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DOES TELEWORK WORK? GAUGING CHALLENGES OF TELECOMMUTING TO ADAPT TO A "NEW NORMAL"

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Abstract: *The paper aims to contribute to a deeper understanding of organisation management while telecommuting. With exploratory factor analysis (EFA), we define the specific set of telework organising efficiency characteristics. We determined the number of factors with Kaiser Eigenvalues rule as well as Cattel's scree criterion. We conducted the study in Lithuania, the country with a low percentage of teleworkers until organisations have been urged to properly implement their performance to remote means after the COVID-19 quarantine was announced. This paper reveals that the fundamental challenges of teleworking are the feedback issues related to working accomplishment, especially to the task and process overload, and individual self-organisation ability. Moreover, the flexibility of work organisation represents a unique characteristic of telework, and managers should cooperate more effectively with teleworkers to keep them motivated.*

Keywords: *telework, organisation management, human resource management, exploratory factor analysis.*

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INTRODUCTION

The implementation of restrictive measures to combat the COVID-19 pandemic (Bonacini et al., 2021) has led to far-reaching socio-economic consequences and shifts worldwide, such as labour market shocks in financial well-being (Botha et al., 2021; Milani, 2021) and acceleration of the processes of work digitization that have taken place so far (McDonald et al., 2020) to mention but a few. The recent concerns about the increase in workers' migration in western countries **(**Jędrzejowska-Schiffauer, Schiffauer, 2017) faced with the pandemic have turned to another challenge – migration constraints (Bite et al., 2020; Oliinyk et al., 2021). Interestingly, employers have been considering reducing the adverse effects of business travel for quite a while already, hoping that distant meetings could improve the balance between costs and expenses (Faulconbridge et al., 2020). The relocation of workers and the global restrictions of movement makes it possible to evaluate the new working and business conditions in many ways. If mobility would not be constrained, we could talk about an experiment in which thousands of workers joined digital nomads (Aroles et al., 2020). On the other hand, it is the work efficiency of nomads and similar issues addressed in the scientific literature over the last decade that allows the knowledge of teleworkers' challenges.

It is telecommuting that enabled companies to adapt to such crises as the COVID-19 outbreak. Telework has also become a key policy instrument used by governments worldwide to minimise the pandemic's spread (Reuschke, Felstead, 2020). An organization's capability to switch to telework has become the main resilience factor in the pandemic's context. Many countries have to deal with specific problems independently, and in this light, the importance of cultural features is re-emerging (Kaasa, 2019). Until the pandemics, telework was differently popular in various countries. The tightening competition in the world economy, requiring more flexible work arrangements (Karamanis, Gogos, 2020; Whiting, Symon, 2020) made telework more relevant. Trends in labour intensification are also reflected in emerging activities, some of which are becoming new digital professions (Kristal, 2019). In Europe, the percentage of people who have worked from home at least in 2018 ranged from 0-10% in Romania, and Macedonia, 11-20% in Lithuania, Bulgaria, and Portugal, to 51-60% in Sweden, Denmark, and Netherland (Reuschke, Felstead, 2020). Before the pandemic, telework was considered useful due to the potential for business cost savings and ways for the organisation to be faster and more agile (Großer, Baumöl, 2017; Morrison-Smith, Ruiz, 2020). Research conducted in the US shows that the employment rates of highly skilled workers, the so-called white-collar workers, are significantly worse after the economic crises (Lopez, Phillips, 2019). However, in the current pandemic, more positive consequences can be expected, as intellectual work was exceptionally well possible through teleworking.

Working conditions, including teleworking, has also been used to motivate employees by enabling them to improve their work-life balance (Klopotek, 2017; Bulková & Masárová, 2017; Gálvez et al., 2011; Peters et al., 2008). However, the global shift of workers to work from home has changed the situation. Working from home for a year has finally begun to bring new aspects of telework to light. So far, they are not unambiguously clear.

There is a lack of knowledge to evaluate and adapt to new conditions (Bloom et al., 2020; McKibbin & Roshen, 2020; Chang & Velasco, 2020). Organisations that have not yet applied to telecommuting have implemented telework without knowing how to do it effectively. Professional organisations also faced surprises, difficulties, and a lack of reliable

knowledge (Micko, 2020; Neeley, 2020). While researchers of telework have so far highlighted the challenges of communication, collaboration and application of technology in cyberspace (e.g., Snellman, 2014), the scale of telecommuting challenges has expanded in the face of a pandemic. Updated research-based recommendations have become vital for organisations in times of "new normal" (Bonacini, Gallo, & Scicchitano, 2021).

