

# HOW IS TELEWORK CHANGING THE WORK IN PUBLIC ORGANIZATIONS? MANAGERS HAVE THEIR SAY

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The rapid diffusion of telework is reshaping organizations' operations and functioning, yet research on its impact on public organizations remains scarce. Given their higher bureaucratization and supervisory control levels, public organizations can face unique challenges. This study draws upon research on flexible work arrangements and new ways of working within human resource management and organizational behavior. It examines how telework has been changing the work in Brazilian public organizations, focusing on managers' experiences. Managers leading teleworkers from various public entities within the Brazilian Federal Executive Power participated in this research. Data were collected through online focus groups and analyzed with content analysis. The findings indicate alterations in the informal and spontaneous aspects of communication and socio-professional relationships, performance management practices and tools, and management paradigms, which shift from presence-based control and rigid supervision to performance monitoring and increased employee autonomy. This study contributes to the literature on the future of work by highlighting the interactions between information technologies, work and management in the context of public organizations. It concludes by raising pertinent issues for future research.

**Keywords:** changing workplace; flexible work arrangements; information and communication technologies; public sector; remote work.

## COMO O TELETRABALHO ESTÁ MUDANDO O TRABALHO NAS ORGANIZAÇÕES PÚBLICAS? COM A PALAVRA, OS GESTORES

A rápida difusão do teletrabalho está moldando as operações e o funcionamento das organizações, embora a pesquisa sobre seus impactos em organizações públicas ainda é escassa. Devido aos níveis elevados de burocratização e controle, as organizações públicas podem enfrentar desafios únicos. Este estudo baseia-se nas pesquisas sobre arranjos flexíveis de trabalho e novas formas de trabalho, nos campos da gestão de pessoas e do comportamento organizacional, e examina como o teletrabalho tem alterado o trabalho em organizações públicas brasileiras, com foco nas experiências dos gestores. Participaram da pesquisa gestores que lideram teletrabalhadores em diversas organizações do Poder Executivo Federal brasileiro. Os dados foram coletados por meio de grupos focais online e analisados utilizando a análise de conteúdo. Os resultados indicam mudanças nos aspectos informais e espontâneos da comunicação e das relações socioprofissionais, nas práticas e ferramentas de gestão de desempenho e nos paradigmas de gestão, que passam do controle baseado na presença e supervisão rígida para o monitoramento dos resultados e maior autonomia dos servidores. Este estudo contribui para a literatura sobre o futuro do trabalho ao destacar as interações entre tecnologias da informação, trabalho e gestão no contexto das organizações públicas. Conclui levantando questões pertinentes para pesquisas futuras.

**Palavras-chave:** transformações no ambiente de trabalho; arranjos de trabalho flexíveis; tecnologias de informação e comunicação; setor público; trabalho remoto.

## ¿CÓMO EL TELETRABAJO ESTÁ CAMBIANDO EL TRABAJO EN LAS ORGANIZACIONES PÚBLICAS? LOS GESTORES TIENEN LA PALABRA

La rápida difusión del teletrabajo está moldeando las operaciones y el funcionamiento de las organizaciones, aunque la investigación sobre sus impactos en las organizaciones públicas sigue escasa. Debido a los altos niveles de burocratización y control, las organizaciones públicas pueden enfrentar desafíos únicos. Este estudio se basa en investigaciones sobre los arreglos laborales flexibles y nuevas formas de trabajo en los campos de la gestión de recursos humanos y el comportamiento organizacional e examina cómo el teletrabajo ha estado transformando el trabajo en organizaciones públicas brasileñas, centrándose en las experiencias de los directivos. Gerentes que lideran teletrabajadores de diversas entidades públicas dentro del Poder Ejecutivo Federal brasileño participaron en esta investigación. Los datos fueron recolectados a través de grupos focales online y analizados mediante análisis de contenido. Los resultados indican alteraciones en los aspectos informales y espontáneos de la comunicación y de las relaciones socio-profesionales, en las prácticas y herramientas de gestión del desempeño, y en los paradigmas de gestión, que pasan de un control basado en la presencia y supervisión rígida a un monitoreo de resultados y una mayor autonomía. Este estudio contribuye a la literatura sobre el futuro del trabajo al resaltar las interacciones entre las tecnologías de la información, el trabajo y la gestión en el contexto de las organizaciones públicas. Concluye planteando cuestiones pertinentes para futuras investigaciones.

