THE IMPACT OF TELEWORK ON THE EMPLOYEE’S WELL-BEING

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Abstract
The present study aimed to investigate the relationship between the main dimensions of telework and the well-being of employees in terms of flourishing. Thus, 338 people (M_age=40.05; 232 females and 106 males) working in telework in different sectors of the economy were recruited through the snowball method. They completed two scales targeting the main features included in telework, such as interference between work and private life, productivity, organizational trust and flexibility (E-work life scale - 17 items), and, respectively, the state of flourishing (Flourishing scale - 8 items). The conceptual model was developed by structural equation modelling using the partial least square approach (PLS-SEM). The results highlight a weak impact of the dimensions of telework on the well-being of employees. The model obtained shows the dimensions of work-life interference and flexibility have a significant negative influence on the well-being of employees while the dimensions of productivity and organizational trust present in telework are not associated with well-being. Continuing the study by using other instruments to measure well-being and various factors involved in telework is important.

Keywords: telework; well-being; work-life interference; productivity; organizational trust; flexibility

Introduction
Telework - work activities done outside our usual workspace by using telecommunication technology - are massively adopted in Romania during the

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COVID-19 pandemic (Law no. 55/15.05.2020). Studies have shown both benefits and costs of telework for individuals and organizations (Charalampous, Grant, Tramontano, & Michailidis, 2019). On the one hand, teleworking guarantees enhanced flexibility in the professional life - private life relation (Kelliher & Anderson, 2010; Grant, Wallace, & Spurgeon, 2013) and a higher employee autonomy level (Nakrošienė, Bučiūnienė, & Goštautaitė, 2019). On the other hand, overlapping professional and private activities prompts employees to immediately respond to work tasks and abruptly interrupt their family life activities, which leads to stress and unpleasant situations (Cooper & Lu, 2019, as cited in Mihai, Stan, Radu, & Dumitru, 2020).

As far as telework (TW) and employee’s well-being go, clear evidence regarding telework benefits and disadvantages do not exist (Vayre, 2019). We can state that studies are divided into two categories. The first category refers to studies that find an increase in well-being during TW because of having higher autonomy during telework (Grant, Wallace, Spurgeon, Tramontano, & Charalampous, 2019), because of having more extended periods for private life (ter Hoeven & van Zoonen, 2015), and because of feeling satisfaction from being more efficient during TW (Ollo-Lopez, Goñi-Legaz, & Erro-Garcés, 2020). The second category refers to studies that find a reverse relation between TW and well-being and think that well-being decreases because of being interrupted by family members, especially by children (Nguyen, 2021), because of intensifying working hours (Steidelmüller, Meyer, & Müller, 2020), because of technostress (Villavicencio-Ayub, Ibarra Aguilar, & Calleja, 2020) and finally, because of social isolation (Sewell & Taskin, 2015).

In these conditions, the present study aims to bring clarifications in the research of the relationship between well-being, a condition on which productivity depends and the main TW particularities. This investigation is ongoing when Romanian institutions introduced telework because of the COVID-19 pandemic.

Scientific literature review

Scientific literature identifies the presence of specific significant themes in analyzing telework. These central themes are the interaction between professional responsibility and employee private life, work productivity, relating to the organization, management and colleagueship, work flexibility and
employee mental health from the standpoint of well-being (Grant et al., 2019; Charalampous et al., 2019).

Work-life interference

The work-life interference, or professional-private life equilibrium, as it appears in various research, is about the employee’s ability to harmoniously integrate professional requirements into private life (Grant et al., 2013). Regarding this dimension, empirical studies show TW’s positive effects on the employee. As such, TW allows workers to combine professional responsibilities with family life and to adapt their spatial and temporal context to their individual needs (Kelliher & Anderson, 2010; ter Hoeven & van Zoonen, 2015).

At the same time, the incapacity of employees to disconnect from work was acknowledged. This can lead to an increased conflict between family and work and to stress. Employees working from home observed that it is difficult for them to disconnect and avoid doing overtime hours (Grant et al., 2019). The obstacle in TW is precisely working next to one’s family. Studies conclude that many obstacles in attaining TW objectives are present because of having the employee’s attention distracted by various family problems (Nguyen, 2021). Nakrošienė et al. (2019) show that families with many children provoke a lack of satisfaction for the teleworking parents that are part of those families. Therefore, many children or living with many family members make it difficult for the employee to manage the work-private life equilibrium, leading to a decrease in work satisfaction and well-being. This aspect is even more present in women that need to dedicate their time to family life requirements (Kossek, Lautsch, & Eaton, 2006; Sullivan, 2012). TW permanently increases stress, intensifies negative feelings, and lowers happiness level in women, whereas, in men, TW-related stress and negative feelings increase while TW occurs during holidays and weekends (Song & Gao, 2019).

