Assessing Working Attitudes of Remote Workers to Enhance Management Control System: A Case Study of COVID-19 Lockdowns in Italy

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Abstract

The COVID-19 pandemic has significantly transformed organizational operations, with remote work emerging abruptly as a prevalent practice during lockdowns and maintaining a pivotal role in contemporary business organizations. This paper investigates the working attitudes shaped by the forced shift to remote work in Italy during the two major waves of COVID-19 lockdowns, exploring a two-wave survey involving 30 Italian companies and 1,861 workers. This research examines the challenges faced by remote workers, their perceptions, and the implications for management control systems. Results indicate that Italian workers' attitudes toward the sudden shift to remote work varied widely, depending on both demographic and organizational factors. Specifically, trust in direct supervisors, number of children, and age emerged as major determinants of workers' attitudes and opinions. Furthermore, these opinions were associated with perceived stress levels.

Keywords: Remote working, Covid-19, Organizational behavior, Management control system, Worker well-being

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1. Introduction

Remote work, defined by Atkinson (2022) as an approach to workplace planning that allows employees to work from a location other than the corporate office, has been a subject of academic and policy interest since the 1980s (DeSanctis, 1984; European Framework Agreement on Telework, United States' Telework Enhancement Act). However, it remained confined to academic, theoretical, and rather niche debate (Pyöriä, 2011; Martin & MacDonnell, 2012) until the unexpected pandemic contingency.

The pandemic-induced surge in interest in remote work has sparked new research streams (Tavoletti & Taras, 2022), exploring the effects on workplace dynamics and management of this novel arrangement, which was a new experience for many workers and companies (Eurofound and ILO, 2017). Indeed, organizational management control practices were significantly impacted by the widespread adoption of remote work during the COVID-19 pandemic (Delfino & van der Kolk, 2021; Mancini *et al*., 2021): managers have adapted by implementing various changes, such as increasing online meetings and utilizing technologies to monitor employees remotely, thus altering organizational control dynamics.

As the first European country to mandate remote working at the pandemic's outbreak in March 2020, Italy experienced a dramatic shift in work arrangements and, thus, presents a particularly significant case study for this phenomenon. This change was revolutionary for Italian workers, as previously only a small percentage had access to remote work options (Eurofound and ILO, 2017), and under specific conditions (Law Number 81/2017). The abrupt shift to remote work posed significant challenges for management control systems in Italian organizations and raised important questions about how to monitor performance, maintain team cohesion, and ensure productivity in a remote work context. However, given the rarity of studies on remote work in the Italian context conducted prior to the pandemic, there is a lack of exploration of the crucial connection between remote work and management control systems.

In this study, we aim to address this gap by presenting findings from research conducted during Italy's two main pandemic waves and subsequent lockdowns, providing insights from remote workers (Lombardi, 2021; Mancini *et al.*, 2021; Noto *et al*., 2023). Our study makes a unique contribution by providing a comprehensive analysis of Italian workers' opinions and behavioral intentions regarding remote work adoption and subsequent shifts in managerial practices. Importantly, we identify and prioritize the factors

that are most impactful in defining personalized remote working arrangements and adapting management control systems. Thanks to this targeted approach, we offer practical, evidence-based guidance for organizations seeking to optimize their remote work policies and control mechanisms in the post-pandemic era.

Indeed, understanding remote workers' attitudes offers several suggestions for optimizing management control systems. It facilitates resource optimization, enabling effective workload management and activity planning tailored to remote employees' preferences. This understanding allows for the adaptation of management policies, such as adjusting work-hour policies to enhance employee satisfaction and productivity (Chatterjee *et al*., 2022).

Moreover, it enhances communication between remote employees and managers, facilitating collaboration and overcoming challenges posed by physical distance (Contreras *et al.*, 2020) through customized work methodologies and suitable online collaboration tools. This knowledge also enables performance evaluation based on results rather than physical presence, promoting employee performance and accountability (Verbeeten & Speklé, 2015). Lastly, it allows for implementing policies prioritizing employee well-being, addressing factors influencing stress and satisfaction to improve work quality and mental health.

This study employs a two-wave survey approach, collecting data from 1,861 emergency-induced remote workers across 30 Italian companies during the COVID-19 lockdowns of 2020 and 2021, to examine:

(1) How do demographic and organizational factors influence remote work attitudes during a crisis?

(2) What is the relationship between remote work attitudes and perceived stress?

By answering these questions, we aim to provide insights that can inform the adaptation of management control systems to remote work challenges.

Our analysis reveals that workforce responses to the sudden shift from traditional on-site to remote work varied substantially, influenced by both demographic and organizational factors. The findings demonstrate that trust in management significantly influenced workers' attitudes toward remote work, along with factors such as number of children, age, and proportion of remote work activities. Furthermore, these attitudes toward remote work emerged as significant predictors of perceived stress levels.

The remainder of the paper is organized as follows: Section 2 presents the literature review; Section 3 describes the data and methodology; Section 4 presents the analysis and results; Section 5 discusses the findings; and Section 6 offers conclusions and implications.

2. Literature Review and hypotheses development

While remote working has been discussed in organizational literature since the early 1980s (DeSanctis, 1984), the widespread reliance on this working arrangement during the pandemic's first surge has rekindled interest in its implications for both management and performance (Adams-Prassl *et al*., 2022; Chatterjee *et al*., 2022) and employee well-being, engagement, and satisfaction (Barabaschi *et al.*, 2022). Analysis of the Scopus Database shows that over half of all remote working publications since the 1980s appeared between 2020-2023, with 95% of papers combining "remote working" and "management control" published during this period.

2.1 Remote Work and Management Control Systems

Recent literature provides initial analyses of how management control systems are adapting to remote working environments' challenges and opportunities. These studies converge on several key themes: the necessity for management control systems to shift from process-oriented to outcome-oriented controls in response to workforce dispersion (Galeotti *et al.*, 2023), the importance of maintaining organizational culture and employee engagement through strategic management control systems adjustments (Pianese *et al*., 2023), and the role of digital tools in ensuring accountability and effective governance in decentralized settings (Delfino & van der Kolk, 2021; Flassak *et al.*, 2023). They also highlight corporate knowledge as a strategic asset in managing remote work (Lombardi, 2021) and stress the need for human-oriented control practices to motivate and reassure employees during crises (Corsi, 2021). Additionally, recent studies discuss the adaptation of qualitative management controls that incorporate employee behavior and cultural elements to better support remote teams (Noto *et al.*, 2023). The COVID-19 crisis has catalyzed significant strategic shifts in management control systems, necessitating rapid adaptations in managerial practices to sustain remote business operations (Catturi, 2021; Paoloni *et al*., 2023). Mancini *et al.* (2021) emphasize that management control systems played a crucial role in helping firms navigate the pandemic, underscoring the adaptability and strategic importance of effective control systems during crises. Collectively, recent literature articulates a multifaceted view of how management control systems are evolving to meet remote work landscape demands, emphasizing

a balanced approach that integrates technology, human resources, and strategic governance to ensure organizational resilience and effectiveness. Analysis of recent literature enabled us to identify the primary factors influencing workers' attitudes during the significant transition from in-person to remote work that have not yet been addressed in management control dynamics, particularly in Italy. These key factors include gender and parental status, age, organizational role, and workplace trust level.