**Palabras clave:** transformación del entorno de Trabajo; arreglos laborales flexibles; tecnologías de la información y la comunicación; sector público; trabajo remoto.

## 1. INTRODUCTION

Current management literature reveals a consensus on the evolutionary changes in work and management practices enabled by technological advancements, which enhance organizational agility and meet employees' evolving expectations and motivations (Carnevale & Hatak, 2020; Iannotta et al., 2020). Key developments include the widespread adoption of flexible work arrangements, which have fundamentally redefined the interaction between spatial and temporal autonomy, virtualization and personal working styles, fostering organizational adaptability and innovation (Carnevale & Hatak, 2020; Holand & Bardoel, 2016; Palumbo et al., 2022).

Catering to individual autonomy, it has been argued that flexible and hybrid work arrangements predominantly suit jobs that are entrepreneurial and mobile in nature (Crevani & Manca, 2023), with limited fit to administrative roles. However, the COVID-19 pandemic has expanded the reach of telework worldwide, including Brazilian public agencies and servants, who were compelled to work from home to ensure continued service delivery to citizens. The Management Program (PGD) originated in the mid-1990s with Decree 1.950/1995 enactment as a mechanism to enhance accountability, transparency, and efficiency in the Brazilian federal public administration by defining deliverables and evaluating civil servants' performance. During the COVID-19 pandemic, the PGD became a central tool for enabling large-scale telework in federal public organizations. In the post-pandemic period, regulatory updates authorized its discretionary continuation, established parameters for setting clear performance targets, and evaluating teams. They shifted the focus from attendance-based control to productivity and results. In practice, this framework seeks to reconcile flexibility in work arrangements with accountability for outcomes, a balance that recent Brazilian studies indicate is feasible and critical to sustaining productivity and service quality in public administration (Legentil et al., 2022; Teixeira & Bacinello, 2024). While implementation remains optional for federal public administration bodies, the decision by many agencies to adopt the PGD reflects its perceived value as a governance and performance management tool in an evolving context of hybrid and remote work.

Traditionally, management practices in Brazilian public bodies have emphasized constant monitoring and control over the physical presence of public servants and adherence to strict office schedules and rules (Legentil et al., 2022; Ribeiro & Mancebo, 2013). Telework challenges this approach as it fosters a more autonomous management of activities and working hours (Donnally & Johns, 2020; Holand & Bardoel, 2016; Hirsch, 2021; Iannotta et al., 2020; Kowalski & Loretto, 2017). This shift poses significant challenges, particularly to managers who must learn how to navigate changes in their teams' work and adapt their roles and responsibilities to a hybrid work environment (Donnally & Johns, 2020; Holand & Bardoel, 2016; Hirsch, 2021; Iannotta et al., 2020; Kowalski & Loretto, 2017).

Despite a wide consensus on the impact of new ways of working on workplace dynamics and management practices, managers have received relatively scarce attention. Most research on new ways of working and flexible arrangements has primarily focused on employee-related outcomes, such as job performance, satisfaction, and well-being (van der Lippe & Lippényi, 2020; Vartiainen & Hyrkkänen, 2010; Wang & Boell, 2021). Additionally, there is limited research on these topics within the public sector, taking into account the specific characteristics of public servants' jobs and the prevalent management practices in this context (Kwon & Kim-Goh, 2022; Palumbo et al., 2022). Studies in public management have examined the impact of telework on variables like job satisfaction, servant's performance, well-being, and bureaucratic efficiency (Caillier, 2013; Kwon & Kim-Goh, 2022; Palumbo et al., 2022; Taskin & Edwards, 2007). Nevertheless, there is little understanding of how managers adjust to reduced direct supervision, implement performance-based monitoring, and navigate the balance between flexibility and accountability. By addressing these gaps, this study offers a more comprehensive perspective on the managerial challenges and adaptations required for effective telework implementation in the public sector. The evolving scenario of new ways of working implementation in the Brazilian public sector presents a unique opportunity to investigate whether and how these changes are transforming managerial practices within public organizations.