Productivity

Studies regarding positive TW effects on individual performance are ambiguous (Omondi & K’Obonyo, 2018). Generally, TW is associated with an increase in employee productivity, having a feeling of control over the working process, and organizational involvement (Ollo-Lopez et al., 2020). For organizations, TW increases productivity because it helps attract and long-term hire talented workers, but also because it reduces office lease costs and helps maintain daily activity continuity (Ollo-Lopez et al., 2020). The employee does
not perceive TW as stressful in the context in which TW is introduced on a global scale and considers that different factors such as incentives and tasks potentially contribute to a rise in productivity (Gajendran, Harrison, & Delaney-Klinger, 2015; Grant et al., 2019). Despite all this, Morikawa (2020) thinks that TW was associated with a decrease in self-reported productivity by employees during the COVID-19 pandemic.

A consensus between research regarding the positive relation of telework and employee performance exists. TW is beneficial for employees in their personal life because professional and private task-accomplishing employees are more contemptuous and productive (Gajendran et al., 2015; Ollo-Lopez et al., 2020). The authors explain the relationship between organization and employees by using Blau’s (1964) social exchange theory which states that employees will respond to autonomy and TW-driven control by increasing performances and by having a more positive attitude towards their company.

**Relating to the organization**

The research looked into the magnitude of TW over the employee-supervisor relation and the ulterior impact on workplace satisfaction. One particular TW research suggested that this relation is positively associated with evaluating supervisors and that a longer TW period leads to a better quality for the relationship between employee and supervisor, but also a decrease in quality between employee and colleagues (Gajendran et al., 2015).

It is crucial for management to take culture into consideration, as well as the way in which efficient usage of TW technology can impact the individual and the organization because team communication and the organization’s social support positively impact employee mental health. Embodying a culture of organizational trust is essential because TW relies on distant monitoring and employee honesty (Grant et al., 2019). A survey on TW employees stresses out the difficulty of maintaining the employees’ trust in the organization, yet this can be improved through communication, coaching, and by increasing trust between employees and managers (van der Meulen, 2017). Similarly, Richardson (2010) interviewed managers and Canadian tech employees and concluded that trust is, alongside communication and autonomy, a crucial concept in managing TW employees. Therefore, supportive management and appropriate management training policies, which include formal and non-formal communication techniques, are essential for TW.
Work flexibility

Many studies find that the flexible nature of TW benefits employees (Grant et al., 2019; Curzi, Pistoressi, & Fabri, 2020; Buomprisco et al., 2021). For instance, Grant et al. (2019) find a weak positive correlation between flexibility and employee mental health in their study of remote-work employees. The result suggests that mental health improves if TW delivers an adequate level of flexibility and autonomy for the employee.

However, the Eurofound (2020) report warns that there is the risk of TW deteriorating the professional-private life balance, producing higher levels of stress and causing health issues to employees, despite the flexibility and high autonomy. An explanation can be found in the fact that flexible work requires or is accompanied by management policies that relocate responsibility from managers to employees, which causes anxiety and stress to the employee (Steidelmüller et al., 2020). Other research indicates that teleworkers tend to work more during their free time and more intensely than employees working in the office (Tavares, 2017). This relates to the „autonomy paradox” (Putnam, Myers, & Gailliard 2014). A high level of autonomy and flexibility is usually accompanied by more intense work and extra-long hours, which enhances the organization’s control over the employee’s life. This phenomenon is telling in the case of TW, as they try to compensate for their colleagues’ lack of work given to the lack of interactions and not keeping pace with office activities (Steidelmüller et al., 2020).

Conceptualizing well-being

Well-being became an increasingly popular research topic during the last 40 years because of positive psychology (Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi et al., 2010; Hone, Jarden, Schofield, & Duncan, 2014; Lyubomirsky, 2010; Ryff & Singer, 1998; Tov, Wirtz, Kushlev, Biswas-Diener, & Diener 2020).

Well-being - a multidimensional construct - was differently conceptualized in positive psychology by the hedonic and eudaimonic approaches (Huta & Waterman, 2014; de la Barrera, Schoeps, Gil-Gómez, & Montoya-Castilla, 2019). Hedonic well-being is understood in terms of subjective well-being and equates to happiness. Eudaimonic well-being is understood in psychosocial terms. Subjective well-being defines the perception and evaluation of life. It includes a cognitive dimension regarding life satisfaction.
n and some connected areas such as work, health, and emotional life (Burger & Samuel, 2017; Lyubomirsky, 2010). Life satisfaction can be defined as a person’s emotional reaction to life outside the workplace, free time, or timeframes outside work (Diener et al., 2010).

