# An Analysis of the Consequential Characteristics of Telework, due to the Coronavirus Pandemic, based on the Opinion surveys of Hungarian Employees

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Abstract: The coronavirus epidemic that appeared at the beginning of 2020, was declared a "pandemic", by the World Health Organization (WHO) on 11 March 2020. The coronavirus pandemic had a significant impact, not only on people's health, but also on jobs. The pandemic has intensified fear, frustration, stress and anxiety in the workplace and changed the way millions of employees do their jobs. The first wave of the coronavirus pandemic globally accelerated the introduction of telework at an unprecedented rate. Previously, in Central and Eastern Europe, including Hungary, telework was the privilege of only a very narrow group of employees. Recently, however, this form of work has become available to many. This study evaluates the effects of teleworking introduced, due to the coronavirus pandemic, by surveying Hungarian employees. The survey took place in the Autumn of 2022, during which, we interviewed 235 employees. The examination of our hypotheses, provided the conclusion, that telework introduced due to the coronavirus, had a significant impact on the working and private lives of Hungarian employees. We will show that a significant relationship exists between the efficacy of telework and the management of working time. Our own investigation also confirms the International Literature, according to which, telework has a significant impact on the mental health of workers. The mental health of Hungarian workers is most strongly affected by anxiety, due to the coronavirus, working in social isolation and the conflict between work and private life.

Keywords: telework; coronavirus; work-life balance; Hungary; mental health

## 1 Introduction

Every crisis is an emotionally stressful and disturbing event in people's lives, and the coronavirus pandemic was no exception. The outbreak of the coronavirus pandemic also caused a serious crisis in the labor markets and triggered significant changes in working conditions worldwide. The health risks associated with the coronavirus pandemic and the mandatory physical distancing measures imposed by the Hungarian government, have forced many Hungarian organizations to switch widely from the traditional form of work, to working from home.

Due to the coronavirus and subsequent crises, the majority of organizations have to deal with a changing environment every day. In addition to flexibility, speed and innovation, this continuous struggle also requires knowledge of the effective and efficient use of the workforce. Recently, it seems that flexible work arrangements, including telework, are one of the options to meet these requirements. Teleworking is a work arrangement that allows an employee to work at home or in another location with the help of information and communication technologies. [1] [2] Teleworking supported the digitization of all work-related tasks. [3] Teleworking can be implemented under two emphasized conditions, namely that it is important that the work takes place away from the site, and that communication between the parties concerned can be established using electronic technological devices. [4] The literature dealing with teleworking emphasizes the examination of several variables, among others the relationship between the organization and human resources, employee independence, technological support, and the balance between work and private life are considered questions to be answered. [5] Teleworking has made it possible for some companies and their employees to more easily survive the sudden shock caused by the coronavirus crisis. [6] At the same time, teleworking was not accessible to everyone, especially in jobs involving physical work and where physical presence is essential to complete the tasks at hand. It should also be noted that, for many, working from home has become stressful. International studies have shown that during the coronavirus, next to job insecurity [7] [8] lack of worklife balance [9] [10] was another main stress factor for employees. Employee's experience teleworking in a different way, as they are in a different life phase and have different life experiences, which also affects their quality of life. The desire for teleworking is developed according to the individual needs of the employees. [11] Teleworking introduced as a result of the coronavirus has also affected the private lives of many Hungarian workers. Work and home environment, well separated up until then, suddenly became one, and many people found it difficult to separate them again. In Hungary, the application of this form of work was still in an early stage of development, larger companies already had experience with it, but a sudden transition of such magnitude had never happened before. It posed a challenge for leadership and employees alike, as the sudden change greatly affected not only the functioning of the organizations, but also the private lives of the employees.

In the last couple of years, a number of Central European studies [12-16] have been conducted in order to analyze the characteristics related to telework from different aspects. The primary objective of this study was to examine the effects of teleworking introduced due to the coronavirus through Hungarian employees. In the course of our research, we were searching for an answer to what effect the sudden introduction of teleworking had on the employees' work performance and private lives.

# 2 Literature Review

In recent years, we saw a significant increase in the number of articles related to telework published in the international literature. We must also not forget that teleworking is not a new type of work arrangement, many authors and researchers have been examining the advantages and disadvantages of this work arrangement since the 1960s and 1970s. According to Jack Nilles – who is also called the "Father" of telecommuting – a "Telecommuter" is a company employee who works at a place other than their usual workplace, one or more days of the week. [17]

The most common form of telework is work from home (WFH). The advantages and disadvantages of WFH have been examined many times in the literature. One of the biggest advantages of WFH is that employees save on the cost of commuting to work. [18] Moreover, the employee saves not only the money, but also the time spent on commuting [19], which for many is even more important than saving the money. [20] Teleworkers enjoy more freedom in creating their work environment. [21] Another big advantage is that WFH often allows the employee to create their own daily work schedule, so telework provides the employee with a high degree of flexibility. A higher degree of autonomy or freedom can also have a positive effect on the manager-employee relationship. [22] [23] A kind of trust can develop that can make the relationship stronger and lend it tranquility, but naturally only if neither the employee nor the management abuses it. [24] These circumstances can increase efficiency and even the quality of work. Another big advantage of telework from the employer's perspective is that, since a significant number of employees works from home, it is not necessary to maintain an office with enough room for everyone. This can significantly reduce monthly expenses, and the company can focus the resources generated in this way on other areas. What is, on the one hand, a saving in costs, can on the other hand mean extra expenses for employees. [25] What employees save on commuting, can easily be spent on something else, as employees who stay at home often have to bear costs such as, internet connections, heating, electricity, etc. That is the reason why many companies give their teleworkers extra compensation to cover these costs. Another disadvantage is that a good relationship does not always form between manager and subordinate, so loss of trust, isolation and the deterioration of social relationships at work, can also be observed in many cases when work is done at home. [26] The most common source of stress in connection with teleworking is job rotation, stressful long working hours, and the feeling of insecurity. [27] There may also be problems with regard to work efficiency. The reason is that when work is performed online, there is no possibility for an employee facing a problem to ask a colleague or a manager for immediate help. As a result, the stance taken on the effectiveness of telework in the literature is disparate, there are researchers [28] [29] according to whom tele work has a negative effect on company productivity. According to a study by Jackson and Fransman, 2018, [30] telework does not necessarily improve productivity or job satisfaction due to family difficulties and social isolation. According to other researchers [31], telework improves the organization's performance because the employee autonomy provided by telework increases employee job satisfaction and thus work efficiency. From an organizational perspective, work efficiency can also be improved by a decrease in the number of sick leaves, an improvement in resource utilization and/or a decrease in staff turnover due to improved satisfaction in telework. [32] Finally, one of the biggest disadvantages of telework is its impact on private life. If there is no proper daily routine, or if the tasks are not properly distributed among the employees, it can often happen that the line between working time and time for private life becomes blurred.