Drawing upon research on flexible work arrangements and new ways of working within human resource management and organizational behavior, we conducted an exploratory qualitative study addressing the following research question: 1) How is the work of top and line managers in public organizations changing due to the adoption of telework? Theoretically, this study expands the literature on the future of work by disclosing the interactions between new ways of working and managerial practices in public organizations. It also gives voice to managers at both top and middle organizational levels, who are key players in current changes and dynamics, thus gaining a deeper understanding of management experiences, capturing nuances that quantitative data might overlook. Furthermore, the findings unveil new research avenues, highlighting core themes and questions and identifying variables that can be quantitatively tested in future studies. From a practical perspective, the study offers some guidance to managers, emphasizing aspects that require their attention and adaptation, revealing the need for organizational support to facilitate these adjustments.

## 2. THEORETICAL FRAMEWORK

There are numerous conceptualizations of teleworking, all of them encompassing information and communication technologies enabling work from a remote location. In this study, telework is defined as “a work practice that involves members of an organization substituting a portion of

their typical work hours (ranging from a few hours per week to nearly full-time) to work away from a central workplace – typically principally from home – using technology to interact with others as needed to conduct work tasks” (Allen et al., 2015, p. 44). This definition aligns with the one portrayed in the regulations and decrees within the scope of Brazilian Federal Executive Power.

There is huge literature on the benefits and drawbacks of working away from the main office. Scholars have examined the direct, mediated and moderated positive impacts of this configuration on a myriad of outcomes, including job satisfaction, well-being, job performance and work-family balance (Allen et al., 2015; Cailier, 2013; Golden & Gajendran, 2019; Grant et al., 2013; van der Lippe & Lippényi 2020; Vartiainen & Hyrkkänen, 2010). Scholars have also identified a number of drawbacks on social relationships, social support, sense of belonging, visibility and workload, especially for employees (Allen et al., 2015; Caillier, 2013; Golden & Gajendran, 2019; Grant et al., 2013; van der Lippe & Lippényi, 2020; Vartiainen, M. & Hyrkkänen, 2010).

More recently, also due to the Covid-19 pandemic that required the entire worldwide population to work from home for several consecutive months, the debate about the changes that information and communication technologies have generated in the world of work has gained momentum. Information and communication technologies have profoundly transformed domestic and organizational spaces, changing work and management practices (Cappelli, 2021; Halford, 2005; Manca, 2022; Palumbo et al., 2022). All the technological structures that support employee performance trigger changes also in the physical offices, which must be reorganized to fit the new needs of an increasingly digital workforce (Markovic & Rossini, 2021).

Technological change in the workplace affects work organization, socio-professional relationships and the role of managers within organizations and their supervisory practices (Hartog et al., 2015; Iannotta et al., 2020; Larson et al., 2020; Melo & Demo, 2024; Mourão et al., 2021; Stoker et al., 2021). In traditional, in-person work environments, social interactions and communication tend to involve informal and spontaneous exchanges to a greater extent, supporting team collaboration, fluidity and identification (Allen et al., 2015; Cappelli, 2021; Golden et al., 2008; Sarker et al., 2011). Differently, telework modifies the dynamics of work-related interpersonal processes (Allen et al., 2015; Resende & Faria, 2023; Wang et al., 2023). The absence or reduction of face-to-face meetings indeed can reduce spontaneous, informal interactions that typically occur in traditional office settings (Marlow et al., 2017; Sarker et al., 2011). These informal interactions play a crucial role in facilitating information sharing and collaboration, which are more challenging to replicate in a virtual environment, even though organizations have increased the use of digital communication platforms (Allen et al., 2015; Marlow et al., 2017; Sarker et al., 2011). On the other hand, the meta-analysis conducted by Gajendran and Harrison (2007) found a positive effect of teleworking on the employee-supervisor relationships. These apparently contradictory findings suggest that there is no straightforward answer to whether

telework positively or negatively impacts the quality of communication and interactions at work. Different effects can be observed depending on the context and the nature of the job involved, the relational dynamics within teams, and the management practices already prevalent in the organization (Boell et al., 2016).