With regard to this relevance thus, our paper aims to contribute to a deeper understanding of organisation management while telecommuting. Using exploratory factor analysis (EFA), the paper defines the sets of characteristics of telework organisation's efficiency. The identified factors of telework efficiency based on the research results also serve from a practical point of view: conducting telework research in organisations enables managers to detail the most significant aspects of teleworking.

The paper's remaining paragraphs are as follows: theoretical substantiation of the research construct, the research methods presentation, and the review of the research results. The paper ends with conclusions and recommendations.

The Theoretical Background of Telecommuting

Jack Nilles (1975) first used the term telecommuting. Variety of telework terms are found in the scientific literature: *teleworking, home-based work, working from home, home-based telework, homeworking, telecommuting, virtual office, virtual work, e-work, flexiplace, flexible work* (Nakrošienė & Butkevičienė, 2016; Brinzea & Secara, 2017). The literature also finds such telework methods as *part-time work, flexi-time, annualised hours, compressed workweeks, hours distributed differently, telework* (Brinzea & Secara, 2017). Regardless of the term chosen, these authors analogously describe telework. It is working from home or elsewhere using technology and communicating with the manager, colleagues and clients remotely (European Social Partners, 2006).

When examining the differences between teleworking and office work, researchers consider both methods' advantages and disadvantages by grouping them. We can also see that researchers most often analyse the challenges for the individual and the organisation (e.g., Allen et al., 2015; Nakrošienė, Butkevičienė, 2016; Rose, 2019; Talwar, 2020; Kraft, 2019; Micko, 2020; Neeley, 2020). However, it can be seen that some other researchers are not limited to the discussion at the employee and organisational level. Nyaanga (2012) notes the benefits of teleworking for society and business and that teleworking has a positive effect at the macro level. It reduces energy consumption and traffic congestion and thus contributes to environmental protection and safeguarding of resources. When speaking about business, the author emphasizes better talent retention, more significant organisational commitment and loyalty, and overall company productivity. In general, the productivity of employees is particularly highlighted in telework research reports. Based on research data, Rose (2019) states that 77 per cent of employees feel more productive when working from home. Other authors note that teleworking in an organisation helps attract and keep highly qualified professionals (Raghuram et al. 2019). Mahler (2012) emphasises that teleworking positively affects savings in office, labour, commuting costs, and work continuity under adverse conditions.

However, it must be acknowledged that telework is not suitable for all professions and not for all individuals. Telework pays off for people with self-discipline and time

management skills (Morrison-Smith., Ruiz, 2020) and can create obstacles for other employees. Telework requires advanced ICT literacy, which has become one of the "must-have" skills for all generations. Millennials were valued for IT adaptation even before the pandemic and, in general, this generation has been constructed as a 'challenge' to poor management with respect to other generations (Williams, 2019). Currently, personal leadership skills have become important for all generations of teleworkers. The previous studies showed that ICT use might be significantly altering job conditions in terms of work intensification, which, in turn, contributes to employee strain and distress (Chesley, 2014). The willingness to telework is also an important aspect to analyse. The study of Cortés-Pérez et al. (2020) has shown that cultural traits are significant when determining remote work's willingness.

Furthermore, the blurred work-family boundaries when trying to fill “work” and “home” domain roles simultaneously can lead employees to experience role conflict, stress, and reduced work motivation (Rofcanin, Anand, 2020). Sewell and Taskin (2015) have come to interesting conclusions in terms of the autonomy of teleworkers. According to the authors, in contrast to the many optimistic predictions, virtual working does not lead to the “emergence of a truly autonomous and self-determining worker“. It is more about the reordering of control through the reshaping of norms. Accordingly, teleworking requires highly flexible and diverse leaders (McCann & Kohntopp, 2019; Even, 2020). Managers' empathy and emotional intelligence become the key qualities when organizing work remotely. A study conducted during the 2020 global COVID-19 crisis showed that companies' success was accompanied by leaders who could motivate and engage staff when working from home (Talwar, 2020).

Another significant telework challenge is mutual trust between employees and managers. When employees' physical activity is not visible, even in evidence of employee productivity, managers have difficulties in controlling (Kraft, 2019). Teleworking makes it challenging to manage employees' workloads; both too low and too high workload are a concern for managers (Taskin, Bridoux, 2010). Besides, teleworkers experience reduced opportunities to change work, with many workers feeling constrained to improve and fully participate in the labour market (Dunn, 2020). In general, telework organisation requires special preparation from both the organisation's strategic level managers and the specialists' direct managers. Managers face difficulties in combining leadership and management functions as it is necessary to manage both performances and create a reliable and collegial work environment. Leaders need to help supply the proper infrastructure for the job, take an interest in the employees' psychological state, agree on the communication means, frequencies, and rules and make sure team members always feel aware of what is happening (Neeley, 2020).