2.2 Attitudes towards remote working across different socio-demographic groups

Regarding gender, recent literature highlights that women, especially working mothers, bore the heaviest burden when governments implemented restrictive measures in Spring 2020. According to Eurofound's two e-surveys conducted between April and July 2020, which garnered over 90,000 responses, these measures required women not only to adjust to radically different work patterns but also to manage increased unpaid work (such as household chores, childcare, and elderly care), resulting in work-life balance challenges (Eurofound, 2020) negative effects on their well-being (Otonkorpi-Lehtoranta, 2021; Çoban, 2022; Smith, 2022). Thus, we hypothesize:

H1: Female gender will be associated with worse attitudes toward remote work.

An additional factor influencing responses to remote work is employee age. A meta-analysis by Martin and MacDonnell (2012) revealed that age serves as a negative moderator in the relationship between remote work and organizational commitment. Additionally, studies investigating the relationship between age and technostress symptoms (e.g.: panic, anxiety, technophobia, mental fatigue, insomnia, poor concentration, irritability, and memory disturbances; see Tarafdar *et al.*, 2010; La Torre *et al.*, 2019) found that for younger people (up to 35 years) the association between ICT use and stress is small or non-existent, while the middle age group (35-45 years) exhibits a stronger correlation (Berg-Beckhoff *et al.*, 2017). These findings led us to hypothesize:

H2: Older age will be associated with worse attitudes toward remote work.

Supervisory responsibility also emerged as a major factor in determining remote workers' well-being and attitudes.

Leading remote teams required managers and team leaders to adjust their leadership behaviors to a different, "virtual" mode (Bartsch *et al.*, 2021; Stoker *et al.*, 2022) and adopt new tools and strategies to track and assess work performance (Palvalin *et al.*, 2015). Such struggles, along with the lack of experience in remote management, contributed to impairing managers' "vision" of their subordinates, leading to new demands for organizational resources and training (Silva-C, 2019). The absence of such facilitating tools (as in the case of abrupt and inadequately prepared adoption of new work modalities) leads us to hypothesize:

H3: Responsibility roles will be associated with worse attitudes towards remote working.

However, other studies highlight how remote working also had beneficial effects on employees' well-being, productivity, and job satisfaction (Barabaschi *et al.*), especially in contexts characterized by high levels of workplace trust and positive supervisory relationships (Sekhar & Patwardhan, 2021; Chatterjee *et al.*, 2022). Indeed, as reported in pre-pandemic studies (e.g., Pyöriä, 2011), an atmosphere of mutual trust and respect is the primary requirement for successful remote working arrangements. However, these elements are not easily attained and are affected by various factors, including relationship benefits and termination costs, shared values, communication, and opportunistic behavior (Morgan & Hunt, 1994). The lack of or change in any of these factors can lead to relationship deterioration, resulting in negative effects on cooperation, employee turnover, uncertainty, conflict, and oppositional behaviors, including fraudulent and unethical conduct (Onesti & Palumbo, 2023). Thus, we hypothesize:

H4: High levels of workplace trust will be associated with better attitudes towards remote working.

2.3 Attitudes toward remote working and Perceived Stress

The literature on work-related stress suggests that it emerges from a mismatch between available resources and job demands (Bakker & Demerouti,

2017), resulting in person-environment disequilibrium (Caplan, 1987). Accordingly, traditionally stress-inducing situations are not inherently stressful but become so when workers perceive inadequate resources to handle job demands. However, empirical evidence consistently identifies key factors such as work overload, work-family conflict, and role ambiguity, as the most prevalent sources of job stress (Weinert *et al.*, 2015).

Regarding remote workers specifically, pre-pandemic literature showed that this working mode is associated with particular stressors, such as time management problems, difficulties reconciling work and family responsibilities, lack of informal communication, and computer-related technical issues (Konradt *et al*., 2000).

However, these factors are not inherently stressful but, as illustrated above, only become so when workers feel they lack necessary coping resources. Indeed, employees who maintained satisfactory work-life balance and received sufficient leader support exhibited reduced stress levels (Schiffrin and Nelson, 2010). Therefore, we hypothesize:

H5: Positive attitudes toward remote working will be associated with lower Perceived Stress (PSS).

It is worth noting that circumstances for Italian workers differed significantly between the first and second lockdowns. Pre-pandemic, only 7% of Italian workers used flexible work arrangements (Eurofound & ILO, 2017). This figure rose dramatically to 53.4% in July 2020, then settled at 44.7% in February 2021 (Eurofound, 2022). Moreover, compared to the first wave, the second wave of restrictions featured greater awareness, more information, better access to personal protective equipment, and a nationwide vaccination campaign (Ministry of Health). These differences in Italian workers' conditions between 2020 and 2021 lead us to hypothesize:

H6: The absolute effects of remote working attitudes on Perceived Stress reduce across the two waves.

Overall, while remote working presented both challenges and opportunities, even as telecommuting's prevalence has declined since restrictive measures were lifted, employees' aspiration to engage in remote work has not diminished (Eurofound, 2022).

3. Methodology

3.1. Design, participants and procedures

Participants were recruited through collaboration between the authors and an HR consulting company. Given the urgent need to collect information and understand the ongoing evolution of the pandemic-driven shift from office to remote work, companies were invited to join the research project via an online subscription form and a dedicated LinkedIn page. The research program targeted Italian medium- and large-sized companies (with 50 or more employees) that had implemented or planned to implement remote, flexible working modes and maintain them post-emergency. After a preliminary meeting with the HR manager and/or team to assess the company's adherence to research protocols, companies were informed of their participation in an exploratory study on remote working evolution. Participation was voluntary and free of charge. To incentivize participation, each company was offered a personalized report comparing their performance to the overall sample population.