Another critical aspect of these transformations lies in the nature and dynamics of leadership and management practices. Managerial work and responsibilities have been specially and profoundly altered by telework, such as the traditional duties that once required direct supervision and immediate responsiveness to employees' demands (Bartsch et al., 2020; Mourão et al., 2021). This work arrangement propels managers toward a more trust-based and results-driven approach, prompting the development and adoption of performance metrics that favor outcomes rather than processes (Bartsch et al., 2020; Iannotta et al., 2020; Mourão et al., 2021; Stoker et al., 2021; Larson et al., 2020). A certain degree of autonomy and control by employees over their daily tasks and activities is often involved (Gajendran & Harrison, 2007; Mourão et al., 2021; Donnally & Johns, 2020; Holand & Bardoel, 2016). Consequently, managers are required to modify their behaviors, negotiate new shared meanings, and integrate interactions mediated by communication and information technologies (de Vries et al., 2019; Iannotta et al., 2020; Larson et al., 2020).

Also, managers must identify and handle employees' potential challenges and problems when working in virtual teams, including social isolation perceptions, work-family/personal balance demands, interpersonal conflict, and reduced team cohesion (Melo & Demo, 2024; Mourão et al., 2021). Managers, therefore, need to learn how to be more flexible and adaptable to the agility that telework demands (Hartog et al., 2015; Iannotta et al., 2020; Mourão et al., 2021).

In the public sector, implementing telework presents unique challenges and opportunities compared to the private sector (Legentil et al., 2022; Palumbo et al., 2022; Taskin & Edwards, 2007). Public sector organizations often operate within a framework of stringent regulations and bureaucratic processes that can impede the flexibility required for an effective telework implementation (Legentil et al., 2022; Taskin & Bridoux, 2010). Additionally, the public sector workforce tends to have a higher proportion of traditionally office-based roles and may involve direct public interaction, making the transition to telework more complex and, in some cases, impossible (Palumbo et al., 2022; Taskin & Edwards, 2007).

In summary, adopting flexible work arrangements in the public sector has brought profound changes to work dynamics, especially in managing distributed teams. Managers may report difficulties related to decreased ability to monitor remote workers and effectively coordinate interdependent tasks, leading to tensions and negative perceptions about remote work (Allen et al., 2015; Aroles et al., 2019; Palumbro et al., 2022). When implemented with a narrow focus on productivity, flexible work can intensify work, isolation, fatigue, and weakened team cohesion

(Palumbo et al., 2022). Addressing these challenges requires both individual coping mechanisms and robust organizational strategies. There are inherent trade-offs between individual variables, such as self-regulation and planning skills, and job and organizational characteristics like task interdependence and management mechanisms (Allen et al., 2015). Key coping and management mechanisms include fostering strong supervisor support, providing comprehensive training for teleworkers and managers, and ensuring clear communication to mitigate feelings of professional isolation (Allen et al., 2015). Additionally, organizations should foster a culture of fairness, autonomy, and adaptation to individual needs to sustain well-being, commitment, and team integration across different work arrangements (Palumbo et al., 2022). The impact of hybridity on team communication and interaction is not completely clear (Kattenbach et al., 2021; Palumbo et al., 2022; Shockley et al., 2021). Many gaps remain unanswered, partly due to the numerous conditions and characteristics of hybrid teams and organizational environments (Marlow et al., 2017).

Recent Brazilian research has highlighted that the challenges of telework in the public sector encompass multiple interrelated dimensions such as work design, institutional frameworks, leadership, and material conditions. Abbad et al. (2019) found that teleworkers perceive lower decision-making autonomy, reduced task variety and significance, and lower specialization than their on-site counterparts. These findings suggest that telework impacts operational routines and motivational and relational aspects. Even when institutional support and remote leadership practices exist, gaps may persist in terms of material resources and managerial adaptation (Filardi et al., 2020; Mourão et al., 2021). Finally, the widespread prejudice and resistance from managers and traditional staff can complicate telework's effective implementation and broader acceptance (Filardi et al., 2020; Leite & Da Cunha Lemos, 2021). Effective telework practices require policies, formal guidelines, and tailored managerial practices, encompassing remote performance evaluation, proactive socio-emotional support, and clarity regarding regulatory frameworks (Leite & Da Cunha Lemos, 2021).

