

# TELEWORK PERCEPTION AND IMPLICATIONS DURING COVID-19 IN THE CZECH REPUBLIC

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## **Abstract**

The research focuses on the perception and implications of telework during the COVID-19 pandemic in the Czech Republic. The aim of the paper is to prove the validity of an existing theoretical model (presented in Romanian research before COVID-19) for the Czech situation during COVID-19 and draw managerial conclusions. Quantitative primary data were collected via questionnaires and analysed using structural equation modelling, evaluating cause-effect relationships between latent variables in two steps: a structural model (showing latent constructs and paths between them) and an outer model (displaying relationships between each latent construct and the indicators defining it). Ten latent variables were defined, and relationships among them were identified. Thirteen hypotheses were tested, of which seven were accepted. Concerning similarities with the previous study, the present study accepted two hypotheses identically to the previous one, while one hypothesis was accepted only in the Romanian research. Model relevancy was proved. The research contributed to extending current literature findings.

**Implications for Central European audience:** Based on the hypotheses tested, autonomy and homonomy in telework should not be understood as contrary but complementary phenomena; managers should support both. Positive emotions about telework should be cultivated because they contribute to work-life balance and positively affect the intention to work from home. Work-life balance is positively related to the positive perception of the social implications of telework.

**Keywords:** autonomy; homonomy; social implications of telework; telework; work-life balance

**JEL Classification:** M54, J24, I31

## Introduction

This article is based upon a conference paper “TELEWORK PERCEPTION AND IMPLICATIONS DURING COVID-19 IN THE CZECH REPUBLIC”, hosted at the conference: “Central and Eastern Europe in the Changing Business Environment, 22<sup>nd</sup> International Joint Conference in Bratislava, Slovakia, 19 – 20 May 2022”.

The focus of the paper is to present the results of research on the perception and implications of telework during the pandemic period in the Czech Republic in 2020-2022 and evaluate the relevance of the model used for managerial purposes. The aim of the paper is to prove the validity of an existing theoretical model (presented in Romanian research before COVID-19) for the Czech situation during COVID-19 and draw managerial conclusions with possible implications for Eastern and Central European countries. The paper explains the research aim and relevance, its methodology and the results of the executed survey. The research was conducted in cooperation of Czech and Romanian authors and builds on the previous Romanian research by Dima et al. (2019). The understanding of the term telework and its real forms has been developing over time (Messenger, 2019). For the purpose of this study, telework is understood as a particular form of work when the employee is not working from the employer's usual facilities (office, etc.) with the help of technology, so it refers, e.g., to remote work, work from home, home office and distance working; all those terms are used as synonyms in the paper.

The previous study (Dima et al., 2019) aimed to evaluate the implications of telework from the individual and social point of view, including the long-lasting results that could be generated, based on data gathered via questionnaires. The sample size was 1180, the target group was Romanian employees. The study results pointed out that (1) work-life balance could be positively influenced by telework and that telework could help develop specific telework abilities at the individual level; and (2) sustainable effects on long-term workforce management could be generated by telework, and thus telework could provide solutions to potential issues at local community levels. The authors formulated the need to implement specific human resource management strategies, including training and development programs and attention to corporate social responsibilities.

The previous study (Dima et al., 2019) focused on the willingness of Romanian employees to accept telework, while the present research was conducted during the COVID-19 pandemic in the Czech Republic, when telework was inevitable for many employees. This research does not favour any sector, identically to the previous research, but in addition to employees' perception of remote work, this research investigates personality traits, namely autonomy and homonomy.

The following text is divided into four sections. The first section presents a literature review, considering the most recent research into telework focusing on COVID-19. Before the pandemic, telework was an additional benefit; during the pandemic, it became a must for many companies. In the second section, the detailed research methodology is explained, including the goal setting and formulation of the hypotheses. The hypotheses observe relationships between latent variables, and their reliability and validity are assessed in the third section. The last section conveys results and discussion.

# 1 Literature Review

The recent situation has revealed that companies must react to the enormous changes in the market and reflect them in their strategies. Based on ILO (2020, p. 2) estimates: "7.9% of the world's workforce worked from home on a permanent basis prior to the COVID-19 pandemic, or approximately 260 million workers." The Czech Republic ranked among countries with less than 5% of the workforce working from home (ILO, 2020, p. 3). The topic of telework caught the attention of a wide range of scientists approaching it from many angles (Raišienė et al., 2021). Studies revealed differences in the usage of homeworking across countries (Beňo, 2021; Frantíková et al., 2017; Prosser, 2017) and even the impact of various forms of distance work on sustainability (Vaishar & Šťastná, 2019).