Finally, recent research shows that the authors emphasize the communication aspects and the changed approach to communication when discussing telework's challenges because of the pandemic experience. According to Micko (2020), the essential lesson of unplanned telework is overcommunication. Leaders must use all tools to communicate with staff and customers to inform them about the current situation, explain why one or another decision is made, and the next step. Organizing virtual teams work requires more emailing and sharing than the traditional way of working (Neeley, 2020).

Previous studies on telework note that virtual work creates new workplace dynamics complexities, making communication and coordination more challenging despite

sophisticated information and communication technologies (Mahler, 2012). Additional research (e.g., Gottfredson, 2020; Kraft, 2019) confirms that there is less feedback, communication and collaboration when working remotely despite the confirmed positive impact of distance technologies on working and business results (Braja & Gemzik-Salwach, 2020; Potjanajaruwit & Girdwichai, 2019). According to Rose (2019, p. 23), even the physical absence of several key team members in meetings leads to group miscommunication, misunderstandings, and more errors in the later implementation of meeting decisions. Accordingly, Sandberg (2020) argues that one of the most significant losses when starting work remotely is the absence of spontaneous conversations. According to the author, a successful long-distance relationship may require more conscious communication, such as quick daily calls, text messages, or online chats. Recent research shows that leaders in the face of COVID-19 had to rapidly implement both technological and managerial innovations to cooperate with teleworkers effectively. For example, Sandberg (2020) introduces a practice when managers ask employees to prepare a daily feedback letter. In such a way, managers become better informed about what employees live for, respond quickly to employees' work-related needs, and solve emerging problems.

Summarizing the reviewed articles, such advantages and disadvantages of telework can be identified (see Table 1).

Table 1. Telework Contradictions.

Advantages of Teleworking	Disadvantages of Telework
Freedom of time planning	Longer working hours
Autonomy in decision making	Lower visibility, noticeability
Time saved on commuting	Blurred boundaries between work and personal life
Possibility to balance work and personal life	More difficult conditions for career development
Possibility to limit unnecessary interaction, no distraction from colleagues	Lack of face-to-face interaction
Reduced workplace maintenance costs	Personal costs for the home-office
More comfort for employees	Challenges for managers
Higher commitment	More complex communication

Theoretical analysis of telework challenges enabled identifying teleworking efficiency and organisational effectiveness that require greater managerial attention and thoughtful decisions. It should be noted that some of the factors found, such as higher commitment, time planning, or decision-making autonomy, are related to an individual's abilities that decide the individual's final performance and even the group to which he or she belongs. The relevant factors of telework efficiency identified based on empirical analysis study results distinguish the latter from the challenges' general context. Research methodology and results are presented further.

METHODOLOGY

A previous study on telework (Raišienė et al., 2020), based on correlation analysis, allowed us to reveal the evaluation of telework in different sociodemographic groups of respondents. In this study, we examined telework from a distinct perspective. The research's focal point is to find the most positive and most negative generalized aspects of telework. EFA analysis application on our data set allows us to reveal the underlying structure of telework characteristics by grouping them into more generalized groups. As a result of doing this, we can identify the most significant telework factors in terms of motivation and demotivation for telework, as well as to determine the required skills for telework.

Instruments. Based on the analysis of scientific publications on teleworking (Table 1), we formed a questionnaire for evaluating teleworking efficiency. The survey was composed of three segments of items: 1) advantages of teleworking. This segment's questions were meant to evaluate what motivates best for telecommuting (e.g., “Possibility to choose worktime”, “Possibility to limit unnecessary interaction (non-work-related chat, coffee breaks, etc.)”; 2) disadvantages of teleworking. These questions were given in order to identify the factors harming telework efficiency (e.g., “Working overtime due to the manager's inability to estimate workload”, “Blurred boundaries between work and personal life”); 3) required skills for teleworking. This segment of questions was given to find out what skills are required for efficient telecommuting (e.g., “Good time management skills”, “Strong personal responsibility for one's work (results, deadlines, etc.)”). Participants were also asked to supply socio-demographic information: their age group, gender, education and a field of activity.

The survey participants were offered a closed type of questionnaire and asked to express their opinion by five-point Likert scale ranging from 1 (Not important at all) to 5 (absolutely essential). To verify the reliability of the questionnaire, Cronbach's alpha coefficient was invoked. Cronbach alpha for advantages of teleworking scale was 0,791, for disadvantages of teleworking scale were 0,946 and required for teleworking – 0,798.