The effective adoption of innovative and customized human resources practices relies on a clear and thorough understanding of the changes brought about by flexible work arrangements, such as telework, considering the peculiarities of organizations and their sectors. This study compares the empirical findings and theoretical articulations presented in this section with the empirical data obtained through field research conducted with Brazilian federal public sector managers. How is the work of top and line managers in public organizations changing due to the adoption of telework? This was the central question we attempted to answer.

### 3. METHODS

To answer our research question, we adopted the focus group technique as it allows for in-depth access to and exploration of the diverse experiences of participants through the interaction and insights generated by the expressions and responses of group members (Morgan, 1996). The strengths of this technique include stimulating engagement with the subject matter, eliciting multiple possible experiences, and enriching the occurrence of various content categories due to the interaction of participants and their prior experiences (Barbour & Kitzinger, 1999; Keemink et al., 2022). For the present study, synchronous online focus groups were conducted, adapting traditional focus group techniques to the virtual environment (Stewart & Williams, 2005).

In this research, the online focus group proved to be a convenient technique for gathering qualitative data from teleworkers. The platform used for data collection was Microsoft Teams, which is considered secure and effective for conducting focus groups (Keemink et al., 2022), accessible and well-known by the participants as it is the official platform adopted by Brazilian public organizations.

#### 3.1 Participants

We adopted a purposive sampling technique, which allowed us to select managers who could provide insights based on their unique expertise and experiences related to the research goal. The Management and Innovation Secretariat Team of the Ministry of Management and Innovation in Public Services provided the names and contacts of potential participants. A total of 14 managers who lead remote or hybrid teams from different direct and indirect public organizations of the Brazilian Federal Executive Power participated in this study. Participants had between three and seven years of experience managing remote teams. Within the scope of the PGD, the minimum duration of remote team management experience was one year. The participants were divided into three focus groups. The first was composed of managers who held high positions (top managers) and worked directly with the implementation of the Performance Management Program in their organizations. The other two groups were composed of front-line managers (line managers). Line managers are immediate supervisors who oversee employees' daily activities and are directly responsible for operational management. They differ from top managers, who are involved in strategic decision-making at higher organizational levels. We tried to ensure the heterogeneity of federal public organizations' characteristics and managers' expertise and experiences with telework. At the same time, we tried to offer a more welcoming occasion for discussion according to the managerial role assumed by the participants. Chart 1 presents a description of the participants' profiles.



**Chart 1 – Description of the participants’ profiles**

Respondent's Code	Gender	Job Position	Working Remotely
R1	Female	Top Manager	Yes - hybrid
R2	Male	Top Manager	Yes
R3	Female	Top Manager	Yes
R4	Female	Top Manager	Yes
R5	Female	Top Manager	Yes
R6	Male	Top Manager	Yes - hybrid
R7	Female	Top Manager	Yes
R8	Female	Line Manager	Yes
R9	Male	Line Manager	No
R10	Female	Line Manager	Yes
R11	Male	Line Manager	Yes
R12	Male	Line Manager	Yes
R13	Female	Line Manager	Yes
R14	Female	Line Manager	Yes

**Source:** elaborated by the authors.

### 3.2 Data collection and analysis procedures

Data were collected between May and June 2023. An email invitation with information about the focus group’s research objectives, date, and time was sent to 20 public sector managers, of whom 14 responded affirmatively and agreed to participate. To those who responded to the email indicating their availability and interest were sent a link for the meeting on the Teams platform. The groups were facilitated by two moderators, both researchers with no personal or professional ties to the managers and their respective organizations. At the beginning of the meeting, the research objectives and ethical considerations regarding the anonymity of participants and organizations in subsequent reports and articles were emphasized, including the voluntary nature of participation and the possibility to withdraw from the meeting at any time. Participants were consulted about session recording to facilitate subsequent transcription and data analysis and all of them consented. Rules for speaking during the session were also established. All participants were to use the raise-hand feature, had as much time as needed to express their opinions, and could speak multiple times on each topic. Participants could monitor the speaking list, and the moderators were responsible for assisting. No specific guidance was given regarding using cameras, but all participants kept their cameras on during the sessions.