A nationwide survey from Greece proved substantial growth in importance of and significant increase in the frequency of engaging in telework, teleconferencing and online learning during COVID-19 (Mouratidis & Papagiannakis, 2021). Based on an analysis of the benefits of telework practices, authors claim that telework could reduce the negative impacts of the pandemic and help alleviate its economic and inequality results. Abulibdeh (2020) examined the impact of COVID-19 on promoting telework usage, and found that telework practices have the potential to remain a key and long-term feature of private as well as public institutions in the future. The main benefits include the positive influence of not only economic but also social indicators such as well-being, gender and regional equality.

Companies' attitudes to telework differed before the COVID-19 period. Research focusing on telework before the COVID-19 pandemic often shows the positives for institutions and their employees (Allen et al., 2015; Gajendran & Harrison, 2007). In comparison with the main characteristic of telework before COVID-19, that telework was considered something special, allowing flexibility and granted to employees as a non-financial benefit, telework was instead imposed on employees during COVID-19. Research suggests that special attention should be paid especially to employees with higher task interdependence who may face daily setbacks. There is a need for further research on how to support institutions and the well-being and performance of their employees (Chong et al., 2020). Furthermore, researchers have studied what made companies adopt telework (Vlčková et al., 2019; Vrchota et al., 2019, 2020); organisational constraints (foreign owner participation, IT level, adoption of project management) and financial indicators have been identified as influential. On the contrary, starting with the COVID-19 situation, different variables that made organisations adopt telework were identified.

Telework-experienced managers, inexperienced managers and experienced employees were all better able to adopt work from home, whilst telework-inexperienced employees were not (Pfeifer, 2021). This has proven concepts defined by evolutionary managerial schools that claim flexibility and proneness to quickly reflect market changes have a crucial impact on company success (Zadrazilová, 2017). Prior to the COVID-19 pandemic, telework abilities (such as independent problem solving, digital literacy skills, burnout management and distraction management) were positively related to socially sustainable implications of telework (e.g., opportunities for young mothers, unemployment rate reduction and decreased traffic) (Dima et al., 2019). The authors explored which abilities were elicited by the pandemic state of emergency.

Important for the purpose of this paper is that authors have described both positive and negative consequences of telework, e.g., social isolation (Marica, 2018; Windeler et al., 2017). Dimitrova (2021) points out the need to study the change in satisfaction with working time before and after COVID-19. Various surveys (Gerding et al., 2021; Garcia et al., 2022) have been devoted to the negative impact of telework on physical health. Gerding et al. (2021) recommended companies to allow workers to get chairs, external monitors, keyboards and mice for home office as laptops are insufficient ergonomically. Similarly, Garcia et al. (2022) reported physical discomforts, e.g., to the head, eyes, hands, upper back, neck, shoulders, elbows and lower back. However, positive impacts on physical health have also been reported. A study in Japan (Kawashima et al., 2021) showed there was a lower percentage of teleworkers than non-teleworkers who reported fever during the pandemic.

Studies point out positive as well as negative (Song & Gao, 2019) effects of telework on mental health and well-being (Miglioretti et al., 2021). Dima et al. (2019, p. 8) revealed: "The greater autonomy teleworkers have in performing their professional and personal activities, the more they gain the required abilities for telework, both technical and non-technical." In this research, autonomy is considered from two viewpoints. First, autonomy in telework means flexibility and control over work, which was felt during the pandemic, whereas autonomy in general measures the motivational trait defined by Angyal (1965) using the scale proposed by Lester and Dench (2011). Based on this theory, health motivation is made up of two principles: autonomy and homonomy. "The trend toward autonomy involves self-expansion at the expense of the environment and includes the desires to explore, achieve, dominate, defend one's integrity, and acquire possessions. The trend toward homonomy involves the desire to integrate with others, such as a family, group, or culture, and to feel at one with Nature, God, or the universe." (Lester & Dench, 2011, p. 213)