Straus et al. (2023) [33] found in their research that in the initial period of the pandemic, the well-being, productivity and commitment to the organization of employees working remotely decreased. Work-life balance is a term referring to the relationship between an individual's professional obligations and private life. [34] Research discussing the balance between work and private life also examines the conflict between work and family. [35] [36] Reconciling work and private life poses a great difficulty for many employees. According to international research, increasing education contributes to an increase in the proportion of those for whom work, the source of satisfaction, success and financial security, comes before private life. Classic studies exploring work-life balance (initially: work-family balance) in the 1980s examined the types of conflicts between the two spheres, i.e., time-based, strain-based, and behavior-based conflicts. [37] This research was based on the thesis that the resources available to individuals are limited, so a competition for these resources inevitably emerges between private life and work. [38] Achieving work-life balance is usually understood to mean restricting one side (usually work) in order to have more time for the other. [39] The boundaries between work and private life are becoming more and more blurred [18], which makes transition between the different roles difficult, so the individual is confronted with conflicts. A conflict arises when one of the two roles (work or private life) requires a greater number of resources than the given individual is willing or able to allocate to it. [40] With the achievement of a work-life balance, advantages benefiting the individual, those benefiting the organization and those benefiting the society as a whole are organically linked. It leads to satisfied employees, more successful businesses, macroeconomic gains and benefits for society. The positives generated at the level of the individual as a result of the wide-ranging application of an approach aimed

at creating a work-life balance, also appear at the level of the society or the economy as a whole. [41]

Based on the above, our first research hypothesis was the following:

**H<sub>1</sub>:** There is a significant relationship between telework and its effect on private life.

**H<sub>0</sub>:** There is no significant relationship between telework and its effect on private life.

It can also be said based on the above that the effect of telework on private life is in most instances related to poor time management. Those working from home tend to work longer hours than when they work on the employer's premises, in part because daily work routines are disrupted, blurring the lines between work and private life. Some researchers have looked at what time teleworkers most like to work. According to Hamermesh (1999) [42], teleworkers prefer working in the evening or at night, because this gives them more free time to perform their household tasks during the daytime hours. According to Gimenez-Nadal et al. (2012) [43], telework allows employees to organize their working time more flexibly. Telework offers employees flexibility and freedom in choosing the method and organization of work [44], but this freedom can also have negative effects on employees. Employees taking part in a study by DeFilippis et al. (2020) [45] have been reported to experience an increase of 48 minutes in the average length of a working day in telework. According to Satpathy et al. (2021) [46], longer working hours affect employee well-being, such as work-life balance, reducing time spent on leisure, family and friends. Poor organization of work has an impact not only on the employee's private life, but also on work performance. One of the most important circumstances connected to achieving organizational goals is how workers manage their working time. [47] Effective time management involves optimal use of time to increase productivity. Good time management requires the proper organization of employees' daily working hours. [48] Appropriate management of working time not only improves employee performance, but also employee satisfaction, motivation and work-life balance. [49]

Our second hypothesis was formulated based on the literature, as follows:

**H2:** A correlation can be shown between the effectivity of telework and the management of working time.

**Ho:** No correlation can be shown between the effectivity of telework and the management of working time.

Teleworking introduced due to the coronavirus affects not only work performance and work-life balance, but also the mental health of workers. The coronavirus pandemic has affected many aspects of employees' lives and thus posed many risks to their mental health. Mental health is characterized by the level of wellbeing in which an individual is able to realize their capacities and handle the stressful

situations that occur regularly in their life. [50] Mental health is affected by many factors, so it is difficult to formulate a uniform definition. An individual's mental health is influenced by personal characteristics as well as by the environment and society. [51] The physical, social and organizational conditions of the work environment significantly determine the mental wellbeing of employees. [52] Teleworking, in and of itself, has many effects that can influence an individual's mental health, examples are lack of boundaries between work and home, extended working hours, lack of relationships at work and limited support from leadership. [1] These factors were amplified even more by the coronavirus pandemic. The main factors affecting the mental health of teleworkers during teleworking introduced due to the coronavirus pandemic were feeling of uncertainty, increased presence of health problems [53], stress caused by social isolation [54], family conflicts [55], isolation at work [56] and excessive food and alcohol consumption. [57-59]

Our third and last hypothesis was formulated based on the above literature:

**H3:** There is a significant relationship between telework and the mental health of employees.

**H<sub>0</sub>:** There is no significant relationship between telework and the mental health of employees.

The rest of the present study contains a detailed presentation of our own investigations, in which the hypotheses presented above are also verified using various statistical tests.

## 3 Material and Methods

Our research examines the effects of telework introduced as a result of the coronavirus pandemic from an employee perspective. The primary data collection was carried out in the form of a quantitative research method, an online questionnaire survey, between September and October 2022. The online questionnaire survey is a fast and safe data collection technique, also ensuring that potential respondents are not harmed, thanks to the guaranteed anonymity. In the course of the online survey, we used our own structured questionnaire containing a total of 31 questions. The questionnaire can be divided into two larger sections, the first part asks about the respondent's general demographics, the second part asks about the effects of the coronavirus on the respondents' workplace through openended, closed-ended and semi-closed questions. For Likert scale type questions, respondent preferences were measured on a scale of 1-5. In relation to scale type questions Cronbach's alpha can be calculated to gain information whether the measure of the scale is reliable enough. Demographics are presented using simple descriptive statistics. Snowball sampling was used, which means that the respondents could also share the questionnaire among their friends. We received a total of 235 evaluable questionnaires. The data were organized into a unified database and evaluated using software capable of statistical calculations, IBM SPSS Statistics 23. The data were subjected to a normality test, and based on the result it was established whether parametric or non-parametric statistical tests were appropriate to examine the hypotheses.

Table 1 shows the demographic data of the sample using simple descriptive statistics. The table lists the percentage distributions and frequencies. Regarding gender distribution, 52.3% of the questionnaires was filled in by females and 47.7% by male. The age distribution is as follows: 12.8% of the respondents belonged to the 1960-1970 age group, 17.9% to the 1970-1980 age group, 29.8% to the 1980-1990 age group and 39.6% belonged to the 1990-2000 age group. In terms of education, 73.6% of the respondents held a University Degree and 26.4% had a High School diploma, at the time of the survey. With regard to job positions, 99.1% of the respondents were employed as intellectual workers, while 0.09% of the respondents performed manual work.