Participants and procedure. Data collection took place within a few very first weeks of quarantine in Lithuania. Based on the official statistics (Statistical indicators, 2020), there are 1359097 employed persons in Lithuania. 41 % (N=557230) of all employed persons worked from home during Covid-19 (Baltijos tyrimai, 2020). Thus, the sample size, calculated based on Paniotto's formula (for 95% reliability and 5% error), was 384. 436 properly completed questionnaires were received.

Data were collected via a web-based survey, which took approximately 15 min. on average to complete. The data collected was stored in data files and later downloaded into SPSS statistical software for analysis. All participants were informed about the purpose of the study. Participation was voluntary, and the respondents were assured of the confidentiality of their response.

The sample comprised of 32,6 % (N=142) men and 67,4 % (N=294) women (Table 1). Concerning age distribution, there were 4 age groups: 64 % (N=249) of participants aged 17-37, 33 % (N=144) of participants aged 38-56 and 3 % (N=13) of 57-77 years old age group. Nearly 22 % (N=94) of the respondents had secondary education, 38 % (N=167) held bachelor's degree, 34 % (N=149) had master's degree and 6 % (N=26) had doctor's degree. In terms of activity fields, the vast majority of the participants worked in the field of services

and intellectual outputs (N=198), 7,6 % (N=33) worked in the field of production and trade, 23,6 % (N=103) of the participants worked in the field of management and administration and 11,7 % (N=51) worked in the field of health, education and social services.

Data analysis. To find and examine the underlying dimensions of the three instruments, factor analysis was used. This statistical method is used to reduce many variables into fewer numbers of factors. The grouping is done by calculating the correlation between variables. One part includes variables that strongly correlate with each other but weakly correlate or do not correlate with different variables, which form other components. Exploratory factor analysis explores the possible underlying structure of a set of interrelated variables without imposing preconceived structure on the outcomes. This method is applied when the number of components is unknown and what variables form them and if the variables are linearly related in general.

There are several requirements for a dataset to be suitable for factor analysis. Firstly, the data should be related to each other, e.g., and they should correlate. This assumption can be checked with the first correlation matrix. The sampling adequacy for factor analysis is verified using the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity. These two methods conclude a minimal standard, mandatory before conducting a factorial analysis.

Secondly, KMO measures sampling adequacy for each variable in the model and the complete model need to be verified. The statistic is the measure of the proportion of variance among variables that might be common variance. KMO returns values between 0 and 1. A value close to 1 shows that patterns of correlations are compact, and so factor analysis should yield distinct and reliable factors. Kaiser (1974) put the following values on the results: 0,00-0,49 unacceptable, 0,50 to 0,59 miserable, 0,60 to 0,69 mediocre, 0,70 to 0,79 middling, 0,80 to 0,89 meritorious and 0,90 to 1,00 marvellous.

Moreover, it is also mandatory to verify whether there are statistically significantly correlating variable pairs saw at all. Bartlett's test of sphericity reveals this. This test compares an observed correlation matrix to the identity matrix. The null hypothesis of the test is that the variables are orthogonal, i.e., not correlated. The alternative hypothesis is that the variables are not orthogonal, i.e., they are correlated enough. Factor analysis has no meaning when the p-value of Barlett's test is higher or equal to the selected significance level.

Furthermore, it was checked whether significant differences between distinguished factors exist in terms of gender, education and field of activity of respondents. Mann - Whitney U test was applied in order to look for dependences on gender. Dunn-Bonferroni post hoc method following a significant Kruskal-Wallis test was used to determine the differences of resulting factors among groups of education and activity field.

Table 2. KMO and Bartlett's Test.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		**0,813**
Bartlett's Test of Sphericity	Approx. Chi-Square	989,345
	Df	36
	Sig.	0,000

In total, 9 components were distinguished during the factor analysis. Table 3 lists the eigenvalues associated with each component (factor) before extraction, after extraction and after rotation and shows each evaluated component's dispersion. The *Total* column gives the

eigenvalue or variance in the original variables accounted for by each component. The *% of variance* column shows the ratio, expressed as a percentage, of the variance accounted for by each component to the total variance in all the variables. The *Cumulative %* column gives the percentage of variance accounted for by the first *n* components. There are as many components as variables for the initial solution, and in correlation analysis, the sum of the eigenvalues equals the number of components.