Müller and Niessen (2019) found that part-time teleworkers were more satisfied with their job through a self-goal setting mediated by autonomy. Dima et al. (2019) identified that autonomy has a positive impact on work-life balance. Yüceol et al. (2021) revealed that remote work during the pandemic increased a statistically positive impact on the well-being of Generation Y academicians. In this paper, the relationships between autonomy and homonomy on the one hand and work-life balance on the other are explored. Hlađo et al. (2020) revealed that work-life balance has an effect on workability. Martin et al. (2022) focused on impacts of home office on job satisfaction, job productivity and job stress; they defined five profiles of teleworkers and revealed that productivity increased only among those employees who mastered intensive growth limited to two digital tools and mainly weekly use, but at the expense of job satisfaction. The teleworkers who were characterised by intensive growth and daily use experienced a decrease in both their job satisfaction and job productivity. Both groups dealt with information overload (so-called infobesity) during the lockdown.

This research focuses exclusively on telework during the state of emergency during the COVID-19 pandemic. As known from change management, stages of shock and denial are followed by mixed negative emotions. Lee (2021) pinpointed that during the pandemic, employees' emotional reactions were dependent on the employer's support and care and perceived psychological safety. Negative emotions (such as anxiety, inferiority, vulnerability, etc.) and positive emotions (such as pride, empathy, interest, etc.) were generated differently depending on downward and upward comparisons within the organisational hierarchy. This paper explores relationships between positive and negative emotions and other detected latent variables.

Abdel et al. (2021) showed that job performance during telework is negatively related to emotional exhaustion, while proactive personality is positively related to leisure crafting, and daily leisure crafting can reduce emotional exhaustion during telework (Abdel et al., 2021).

Positive social implications have been studied (Jesus et al., 2020; Schur et al., 2020), such as the employment of people with disabilities. Authors have examined the effects of COVID-19, focusing on challenges and opportunities that telework may offer to people with disabilities. If the challenges and opportunities are addressed in a systematic way, it can result in improved capacities and capabilities for employment, equity, health and quality of life for people with disabilities. Many papers have focused on telework in the context of specific countries, while gender-related topics have been highlighted. For Turkey, for example, Coban (2022) explored attitudes to telework and pointed at the gender inequality in the telework options and the more challenging environment for married women with children. Thanks to the traditional gender identity, the circumstances were not viable for women. "The pandemic has revealed once again that, without public policies and interventions for a fair division of domestic and care work, it is impossible for women to reach a work-life balance by telework." (Coban, 2022, p. 253) Regarding Vietnam, research shows that the presence of more than one child in the household negatively affects the perception of home-based telework (Nguyen, 2021), and the increased disproportion of allocating household responsibilities between males and females is highlighted (Nguyen & Armoogum, 2021).

This research builds on a model from a paper previously published by the authors, titled "Sustainable Social and Individual Implications of Telework: A New Insight into the Romanian Labor Market" (Dima et al., 2019). Additional sources are included in the previously published article; thus, the literature review in this paper should be understood as an extension to the existing and published one.

## 2 Methodology

The present study focuses on the perception and implications of telework during the COVID-19 period in the Czech Republic in 2020-2022. The goal is to replicate research previously conducted by the authors in 2018-2019 (Dima et al., 2019) under the specific situation of COVID-19 in the Czech Republic, and to identify the relationships of the latent variables that were elicited by this specific situation, and to include motivational traits this time.

### 2.1 Statistical method

Structural equation modelling (SEM) is a technique aimed to evaluate cause-effect relationships between latent variables. A specific approach of SEM is partial least squares (PLS-SEM), the purpose of which is to maximise the explained variance of the dependent latent constructs, being suitable for a wide range of sample sizes (Hair et al., 2011). This multivariate analysis technique is quite similar to multiple regression analysis, which is appropriate for exploratory and predictive purposes. PLS-SEM is justified, especially when data are non-normal, when the samples are small and when the constructs are formative (Hair et al., 2014). The structural equation model has two components (Hair et al., 2017): the structural/inner model (showing the latent constructs and paths between them) and the measurement/outer model (displaying the relationships between each latent construct and the indicators defining it). As for the PLS-SEM algorithm, it consists of two steps: the first is the assessment of measures used in the model in accordance with some criteria (e.g., reliability, validity), and the second is the evaluation of the

structural model aimed at calculating the coefficients of determination ( $R^2$ ), respectively the level and the statistical significance of the path coefficients (Hair et al., 2011).