Questionnaires were administered during April-July 2020 and January-June 2021—corresponding to Italy's two main restriction waves. Clicking a link redirected participants to our Qualtrics-hosted questionnaire. Participants were informed of University Ethical approval and data storage and processing procedures, all adhering to Regulation (EU) 2016/679 GDPR. Following the 1964 Helsinki Declaration's ethical standards, participants were informed of their right to refuse participation or withdraw consent at any time without reprisal.

A total of 1,861 participants across data collection waves completed all survey measures (First wave, N=1,267; Second Wave, N=594), distributed as shown in Table 1.

As Table 1 shows, male respondents represent 60.83% of the sample (compared to 38.26% females and 0.91% who preferred not to respond). The majority of respondents belong to Generation X and Generation Y/Millennials, together comprising 86.67% of the total sample. Age information was collected on a continuous scale and then grouped into generations (Dimock, 2019). The sample's mean age is 43.79 years (SD = 9.9 years).

Regarding professional roles, about a quarter of the respondents hold a position of responsibility over other employees, while, for what concerns family responsibilities, 59.11% or respondents are parents.

Table 1. Socio-demographic characterization of the sample

		#	%
Socio-demographic variables	**Gender**		
	Female	712	38.26%
	Male	1132	60.83%
	Prefers not to answer	17	0.91%
	Age range		
	Boomer (1946-1964)	171	9.19%
	Gen X (1965-1980)	943	50.67%
	Millennials (1981-1996)	670	36.00%
	Gen Z (1997-2012)	23	1.24%
	Number of children		
	0	761	40.89%
	1	451	24.23%
	2	540	29.02%
	3	97	5.21%
	4+	12	0.64%
Work-related variables	**Responsibility**		
	Responsible for others	464	24.93%
	Not responsible for others	1381	74.21%

3.2. Measures

The questionnaire was developed through a series of brainstorming sessions involving a team of Business Administration and Behavioral Economics experts, and Clinical and Experimental Psychologists to ensure comprehensive coverage of relevant variables aligned with organizational well-being literature. The final questionnaire comprised five main sections:

1. **Demographic variables**: This section collected data on *gender*, *age*, *education*, primary *mode of travel* from home to work when not working remotely, and *travel times (Time To Work)*. Gender was coded as 0 for female and 1 for male to clearly indicate the relationship direction between gender and dependent variables in subsequent models. This section also assessed respondents' responsibility roles through the yes/no question "Are you responsible for other workers?" and measured remote work proportion through the question "How much of your work is currently done remotely?"

2. Remote Working Effect: This section assessed remote work's impact on different work aspects. Participants responded to "How has Remote Working affected the following aspects of work?" using a 3-point Likert scale (improvement, worsening, or no change) compared to on-site work, addressing: *productivity at work; relationship with family members and in the private sphere; proposed innovations; relationship with colleagues; relationship with management; relationship with collaborators; relationship with clients; workload.*

A summary measure "Remote Working Effect" was developed:

$$RWeff_i = \frac{\sum_{n=1}^{8} RWeff_{n,i}}{Max\ reachable_i} \quad (1)$$

This captured remote working's effect across eight work-life aspects. Higher scores indicate more positive effects. The index showed good internal consistency (Cronbach's $\alpha = 0.70$).

3. Remote Working Opinion: This second section examined employees' general opinions about the implementation of emergency remote working in their company. Using 5-point Likert scales (*very positive, positive, neutral, negative, very negative*), participants rated their workstation quality (*workstation*), colleagues' remote work performance (*coll*), and overall company performance (*envir*). They also indicated on a 5-point Likert scale (*absolutely yes, probably yes, neither yes nor no, probably no, absolutely no*) their intention to continue remote work post-emergency (*contin*) and likelihood of recommending remote work implementation (*recommend*). These measures were summarized into a "Remote Working Opinion" index:

$$RWop_i = \frac{\sum_{n=1}^{5} workstation_i + envir_i + coll_i + contin_i + recommend_i}{Max\ reachable_i} \quad (2)$$

Higher scores indicate more favorable remote work opinions. The index demonstrated excellent internal consistency (Cronbach's $\alpha = 0.87$).

4. **Psychological scales***:* This section measured factors potentially affecting remote work appreciation and problematic stress levels. Perceived stress was assessed using Cohen's (1988) Perceived Stress Scale. Participants indicated negative feeling frequency on a scale from "Never" to "Very Frequently." While normative scores are typically 12.1 for men and 13.7 for

women, these thresholds—established under normal conditions—must consider pandemic-related contextual factors (Weierstall-Pust *et al.*, 2022), such as health concerns, future uncertainty, and reduced social interactions.

5. **Trust measures:** Added in the second wave, Trust in Organization, Co-workers, and Immediate Manager(s) were assessed using the Workplace Trust Survey Scale (WTS; Connell *et al.*, 2003). Sample items, measured on a 5-point Likert scale, include "There is a widely held belief that X is moving forward for the better," "I feel I can trust my co-workers to do their jobs well," and "I feel that my supervisor listens to what I have to say."

3.3. Models

In previous sections, we highlighted main trends in remote working and created two variables to test Remote Working (RW) effects and workers' opinions about Remote Working. Here we formally test the opinion prediction model toward Remote Working (Model 1) and the relationship between Remote Working attitudes and Perceived Stress - PSS (Model 2).

As a first step, we checked for potential multicollinearity. Table 2 presents the descriptive statistics and correlation coefficients and shows how the main independent variables - with the (anticipated) exception of Trust Measures - show low to moderate correlations, indicating that each variable contributes uniquely to the analysis.

Table 2. Descriptive statistics and correlation between the main covariates

	Mean (SD)	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
1 Gender	0.61 (0.49)												
2 Age	43.12 (9.86)	.03											
3 TTW	25.65 (17.00)	.08	-.01										
4 Resp	0.35 (0.43)	.14	.12	-.02									
5 Childs	1.00 (0.98)	.04	.47	-.01	.13								
6 RWshare	62.11 (37.39)	-.10	-.08	.07	-.15	-.07							

7 TR1	71.28 (17.59)	.14	.03	.05	.05	.04	.13					
8 TR2	63.32 (19.56)	.10	-.01	.04	-.02	.04	.21	.76				
9 TR3	61.64 (22.43)	-.03	-.03	-.07	-01	.00	.11	.44	.51			
10 RWop	0.78 (0.13)	.03	-.03	.05	-.05	.05	.15	.14	.15	.07		
11 RWeff	0.71 (0.11)	-.03	-.11	.01	-.08	-.00	.13	.06	.09	.14	.67	
12 PSS	14.94 (6.60)	-.19	-.11	.04	.01	-.07	.02	-.24	-.21	-.21	-.30	-.26