Psychological well-being was structured in a model (Ryff & Singer, 1998) that includes the following: self-acceptance, good relations with others, autonomy (the capacity to handle social pressure, to think and act in certain ways), event control, life goals, personal growth (the feeling of personal development). Similarly, some authors (Diener et al., 2010; Diener, 2013; Myers & Diener, 2018) believe that self-acceptance, competence, meaning, optimism, engagement, social relations, and self-respect are important for the positive functioning of the individual. The concept of flourishing reunites both subjective and social well-being aspects, integrating both hedonic and eudaimonic perspectives (Keyes, 2007). It is seen as the individual’s long-term maximal well-being, as a state of maximum complexity (Negovan, 2013), describing high levels of subjective well-being (Hone et al., 2014). It also integrates human psychological needs: the capacity to see one’s life purpose, to become involved in activities, optimism, positive social relations, high self-esteem, and competency feelings (Diener et al., 2010; Silva & Caetano, 2013).

Objective

The objective of the study was to investigate the relationship between the particularities of the telework and the well-being of employees conceptualized in terms of flourishing that brings together the two bitter perspectives in hedonic and eudaimonic in characterizing well-being.

Research agrees on the definition of telework: it underlines technologically mediated communication and employee-chosen spatial and temporal context (Fooner & Roloff, 2010; Grant et al., 2013; Allen, Golden, & Shockley, 2015; Vega, Anderson, & Kaplan, 2015). Telework and remote work were used interchangeably in this research.

Hypotheses

1. Work-life interference dimension negatively impacts well-being.
2. Employee trust in the organization positively impacts well-being.
3. Productivity positively impacts well-being.
4. Flexibility negatively impacts well-being.
Method

Participants

Collected sociodemographic data are about: gender, age, studies, professional field, telework period, labor sector, the activity’s urban or rural environment.

Participants and procedure: 338 respondents, out of which 232 are females and 106 are males having $M_{age}=40.05$; $SD=9.65$ (the youngest respondent was 21 years old while the oldest was 69 years old) were recruited between September and November 2020. The resulting respondent group is described in detail when analyzing the results. They were given a specific Google Forms link access. The link was secured and did not allow the filling-up of multiple queries by a single person. Article authors distributed this link to university colleagues and ex-students from the master programs. Sampling was done by snowballing. The method gives the researcher access to groups of individuals to which the researcher has typically limited.

A broad definition of telework was posted before the test. Subjects responded after being aware of the definition and deciding for themselves if they teleworked or not. Subjects filled out the form when they thought they had teleworked. Subjects filled out the form anonymously in order to control the results biasing. (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003).

Instruments

E-work life scale - (EWL) done by Grant et al. (2019) contains 17 items structured on a Likert scale ranging from 1 - strongly agree to 5 - strongly disagree. The sixth “not the case” option exists for each item. Five items are reversed. EWL measures four major telework factors. The first is the work-life interference factor, which refers to efficient time allocation to professional and private life (7 items - Example: My social life is poor when teleworking). The second is productivity or the efficiency with which the subject completes its tasks (3 items - When teleworking, I can concentrate better on my tasks). The next factor is organizational trust, which relates to direct team leads, support, and the level of autonomy the organization allows (3 items - My organization trusts my efficiency when I telework). The last is flexibility regarding the schedule (3 items - My work is so flexible I could take time off whenever I want during telework hours).
The scale was translated from English to Romanian and then from Romanian to English. The translation kept the item’s form and semantic content. Translating and validating this type of scale extends knowledge regarding telework cultural aspects. Subjects filled out the form when they thought they had teleworked. Subjects filled out the form anonymously in order to control the results biasing. As shown in the Results paragraph, the scale has good psychometric properties (see exploratory factor analysis - EFA and confirmatory factor analysis - CFA).

Flourishing Scale - (FS) contains eight items regarding „psychosocial prosperity” (Diener et al., 2010, p. 144). The scale measures the life goals sphere, interpersonal relations, self-esteem, and competency feelings. These are assessed on a scale from 1 - strong disagreement to 7 - strong agreement. Example of item: I am competent and capable in activities that matter to me. Values range from 8 to 56. Studies confirmed the validity, factorial structure, and alfa Cronbach values over 0,80 for different cultural groups (Hone et al., 2014; Silva & Caetano, 2013; Sumi, 2014). This research’s α Cronbach value is 0,91 (CI95% - 0,89-0,93). Therefore, the scale displays a high internal consistency.