## 2.2. Hypotheses and latent variables

Based on reviewing the secondary sources (see above), the following aspects were identified as related to telework, its perception and social implications: autonomy, homonomy, work-life balance, telework abilities, social implications of telework, intention to work from home, concerns regarding telework, and positive emotions. Based on the literature review and the previous research model (Dima et al., 2019), the following hypotheses were formulated:

- H1: Autonomy in telework is positively related to autonomy.*
- H2: Homonomy in telework is positively related to homonomy.*
- H3: Homonomy in telework is positively related to autonomy in telework.*
- H4: Homonomy in telework is positively related to work-life balance.*
- H5: Autonomy in telework is positively related to work-life balance.*
- H6: Autonomy in telework is positively related to telework abilities.*
- H7: Work-life balance is positively related to the social implications of telework.*
- H8: Telework abilities are positively related to the intention to work from home.*
- H9: The concerns regarding telework are negatively related to the intention to work from home.*
- H10: The concerns regarding telework are negatively related to work-life balance.*
- H11: Positive emotions are positively related to the intention to work from home.*
- H12: Positive emotions are positively related to work-life balance.*
- H13: The social implications of telework are positively related to intention to work from home.*

The latent variables included in the conceptual model are presented in Table 1.

**Table 1 | Latent variables**

Latent variable	Items
Autonomy	If a goal is important to me, I will pursue it.
	I set my own standards and goals for myself.
	It is important to me to meet my own objectives for a task.
	I enjoy accomplishing things.
	It is important that I myself know that I have done a good job.
Homonomy	I often find myself thinking about my friends and family.
	I like to spend my free time with others.
	I need to be close to my family.
	My roots, cultural and ethnic, are important to me.

	<p>I like to have a few intimate friends that I can rely on and who can rely on me.</p> <p>I get pleasure from helping others.</p>
<b>Autonomy in telework</b>	<p>I had more flexibility in arranging the non-work schedule.</p> <p>I had more flexibility in arranging the work schedule.</p> <p>I had more control over my work.</p>
<b>Homonymy in telework</b>	<p>I had a bigger opportunity to be closer to my family (both physically and psychologically).</p> <p>I had a bigger opportunity to spend time with others.</p> <p>I had a bigger opportunity to create closer interpersonal relationships with people that I can rely on and who can rely on me.</p>
<b>Work-life balance</b>	<p>I was able to cope more easily with family responsibilities than when working at the employer's office.</p> <p>Overall, I was able to manage time more efficiently than when working at the employer's premises.</p> <p>I was less stressed.</p> <p>I had fewer health problems caused by work.</p>
<b>Telework abilities</b>	<p>I had to learn how to manage the overwork tendency.</p> <p>I had to be more organised than when I worked at the office.</p> <p>I needed more tenacity than when I worked at the office.</p> <p>I had to solve problems independently.</p>
<b>Telework concerns</b>	<p>Lack of support from colleagues.</p> <p>Lack of management support.</p> <p>Responsibility for my work.</p>
<b>Positive emotions related to telework</b>	<p>I liked more working from home.</p> <p>I felt more productive working from home.</p> <p>I felt proud to be able to work from home.</p> <p>I felt grateful to be able to work from home.</p>
<b>Social implications of telework</b>	<p>Telework offers professional opportunities to young mothers.</p> <p>Telework can reduce unemployment in rural areas.</p> <p>Telework would help reduce traffic on public roads.</p> <p>Telework can be an effective solution in any crisis situation.</p>
<b>Intention to work from home</b>	<p>I will always work with pleasure from home, no matter the situation.</p> <p>I will recommend working from home to anyone.</p>

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I intend to improve myself technically in order to work from home in the future.

I intend to ask to work from home also outside of crisis situations.

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Source: own research

## 2.3 Data collection

Quantitative data were collected during November and December 2021 and January 2022 via questionnaires on a sample consisting of 84 persons that were involved in telework activity during the COVID-19 situation in the Czech Republic. The sample structure is presented in Table 2.