3.3.1. Model 1

The general model for the Remote Working opinion prediction (Remote Working Opinion and Remote Working Effect) is:

$$RWop_i = \alpha_i + \beta_1 Gender_i + \beta_2 Age_i + \beta_3 TTW_i + \beta_4 Resp_i + \beta_5 Childs_i + \beta_6 RW\_share_i + \beta_7 TR1_i + \beta_8 TR2_i + \beta_9 TR3_i + U_i + \varepsilon_i$$

$$RWeff_i = \alpha_i + \beta_1 Gender_i + \beta_2 Age_i + \beta_3 TTW_i + \beta_4 Resp_i + \beta_5 Childs_i + \beta_6 RW\_share_i + \beta_7 TR1_i + \beta_8 TR2_i + \beta_9 TR3_i + U_i + \varepsilon_i \quad (3)$$

Where: *Gender* indicates the male or female gender of the respondents; *Age* represents respondent age range; *TTW* (Time to Work) indicates work-place commute time; *Resp* indicates supervisory responsibilities; *Childs* accounts for presence of children; *RW_share* represents proportion of remote work activities; *TR* measures trust toward organization (*TR1*), co-workers (*TR2*), and immediate manager(s) (*TR3*); *U* represents firm-specific effects (dummy variable) and ε is the residual term.

3.3.2. Model 2

Our proposed models aim to clarify the intricate connections among the perceptions of remote working, opinions about it, and the resulting impact on perceived stress. To examine the relationship between Remote Working attitudes and Perceived Stress (PSS), we propose:

$$PSS_i = \alpha_i + \beta_1 Gender_i + \beta_2 Age_i + \beta_3 RWop_i + \beta_4 RWeff_i + U_i + \varepsilon_i \quad (4)$$

To measure heterogeneous impacts across the two sub-samples (Wave 1: April-July 2020; Wave 2: January-June 2021), we use:

$$PSS\_w_i = \alpha_i + W_1\beta_1 Gender_i + W_1\beta_2 Age_i + W_1\beta_3 RWop_i + W_1\beta_4 RWeff_i + W_2\beta_5 Gender_i + W_2\beta_6 Age_i + W_2\beta_7 RWop_i + W_2\beta_8 RWeff_i + \varepsilon_i \quad (5)$$

Where *W1* and *W2* are dummy variables separating the two waves to identify potential heterogeneous effects between aggregates.

4. Results

To evaluate our hypotheses, we performed preliminary T-tests and ANOVA analyses before conducting regression models. Overall attitudes toward remote working were generally positive, both in terms of Remote Working Opinion (M = 3.89, SD = 0.66) and Effect (M = 2.13, SD = 0.32).

To test H1 (*Female gender will be associated with worse attitudes toward remote working*) and H3 (*Responsibility roles will be associated with worse attitudes toward remote working*), we conducted T-tests. We found no significant differences between men and women regarding Remote Working Opinion (t = 0.78, p = .44). However, contrary to our hypothesis, women showed a better perception than men regarding Remote Working Effect (t = 2.40, p = .016). Similarly, we found no significant effect for people with supervisory responsibilities in terms of Remote Working Opinion (t = 1.65, p = 0.11), while a significant difference emerged for Remote Working Effect (t = 3.07, p = 0.002), with workers in roles of responsibility exhibiting lower scores (albeit still on the positive side of the Likert scale).

To test H2 (*Older age will be associated with worse attitudes toward remote working*), we conducted a one-way ANOVA comparing Boomers, Gen X, and Millennials (excluding Gen Z results due to small sample size, n = 23). No significant differences were found in terms of Remote Working Opinion ($F(2,1762) = 1.63$; $p = 0.20$). However, we observed an age effect on Remote Working Effect perception ($F(2, 1762) = 7.704$; $p < .001$), showing significant differences among generations: specifically, Millennials reported higher satisfaction, while Gen X and Boomers reported more "neutral" or "no change" perceptions, confirming our hypothesis.

Table 3. Model 1 - Opinion prediction model towards Remote Working.

	Regressors									
Remote Working	Gender	Age	TTW	Resp	Childs	RW_ Share	Tr1	Tr2	Tr3	R2
(1) RWop	0.050	-0.114***	0.081*	-0.001	0.090*	0.287***	-	-	-	0.153
(2) RWeff	0.003	-0.168***	0.080*	-0.031	0.054	0.276***	-	-	-	0.163
(3) RWop	0.039	-0.110***	0.080*	-0.002	0.0839*	0.268***	0.020	0.063	0.023	0.161
(4) RWeff	0.004	-0.164***	0.089*	-0.025	0.049	0.271***	-0.059	0.027	0.126***	0.175

Note: Standardized beta coefficients. * p <0.1; ** p < 0.05; *** p < 0.01. Note: (3), (4) refer only the second wave.

The results of our first regression model, as reported in Table 3, reveal two main trends. On the one hand, we found positive relationships between Remote Working Opinion and both number of children and trust in immediate manager (TR3): greater numbers of children and higher levels of managerial trust associated with better remote working attitudes. These findings support H4 (*High levels of trust will be associated with better attitudes toward remote working*). Our analyses also revealed positive effects of Time to Work (TTW) and remote work share (RWshare) on attitudes toward remote work (both Opinion and Effect). Gender did not emerge as a statistically significant variable.

On the other hand, we found a negative relationship with *Age*: older individuals showed less favorable attitudes toward remote working, viewing this work mode as having a detrimental effect on their quality of work life, further supporting H2. Although individuals with supervisory responsibilities reported more negative perceptions than those without such responsibilities, this association did not achieve statistical significance in the model. Table 4 presents additional significant findings from Model 2. Gender and Age show significant negative associations with Perceived Stress. We found a strong negative relationship between Remote Working attitudes and Stress, supporting H5 (*Positive attitudes toward remote working will be associated with lower Perceived Stress*). Indeed, facing mandatory remote work periods contrary to one's preferences increased stress levels, while individuals with better predispositions reported lower perceived stress. This association is evident across both Remote Working Opinion and Effect measures.

Table 4. Relation of Remote Working attitudes on the Perceived Stress –PSS (model 2).