Data analysis

The data were analyzed using the structural equation modeling by the partial least squares method with ADANCO software v2.2.1. (2020). The analysis focused first of all on the evaluation of the reliability and validity of the model and, secondly, on the testing of the hypotheses (evaluation of the structural model). Also, the SPSS v22 and AMOS v20 programs (Chicago, IL, USA) were used to verify the factorial validity of the E-Work Life scale, which, to our knowledge, is used for the first time in the Romanian environment.

Results and discussion

To begin with, we identified the sociodemographic characteristics of the subject group. The sample contains a higher percentage of female respondents (68,6%) compared with 31,40% male respondents. The sample is covered by 97,55% of graduates and post-graduates. Subjects having only a high school degree represent 2,36% of the subjects' total. Professional fields vary. Education weighs in the most (24,55%). Then we have the I.T. (14,79%) and
telecommunications (10.84%) fields. Age groups are relatively even, except for the 60-plus year-olds (2.00%). Most participants belong to the 40-49-year-old age group (37.20%). 41.12% of subjects work in the public sector, while 58.87% work in the private sector. All subjects are residents in an urban area. The telework period was rounded into subperiods of 5 months each, given that telework was legalized in Romania in 2018 and the maximum legal telework period in Romania is two years (Law no. 81/30.03.18). Most subjects (55.03%) have been working for approximately one year in TW.

Given that the EWL scale was translated and deployed in a different culture, different for that for which it was designed, we first did the factorial analysis of the scale. Both EFA (Kayser-Meyer-Olkin=0.87 and the sphericity Bartlett test=2418.54; df=136; p<.001) as well as the CFA show that the four-factor scale structure is maintained in the Romanian version (the total variance=64.68%) and keeps its item number. However, item 16 regarding flexibility was eliminated because of the weak factorial load in both types of analysis (0.39 for CFA and 0.40 for EFA). This led to an improvement of matching indices (χ²=292.32; df=112; χ²/df=2.69; CFI=0.93; TLI=0.92; RMSEA=0.069 - CI90%; 0.059-0.079; p<.01). The items highlight the good factor loading (ranging from 0.57 to 0.90) and the Cronbach's indices for all 4 subscales are over 0.70.

Evaluating model characteristics

We first measured the model characteristics. We used the bootstrapping technique on 5000 samples, according to Henseler, Hubona, and Ray's (2016) recommendation. Thus we examined the construct's reliability, convergent and discriminant validity. We used two reliability coefficients for model construct reliability: Jöreskog’s rho (ρc) (CR), which should be greater than 0.80 (Henseler et al., 2016) and α Cronbach, which should be greater than 0.60 and lower than 1 to obtain an acceptable level of reliability (Pallant, 2007). We observe the reliability rating is good, given the coefficients from Table 1. We used the Average variance extracted (AVE) for assessing convergent validity and the high sensibility Heterotrait-monotrait (HTMT) criterion for discriminant validity. As a general rule, it is recommended that the AVE have a minimum of 0.50, while HTMT has a good value when below 0.90 or even 0.85 (Henseler, 2020).
Table 1. Construct reliability and convergent validity

<table>
<thead>
<tr>
<th>Factors</th>
<th>Jöreskog rho (ρc)</th>
<th>Cronbach alpha (α)</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work-life life interference</td>
<td>0,87</td>
<td>0,84</td>
<td>0,52</td>
</tr>
<tr>
<td>Productivity</td>
<td>0,89</td>
<td>0,86</td>
<td>0,68</td>
</tr>
<tr>
<td>Organizational trust</td>
<td>0,84</td>
<td>0,74</td>
<td>0,65</td>
</tr>
<tr>
<td>Flexibility</td>
<td>0,84</td>
<td>0,63</td>
<td>0,72</td>
</tr>
<tr>
<td>Flourishing</td>
<td>0,92</td>
<td>0,91</td>
<td>0,61</td>
</tr>
</tbody>
</table>

In our case, the AVE scores over 0,50 for each variable (table no.1), while the HTMT scores below 0,85; the highest value is 0,67. Items have their factorial load between 0,60 and 0,70 (3 items), between 0,71 and 0,80 (11 items) and over 0,80 (10 items).