**Table 2 | Sample structure**

Variable		Number of respondents	Per cent (%)
Age	18-25 years	4	4.76
	26-35 years	18	21.43
	36-45 years	38	45.24
	46-55 years	12	14.29
	56-65 years	7	8.33
	Over 65 years	5	5.95
Gender	Male	29	34.52
	Female	55	65.48

Source: own research

Collected data were analysed using statistical methods and presented using visualisations (tables and figures) as follows. The respondents were contacted by field operators who were given instructions regarding the research focus and criteria of respondent selection. The questionnaire, which was in the Czech language, included a filtration question itself. The main body of the questionnaire was identical to the one used in the previous research (Dima et al., 2019), plus additional questions were added to fulfil the specific goal of the current research. To translate the questionnaire into the Czech language, the “back-translation” method (Saunders et al., 2009, p. 465) was used. The accuracy of the translation was checked, and the questionnaire was pilot-tested by chosen experts and target group representatives. The target group was employees who had experience with telework as a result of the COVID-19 situation during the last two years in the Czech Republic).

## 2.4 Sample size justification

According to Hair et al. (2014), PLS-SEM can be used in the case of small samples, even though the model is highly complex. As regards the minimum sample size, which attests that the model can be generalised, many researchers rely on the “10-times rule”, which states that the minimum sample size should be higher than 10 multiplied by the maximum number of links in the inner or outer model, pointing at any latent variable (Ranatunga et al., 2020). According



to the model presented in our paper, the maximum number of links in the inner model is 4 (arrows pointing to variables of work-life balance and intention to work from home). In the outer model, the maximum number of indicators (items) related to a latent variable is 6 (for homonomy). Consequently, according to the “10-times rule” the minimum sample size is 60 observations, and our research complies with this requirement.

### 3 Construct Reliability and Validity

Ten latent variables were defined, hypotheses were validated, and questionnaire items with a Likert scale (from 1 for “I strongly disagree” to 5 for “I strongly agree”) were used. In order to evaluate the construct reliability, the scores for Cronbach's alpha and composite reliability were calculated. As results from Table 3, for all the variables, the scores are greater than 0.7 or very close to this value. We may conclude that the variables included in the model have good reliability (Malhotra et al., 2017).

For assessing the convergent validity, the average variance extracted (AVE) was determined, 0.5 being the minimum accepted value (Malhotra et al., 2017). For the latent variables considered in the current model, the scores were higher than 0.5 (Table 3), except one of them (homonomy), the score of which is very close to this value.

**Table 3 | Construct reliability and validity**

Variable	Cronbach's alpha	Composite reliability	Average variance extracted (AVE)
Autonomy	0.799	0.832	0.502
Autonomy in telework	0.857	0.913	0.779
Homonomy	0.711	0.811	0.462
Homonomy in telework	0.683	0.827	0.618
Intention to work from home	0.837	0.892	0.677
Positive emotions	0.828	0.886	0.665
Social implications	0.819	0.877	0.644
Telework abilities	0.779	0.800	0.514
Telework concerns	0.797	0.828	0.624
Work-life balance	0.799	0.866	0.626

Source: own research

In order to evaluate the divergent validity, the Fornell-Larcker criterion was applied. As evident from Table 4, almost all the values from the main diagonal, meaning the square root of AVE for each latent variable, are greater than their correlation with the other latent variables (Fornell & Larcker, 1981).

**Table 4 | Fornell-Larcker criterion**

	Autonomy	Autonomy in telework	Homonomy	Homonomy in telework	Intention to work from home	Positive emotions	Social implications	Telework abilities	Telework concerns	Work-life balance
<b>Autonomy</b>	0.708									
<b>Autonomy in telework</b>	0.207	0.883								
<b>Homonomy</b>	0.458	0.098	0.680							
<b>Homonomy in telework</b>	0.284	0.754	0.346	0.786						
<b>Intention to work from home</b>	0.233	0.560	0.003	0.502	0.823					
<b>Positive emotions</b>	0.290	0.603	0.036	0.512	0.881	0.816				
<b>Social implications</b>	0.353	0.360	0.214	0.397	0.583	0.630	0.802			
<b>Telework abilities</b>	-0.150	-0.297	0.061	-0.290	-0.218	-0.261	-0.041	0.717		
<b>Telework concerns</b>	-0.206	0.019	-0.028	0.092	0.220	0.145	0.153	0.102	0.790	
<b>Work-life balance</b>	0.215	0.822	0.137	0.807	0.607	0.652	0.381	-0.430	0.000	0.791

Source: own research

## 4 Results and Discussion

In this section, the research results are formulated and discussed. Thirteen hypotheses as mentioned above were assessed. In order to test the proposed hypotheses, structural equation modelling based on the partial least squares approach was applied. Further on, in conclusion, implications for key decision-makers (especially policymakers and managers) are drawn.