Table 1
Description of the sample

N total 235	Percentage	Frequency	Valid %	Cumulative %
Gender	Male	112	47.7%	47.7%
	Female	123	52.3%	52.3%
Age groups	1960-1970 age group	30	12.8%	12.8%
	1970-1980 age group	40	17.9%	30.6%
	1980-1990 age group	70	29.8%	29.8%
	1990-2000 age group	93	39.6%	39.6%
Educational	University	173	73.6%	73.6%
level	High School	62	26.4%	100%
Position	Manual worker	2	0.09%	0.09%
	Intellectual worker	233	99.1%	100%

Source: Authors' own calculations, using SPSS (2022)

### 4 Results

The surveyed employees have divergent views on the effects of telework introduced as a result of the coronavirus pandemic. Percentage distributions were analyzed using simple descriptive statistics. 44.3% of the respondents had a favorable opinion on telework. In 31.1% of the cases, the effectiveness of telework was judged to be the same as work done on the employer's premises. 74% of employers did not provide additional support to their employees, only 26% of employers provided support in the form of transportation to the workplace (provision of a car), contribution to public transportation or compensation for Internet use.

Table 2 enumerates the advantages and disadvantages of telework regarding private life. The listed positive and negative factors vary from person to person, but some influencing factors can be found on both sides. According to the respondents, working at home can lead to more as well as less stress, more as well as less time for family. The same is true for feelings of tension, as well as for the nature of the newly created work environment. The unique nature of telework and its impact on the employee is also reflected in the fact that while someone complains about being alone and isolated, others view solitude favorably and perceive it as more "me" time. A clear advantage is the reduction of travel time and costs and the possibility of flexible scheduling.

Table 2
The impact of telework on private life

The positive effect of telework on private life	The negative effect of telework on private life				
Saving travel time	Isolation				
Better relationships within family	Less social contact				
Less stress	Loneliness				
Flexibility	Irregular lifestyle				
Autonomy	Anxiety				
Cost effectiveness	Job change				
Calm environment	Less time for family				
More joint programs with the family	More stress				
Comfort	Difficult to create your own space				
More sleep	More distractions				
More me time	Conflicts				

Source: Authors' own research (2022)

Regarding the character of the work environment, 43.8% of respondents could not decide whether office work or telework is more stressful for them. However, during the coronavirus pandemic, the prevalence of workplace stress among the surveyed employees was 79.1%. The causes of workplace stress can be traced back to the amount of overtime, risk of infection, non-compliance with hygiene rules, behavior of irresponsible and unvaccinated colleagues, and at the same time, it was considered a serious problem and source of stress that telework was not provided to the same extent for everyone and that management was unable to properly coordinate working remotely. In one of our subsequent questions, we touched on the comparison of office and telework, where the respondents could elaborate on their opinions; the results are summarized in Table 3. Both types of work involve many challenges, and individual aspects can appear as advantages and also as disadvantages, such as the continuous monitoring of employees by management or the lack of supervision or even the low stimulus work environment, many employees in the same space or the noise. While less communication and a lack of depth in collegial relationships were objected to in the case of telework, tolerating

colleagues and lots of rumors also appeared for office work. In the case of telework, a weak or poor-quality internet connection or provision of necessary and suitable conditions and tools for performing work can be considered difficulties, since telework is carried out through information and communication technologies. In the case of office work, the number of tasks that need to be solved abruptly, the number of colleagues who come to work sick and avoiding personal conflicts are among the big challenges.

Table 3
Comparison of office work and telework

Telework is more stressful	Office work is more stressful
Lack of control	Continuous presence of management
Poor quality of internet connection	Several sudden tasks to be solved
More difficult documentation	Personal conflicts
More difficult concentration	More work and deadlines
More difficult information gathering	Adapting to others
Difficult work	Different ways of thinking of colleagues
Improper treatment of the employee	Many people in one airspace
Asking for help is difficult	Disturbing each other
Stressful	Time wasted on travel
More distractions	Sick colleagues
Lack of communication	Physically and mentally taxing
More difficult contact	Sound disturbance
Lack of personal and work relationships	Decreasing concentration
Private life and work are mixed	The pressure is high
Missing conditions	Lots of rumors
Low stimulus environment	Tolerance of colleagues
Uncertainty	

Source: Authors' own research (2022)

Table 4 gives an enumeration of the difficulties experienced in telework together with the most often marked Likert scale value and percentage distribution pertaining to the individual items. The value of the Cronbach-alpha reliability coefficient is 0.763, therefore, the measurement reliability of the scales is adequate. 41.3% of respondents fully agree that the noise level experienced at home was one of the biggest disadvantages of teleworking, and according to 30.6% of respondents, coping with anxiety due to Covid-19 caused the greatest difficulties. 25.1% of respondents did not experience maintaining a work-life balance as a significant challenge. Social isolation, the layout of and lighting in the home workspace and internet connection quality were considered to be moderate problems. Setting fix working hours, taking regular breaks while working and providing for the necessary conditions for telework all presented difficulties to the surveyed employees.

Aspect	Most common value	Percent				
Work-life balance	4	25.1%				
Setting fixed working hours	2	28.1%				
Taking regular breaks while working	2	25.1%				
Working in social isolation	3	25.5%				
Treating anxiety due to Covid-19	5	30.6%				
Home workspace layout	3	34.9%				
Lighting in the home workspace	3	44.3%				
Working at home noise level	5	41.3%				
Interruption of the Internet service	3	55.7%				
Access to office supplies/materials	2	43.8%				
Access to telework software	2	52.8%				
Providing a computer/laptop for telework	2	66.4%				
"very difficult or very bad" = 1 and "very easy or very good" = 5						

Table 4
Difficulties experienced during telework

Source: Own calculations, using SPSS (2022)

## 4.1 Hypothesis Tests

Our first research hypothesis was the following:

**H<sub>1</sub>:** There is a significant relationship between telework and its effect on private life.

**Ho:** There is no significant relationship between telework and its effect on private life.

The data collected during the questionnaire survey come from a normal distribution, so we used parametric statistical tests to examine our hypotheses. To test the first hypothesis, we used a one-way analysis of variance (ANOVA), based on which it can be established whether there is a statistically significant difference between the means of the studied groups. The statistical test is shown in Table 5. According to test of homogeneity (Levene's test, 0.457), the variances are homogeneous, so an ANOVA can be used. In the ANOVA table the p-value is 0.000, so a significant correlation can be shown between the examined variables. In addition, a post hoc analysis is needed to examine the differences between the group means, which is given in the Multiple Comparisons table. In our case, we perform Hochberg's GT2. In the table, each row shows a comparison of a pair of categories. The first column shows the differences in mean values, the second the standard errors and the third the significance levels. The significance level, i.e., the p-value is <0.05, so the two examined means differ significantly from each other in all comparisons. After determining the significance of the relationship, we quantify the strength of the effect, i.e., the value of r. The following formula was used for this:

$$r = \sqrt{\frac{\textit{Sum of Squares (between groups)}}{\textit{Sum of Squares (total)}}} = \sqrt{\frac{60.422}{303.685}} = 0.45$$

The value of r is 0.45, which means a strong effect, so telework has a strong influence on the employee's private life. We accept the  $H_1$  hypothesis and reject the alternative  $H_0$  hypothesis. The interviewed Hungarian employees also confirmed the fact already known from the literature that telework strongly affects work-life balance.