	Regressors					
y	Gender	Age	RWop	RWeff	R2	N
(1) PSS	-0.122***	-0.085***	-	-	0.177	1793
(2) PSS	-0.134***	-0.105***	-0.317***	-	0.269	1793
(3) PSS	-0.139***	-0.111***	-0.223***	-0.146***	0.281	1793
(4) PSS_w1	-0.152***	-0.153***	-0.348***	-	0.159	1206
(5) PSS_w1	-0.158***	-0.162***	-0.249***	-0.160***	0.175	1206
(6) PSS_w2	-0.190***	-0.111***	-0.300***	-	0.140	574
(7) PSS_w2	-0.195***	-0.123***	-0.206***	-0.140***	0.151	574

Note: Standardized beta coefficients. * p <0.1; ** p < 0.05; *** p < 0.01.
Note: The models report a smaller number than the total number of participants in the questionnaires, due to the lack of answers to some questions of the survey by the participants.

To gain deeper insight into the relationship dynamics between remote work attitudes and perceived stress, we conducted additional analyses on data from Wave 1 (PSS_w1) and Wave 2 (PSS_w2). Despite the ongoing global health emergency, Italian workers' circumstances differed notably between the first and second lockdowns, including factors such as improved information about the Coronavirus, better access to personal protective equipment, and the introduction of a nationwide vaccination campaign overseen by the Ministry of Health (initiated in late December 2020).

Supporting H6, the absolute value of effects on Perceived Stress decreased slightly in Wave 2, after longer exposure to Remote Working. This result suggests a potential habituation effect as individuals adapted to new working conditions.

5. Discussion

Extant literature on remote work under extraordinary emergency conditions highlights that individual differences extend beyond basic worker demographics or occupational status in determining workers' attitudes and opinions toward this work arrangement (Schwedel *et al.*, 2022; Adamovic,

2022). Our findings confirm that effective remote working depends on both individual and organizational factors.

Our investigation reveals a positive relationship between trust in immediate manager(s) and positive attitudes toward remote working, supporting our hypothesis (H4) and emerging research on effective remote leadership (Contreras *et al.*, 2020). These findings underscore the importance of shifting from control-based to trust-based management control systems in remote work contexts and highlight managers' role in shaping employees' experiences. This emphasizes organizations' need to foster trust-building practices and high-quality leader-member exchanges (Graen & Uhl-Bien, 1995) in virtual work environments.

Participants with children report significantly more positive (albeit modest) Remote Working Opinions. While prior research (Hilbrecht *et al.*, 2008) links such preferences to flexible scheduling and facilitated time management, in this pandemic context, such positive attitudes might stem from limited childcare alternatives when schools closed and social distancing restricted childcare services.

On the other hand, our results confirm Galanti *et al.*'s (2021) findings that lower productivity perception and work-life quality correlate with increasing worker age. This relationship may stem from both technological challenges and reduced adaptability to rapid changes (Sharit *et al.*, 2009).

These results can be interpreted through the Job Demands-Resources (JD-R) Model lens (Bakker & Demerouti, 2017). For those with adequate resources, such as technological skills and management support, remote work job demands (e.g., reduced informal communication, rapid adaptation needs) were balanced, resulting in better remote work attitudes. Conversely, those lacking such resources showed more negative attitudes. Our findings on age-related differences exemplify this model, where older workers may face higher job demands, outweighing available resources.

Regarding responsibility's effect on remote work attitudes, we found that individuals in supervisory positions hold worse opinions than those without such responsibilities. However, further analyses failed to reveal significant relationships between supervising others and perceived remote work impact on productivity and work-life quality. These findings diverge from pandemic-era literature (e.g., Graf-Vlachy *et al.*, 2020) but align with Gajendran and Harrison's (2007) meta-analysis, suggesting that remote working's flexibility facilitates leisure engagement, mitigating workplace stress (Konradt *et al*., 2003).

Our study also revealed that individual factors beyond socio-demographic characteristics (age, gender, and family status) shape remote work attitudes,

aligning with the person-environment fit theory (Edwards *et al*., 1998), which posits that congruence between individual characteristics and environmental factors influences work-related outcomes and attitudes.

Specifically, commute time (*TTW*) and remote work volume (*RW_share*) emerged as determinants positively related to both Remote Work Opinion and Remote Working Effect indices. Unsurprisingly, employees with longer commutes hold more favorable attitudes toward remote work, although this effect is modest ($\beta = 0.080$). Regarding RW_share, our findings indicate that increased remote work exposure leads to more positive attitudes, suggesting that familiarity enhances disposition.

In our second model, as hypothesized (H5), we found a negative relationship between remote working opinions and perceived stress. This highlights how individuals holding unfavorable attitudes toward remote work perceived the forced, rushed remote working adoption during the pandemic as more stressful, while those with positive attitudes experienced lower stress levels.

Comparing data between waves reveals that remote working opinions' absolute effects on Perceived Stress diminished after prolonged experience, supporting our expectations (H6). This outcome, though derived from cross-sample comparison, may reflect workers' overall familiarization with new working arrangements.

6. Conclusions

Limitations and Future Research

One limitation of this study—though anticipated and inherent to its purpose—lies in the exceptional period of data collection.While our findings captured a clear picture of the Italian workforce's response to the abrupt adoption of emergency remote working, our study was hindered by the inability to effectively differentiate between stressors attributable to the mandatory remote working protocol and those that arose from the prevailing health crisis. For an overview of Italian workforce opinions and attitudes toward remote working, future research should investigate these aspects in post-pandemic work environments, examining larger worker populations and validating relationships for practical managerial implications.

Another limitation concerns the geographical distribution of participating companies, with 55% of questionnaires from the Emilia-Romagna region, and the remaining 45% distributed across Northern, Central, and Southern Italy, with minimal representation from the islands (five questionnaires). Future research should focus more specifically on these areas to provide a broader and more diverse sample.

Implications for research

Our study contributes to the existing theoretical frameworks in several ways. Our findings extend the application of the Leader-Member Exchange (LMX) theory (Graen & Uhl-Bien, 1995) to remote work contexts, showing trust's role in shaping remote work attitudes. They provide empirical support for the Person-Environment Fit theory in forced remote work contexts, showing how individual characteristics interact with environmental factors to influence work-related attitudes.

The insights gained from examining Italian employees' and managers' remote working opinions contribute to current debates on remote work's organizational effects, highlighting how demographic and psychological factors affect workers' perceptions.

A noteworthy finding relates to perceived stress. Beyond established factors extensively examined in current literature, such as age and gender, our study revealed a negative correlation between telecommuting attitudes and perceived stress. These results suggest that positive remote work attitudes function as resources within the JD-R framework, buffering against job demands. Nevertheless, further examinations under normal circumstances may be necessary to investigate this phenomenon.