### 4.1 Data analysis

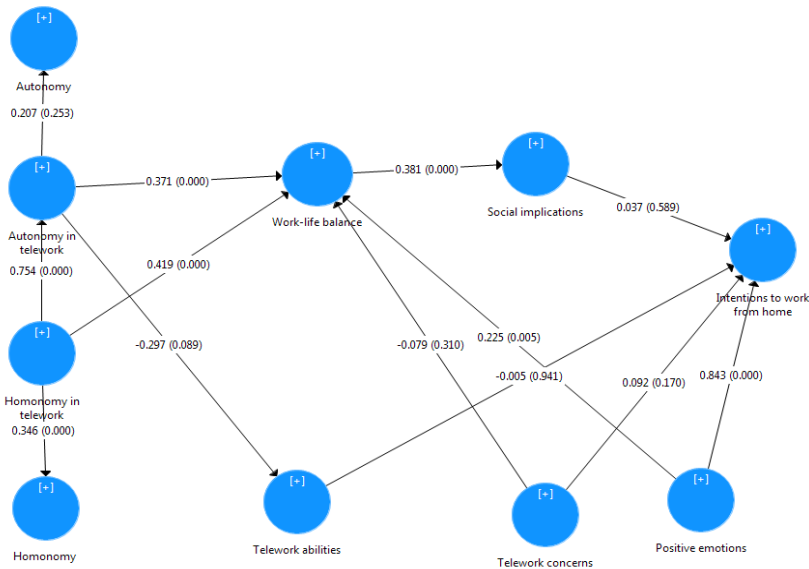
The data analysis was performed by using Smart PLS 3.0 software. Table 5 and Figure 1 present the results on relationships between the latent variables, the strength of these relationships (using path coefficients) and the statistical significance (using t-test and p-values).

**Table 5 | Path coefficients and p-values**

Path	Path coefficients	T-statistics	P-values
Autonomy in telework -> Autonomy	0.207	1.130	0.253
Autonomy in telework -> Telework abilities	-0.297	1.881	0.089
Autonomy in telework -> Work-life balance	0.371	3.721	0.000
Telework concerns -> Intention to work from home	0.092	1.369	0.170
Telework concerns -> Work-life balance	-0.079	1.031	0.310
Homonomy in telework -> Autonomy in telework	0.754	16.780	0.000
Homonomy in telework -> Homonomy	0.346	3.849	0.000
Homonomy in telework -> Work-life balance	0.419	4.435	0.000
Positive emotions -> Intention to work from home	0.843	13.305	0.000
Positive emotions -> Work-life balance	0.225	2.756	0.005
Social implications -> Intention to work from home	0.037	0.553	0.589
Telework abilities -> Intention to work from home	-0.005	0.076	0.941
Work-life balance -> Social implications	0.381	3.932	0.000

Source: own research

**Figure 1 | Path coefficients and p-values – visualisation**



Source: own research

The variance explained by the latent variables was measured using the R-squared coefficients, presented in Table 6.

**Table 6 | R-squared coefficients**

Variable	R-squared	Adjusted R-squared
Autonomy	0.043	0.031
Autonomy in telework	0.569	0.563
Homonomy	0.119	0.109
Intention to work from home	0.786	0.776
Social implications	0.146	0.135
Telework abilities	0.088	0.077
Work-life balance	0.790	0.780

Source: own research

## 4.2 Data results

Concerning the relationship between autonomy in telework and autonomy, this relationship is not statistically significant, autonomy in telework does not influence autonomy in general, with hypothesis H1 being rejected ( $p > 0.05$ ). Thus, persons forced to become autonomous during telework activity are not inclined to be autonomous in general.

Homonomy in telework is positively related to homonomy, the strength between the two variables being moderate (the path coefficient  $\beta = 0.346$ ,  $p < 0.05$ ). Thus, hypothesis H2 is accepted; people that are determined to develop their interpersonal relationships during telework are more inclined to become more socially oriented in general.