Table 5
The first hypothesis test

	Te	est of Ho	mogei	neity (	of Va	arian	ces				
Levene Statistic					df1	df1 df2		lf2	Sig.		
0.457					2		2	232		0.634	
ANOVA	ANOVA Sum of Squares		d	f	Mean Square		F	F Sig			
Between Groups	60.	422	2			30.2	11	28.81	2	0.000	
Within Groups	243	.263	23	2		1.04	.9				
Total	303	.685	23	4							
		Mul	tiple C	ompa	riso	ns					
		Depende	ent Vai	iable:	Tele	ewor	k				
	(I) WL B	(J) WLB	D	Mean Difference (I-J)			Std. Error		Sig.		
	1	2		0.477	*	0.188			0.035		
	1	3	-	1.395	*	(	0.203		(	0	
Uachbara	2	1		0.477*		0.188			0.035		
Hochberg	Z	3		0.918	*	(	).151		(	0	
	3	1		1.395	*	0.203			0		
	3	2		0.918	*	0.151			(	Sig. 0.000 Sig. 0.005 0.005 0.005 0.005 0.005	
* 7	The mean	n differe	nce is s	ignifi	cant	at th	e 0.05	level.			

Source: Authors' own calculations, using SPSS (2022)

Our second research hypothesis was the following:

**H2:** A correlation can be shown between the effectivity of telework and the management of working time.

**H<sub>0</sub>:** No correlation can be shown between the effectivity of telework and the management of working time.

We used a one-way analysis of variance (ANOVA) to test the second hypothesis. The statistical test is shown in Table 6. According to our test of homogeneity (Levene's test, 0.195), the variances are homogeneous, so an ANOVA can be used. In the ANOVA table the p-value is 0.000, so a significant relationship can be shown

between the examined variables. In addition, a post hoc analysis is needed to examine the differences between the group means, which is given in the Multiple Comparisons table. During the examination, we performed a Gabriel test. In the table, each row shows a comparison of a pair of categories. The first column shows the differences in mean values, the second the standard errors and the third the significance levels. The significance level, i.e., the p-value is <0.05, so the two examined means differ significantly from each other in all comparisons. After determining the significance of the relationship, we quantified the strength of the effect, i.e., the value of r. The following formula was used for this:

$$r = \sqrt{\frac{\textit{Sum of Squares (between groups)}}{\textit{Sum of Squares (total)}}} = \sqrt{\frac{109.008}{303.685}} = 0.60$$

The value of r is 0.60, which means a strong effect, so there is a significant relationship between the efficiency of telework and the management of working time. We accept the  $H_2$  hypothesis and reject the alternative  $H_0$  hypothesis. Those workers who do their job efficiently in telework are characterized by being able to manage their working time well, i.e., by having good time management.

Table 6
The second hypothesis test

		Test of	Homogenei	ty o	f Var	iances	}				
Levene St	atistic		df1		df2				Sig.		
0.195			4			23	30		(	0.941	
ANOVA		Sum of	Squares		df	Mea	ın Sq.		F	Sig.	
Between C	Groups	109	9.008		4	27	.252	32	2.197	0.000	
Within Gr	oups	194	1.677	2	30	0.	846				
Total		303	3.685	2	34						
		M	Iultiple Con	npa	risons	1					
	Е	ependent	Variable: 7	<b>Tele</b>	work	efficie	ency				
	(I)Tin		(J)Time	N	Iean l		Std. Error		Sig.		
	Manage	Man.		(I-J)	)						
			2		-0.883	3*	0.236		0.001		
	1		3		-1.400*		0.243			0	
	1		4		-1.890*		0.25			0	
			5		-2.250*		0.238			0	
			1	0.883*		*	0.236			0.001	
Gabriel	2		3		517* 0.1		174		0.032		
Gabrici	2		4	-1.008*		3*	0.183			0	
			5		-1.36	7*	0.	166		0	
			1		1.400	)*	0.	243		0	
	3		2		0.517	*	0.	174		0.032	
	3		4		-0.49	)	0.	193		0.108	
			5		-0.850	)*	0.	176		0	

	4	1	1.890*	0.25	0				
		2	1.008*	0.183	0				
		3	0.49	0.193	0.108				
		5	-0.36	0.185	0.413				
	5	1	2.250*	0.238	0				
		2	1.367*	0.166	0				
		3	0.850*	0.176	0				
		4	0.36	0.185	0.413				
* The mea	* The mean difference is significant at the 0.05 level								

Source: Authors' own calculations, using SPSS (2022)

Our third research hypothesis was the following:

**H3:** There is a significant relationship between telework and the mental health of employees.

**Ho:** There is no significant relationship between telework and the mental health of employees.

To test the third hypothesis, we perform a linear regression analysis, in the course of which we examine the relationship between two or more variables. A variable is assumed to be contingent on another variable that affects it. The statistical test is shown in Table 7. The regression model is shown in the Model Summary table. The value of R is 0.563, which is a value closer to 1. This means that a moderate relationship can be shown between the variables. The value of the coefficient of determination (R<sup>2</sup>) ranges from 0 to 1. R<sup>2</sup>=0.317 (31.7%), therefore, the model explains 31.7%, of the variance of the dependent variable. The ANOVA table has shown how well the regression model describes the data. In the last two columns, F=21.211 and p=0.000, which meets the accepted p <0.05 criterion. The Coefficients table shows the coefficients of the regression equation. It can be determined based on the table whether the individual variables have a significant independent effect on the dependent variable. We take into account the results of the t-test, a variable is significantly related to the dependent variable if the variable meets the p <0.05 criterion. This correlation is partial, the effects of the other variables of the model are filtered out. Based on the model, the work-life balance (p=0.001), coping with anxiety due to Covid-19 (p=0.000) and working in social isolation (p=0.000) variables are significantly related to the dependent variable, which in this case is the effect of teleworking on the mental health. The magnitude and direction of the effects are specified by the values in column B, which indicate the slope of the line pertaining to the given variable. The value pertaining to the work-life balance variable is -0.256, which means that if a person's work/life balance value is increased by 1 unit, the effect of teleworking on their mental health decreases by 0.256 points. The value pertaining to the coping with anxiety due to Covid-19 is -0.363, which means that if a person's coping with anxiety due to Covid-19 value is increased by 1 unit, the effect of telework on their mental health decreases by 0.363 points. The value pertaining to the variable working in social isolation is -0.303, which means that if a person's working in social isolation value is increased by 1 unit, the effect of telework on their mental health decreases by 0.303 points. Overall, in the survey, work-life balance received 4 points, coping with anxiety due to Covid-19 received 5 points and working in social isolation received 3 points. Based on this, the equation takes the following form:

Effect of telework on mental health = 4.654 (intercept) + (-0.256\*4) + (-0.363\*5) + (-0.303\*3) +e (standard error of measurement) = 0.906+e

Based on the aggregate results, (after rounding up) we can give an estimate of 1 point for the effect of telework on the mental health of employees, plus an error, which arises in the case of each estimation.

The Beta coefficient is suitable for comparing the effects pertaining to different variables; it can take a value between (-1 and 1). The effect of telework on mental health is marginal in the case of work-life balance (-0.215), coping with anxiety due to Covid-19 (-0.277) and working in social isolation (-0.256). As a result of hypothesis testing, we have verified the  $H_3$  hypothesis and rejected the alternative  $H_0$  hypothesis. The effect of telework on mental health appeared to be particularly strong in relation to work-life balance, coping with anxiety due to Covid-19 and working in social isolation.

Table 7
The third hypothesis test

Model Summaryb	R 0.563a	R Square 0.317	Adjusted Square 0.302	d R	R Std. Error of the Estimate 1.3443		stimate	
	ANOVAa							
Model 1	S	um of Squares	Df	Mean	Square	F	Sig.	
Regression		191.651	5	38	3.33	21.211	0.000b	
Residual		413.813	229	1.	807			
Total		605.464	234					
	Coefficients a							
		Unstandardize d Coefficients			ardized ficients	t	Sig.	
		В	Std. Error	В	eta			
(Constant)		4.652	0.319			14.562	0.000	
[Work-life bal	ance]	-0.256	0.079	-0.	.215	-3.234	0.001	
[Fixed working hours]		0.003	0.091	0.	002	0.03	0.976	
[Taking regular breaks while working]		0.014	0.086	0.	011	0.157	0.875	
[Anxiety due to Covid-19]		-0.363	0.083	-0	.277	-4.358	0.000	

[Working in social isolation]	-0.303	0078	-0.256	-3.874	0.000
a Dependent Variable: E	Effect of teleworking	g on the m	ental health		

Source: Authors' own calculations, using SPSS (2022)

## 4.2 Discussion

The results of the present study also confirmed that the transition to telework in Hungarian companies has had an impact on employees. In the course of our research, we found a correlation between telework and work-life balance. This result is in line with previous studies according to which improperly organized telework can lead to negative effects such as work-family conflicts. [60] When working to achieve work-life balance, the individual strives to minimize conflicts between the different groups of responsibilities (work, family, friends). [61] However, in the course of fulfilling work obligations, the balance between work and private life is often disrupted. [62] The cases of employees who manage to find and maintain a balance between work and private life show that, in addition to organizational performance, this has a great impact on their general wellbeing and life satisfaction. [63] The efficiency of telework can be greatly influenced by how employees manage their working time. One of the most important advantages for employees is the flexibility of telework, the possibility of independent time management. [64] What is an advantage for one employee can in many cases be a disadvantage for another, if the organization of work or the employee's time management is not appropriate, it can have a negative impact not only on their organizational performance, but also their private life. [65] According to our research results, a significant relationship can be shown between the efficiency of telework and the organization of work. Our third research question was aimed at examining the effect of tele work on mental health. Teleworking, in and of itself, involves a number of factors that can have an impact on the employee's mental health, such as stress, feeling of isolation, deterioration of social relations at work etc. [66] [67] Many people were not prepared for telework introduced by the coronavirus pandemic because many organizations introduced the measure overnight and this caused increased stress in the case of some employees. [68] The results of our own investigation also confirmed what had been described in the international literature, that a relationship can be shown between certain factors of telework and the mental health of employees (e.g., depression, anxiety and psychological strain).

#### **Conclusions**

The Coronavirus Pandemic fundamentally changed our everyday lives and also had a significant impact on labor markets. The introduction of physical distancing measures and other government restrictions, had serious consequences, for many employees, including (mandatory) furloughs, reduced working hours and wages, layoffs and changes to the "normal" work practices. For a significant part of the

workforce, the pandemic led to a sudden increase in workload and significant changes in work schedules and working conditions, such as telework.

Some of the employees interviewed, during the survey, liked the idea of working remotely, even after the coronavirus crisis, 26.8% of respondents preferred a few days a month, while 25.5% of respondents indicated a desire to continue telework full-time or almost full-time, even after the crisis ended. Based on the results obtained, it can be said that the labor market of the future will have, flexible work arrangements, including telework and could be an easily and effectively applied motivational tool for many employees. While in those jobs where it is not possible to introduce full telework, the option of "hybrid" work arrangements could be a possible solution.

In the course of our research, it was also revealed that Hungarian employers are not yet fully prepared for telework, the answers have also shown that they provide very little additional support to teleworkers. That is why we recommend that company managers improve their technical/digital equipment, in order to ensure optimal working conditions, for telework. Furthermore, the behavior of management during telework is expected to be more empathetic, work processes should be designed in such a way that they can be easily supervised and monitored and deadlines should be handled more flexibly. In addition to efficient job performance, all of this can also help reinforce trust between managers and subordinates. We recommend that employees develop their daily routine in-line with their teleworking. Establishing a separate work space and define specific work hours, with breaks, can be a good solution, as well as setting daily and weekly short-term goals, help to understand and achieve long-term goals. Regular contact with co-workers and the manager helps in managing changes and advising employees about needed tasks. The basic condition for maintaining concentration is the exclusion of distracting factors. In order to maintain health, regular exercise and a healthy diet are essential. Asking for regular feedback concerning the quality and efficiency of work, helps in development and learning. The future will show, to what extent, the introduction of telework can continue to develop in Hungary, maintain current levels, or whether it will finish, after the coronavirus crisis has passed.