A question guide was used to explore what comes to the managers' minds regarding the changes brought about by the implementation of telework, including an initial broad question about perceived changes and a more specific question about changes in socio-professional relationships. The questions were the following:

- 1) What are the main changes experienced by managers with the implementation of telework?
- 2) How are relationships and interactions between people at work changing with the implementation of telework?

In total, there were 216 minutes of group discussions and transcribed content. The recordings were transcribed, and the data was analyzed using content analysis (Bardin, 2016). Content analysis was conducted following Bardin's (2016) three-step procedure, operationalized as follows: (a) the pre-analysis involved a floating reading of the entire corpus to familiarize the researchers with the material and organize it according to two a priori analytical dimensions derived from the research questions (main changes brought by telework and main changes in relationships and interactions at work); (b) during the exploration of the material, the unit of analysis was defined as meaning units (sentences and paragraphs expressing a complete idea), which were openly coded and grouped into emerging subcategories. For example, "planning and monitoring" was identified as a subcategory of the a priori category "main changes brought by telework." This process resulted in subcategories supported by illustrative participant quotes; (c) in the treatment and interpretation phase, the categories were compared and related to the theoretical framework and empirical evidence on telework, which allowed us to highlight both convergences and specificities. To ensure transparency and rigor, two researchers independently coded the data, and the findings were compared and discussed with the other two researchers until a consensus was reached.

## 4. RESULTS AND DISCUSSION

The data gathered through the focus groups allowed for a snapshot of public sector managers' perceptions regarding the thematic categories expressed in the research questions. The results presented below are organized according to the predefined thematic categories. They describe the themes that surfaced during the focus groups and their respective quotes. No differences were observed in the themes discussed or in participants' level of engagement with these themes based on their sociodemographic or professional characteristics.

## 4.1 Main changes experienced due to telework according to managers

When asked about the main changes brought by telework, top and line managers emphasized the aspects that challenge them the most. Chart 2 summarizes the themes that surfaced and their respective sample quotes.

**Chart 2 – Main themes and sample quotes on the changes brought by telework**

Theme	Job Position	Sample Quotes
Communication and interpersonal relationships	Top managers	<p><i>“Although we have a good structure and tools for handling with this new work configuration... although our deliverables are based on goals, there is this feeling that you are distant...” (R8).</i></p> <p><i>“What was the highest difficulty? I would respond the management of relationships. We conducted an organizational climate survey, and for servants in the PGD, the satisfaction in the relationship with the manager was ranked worse than our last survey” (R5).</i></p>
	Line managers	<p><i>At the moment, I have only one person who was already working with me before the telework implementation. So, the point is knowing and understanding how each person works alone. This is a great difficulty, because, during this pandemic, new people joined the team and started to work remotely. It is more complicated to talk and notice the person’s reaction, so it is more difficult for you to understand each collaborator’s unique skills and abilities” (R10)</i></p>
Planning and monitoring	Top managers	<p><i>“When we were in the office, what was required? Presence. But, for example, with remote work and management by results, we discovered what was beneath the surface. In fact, telework gets the truth out!” (R3)</i></p> <p><i>“We have learnt to develop a different mindset and a new way of working by focusing on deliverables or results instead of the classic facetime... So, we realized that people sometimes have a bureaucratic habit of controlling things, which no longer makes sense in the context of remote work. This is difficult, right?” (R6)</i></p>
	Line managers	<p><i>“What’s next? What is the work plan with the issue of deliverables? When you don’t deliver, the manager must do something, right? Before the telework, we had no way to map this particular aspect of the work. Today we have a way to map it, and low performance demands some action from the manager in real time” (R7)</i></p>
Well-Being monitoring and caring	Top managers	<p><i>“One point I would say is hard to manage is the concern about following the servant’s well-being because when we were physically in the office, we could see how each servant was feeling now, you know? If he arrived sad or worried for something. Now it is impossible to capture this aspect being distant” (R8).</i></p>
	Line managers	<p><i>“And about personal issues, sometimes, for example, when you had a servant that was not doing well or he had some family or personal problem, it was evident... Now it is not” (R7).</i></p>