The eigenvalue of the first factor is 3,463. As this value is higher than 1,0, it means that the factor explains 3,463 times more dispersion than a separate variable. In percent values, the first factor explains 3,463/9 = 0,3482 or 34,82% dispersion. If a factor's eigenvalue is less than 1, it explains less dispersion than a separate variable. In order to decide what number of factors should be retained, Kaiser's criterion was invoked. Kaiser's criterion is suggested to investigate factors the eigenvalues of which are higher or equal to 1. In addition to the eigenvalue criterion, the scree plot was visually inspected to decide how many factors should be retained. In our case, a two-factor structure (see Table 3) has been captured from the instrument. Cumulative variance explained by these two factors was 53,305%. The constituted factor model is applicable if stays not less than 50 % of the initial variable dispersion (Field, 2009); accordingly, we can state that our factor model is appropriate.

Table 3. Total Variance Explained.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1.	3,463	38,482	38,482	3,463	38,482	38,482	2,775	30,831	30,831
2.	1,334	14,823	53,305	1,334	14,823	53,305	2,023	22,474	53,305
3.	0,814	9,044	62,349						
4.	0,753	8,363	70,713						
5.	0,695	7,719	78,431						
6.	0,598	6,640	85,072						
7.	0,515	5,717	90,789						
8.	0,498	5,401	96,189						
9.	0,343	3,811	100,000						

As can be seen in Table 4, Factor 1 has 5 items. The percentage of total variance explained by the first factor was 38,48 %. This factor was named *Flexibility of work organisation*. The 2 factor comprises 4 items and explains 14,82 % of the total variance. It was labelled *Social independence*. After the scale items were identified using factor analysis, the factors' internal consistency was determined by computing an Alpha coefficient (Cronbach). The test evaluates whether all questions of the scale reflect the investigated value

and allow to specify the number of questions needed in the scale. Cronbach's alpha reliability coefficient ranges typically between 0 and 1. The closer the Cronbach alpha coefficient is to 1,0, the greater the scale items' internal consistency. There are different reports about the acceptable values of alpha, ranging from 0,70 to 0,95 (Nunnally, Bernstein, 1994). If the scale is only used for statistical analysis (as in our particular case), the authors suggest that Cronbach's alpha may be lower than 0,7, but it should nonetheless be around 0,5. In our case, the Cronbach's alpha of factor 1 is 0,796, which can be considered as good and 0,663 for factor 2, which is acceptable.

Table 4. The Results of Teleworking Advantages Factor (Fa) Analysis.

		L	%	α
Fa_1. The Flexibility of Work Organisation				
1.	Possibility to choose worktime	0,775	38,482	0,796
2.	Possibility to independently organize work	0,772		
3.	Possibility to balance work and personal life	0,732		
4.	Possibility to work individually	0,673		
5.	Possibility to choose workplace	0,660		
Fa_2. Social Independence				
1.	Possibility to avoid formal dress code and appearance-related requirements at the workplace	0,787	14,823	0,663
2.	Possibility to limit unnecessary interaction (non-work-related chat, coffee breaks, etc.)	0,705		
3.	Possibility to better keep up with the selected wellness program	0,684		
4.	Time saved on commuting	0,544		

Next, we examined the underlying factors of the telework disadvantages scale. The Kaiser–Meyer–Olkin measure verified the sampling adequacy for the analysis; a KMO value of 0,942 was obtained (Table 5). This shows that the sample adequacy for explored factor analysis is marvellous. The Bartlett's test of sphericity χ^2 (406) = 6702,498, $p<0,001$ was significant, showing that the data are adequate to conduct a factor analysis.

Table 5. KMO and Bartlett's Test.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		**0,942**
Bartlett's Test of Sphericity	Approx. Chi-Square	6702,498
	Df	406
	Sig.	0,000

Items with eigenvalues greater than 1 were kept in the factor. A four-factor structure (see Table 6) has been captured from the instrument. The first eigenvalue of 11,682 corresponds to the first factor associated with 40,282 % of the original data variance. The next eigenvalues are 1,945, 1,661 and 1,308, respectively, corresponding to 57,226 % of the original data variance.

Table 6. Total Variance Explained.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1.	11,682	40,282	40,282	11,682	40,282	40,282	4,557	15,713	15,713
2.	1,945	6,707	46,988	1,945	6,707	46,988	4,185	14,431	30,144
3.	1,661	5,726	52,714	1,661	5,726	52,714	4,020	13,862	44,066
4.	1,308	4,511	57,226	1,308	4,511	57,226	3,834	13,219	57,226
5.	0,968	3,338	60,563						
6.	0,946	3,263	63,826						
7.	0,842	2,903	66,729						
...	...	...	...						
28.	0,231	0,797	99,280						
29.	0,209	0,720	100,00						

10 items were loaded onto factor 1 and were labelled as *Feedback issues related to work accomplishment* (Table 7). The percentage of total variance explained by the first factor was 40,282. The second factor has 6 items, and it explains 6,707 % of the total variance. Factor 2 was named *Communication-related challenges.* The third factor comprised 7 items labelled as *Challenges related to interpersonal relationships*, and it explained 5,726 % of the total variance. Finally, the fourth factor, named *Challenges associated with a non-standard work environment*, explained 4,511 % of the total variance. It comprised of 5 items.