One of the novelties of our research is that few similarly comprehensive studies, covering other factors, in addition to the effects of telework on private life, have been done to date, so the results achieved herein and statistically verified, may be of interest to those involved in the topic.

#### **Future Research and Research Limitations**

The present research has certain limitations. One such limitation is that the research was conducted with a sample from only Hungary, so the results are not suitable to draw International conclusions, but, at the same time, they can provide a good starting point for future research projects. One of the limitations of questionnaire approach, is the subjectivity of the respondents, which can distort the results. In addition, questionnaires usually do not allow the exploration of deeper

relationships, as they are limited in terms of interaction and supplementary questions. Future work would be to extend this examination to other Central European countries, as well as conduct a longitudinal study, in order to have a better understanding of how the current research results have changed after the pandemic.

#### References

- [1] Allen, T. D.; Golden, T. D.; Shockley, K. M.: How Effective Is Telecommuting? Assessing the Status of Our Scientific Findings, Psychological Science in the Public Interest, 2015, 16(2), pp. 40-68, https://doi.org/10.1177/1529100615593273
- [2] Mele, V.; Belardinelli, P.; Bellé, N.: Telework in public organizations: A systematic review andresearch agenda. Public Administrative Review, 2023, 83(1), pp. 1-18, DOI: 10.1111/puar.13734
- [3] Sirovátka, T.; Saxonberg, S.; Csudai, E.: Emergency welfare states in action: Social policy adaptations to COVID-19 in the Czechia, Hungary and Slovakia. *Social Policy Administration*, 2023, 58, pp. 93-107, DOI: 10.1111/spol.12945
- [4] Garai-Fodor, M.: The Impact of the Coronavirus on Competence, from a Generation-Specific Perspective. Acta Polytechnica Hungarica, 2022, 19(8), pp. 111-125, DOI: 10.12700/APH.19.8.2022.8.7
- [5] Petrulyté, A.; Guoginé, V.; Briška, I.; Svence, G.; Gajdošová, E.: Effectiveness of the Teacher Resilience Distance Support Programme in Latvia, Lithuania and Slovakia. Advances in Social Sciences Research Journal, 2023, 10(2), pp. 286-304, DOI:10.14738/assrj.102.14069
- [6] Pulido-Martos, M.; Cortés-Denia, D.; Lopez-Zafra, E.: Teleworking in times of COVID-19: Effects on the acquisition of personal resources, Frontiers in Psychology, 2021, 12, 685275, pp. 1-7, https://doi.org/10.3389/fpsyg.2021.685275
- [7] Konkel, M.; Heffernan, M.: How job insecurity affects emotional exhaustion? A study of job insecurity rumination and psychological capital during COVID-19, The Irish Journal of Management, 2021, 40(2), pp. 86-99, https://doi.org/10.2478/ijm-2021-0009
- [8] Peng, B.; Potipiroon, W.: Fear of Losing Jobs during COVID-19: Can Psychological Capital Alleviate Job Insecurity and Job Stress? Behavioral Sciences, 2022, 12(6), p. 168, https://doi.org/10.3390/bs12060168
- [9] Csiszárik-Kocsir, Á.; Garai-Fodor, M.; Varga, J.: What has Become Important during the Pandemic? - Reassessing Preferences and Purchasing Habits as an Aftermath of the Coronavirus Epidemic through the Eyes of Different Generations, Acta Polytechnica Hungarica, 2021, 18(11), pp. 49-74, https://doi.org/10.12700/aph.18.11.2021.11.4

- [10] Atkinson, C. L.: A Review of Telework in the COVID-19 Pandemic: Lessons Learned for Work-Life Balance? COVID, 2022, 2(10), pp. 1405-1416, https://doi.org/10.3390/covid2100101
- [11] Weerarathna, R.; Rathnayake, N.; Yasara, I.; Jayasekara, P.; Ruwanpara, D.; Nambugoda, S.: Towards work-life balance or away? The impact of work from home factors on work-life balance among software engineers during Covid-19 pandemic, PLOS ONE, 2022, 17(12), e0277931, https://doi.org/10.1371/journal.pone.0277931
- [12] Esposito, P.; Medolia, S.; Scicchitano, S.; Tealdi, C.: Working from home and job satisfaction: the role of gender and personality traits. GLO Discussion Paper, No. 1382, Global Labor Organization (GLO), Essen, 2024, 1382, pp. 1-28
- [13] Stanienda, J.: The Impact of the COVID-19 Pandemic on the Labor Market in Poland, Post-COVID Economic Revival, 2022, Vol. 2, pp. 357-369, https://doi.org/10.1007/978-3-030-83566-8\_23
- [14] Lipták, K.: Home office and COVID-19 from the perspective of employees, Tér-gazdaság-Ember, 2022, 10(1), pp. 29-42
- [15] Karácsony, P.: Impact of teleworking on job satisfaction among Slovakian employees in the era of COVID-19, Problems and Perspectives in Management, 2021, 19(3), pp. 1-9, https://doi.org/10.21511/ppm.19(3).2021.01
- [16] Karácsony, P.; Vasa, L.; Bilan, Y.; Lipták, K.: Hungarian Experiences of the Transition from Traditional Work to Telework, Transformations in Business & Economics, 2021, 20(3) (54), pp. 168-182
- [17] Giedrė Raišienė, A.; Rapuano, V.; Dőry, T.; Varkulevičiūtė, K.: Does telework work? Gauging challenges of telecommuting to adapt to a "new normal", Human Technology, 2021, 17(2), pp. 126-144, https://doi.org/10.14254/1795-6889.2021.17-2.3
- [18] Athanasiadou, C.; Theriou, G.: Telework: Systematic literature review and future research agenda, Heliyon, 2021, 7(10), e08165, pp. 1-18, https://doi.org/10.1016/j.heliyon.2021.e08165
- [19] Tremblay, D. G.; Thomsin, L.: Telework and mobile working: analysis of its benefits and drawbacks, International Journal of Work Innovation, 2012, 1(1), 100, https://doi.org/10.1504/ijwi.2012.047995
- [20] Stiles, J.; Smart, M. J.: Working at home and elsewhere: daily work location, telework, and travel among United States knowledge workers, Transportation, 2020, 48(5), pp. 2461-2491, https://doi.org/10.1007/s11116-020-10136-6