The software ADANCO 2.2.1 provides us its SRMR (standardized root mean squares residual) index, good if below 0,080 (Hu & Bentler, 1999), which functions as a way to evaluate the model. In this study, SRMR had a value of 0,0695 for both the estimated and the saturated models. Before testing the hypotheses, we verified multicollinearity by using VIF (variance inflation factor), which had a value below 3,3 and which indicated the absence of multicollinearity (Kock, 2015).

**Evaluating the structural model**

Table no. 2 presents the structural model’s summary. R² for flourishing is extremely low, having a value of 0,05, which represents in effect size terms (f² Cohen) a reduced impact of TW dimensions on well-being. Two independent variables are negatively linked to flourishing: work-life life interference (β=–0,17; p<.01) and, on a lower scale, work flexibility (β=–0,10; p<.05) (figure 1). Thus, hypothesis 1 are accepted and hypothesis 4 is partially accepted.

There is a high probability that the employees’ well-being will drop if they perceive the interference between professional and private life. It is possible that low well-being affects productivity, given that research finds a strong relationship between well-being and performance (Kim, 2014). The obtained result suggests it is difficult for our analyzed employees to create clear limits between professional and private life. It is probable that they find it hard to manage their time and find clear limits between these two spheres.
The result resembles the one on teleworkers from England (Grant et al., 2019) where the negative relation between vitality, mental and physical employee health, and work-life interference.

The model exhibits a weak negative relationship between flexibility and flourishing (β=−0.10; p<.05). This contradicts results found by Grant et al. (2019), which demonstrate the existence of positive relation between flexibility and employee mental health. It is possible that a great portion of teleworking individuals does not perceive flexibility in work during the pandemic context. TW was changed when it fully switched to home-based TW. It was not flexible anymore and became rigid and static.
Our result relies on research that finds flexibility to create work intensifying, which in turn leads to a rise in stress levels (Kelliher, Anderson, 2010; Vander Elst et al., 2017).

On the other hand, the result converges with research indicating the negative potential of flexible work (Steidelmüller et al., 2020). According to this research, employees are not guided by managers as in traditional work. Instead, employees decide for themselves how their work targets are to be accomplished, thus internalizing these objectives and letting them invade their personal lives. This leads to an increase in stress. The result reflects the claims of some studies that indicate that the autonomy offered to employees by telework is likely to generate stress through the responsibility it brings (Steidelmüller et al., 2020). Independent variables such as organizational trust (p=.30) and productivity (p=.44) are not significantly related to well-being. As such, hypotheses 2 and 3 were rejected. In contrast to various other studies where TW and an increase in work efficiency are correlated (Gajendran et al., 2015; Ollo-López et al., 2020), we did not observe an influence of work productivity over employee well-being. Although most studies find organization and good communication with management essential for the employee TW process (Gajendran et al., 2015; Grant et al., 2019), we did not find a significant relationship between well-being and communicating with the organization. It is highly probable in TW that management policies change by stressing our formal and informal communication, creating common objectives, and clearly establishing work volumes (Grant et al., 2013; van der Meulen, 2017).

**Study limitations**

As in any research, this has its limits. We refer to sample size and to the fact that research tools rely exclusively on using self-report scales. Also, we did not differentiate the subjects based on their work experience because of having a
limited number of subjects. This would have yielded supplementary information. Another possible limitation arrives from the fact that the sample mostly contains high-level knowledge workers, which can be seen in their university or post-university level studies. Another limitation comes from the fact that the flexibility dimension from the resulted model is represented by two items.

**Conclusions**

The study investigated the relationship between employee well-being and primary factors in characterizing telework: work-life interference, employee’s productivity, trusting the organization, and work flexibility. It appears that working at a distance does not significantly influence employee well-being. Results give way to two hypotheses. First, work-life interference’s negative impact on employee well-being shows us that well-being decreases in situations where employees perceive a conflict between work and private life. Therefore, it is important that employees learn to create clear limits between professional responsibilities and family life requirements in order to make telework easier for them. Second, we refer to the minimal yet negative impact of flexibility on well-being. Productivity and organizational trust do not impact well-being. This topic requires further research that analyzes telework and well-being with different tools and different perspectives on well-being. It also requires that future research analyze the relation between different telework aspects and individual mental health, depending on work fields, activity complexity, and telework experience. Telework beginning stages probably involve the perception of many benefits by the employee, but as that period progresses, the employee will perceive how benefits turn into negative aspects. As managers in multinational corporations affirm, prolonging work without physical interaction lowers the employee’s energy regardless of their family situation or their personality, leading to estrangement, anxiety, and social disconnection (Cornea, 2021).

**References**