What is more, the questionnaire scale internal consistency was evaluated using Cronbach's alpha coefficient. The Cronbach's alpha values of telework disadvantages factor scale fluctuate from 0,833 to 0,900. It can be stated that the internal consistency of the scales is particularly good.

Finally, we explored the dimensions of the scale of the qualities required for teleworking. An examination of the Kaiser-Meyer Olkin measure (0,830) of sampling adequacy suggested that sample adequacy for explored factor analysis is meritorious (Table 8). The Bartlett's test of sphericity χ^2 (21) = 896,994 was significant ($p<0,001$), showing that the data are adequate to conduct a factor analysis.

Table 7. The Results of Teleworking Disadvantages Factor (Fd) Analysis.

		L	%	α
Fd_1. Feedback issues related to work accomplishment				
1.	Exaggerated expectations of the manager/employer, without taking into consideration the actual workload	0,732	40,282	0,900
2.	Working overtime due to the manager's inability to estimate workload	0,666		
3.	Doubts regarding evaluation: will the managers notice and adequately appreciate my results	0,657		
4.	Information overload	0,629		
5.	Being under the impression that other people finish their tasks and enjoy life at home while I continue working all the time	0,572		
6.	Communication overloads	0,538		
7.	Career restrictions due to limited possibilities to demonstrate exceptional skills or extraordinary work results	0,537		
8.	Complicated access to work-related information	0,505		
Fd_2. Communication-related challenges				
1.	Time-consuming asynchronous communication (text messages and discussions)	0,727	6,707	0,865
2.	Tensions due to the distribution of attention between work tasks and intense communication	0,702		
3.	Extended on-line meetings	0,699		
4.	Extended decision-making time	0,686		
5.	When telecommuting the team becomes focused on the communication rather than the tasks	0,660		
6.	Difficulties in identifying the start and end of several simultaneously implemented tasks	0,622		
Fd_3. Challenges related to interpersonal relationships				
1.	Lack of face-to-face interaction with colleagues	0,723	5,726	0,853
2.	Lack of team spirit, the "we" feeling	0,683		
3.	Constraints on the possibilities to build mutual trust	0,672		
4.	Lack of face-to-face interaction with the manager	0,663		
5.	Lack of mutual trust between employees and their managers	0,604		
6.	Communication problems with other employees	0,559		
7.	Lack of feedback	0,527		
Fd_4. Challenges related to the non-standard work environment				
1.	Challenges related to self-organisation and following of work routine	0,742	4,511	0,833
2.	Distractions when teleworking by other household members	0,726		
3.	Blurred boundaries between work and personal life	0,720		
4.	Self-motivation related challenges	0,671		
5.	Lack of inspirational work atmosphere	0,552		
6.	Lack of understanding on the part of family members (do not consider telecommuting as "serious" work)	0,531		

Table 8. KMO and Bartlett's Test.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		**0,830**
Bartlett's Test of Sphericity	Approx. Chi-Square	896,994
	Df	21
	Sig.	0,000

Next, the factor analysis extracted two factors since the eigenvalue greater than 1 (Table 9). The first eigenvalue of 3,302 corresponds to the first factor associated with 47,167 % of the original data variance. The second eigenvalue of 1,001 corresponds to the second factor associated with 14,306 % of the original data variance. To sum up, the cumulative percentage of the total variance explained by the two extracted factors was 61,473 %.

Table 9. Total Variance Explained.

Component	**Initial Eigenvalues**			**Extraction Sums of Squared Loadings**			**Rotation Sums of Squared Loadings**		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1.	3,302	47,167	47,167	3,302	47,167	47,167	2,457	35,101	35,101
2.	1,001	14,306	61,473	1,001	14,306	61,473	1,846	26,372	61,473
3.	0,763	10,907	72,381						
4.	0,606	8,655	81,035						
5.	0,546	7,798	88,833						
6.	0,443	6,324	95,157						
7.	0,339	4,843	100,000						

As can be seen in Table 10, Factor 1 contains four items, which were named *Self-organisation and independent working skills.* The reliability coefficient Cronbach alpha of this factor is 0,764, which can be considered as good. Factor 2 was labelled *Personal leadership skills*, and it comprises three items. The Cronbach alpha of Factor 2 is acceptable – 0,645.