Homonomy in telework is positively related to autonomy in telework, there being a strong relationship between the two variables ( $\beta = 0.754$ ,  $p < 0.05$ ) that leads to the acceptance of H3. Thus, employees who better manage their social life during telework are more able to organise their telework better, becoming more autonomous.

Homonomy in telework is positively related to work-life balance, with H4 being accepted ( $\beta = 0.419$ ,  $p < 0.05$ ). Employees who are more oriented to developing strong relationships during telework develop a more stable balance between personal life and professional life.

Autonomy in telework is positively related to work-life balance: the more autonomous an employee is during telework activity, the better the employee manages the balance between personal and professional life ( $\beta = 0.371$ ,  $p < 0.05$ ), with hypothesis H5 being accepted.

The relationship between autonomy in telework and telework abilities is not statistically significant; thus, an increase in employees' telework autonomy does not lead to an increase in their abilities with regard to coping with telework, H6 being rejected.

Work-life balance is positively related to the social implications of telework. Thus, the more employees are satisfied with their work-life balance, the more they consider telework to have sustainable social implications. As such, H7 is accepted.

Telework abilities do not influence the intention to work from home. Therefore, even though the employees gain abilities through telework, they do not manifest a strong proneness to work remotely. H8 is thus rejected.

There is no significant relationship between the concerns regarding telework and the intention to work from home: the challenges involved in working remotely do not influence employees' intentions to adopt this working mode. Thus, H9 is rejected.

The concerns regarding telework do not influence the work-life balance; thus, H10 is rejected. Difficulties encountered during telework activities do not have significant negative effects on work-life balance.

Positive emotions are positively related to both work-life balance ( $\beta = 0.225$ ,  $p < 0.05$ ) and the intention to work from home ( $\beta = 0.843$ ,  $p < 0.05$ ), hypotheses H11 and H12 being accepted.

As regards the social implications of telework, from the model results, they are not positively related to the intention to work from home, hypothesis H13 being rejected. The positive social effects perceived by the employees do not motivate them enough in order to manifest intention to work remotely, other factors being responsible for such behaviour.

### 4.3 Discussion

The results are based on a sample that was a part of a population that arose spontaneously in the turbulent atmosphere of the COVID-19 pandemic and the parameters of which (including standard deviation) were and still are unknown. Since the population was and still is unknown, our primary goal was not to reach a sample imitating given parameters. As mentioned above, according to the "10-times rule," the minimum sample size is 60 observations. Our goal, on the contrary, was to prove the validity of the model for the Czech environment during COVID-19, and since the outcomes partially replicate the outcomes presented in a Romanian study (Dima et al., 2019) by revealing nearly the same four latent variables (constructs) among Czech teleworkers, this goal was met. Findings beyond this replication need to be validated on a larger sample.

In comparison with the previous Romanian research, the present study revealed four constructs (latent variables) present already in the Romanian study, namely (1) autonomy in telework, (2) work-life balance, (3) social implications of telework, which were extended by one item in our study (explicit variable), (4) telework abilities, which came out of different items (explicit variables), only one was identical. The remaining six latent variables are an extension to the previous model, namely: autonomy, homonomy, homonomy in telework, telework concerns, positive emotions related to telework, and intention to work from home.

Regarding the similarities with the previous research as for the outer model (relationships between the constructs), the present study accepted two hypotheses identically to the previous one (H5: Autonomy in telework is positively related to work-life balance; H7: Work-life balance is positively related to the social implications of telework). One hypothesis was accepted only in the first research (H6: Autonomy in telework is positively related to telework abilities). Here, it is necessary to take into account that the construct of telework abilities was different and that different telework abilities were required in Romania before COVID-19 and in the Czech Republic during COVID-19. Five further hypotheses were accepted only in the present study (H2: Homonomy in telework is positively related to homonomy; H3: Homonomy in telework is positively related to autonomy in telework; H4: Homonomy in telework is positively related to

work-life balance; H11: Positive emotions are positively related to the intention to work from home; H12: Positive emotions are positively related to work-life balance).