- [21] Elldér, E.: Telework and daily travel: New evidence from Sweden, Journal of Transport Geography, 2020, 86, 102777, https://doi.org/10.1016/j.jtrangeo.2020.102777
- [22] Bergefurt, L.; Appel-Meulenbroek, R.; Maris, C.; Arentze, T.; Weijs-Perrée, M.; De Kort, Y.: The influence of distractions of the home-work environment on mental health during the COVID-19 pandemic. Ergonomics, 2023, 66(1), pp. 16-33, DOI: 10.1080/00140139.2022.2053590
- [23] Nobuyuki, I.: The Dilemma of Hybrid Work for Creativity: Autonomy of Telework or Face-to-face Network in Office? Academy of Management Proceedings, 2022, 2022(1) https://doi.org/10.5465/ambpp.2022.15382abstract
- [24] Cropley, M.; Weidenstedt, L.; Leick, B.; Sütterlin, S.: Working from home during lockdown: the association between rest breaks and well-being. Ergonomics, 2023, 66(4), pp. 443-453, DOI: 10.1080/00140139.2022.2095038
- [25] Sewell, G.; Taskin, L.: Out of Sight, Out of Mind in a New World of Work? Autonomy, Control, and Spatiotemporal Scaling in Telework, Organization Studies, 2015, 36(11), pp. 1507-1529, https://doi.org/10.1177/0170840615593587
- [26] Garavand, A.; Jalali, S.; Hajipour Talebi, A.; Sabahi, A.: Advantages and disadvantages of teleworking in healthcare institutions during COVID-19: A systematic review, Informatics in Medicine Unlocked, 2022, 34, 101119, https://doi.org/10.1016/j.imu.2022.101119
- [27] Filardi, F.; Castro, R. M. P. D.; Zanini, M. T. F.: Advantages and disadvantages of teleworking in Brazilian public administration: analysis of SERPRO and Federal Revenue experiences, Cadernos EBAPE.BR, 2020, 18(1), pp. 28-46, https://doi.org/10.1590/1679-395174605x
- [28] Garami, M.: A mobbing gazdaságra káros hatásai. Miskolci Jogi Szemle, 2023, 18(2), pp. 222-238
- [29] Golden, T. D.: Altering the effects of work and family conflict on exhaustion: Telework during traditional and nontraditional work hours, Journal of Business and Psychology, 2012, 27(3), pp. 255-269, https://doi.org/10.1007/s10869-011-9247-0
- [30] Golden, T.; Gajendran, R.: Unpacking the role of a telecommuter's job in their performance: Examining job complexity, problem solving, interdependence, and social support, Journal of Business and Psychology, 2019, 34(1), pp. 55-69, https://doi.org/10.1007/s10869-018-9530-4
- [31] Jackson, L. T. B.; Fransman, E. I.: Flexi work, financial well-being, work—life balance and their effects on subjective experiences of productivity and job satisfaction of females in an institution of higher learning, South African

- Journal of Economic and Management Sciences, 2018, 21(1), pp. 1-13, https://doi.org/10.4102/sajems.v21i1.1487
- [32] Martin, L.; Hauret, L.; Fuhrer, C.: Digitally transformed home office impacts on job satisfaction, job stress and job productivity, COVID-19 findings. PLOS ONE, 2022, 17(3), e0265131, https://doi.org/10.1371/journal.pone.0265131
- [33] Coenen, M.; Kok, R. A. W.: Workplace flexibility and new product development performance: The role of telework and flexible work schedules, European Management Journal, 2014, 32(4), pp. 564-576, https://doi.org/10.1016/j.emj.2013.12.003
- [34] Straus, E.; Uhlig, L.; Kühnel, J.; Korunka, Ch.: Remote workers' well-being, perceived productivity, and engagement: which resources should HRM improve during COVID-19? A longitudinal diary study. The International Journal of Human Resource Management, 2023, 34(15), pp. 2960-2990, DOI: 10.1080/09585192.2022.2075235
- [35] Kelliher, C.; Richardson, J.; Boiarintseva, G.: All of work? All of life? Reconceptualising work–life balance for the 21st century, Human Resource Management Journal, 2018, pp. 1-16, https://doi.org/10.1111/1748-8583.12215
- [36] Bencsik, A.: Knowledge Management Challenges during COVID-19. Acta Polytechnica Hungarica, 2022, 19(7), pp. 107-126, DOI: 10.12700/APH.19.7.2022.7.6
- [37] Rick, J.; Hanitzsch, T.: Journalistic Work During a Pandemic: Changing Contexts and Subjective Perceptions. Journalism Practice, 2024, 18(1), pp. 99-118, DOI: 10.1080/17512786.2023.2250760
- [38] Greenhaus, J. H.; Beutell, N. J.: Sources of Conflict Between Work and Family Roles. Academy of Management Review, 1985, 10(1): pp. 76-88, https://doi.org/10.5465/AMR.1985.4277352.
- [39] Tick, A.; Szabó, G.; Zs. Reicher, R.: Contribution of a CRM System to the Creation of a Family-Friendly Working Environment, Acta Polytechnica Hungarica, 2021, 18(11), pp. 75-96, https://doi.org/10.12700/aph.18.11.2021.11.5
- [40] Kossek, E. E.; Lautsch, B. A.: Work–family boundary management styles in organizations, Organizational Psychology Review, 2012, 2(2), pp. 152-171, https://doi.org/10.1177/2041386611436264
- [41] L. K.; Grawitch, M. J.; Maloney, P. W.: Work-life balance: Contemporary perspectives. In:Grawitch, M. J., & Ballard, D. W. (Eds.), The psychologically healthy workplace: Building a win-win environmentfor organizations and employees, American Psychological Association, 2015, pp. 111-133, https://doi.org/10.1037/14731-006