Table 10. The Results of The Required Qualities for Teleworking Factor (Fq) Analysis.

		L	%	α
Fq_1. Self-organisation and independent working skills				
1.	Ability to work independently	0,842	47,167	0,764
2.	Good time management skills	0,821		
3.	Strong personal responsibility for one's work (results, deadlines, etc.)	0,729		
4.	Digital literacy	0,550		
Fq_2. Personal leadership skills				
1.	Personal leadership	0,825	14,306	0,645
2.	Good communication skills	0,775		
3.	Ability to engage and maintain a commitment to the organisation	0,615		

It can be noted that there is a significant difference between the importance of telework skills in Factor 1. Working independently and good time management skills were considered more important than strong personal responsibility for one's work and digital literacy. Even though Factor 2 was of lesser importance and explained only 14,3 % of the total variance, it still indicates that personal leadership is noteworthy when managing teleworkers.

Finally, dependences between resulting factors and social-economic variables were verified. Firstly, we explored whether distinguished sets of teleworking characteristics depend on gender.

Table 11. Factor Dependences on Gender.

Factor	Gender	N	Mean Rank	Mann-Whitney U	p
Fd_1. Feedback issues related to work accomplishment	Male	142	236,85	18268,500	0,034
	Female	294	209,64		
Fd_2. Communication-related challenges	Male	142	244,76	17144,500	0,002
	Female	294	205,81		
Fd_4. Challenges related to the non-standard work environment	Male	142	238,02	18102,500	0,024
	Female	294	209,07		
Fq_1. Self-organisation and independent working skills	Male	142	186,63	16349,000	0,000
	Female	294	233,89		
Fq_2. Personal leadership skills	Male	142	188,00	16543,000	0,000
	Female	294	233,23		

There were no differences in the evaluation of the factors of teleworking advantages between men and women ($p > 0,05$). However, the analysis showed that men significantly more than women emphasize negative aspects of teleworking. They experience more feedback issues related to work accomplishment ($p = 0,034$), communication-related challenges ($p = 0,002$), and challenges related to the non-standard work environment ($p = 0,024$). In terms of required qualities for teleworking, women significantly more than men payed attention to self-organisation and independent working skills ($p < 0,001$) as well as personal leadership skills ($p < 0,001$).

Next, we examined the resulting factors depending on the education of the respondents (Table 12). The results of the test demonstrated significant differences in the factors of the required qualities for teleworking in terms of education of the respondents.

Table 12. Factor Dependences on Education.

Factor	Education Group	N	Mean Rank	χ^2	P
Fq_1. Self-organisation and independent working skills	Secondary school	94	159,53	28,596	0,000
	Bachelor's degree	167	232,51		
	Master's degree	149	232,78		
	Doctor's degree	26	259,87		
Fq_2. Personal leadership skills	Secondary school	94	172,69	20,259	0,000
	Bachelor's degree	167	236,35		
	Master's degree	149	233,34		
	Doctor's degree	26	184,40		

We found that respondents holding secondary school degree value less self-organization and independent working skills as compared to the respondents having a bachelor ($p < 0,001$), master ($p < 0,001$), and doctor degree ($p = 0,001$). Furthermore, they attach less importance to personal leadership skills when teleworking compared to the respondents holding bachelor ($p = 0,001$), and master degree ($p < 0,001$).

Analysing distinguished factors in terms of the field of activity (Table 13), we found that respondents working in the field of management and administration as well those working in health, education and social services attach more importance to self-organisation and independent working skills than respondents working in the field of services and intellectual outputs ($p = 0,026$; $p = 0,022$).

Table 13. Factor Dependences on the Field of Activity.

Factor	Field of Activity	N	Mean Rank	χ^2	p
Fq_1. Self-organisation and independent working skills	Services and intellectual outputs	198	203,83	31,558	0,000
	Production and trade	33	243,70		
	Management and administration	103	249,01		
	Health, education, and social services	51	263,04		
	Other	51	152,98		
Fq_2. Personal leadership skills	Services and intellectual outputs	198	207,68	16,222	0,003
	Production and trade	33	215,05		
	Management and administration	103	252,07		
	Health, education, and social services	51	237,59		
	Other	51	175,84		

Finally, respondents working in the management and administration field assigned more importance to personal leadership skills ($p = 0,033$) as the qualities required to remote worker, compared to those working in the field of services and intellectual outputs.