Based on the research findings, the following managerial and policymaker implications can be formulated. Autonomy and homonomy in telework should not be understood as contrary but complementary phenomena. As they contribute both to work-life balance, managers should support them both. Managers should further support positive emotions about telework because they, on the one hand, contribute to work-life balance and, on the other hand, they positively affect the intention to work from home. Work-life balance was found as a crucial variable positively related to the positive perception of the social implications of telework.

## Conclusion

The goal of the paper was to prove the validity of the already existing theoretical model (revealed in Romanian research before COVID-19) for the Czech Republic's situation during COVID-19 and draw managerial conclusions. The paper introduced the research, explained its aim and relevance, its methodology, and the results of the survey.

Telework was adopted during the pandemic situation worldwide mainly to protect public health while searching for ways to continue with economic activities. Thanks to the experience, we were given the opportunity to monitor the positive and negative impacts of telework, and now we have the chance to focus on maintaining the positive impacts and minimising the negative side effects.

We can observe different contexts of telework within research before the pandemic of COVID-19 and during it. While the research before COVID-19 points out the main reasons why companies should implement telework and what benefits it can bring to them, the research coming out during the pandemic focuses mainly on specifics influencing physical and mental health, telework productivity, satisfaction, and stress. Various aspects of human capital were examined (experience with telework before COVID-19, intensity, and extensity of growth of telework). The research was also devoted to sustainability, such as gender inequalities, workers with disabilities, etc. Interestingly, some research pointed out a decrease in gender inequality; on the contrary, some identified the opposite phenomenon. The possible explanation appears to be the differences in traditional gender identity. Our research enriches these views by focusing on factors influencing work-life balance and intention to work from home.

The presented research focuses on the perception and implications of telework during the COVID-19 period in the Czech Republic within the years 2020-2022. The goal of the research, as mentioned in the methodology, is to replicate the research which was previously conducted by the authors in 2018-2019 (Dima et al., 2019) under the specific situation of COVID-19 in the Czech Republic and to identify the relationships of the latent variables elicited by this specific situation, and to involve motivational traits this time.

A great percentage (78.6%) of the variance of variable intention to work from home is explained by the variables: social implications of telework, telework abilities, telework concerns, and positive emotions (Table 6). Whereas positive emotions (namely pleasure, productivity, pride, and gratefulness) related to telework are the most crucial latent variable. Positive emotions contribute both to the intention to work from home and work-life balance; therefore, managers should support them. Additionally, work-life balance was found to be a crucial variable positively related to the positive perception of the social implications of telework. This is a key finding not

only for managers in Central and Eastern Europe but especially for Central and Eastern European policymakers.

Regarding the verification of hypotheses that were formulated in the research part, six out of 13 were rejected, and the remaining seven were accepted. Concerning the similarities with the article by Dima et al. (2019), the model tested in the present study was quite different. It can be outlined that hypotheses H5 and H7 are accepted in both studies, while H6 is accepted only in the first one. Autonomy and homonomy in telework should not be understood as contrary but complementary phenomena; therefore, managers and policymakers should pay attention to both independence and team cooperation. Employees proceed well when they are supported in their independence and, at the same time, when team spirit is created.

Policymakers have the great opportunity to use the experience from COVID-19 and support productivity and innovation by promoting telework. The findings of the present paper can be useful to decision-makers for understanding employees' willingness to work from home in order to adopt decisions meant to increase work satisfaction and productivity. Also, the sustainable effects of telework might influence public institutions to adjust their actions in order to take advantage of the positive effects that working from home may have on various categories of the public. Space for further research is open to exploring more deeply the possible impacts of telework on urban mobility. Future studies can evaluate whether there exist any gender differences in forming intentions towards teleworking in the Central and Eastern European region. Besides, it would be useful to assess whether employees are open to adopting working from home during normal times, not being forced by sanitary or other crises.

Limitations of the results presented in this paper are connected to the pioneering nature of the research during COVID-19 in the Czech Republic. The model indicates relationships between key phenomena and is a starting point for further studies. The relevance of the applied model was verified, the quantitative data collection will continue, a larger sample will be reached, and thus the future results will allow further contribution to theoretical concepts, and further managerial implications will be formulated. The Czech authors are already engaged in cooperation with three other Central and Eastern European countries (Poland, Slovakia and Hungary), and together they work on a project supported by Visegrad Strategic Grant No. 22210016 named "Supporting mental health in organisations: developing future business leaders".

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