Collectively, our findings emphasize three critical elements for successful remote work implementation: *trust-based leadership, provision of resources*, and *attention to individual fit*.

Managerial implications

The discussion of our findings' implications for management control systems in remote working during extraordinary emergency conditions reveals several critical insights beyond structural and technical aspects. They underscore the necessity of integrating human and psychological considerations to enhance remote work environments' efficacy at the employee, middle management, and upper management levels.

1) Employee

At the employee level, evidence from our study shows that participants with children and longer commute to work exhibit positive attitudes towards remote work. These findings suggest that management control systems should incorporate flexible scheduling options to accommodate parents' and caregivers' unique needs. Tailoring work arrangements to account for such

variables can optimize employee satisfaction and effectiveness, while aligning with work-life balance principles (Kossek, Lautsch, & Eaton, 2011), as supported by remote work dynamics research (Golden & Veiga, 2005).

Similarly, as our findings suggest that older workers might perceive remote working negatively due to technological challenges, management control systems must include comprehensive training programs and ongoing IT support to ensure all employees' comfort and proficiency with digital tools. Implementing regular feedback systems on technological tools' usability and effectiveness is crucial, allowing iterative improvements to accommodate varying competencies and preferences (Venkatesh & Bala, 2008).

2) Middle management

Moving to the middle management level, the positive relationship between trust in immediate managers and attitudes toward remote working suggests that management control systems should evolve from traditional control-based approaches to trust-based, distributed leadership (Spillane, 2005). This shift requires training leaders and managers to support their teams through empowerment and confidence rather than strict supervision. Organizations should invest in training programs focusing on remote leadership competencies, including communication, empathy, and digital collaboration tools, to better manage distributed teams (Madlock, 2012).

For individuals in roles of responsibility who may view remote work more negatively, clear delineation and communication of responsibilities can mitigate concerns related to oversight and control of dispersed teams. Organizations must ensure workload is evenly distributed and that employees managing others have adequate support and resources to handle their supervisory duties without undue stress. Given the relationship between remote working opinions and perceived stress, management control systems should include mechanisms to monitor stress levels and provide resources such as mental health support and stress management workshops (Sonnentag & Frese, 2003).

3) Upper management

Lastly, upper management plays a key part in creating organizational strategic direction and culture, particularly in remote work environments. Positive attitudes toward remote work among employees with flexible schedules and adequate support systems highlight the importance of upper management cultivating a corporate culture that values flexibility, work-life balance, and employee well-being, and ensuring that these policies are consistently implemented across all organizational levels. By setting clear examples, upper

management can encourage a culture prioritizing workforce unique needs, thereby enhancing job satisfaction and productivity (Kossek *et al.*, 2011). Our findings also highlight upper management's need to implement robust systems for regular feedback regarding technological tools' usability and effectiveness and remote work policies. Such feedback mechanisms would allow for continual improvement and keep management control systems adaptable to changing labor needs (Venkatesh & Bala, 2008).

Policy-making implications

An insightful (somewhat unexpected) finding concerns positive Remote Working Opinion among parents. This result appears to contradict studies on working mothers during the COVID-19 pandemic (Çoban, 2022; Otonkorpi-Lehtoranta, 2021; Smith, 2022). However, it aligns with recent European and Italian regulations on work-life balance for parents, such as Legislative Decree No. 105 of June 30, 2022, which transposes European Directive (EU) 2019/1158, guaranteeing priority remote work access for parents with children under 12 years old.

In this regard, our findings not only corroborate recent European and Italian regulations on work-life balance for parents, but also suggest areas for future policy development. For example, parents' positive attitudes towards remote working indicate that policies facilitating flexible working arrangements for caregivers are well-founded. However, our findings also highlight the potential challenges faced by older workers in remote settings: policymakers should consider initiatives supporting digital literacy and technological adaptation for older workforce segments.

References

Adamovic, M. (2022), "How does employee cultural background influence the effects of telework on job stress? The roles of power distance, individualism, and beliefs about telework", International Journal of Information Management, Vol. 62, p. 102437. Doi: Doi: 10.1016/j.ijinfomgt.2021.102437.

Adams-Prassl, A., Boneva, T., Golin, M., & Rauh, C. (2022), "Work that can be done from home: evidence on variation within and across occupations and industries", Labour Economics, Vol. 74, p. 102083. Doi: 10.1016/j.labeco.2022.102169.

Atkinson, C. L. (2022). A review of telework in the COVID-19 pandemic: lessons learned for work-life balance?. COVID, 2(10), pp. 1405-1416.

Bakker, A. B., & Demerouti, E. (2017). "Job demands–resources theory: Taking stock and looking forward". Journal of Occupational Health Psychology, Vol. 22 No. 3, pp. 273-285. Doi: 10.1037/ocp0000056

Barabaschi, B., Barbieri, L., Cantoni, F., Platoni, S., & Virtuani, R. (2022), "Remote working in Italian SMEs during COVID-19. Learning challenges of a new work organization",

Journal of Workplace Learning, Vol. 34 No. 6, pp. 497-512. Doi: 10.15167/1824-3576/IPEJM2021.3.1423.

Bartsch, S., Weber, E., Büttgen, M. and Huber, A. (2021), "Leadership matters in crisis-induced digital transformation: how to lead service employees effectively during the COVID-19 pandemic", Journal of Service Management, Vol. 32 No. 1, pp. 71-85. Doi: 10.1108/JOSM-05-2020-0160.

Berg-Beckhoff, G., Nielsen, G., & Ladekjær Larsen, E. (2017), "Use of information communication technology and stress, burnout, and mental health in older, middle-aged, and younger workers–results from a systematic review", International journal of occupational and environmental health, Vol. 23 No.2, pp. 160-171. Doi: 10.1080/10773525.2018.1436015.

Caplan, R. D. (1987). "Person-environment fit theory and organizations: Commensurate dimensions, time perspectives, and mechanisms". Journal of Vocational behavior, Vol. 31 No. 3, pp. 248-267. Doi: 10.1016/0001-8791(87)90042-X.

Catturi, G. (2021). "Potere aziendale, pandemia e smart working". Management Control, 2 . Doi: 10.3280/MACO2022-003009.

Chatterjee, S., Chaudhuri, R., Vrontis, D. (2022). "Does remote work flexibility enhance organization performance? Moderating role of organization policy and top management support". Journal of Business Research, Vol. 139, pp. 1501-1512. Doi: 10.1016/j.jbusres.2021.10.069

Cohen, S. (1988). Perceived stress in a probability sample of the United States. The social psychology of health/Sage.