DISCUSSION

Comparing the theoretical analysis of telework in terms of organisation management and empirical research conducted during mass work from home can indicate that most focus points remained unchanged. Still, new nuances and specific changes emerged in the attitudes of teleworkers towards working conditions.

This paper shows that employees consider such factors as "Flexibility of work organisation" and "Social independence" to be positive when working from home. Similar to the findings of earlier research, our study confirmed the importance of autonomous decision-making for teleworkers. In this regard, teleworkers value the possibility of choosing worktime, independently organising work, balancing work and personal life, and choosing the workplace. However, it was surprising that one of the principal factors is that employees value working individually. In the literature, the limited opportunity to work together in teams is emphasized as a drawback of telework (e.g., Eikenberry, Wayne, 2018; Even, 2020). Thus, our study results indirectly suggest that keeping team collaboration requires more effort from managers and raises whether the teamwork is not overestimated if the opportunity to work individually is seen as an advantage of teleworking rather than a disadvantage. This question becomes less rhetorical when we see that the factor "Social independence" is characterized by the possibility of not following formal requirements for appearance and routine, taking care of personal health, avoiding informal communication with co-workers and saving time from communication in general. However, we cannot make generalized conclusions about communication avoidance without further research. Our study showed that employees were not satisfied with relatives at home during the working day as well – respondents felt distracted by them. Besides, the fact that the survey was conducted in different circumstances, during the quarantine due to the pandemic, should not be overlooked. The intensity of communication in the respondents' environment was unusually increased.

On the other hand, the research results show that communication with managers stays relevant for the employees, i.e., factor "Feedback issues related to work accomplishment". Employees wanted to be noticed and valued by managers, and they were concerned whether managers did not directly see them will not affect performance evaluation and career. Less frequent feedback between managers and employees was found as a drawback of telecommuting.

The research results also showed that "Communication-related challenges" are crucial for telecommuting in all circumstances. However, our study participants did not highlight the lack of communication and miscommunication, nor the limitations of nonverbal expressions, which was mentioned in the literature; instead, they emphasized the increased time needed for telecommuting, i.e., prolonged meetings and excessive focus on the communication process itself, leaving the desired result blurred in the background.

In terms of telecommuting contradictions, it may seem inconsistent that respondents marked such factors as individual communication and restriction of social contacts as advantages of teleworking. In contrast, respondents equally assessed the lack of social connections as a disadvantage of telework. However, it should be noted that the employees did not lack communication as such. Instead, there was not enough team spirit or "we-feeling", which was challenging to ensure while working from home. Respondents also noted

that working from home makes it more difficult to achieve mutual trust with managers. It can be said that teleworkers lack what organisational culture brings when working in an office – organisational identity and a sense of belonging.

As a disadvantage of telework, respondents emphasized the non-standard work environment. Employees are distracted by the home environment, work is interfering with personal life, and there is a lack of inspiration for work. It is important to note separately that factors found in the study, such as "Self-organisation and independent working skills" and "Personal leadership skills" fall into the area of employees' abilities. Research has shown that telework requires an individual's ability to work independently, time planning skills, and personal responsibility for work outcomes. Besides, a teleworker needs to have personal leadership skills, practical communication skills, and the ability to engage and commit to the organisation. As can be seen, the manager's role should be specified, and the decision-making power should be shared in a teleworking environment.

CONCLUSIONS

This paper highlights the sets of telework advantages and disadvantages and group the personal qualities needed for a modern teleworker. Finally, teleworking has its specificities in terms of human resource management. It is working in a different context, created primarily by the social environment of the individual employee. For a teleworker, the significance of the organisation's requirements decreases and his or her own needs in terms of job performance and personal assessment become sharper. Thus, managers need to rethink their working methods when working with telecommuters. The identified factors enable an assessment of telework in the organisation in a structured and targeted manner and consider telework organisation improvement. The results revealed that the work organisation's flexibility could be considered the major advantage of teleworking. Such factors as the possibility of choosing worktime, independently organising work or opportunity to balance work and personal life are the key motivators for the work from home. Besides, our study has shown the significance of feedback issues related to working accomplishment when telecommuting. In this concern, the manager's exaggerated expectations, working overtime due to the manager's inability to estimate workload and doubts regarding evaluation were indicated as the most demotivating factors. This is an essential finding for organisation managers to rethink and implement innovative managerial methods to cooperate with teleworkers and keep them motivated effectively. The identified groups of telework factors serve as the guidelines for organizations (e.g., large-scale organizations situated in different countries) that are not ready to deal with their employees telework-related issues. Rather, on the contrary, we emphasize that these are the guidelines that should be followed by employers seeking to create conditions for productive work.

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