- [42] Czeglédi, CS.; Cseh Papp, I.; Marosné Kuna, Zs.; Hajós, L.: The main elements of diversity in Hungary, Szaktudás Kiadó Ház, Budapest, 2013
- [43] Hamermesh, D. S.: The Timing of Work Over Time, The Economic Journal, 1999, 109(452), pp. 37-66, https://doi.org/10.1111/1468-0297.00390
- [44] Gimenez-Nadal, J. I.; Sevilla, A.: Trends in time allocation: A cross-country analysis, European Economic Review, 2012, 56(6), pp. 1338-1359, https://doi.org/10.1016/j.euroecorev.2012.02.011
- [45] Kossek, E. E.; Lautsch, B. A.; Eaton, S. C.: Telecommuting, control, and boundary management: Correlates of policy use and practice, job control, and work–family effectiveness, Journal of Vocational Behavior, 2006, 68(2), pp. 347-367, https://doi.org/10.1016/j.jvb.2005.07.002
- [46] DeFilippis, E.; Impink, S.; Singell, M.; Polzer, J. T.; Sadun, R.: Collaborating During Coronavirus: The Impact of COVID-19 on the Nature of Work, SSRN Electronic Journal, 2020, https://doi.org/10.2139/ssrn.3654470
- [47] Satpathy, S.; Patel, G.; Kumar, K.: Identifying and ranking techno-stressors among IT employees due to work from home arrangement during Covid-19 pandemic, DECISION, 2021, 48(4), pp. 391-402, https://doi.org/10.1007/s40622-021-00295-5
- [48] Palmer, D. K.; Schoorman, F. D.: Unpackaging the multiple aspects of time in polychronicity, Journal of Managerial Psychology, 1999, 14(3/4), pp. 323-345, https://doi.org/10.1108/02683949910263918
- [49] Sahito, Z.; Khawaja, M.; Panhwar, U. M.; Siddiqui, A.; Saeed, H.: Teachers' Time Management and the Performance of Students: A Comparison of Government and Private Schools of Hyderabad, Sindh, Pakistan, World Journal of Education, 2016, 6(6) https://doi.org/10.5430/wje.v6n6p42
- [50] Green, P.; Skinner, D.: Does time management training work? An evaluation, International Journal of Training and Development, 2005, 9(2), pp. 124-139, https://doi.org/10.1111/j.1468-2419.2005.00226.x
- [51] WHO: Mental health: Fact sheet. 2019, https://www.euro.who.int/de/health-topics/noncommunicable-diseases/mental-health/data-and-resources/fact-sheet-mental-health-2019, Accessed 20 January 2023
- [52] Bovier, P. A.; Chamot, E.; Perneger, T. V.: Perceived stress, internal resources, and social support as determinants of mental health among young adults, Quality of Life Research, 2004, 13(1), pp. 161-170, https://doi.org/10.1023/b;qure.0000015288.43768.e4
- [53] Martin, A.; Karanika-Murray, M.; Biron, C.; Sanderson, K.: The Psychosocial Work Environment, Employee Mental Health and Organizational Interventions: Improving Research and Practice by Taking a Multilevel Approach, Stress and Health, 2014, 32(3), pp. 201-215, Portico. https://doi.org/10.1002/smi.2593

- [54] Jaworski, M: Critical Health Conditions And Mental Health During Pandemic Covid-19, European Proceedings of Health, 2020, https://doi.org/10.15405/eph.20101.4
- [55] Ashour, L. M.: Major mental disorders in society during COVID-19, Social Work in Mental Health, 2021, 20(2), pp. 226-239, https://doi.org/10.1080/15332985.2021.2001408
- [56] Andrade, C.; Petiz Lousã, E.: Telework and Work–Family Conflict during COVID-19 Lockdown in Portugal: The Influence of Job-Related Factors, Administrative Sciences, 2021, 11(3), p. 103, https://doi.org/10.3390/admsci11030103
- [56] Abdulova, A.: Impact of Workplace Isolation on Job Satisfaction of Azerbaijan Companies During Covid-19, European Proceedings of Social and Behavioural Sciences, 2021, https://doi.org/10.15405/epsbs.2021.12.04.3
- [57] Kitukutha, N. M.; Vasa, L.; Oláh, J.: The impact of COVID-19 on the economy and sustainable e-commerce, Forum Scientiae Oeconomia, 2021, 9(2), pp. 47-72, https://doi.org/10.23762/fSoVol9\_no2\_3
- [58] Gyenge, B.; Máté, Z.; Vida, I.; Bilan, Y.; Vasa, L.: A New Strategic Marketing Management Model for the Specificities of E-Commerce in the Supply Chain, Journal of Theoretical and Applied Electronic Commerce Research, 2021, 16(4), pp. 1136-1149, https://doi.org/10.3390/jtaer16040064
- [59] Grossman, E. R.; Benjamin-Neelon, S. E.; Sonnenschein, S.: Alcohol consumption and alcohol home delivery laws during the COVID-19 pandemic, Substance Abuse, 2022, 43(1), pp. 1141-1146, https://doi.org/10.1080/08897077.2022.2060432
- [60] Solís, M.: Moderators of telework effects on the work-family conflict and on worker performance, European Journal of Management and Business Economics, 2017, 26(1), pp. 21-34, https://doi.org/10.1108/ejmbe-07-2017-002
- [61] Bulińska-Stangrecka, H.; Bagieńska, A.; Iddagoda, A.: Work-Life Balance During COVID-19 Pandemic and Remote Work: A Systematic Literature Review. In Bülent Akkaya, Kittisak Jermsittiparsert, Muhammad Abid Malik and Yesim Kocyigit. (Eds.) Emerging Trends in and Strategies for Industry 4.0 During and Beyond Covid-19, Science, 2021, pp. 19-59, https://doi.org/10.2478/9788366675391
- [62] Gálvanez, A.; Martínez, M. J.; Pérez, C.: Telework and Work-Life Balance: Some Dimensions for Organisational Change, Journal of Workplace Rights, 2011, 16(3-4), pp. 273-297, https://doi.org/10.2190/wr.16.3-4.b
- [63] Troup, C.; Rose, J.: Working from home: do formal or informal telework arrangements provide better work–family outcomes? Community, Work

- & amp; Family, 2012, 15(4), pp. 471-486, https://doi.org/10.1080/13668803.2012.724220
- [64] Martínez Sánchez, A.; Pérez Pérez, M.; de Luis Carnicer, P.; José Vela Jiménez, M.: Teleworking and workplace flexibility: a study of impact on firm performance, Personnel Review, 2007, 36(1), pp. 42-64, https://doi.org/10.1108/00483480710716713
- [65] Jaakson, K.; Kallaste, E.: Beyond flexibility: reallocation of responsibilities in the case of telework, New Technology, Work and Employment, 2010, 25(3), pp. 196-209, https://doi.org/10.1111/j.1468-005x.2010.00248.x
- [66] Amstad, F. T.; Meier, L. L.; Fasel, U.; Elfering, A.; Semmer, N. K.: A meta-analysis of work–family conflict and various outcomes with a special emphasis on cross-domain versus matching-domain relations, Journal of Occupational Health Psychology, 2011, 16(2), pp. 151-169, https://doi.org/10.1037/a0022170
- [67] Konradt, U.: Health circles for teleworkers: selective results on stress, strain and coping styles, Health Education Research, 2000, 15(3), pp. 327-338, https://doi.org/10.1093/her/15.3.327
- [68] Bertino, V.; Nisticò, V.; D'Agostino, A.; Priori, A.; Gambini, O.; Demartini, B.: Telework during COVID-19 outbreak: Impact on mental health among Italian workers, International Journal of Healthcare, 2021, 7(2), p. 29, https://doi.org/10.5430/ijh.v7n2p29