Connell, J., Ferres, N., & Travaglione, T. (2003), "Engendering trust in manager-subordinate relationships: predictors and outcomes", Personnel Review, Vol. 32 No. 5, pp. 569-587. Doi: 10.1108/00483480310488342

Contreras, F., Baykal, E., and Abid, G. (2020), "E-Leadership and Teleworking in Times of COVID-19 and Beyond: What We Know and Where Do We Go", Frontiers in Psychology, Vol. 11, p. 590271. Doi: 10.3389/fpsyg.2020.590271.

Corsi, K. (2021). "Il lato umano del controllo per fronteggiare la crisi*", Management Control*, 1, pp. 5-12. Doi: 10.3280/MACO2021-001001.

Çoban, S. (2022), "Gender and telework: Work and family experiences of teleworking professional, middle-class, married women with children during the Covid-19 pandemic in Turkey", Gender, Work and Organization, Vol. 29, No. 1, pp. 241-255. Doi: Doi: 10.1111/gwao.12684

Delfino, G. F., van der Kolk, B. (2021), "Remote working, management control changes and employee responses during the COVID-19 crisis", Accounting, Auditing & Accountability Journal, Vol. 34 No. 6, pp. 1376-1387. Doi: 10.1108/AAAJ-06-2020-4657.

DeSanctis, G. (1984), "Attitudes toward telecommuting: Implications for work-at-home programs", Information and Management, Vol. 7 No. 3, pp. 133 – 139.

Dimock, M. (2019), "Defining generations: Where Millennials end and Generation Z begins", Pew Research Center, available at: https://www.pewresearch.org/fact-tank/2019/01/17/where-millennials-end-and-generation-z-begins/ (accessed 10 December 2022)

Edwards, J. R., Caplan, R. D., & Harrison, R. V. (1998). Person-environment fit theory: Conceptual foundations, empirical evidence, and directions for future research. In C. L. Cooper (Ed.), Theories of organizational stress (pp. 28-67). Oxford University Press.

ETUC, UNICE-UEAPME and CEEP. 16 July 2002. "Framework Agreement on Telework". Brussels.

Eurofound (2020). "Living, working and COVID-19". COVID-19 series, Publications Office of the European Union, Luxembourg.

Eurofound (2022). "Living and working in Europe 2021". Publications Office of the European Union, Luxembourg.

Eurofound and the International Labour Office (2017), "Working anytime, anywhere: The effects on the world of work", Publications Office of the European Union, Luxembourg, and the International Labour Office, Geneva.

Flassak, K., Haag, J., Hofmann, C. et al. (2023),"Working from home and management controls". Journal of Business Economics, Vol. 93, 193–228. Doi: 10.1007/s11573-022-01123-7.

Galanti, T., Guidetti, G., Mazzei, E., Zappalà, S., & Toscano, F. (2021), "Work From Home During the COVID-19 Outbreak: The Impact on Employees' Remote Work Productivity, Engagement, and Stress", Journal of occupational and environmental medicine, Vol. 63 No. 7, pp. e426–e432. Doi:10.1097/JOM.0000000000002236.

Gajendran R.S., Harrison, D.A. (2007), "The good, the bad, and the unknown about telecommuting: meta-analysis of psychological mediators and individual consequences". Journal of Applied Psychology, Vol. 92 No. 6, pp. 1524-1541. Doi: 10.1037/0021-9010.92.6.1524.

Galeotti, M., Lombardi, R., Principale, S., and Sura, S. (2023). "Aligning Integrated Data Management with Corporate Reporting: The role of sustainability reporting". Management Control, 2, pp. 65-81. Doi: 10.3280/MACO2023-002-S1004.

Golden, T. D., & Veiga, J. F. (2005). The Impact of Extent of Telecommuting on Job Satisfaction: Resolving Inconsistent Findings. Journal of Management, 31(2), 301-318.

Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. The Leadership Quarterly, 6(2), 219-247.

Graf-Vlachy, L., Sun, S., and Zhang, S. X. (2020), "Predictors of managers' mental health during the COVID-19 pandemic". European Journal of Psychotraumatology, Vol. 11 No. 1, p. 1834195. Doi: 10.1080/20008198.2020.1834195

Hilbrecht, M., Shaw, S. M., Johnson, L. C., & Andrey, J. (2008), "'I'm home for the kids': contradictory implications for work–life balance of teleworking mothers", Gender, Work & Organization, Vol. 15 No. 5, pp. 454-476. Doi: 10.1111/j.1468-0432.2008.00413.x

Konradt, U., Schmook, R., Wilm, A., & Hertel, G. (2000), "Health circles for teleworkers: selective results on stress, strain and coping styles". Health education research, Vol. 15 No. 3, pp. 327-338. Doi: 10.1093/her/15.3.327

Konradt, U., Hertel, G., & Schmook, R. (2003), "Quality of management by objectives, task-related stressors, and non-task-related stressors as predictors of stress and job satisfaction among teleworkers", European Journal of Work and Organizational Psychology, Vol. 12 No. 1, pp. 61–79. Doi: 10.1080/13594320344000020.

Kossek, E. E., Lautsch, B. A., & Eaton, S. C. (2011). "Telecommuting, Control, and Boundary Management: Correlates of Policy Use and Practice, Job Control, and Work–Family Effectiveness". Journal of Vocational Behavior, Vol. 79 No. 2, pp. 347-360.

La Torre, G., Esposito, A., Sciarra, I. and Chiappetta, M. (2019), "Definition, symptoms and risk of techno-stress: a systematic review", International Archives of Occupational and Environmental Health, Vol. 92, pp.13–35.

Lombardi, R. (2021). "Le dimensioni della conoscenza aziendale. Profili di investigazione tra crisi pandemica ed economia digitale", *Management Control*, 3, pp. 5-14. Doi: 10.3280/MACO2021-003001

Madlock, P. (2012). "The influence of supervisors' leadership style on telecommuters". Journal of Business Strategies, Vol. 29 No. 1, pp. 1-24.

Mancini, D., Iacoviello, G., and De Nicola, M. (2021). "L'impatto della crisi pandemica sui sistemi di controllo di gestione: un'analisi empirica". Management Control, Vol. 1.

