0.510	-0.218	-0.256
No need to look fit and dress nicely	0.425	0.411	0.197
Loneliness	-0.079	0.846	-0.045
Human relationships are broken down	-0.044	0.816	0.072
Lack of personal contact with colleagues	-0.057	0.723	0.189
The freedom from daily working hours and being tied to a specific location	0.426	0.180	-0.725
The respondents work much more than before, in the traditional way	0.376	0.268	0.635
Much higher household overheads	0.043	0.175	0.584

Note: Groups of variables that can be defined by components are marked in different colours.

Principal Component Analysis resulted in three-factor components in the for-profit sector (Table 7). They are 1. *freedom and efficiency*; 2. *isolation*; 3. *flexibility and extra work*. In the non-profit sector, also three but somewhat different factor components were made (see above Table 4): 1. *isolation and a lack of personal relationships*; 2. *greater efficiency and family orientation*; 3. *freedom and flexibility*.

Looking at the opinions of employees by age, we found that there is a small discrepancy between persons under 35 and over 35 concerning the attributes of teleworking. Individuals under 35 tended to give higher mean scores to freedom, appearance, and reduced travel time, while individuals over 35 considered freedom and lack of personal relationships to be the most important factors. The opinions of employees without children did not differ significantly from those with children, and the sector had no real influence on them. This is a surprising finding, as it is often claimed in the literature that telecommuting can be a good solution for people with children Kazainé (2020). However, when the effect of the number of children was also incorporated into the analysis, we found that teleworking allowed more time with family for employees with children in the for-profit sector (4.49). Individuals with three children considered the reduced travel time as the most typical attribute of teleworking (4.63). We found completely different opinions in the non-profit sector. For employees with three or more children, freedom (4.20), lack of personal connections (4.00), and isolation (4.00) were the most important attributes, while the least typical responses were more time for family (3.20) and flexibility (3.20).

Difficulties During Telework

When comparing the opinions of the employees in the for-profit and non-profit sectors in Hungary, different results were obtained. Here, nearly a quarter (25.3%) of respondents also experienced communication difficulties with their boss. In contrast to the non-profit sector in both countries, the largest percentage of difficulties were reported by people under 35 (31.5%) and single people (33.3%). The lowest percentage of difficulties was reported by respondents working in the non-profit sector (19.0%) and individuals over the age of 35 (21.1%). In terms of age, there is a significant correlation when a value of 11.3% is reached

or, in the case of a breakdown by sector, a value of 8.7% is indicated. A similar phenomenon can be observed in the case of communication with business partners. 16.6% of respondents have experienced communication difficulties with their business partners. The most difficulties continued to be reported by those under 35 (19.2%) and those living alone (30.6%). A weak significant relationship between communication and marital status can be demonstrated ($\chi^2 = 6.455$, $p = 0.011$, $df = 1$, Cramer's $V = 0.188$). Within the organisation, maintaining contact with colleagues caused slightly more difficulties than communicating with supervisors at work (28.6 vs. 25.3%). Higher than average difficulties were reported by those living alone (38.9%), those without children (35.0%), those under 35 (32.9%), and those working in the private sector (33.0%). A weak significant influence of the number of children on the communication difficulties was found ($\chi^2 = 4.495$, $p = 0.038$, $df = 1$, Cramer's $V = 0.157$). Based on our research findings it can be concluded that:

- people aged under 35 had more communication difficulties than people aged over 35,
- single people had more communication difficulties than people living in a relationship,
- people without children had more communication difficulties than people with children,
- people working in the private sector had more communication difficulties than people working in the non-profit sector.

28.0% of the respondents faced the problem of lack of office equipment in the telework. The above phenomenon was also observed here. The lack of equipment causes above-average difficulties to childless persons (32.0%), single persons (36.1%), persons under 35 years of age (30.1%) and persons working in the private sector (36.7%).

The balance between work and leisure is the greatest difficulty. 62.6% of the respondents think that it was difficult for them to balance work and leisure during the pandemic. By age and marital status, there was no significant difference in the opinions. However, by sector, significantly different opinions about work-life balance were found ($\chi^2 = 4.058$, $p = 0.044$, $df = 1$, Cramer's $V = 0.140$). *In the private sector, the balance between work and leisure is even more difficult.* 70.9% of private sector representatives, while only 56.3% of those working in the non-profit sector believe that finding the right balance is a difficulty. Harder family relations were seen as a difficulty by only 12.1% of respondents. Difficulties significantly above the mean were only cited by those over 35 (14.7%) and those working in the non-profit sector (15.2%).

Opinions about the hardships of teleworking while raising a minor child differ significantly by age and number of children. 40.4% of respondents over the age of 35 and 55.6% of respondents with children indicated that raising children while teleworking was a hardship. In contrast, only 2-4% of respondents without children and those younger than 35 indicated difficulty. In both cases, these are moderately strong significant relationships. (Age - Difficulty: $\chi^2 = 30.004$, $p = 0.000$, $df = 1$, Cramer's $V = 0.406$; Child - Difficulty: $\chi^2 = 65.766$, $p = 0.000$, $df = 1$, Cramer's $V = 0.601$).

CONCLUSIONS

Teleworking has a strong impact on communication within the organization as well as on the individual's life and family relationships. We found that in teleworking, communication with colleagues is a greater difficulty than communication with superiors. The difficulties in communicating with colleagues, apart from employees in the Romanian non-profit sector, are most evident among single teleworkers with no children. In addition to communication difficulties, the lack of work equipment is also higher than average among single teleworkers and teleworkers without children. In these two segments, difficulties at work have a negative impact on the work-life balance.

The opposite phenomenon is observed for workers in the non-profit and private sectors. While in the private sector, it is more difficult to maintain contact with colleagues and managers, more non-profit sector employees than private sector employees feel that there is a lack of work-life balance and that their family relationships are broken.

Finally, when comparing opinions and difficulties, we would like to highlight one more point. On the one hand, both the literature on the advantages and disadvantages of teleworking and the respondents' opinions shows that teleworking leads to a deterioration in human relations. The responses make it worth looking at work and family relationships separately. Only one-sixth of respondents think that deterioration in family relationships is a difficulty. In contrast, difficulties in communicating at work suggest that both deterioration in relationships and a lack of personal relationships are perceived at work.

It is too early to predict the extent to which working from home will be a part of our daily lives once the pandemic is contained. Nevertheless, we believe that the lessons of this extraordinary period will reveal and show the extent to which the supposed and hoped-for benefits of teleworking are working in practice and which disadvantages are more pronounced.

In the period of the COVID pandemic, the relationship between most workers to work has changed in time, space and the way work is organised. The home office was one of the most important forms of adaptation, in which achieving business goals remained a priority. It became clear that managers still needed to evolve to this working arrangement and to lead their teams remotely, focusing on results rather than process-centred management. Employees perceived the home office as less stressful and particularly appreciated the time saved in commuting to work but were unhappy about being isolated from colleagues and were most concerned about social interactions, internet connectivity and increased workload.

There are impacts of the changing work environment, we have studied them in two countries and two sectors and they can be used to help HR professionals in companies adopting digital solutions to manage the negative impacts.

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Authors' Note

Katalin Lipták's work and this paper was supported by the Bolyai János Research Scholarship of the Hungarian Academy of Sciences.

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Human Technology
ISSN 1795-6889
<https://ht.csr-pub.eu>