Martin, B. H. and MacDonnell, R. (2012), "Is telework effective for organizations? A meta-analysis of empirical research on perceptions of telework and organizational outcomes", Management Research Review, Vol. 35 No. 7, pp. 602-616. Doi: 10.1108/01409171211238820

Ministry of Health, "Vaccine Day il 27 dicembre in tutta Italia e in Europa", available at: https://www.salute.gov.it/portale/nuovocoronavirus/dettaglioNotizieNuovoCoronavirus.jsp?id=5242 (accessed 19 April 2023)

Ministry of Labour and Social Policies, "Smart Working", available at: https://www.lavoro.gov.it/strumenti-e-servizi/smart-working/ (accessed 10 December 2022)

Morgan, R. M., & Hunt, S. D. (1994), "The commitment-trust theory of relationship marketing", Journal of marketing, Vol. 58 No. 3, pp. 20-38. Doi: 10.2307/1252308.

Noto, G., Marisca, C. and Barresi, G. (2023), "Adapting management control to virtual teams: evidence from a natural experiment", Qualitative Research in Accounting & Management, Vol. 20 No. 5, pp. 621-646. Doi:10.1108/QRAM-04-2022-0066.

Office of the Federal Register, National Archives and Records Administration. 9 December 2010. "Public Law 111 - 292 - Telework Enhancement Act of 2010".

Onesti, G., Palumbo, R. (2023), "Tone at the Top for Sustainable Corporate Governance to Prevent Fraud", Sustainability, Vol. 15 No. 3. Doi: 10.3390/su15032198.

Otonkorpi-Lehtoranta, K., Salin, M., Hakovirta, M., Kaittila, A. (2021), "Gendering boundary work: Experiences of work–family practices among Finnish working parents during COVID-19 lockdown", Gender, Work and Organization, Vol. 29 No. 6, pp. 1952-1968. Doi: 10.1111/gwao.12773.

Palvalin, M., Vuolle, M., Jääskeläinen, A., Laihonen, H. and Lönnqvist, A. (2015), "SmartWoW – constructing a tool for knowledge work performance analysi"", International Journal of Productivity and Performance Management, Vol. 64 No. 4, pp. 479-498. Doi: 10.1108/IJPPM-06-2013-0122.

Paoloni, P., Manzo, M., and Procacci, V. (2023). "The impact of the pandemic crisis on the digital Transition process of Italian SMEs". Management Control. Vol. 2. Doi: 10.1016/j.jbusres.2022.05.038.

Pianese, T., Errichiello, L., and da Cunha J.V. (2023). "Organizational control in the context of remote working: A synthesis of empirical findings and a research agenda", European Management Review, Vol. 20, pp. 326-345. Doi:10.1111/emre.12515.

Pyöriä, P. (2011), "Managing telework: risks, fears and rules", Management Research Review, Vol. 34 No. 4, pp. 386-399. Doi: 10.1108/01409171111117843.

Schiffrin, H. H., & Nelson, S. K. (2010). "Stressed and happy? Investigating the relationship between happiness and perceived stress". Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being, Vol. 11 No. 1, pp. 33–39. Doi: 10.1007/s10902-008-9104-7.

Schwedel, A., Root, J., Allen, J., Hazan, J, Almquist, E., Devlin, T. & Harris, K. (2022), "The Working Future: More Human, Not Less", Bain & Company. URL: https://www.bain.com/contentassets/d620202718c146359acb05c02d9060db/bain-report_the-working-future.pdf

Sekhar, C. and Patwardhan, M. (2021), "Flexible working arrangement and job performance: the mediating role of supervisor support", International Journal of Productivity and Performance Management, Vol. ahead-of-print No. ahead-of-print. Doi:10.1108/IJPPM-07-2020-0396.

Sharit, J., Czaja, S. J., Hernandez, M. A., Nair, S. N. (2009), "The employability of older workers as teleworkers: An appraisal of issues and an empirical study", Human Factors and Ergonomics in Manufacturing & Service Industries, Vol. 19 No. 5, pp. 457-477. Doi: 10.1002/hfm.20138

Silva-C, A. (2019), "The attitude of managers toward telework, why is it so difficult to adopt it in organizations?", Technology in Society, Vol. 59, p. 101133. Doi: https://doi.org/10.1016/j.techsoc.2019.04.009

Smith, J. (2022), "From "nobody's clapping for us" to "bad moms": COVID-19 and the circle of childcare in Canada", Gender, Work and Organization, Vol. 29 No. 1, pp. 353-367. Doi: 10.1111/gwao.12758.

Sonnentag, S., Frese, M. (2003), "Stress in organizations". In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), "Handbook of psychology: Industrial and organizational psychology", Vol. 12, pp. 453–491. John Wiley & Sons, Inc. Doi: 10.1002/0471264385.wei1218.

Spillane, J.P. (2005), "Distributed Leadership", The Educational Forum, Vol. 69 No. 2, pp. 143-150. Doi:10.1080/00131720508984678.

Stoker, J.I., Garretsen, H., & Lammers, J. (2022), "Leading and Working From Home in Times of COVID-19: On the Perceived Changes in Leadership Behaviors", Journal of Leadership and Organizational Studies, Vol. 29 No. 2, pp. 208-218. Doi: 10.1177/15480518211007452.

Tarafdar, M., Tu, Q., and Ragu-Nathan, T. S. (2010), "Impact of technostress on end-user satisfaction and performance", Journal of Management Information Systems, Vol. 27, pp. 303–334. Doi: 10.2307/29780194.

Tavoletti, E. and Taras, V. (2022), "From the periphery to the centre: a bibliometric review of global virtual teams as a new ordinary workplace", Management Research Review, Vol. ahead-of-print No. ahead-of-print. Doi: 10.1108/MRR-12-2021-0869.

Venkatesh, V., & Bala, H. (2008), "Technology Acceptance Model 3 and a Research Agenda on Interventions", Decision Sciences, Vol. 39 No. 2, pp. 273-315. Doi: 10.1111/j.1540-5915.2008.00192.x.

Verbeeten, F. H., & Speklé, R. F. (2015). "Management control, results-oriented culture and public sector performance: Empirical evidence on new public management", Organization studies, 36(7), 953-978. Doi: 10.1177/0170840615580014.

Weierstall-Pust, R., Schnell, T., Heßmann, P., Feld, M., Höfer, M., Plate, A., & Müller, M. J. (2022), "Stressors related to the Covid-19 pandemic, climate change, and the Ukraine crisis, and their impact on stress symptoms in Germany: analysis of cross-sectional survey data", BMC Public Health, Vol. 22 No. 1, pp. 1-10. Doi:10.1186/s12889-022-14682-9.

Weinert, C., Maier, C., & Laumer, S. (2015). "Why are teleworkers stressed? An empirical analysis of the causes of telework-enabled stress". Wirtschaftsinformatik Proceedings 2015, p. 94