Theme	Job Position	Sample Quotes
Managers' workload	Top managers	<p>"One of the first thing that changed concerning managers was the need to plan the team's activities ahead of time and the expected deliverables. We now plan deliverables monthly. Before, it was not necessary because the control relied on the frequency of interaction... So, I believe the manager's workload has increased." (R7)</p> <p>"We are managers, but also servants to our organization, like everybody else. So, I realize that many servants had an increase in quality of their lives, having a more flexible job or choosing their work schedules better to make it compatible with their personal commitments. The managers would also like to do this. But they have a lot of people in a hybrid team to deal with each day, which is more challenging. Having people geographically dispersed, who depend on you, with flexible hours is a complex scenario" (R5).</p>
Digital platforms and software	Line managers	<p>"Now these tools that allow you to manage and track deliverables are mandatory" (R12).</p> <p>"When we went to remote work, the Teams App to develop work plans was already in use, so it was easy to continue using it. Also, we already had the habit of having weekly in-person meetings. We kept this habit and started having weekly meetings with the manager, it was something that we didn't do..." (R13).</p>
Management paradigm shifts and legal constraints	Line managers	<p>"These changes brought a natural evolution of work models and imposed challenges, mainly because of the legal constraints... We notice these constraints when, for example, a servant does not reach his or her goals. One possible sanction is the exclusion from telework, so the person needs to return physically in the office. There is no discount on the payroll. This is not a sanction. It means that on-site work is a penalty... So, we got stuck on some normative issues that challenged the management of people that eventually failed to comply with their legal duties. One thing leads to another and ends up inhibiting us from acting more seriously and consciously from the human resources management perspective" (R11).</p> <p>"So, anything that deviates a little from the pattern has a little more impact because naturally, we have to follow the principle of legality and so on, and sometimes we are like, hey, what can we do?" (R10).</p>

**Source:** elaborated by the authors.

The first element that surfaced and engaged all participants was the changes in communication and interpersonal relationships within the teams. On the one hand, as one participant acknowledged, remote work and technologies have important advantages in reaching a greater number of employees. On the other hand, communication within the team and between supervisors and subordinates was affected by this new work configuration, becoming more challenging. Notably, as highlighted by Participant 8, these challenges were not due to insufficient information and communication tools, or to the lack of skills in using the available technologies to enable remote collaborations. Instead, top and line managers faced more difficulties in eliciting subjective and informal elements of communication and interpersonal contacts.

The results are consistent with previous theoretical and empirical studies (Allen et al., 2015; Golden et al., 2008; Sarker et al., 2011). Telework is directly impacting the dynamics of communication and human interactions at work, following a trend of changes in different types of organizations worldwide (Marlow et al., 2017; Sarker et al., 2011). Similarly to what happens in the context of flexible offices (Manca, 2022), telework can reduce the ability of managers to gauge informational and personal exchanges that are yet fundamental to sense how people are doing and whether they are thriving with telework, as emphasized by Participants 5 and 10. Also, some part of informal and tacit knowledge is not easy to acquire in such a context, and this paves the way for productivity concerns.

According to top and line managers, a second change brought about by telework involves planning and monitoring the work of the team and its outcomes. This theme encompasses various aspects of work organization that, in the public sector, is characterized by high levels of standardization, regulation and office-based roles (Legentil et al., 2022; Palumbo et al., 2022; Taskin & Edwards, 2007). Telework has redefined the traditionally control-oriented roles of managers, creating additional struggles for them to adapt, as reflected in the statements of Participants 3, 6, and 7.

With telework implementation, the managers' job shifted toward deliverables, necessitating more refined skills in setting performance indicators, developing and discussing work plans, and intervening when results deviate from expectations. Consequently, there is a transformation in the work organization and human resources practices that underpin managerial roles. In this regard, Participant 3 commented: *"the managers have been actually forced to act differently, and being more manager, isn't that right?"*. According to top and line managers, the changes brought about by telework have exposed long-standing performance management issues within public sector organizations, compelling managers to adopt more effective practices for leading team performance, as reflected in the statements of Participants 3 and 7.

Top and line managers also expressed concern about monitoring and caring employees' feelings and well-being, and this represents a salient challenge since managers are increasingly being held accountable for their teams' mental health and quality of work life (Guerci et al., 2017). Empathic attitudes, the ability to offer social support, and a careful eye on the particularities of subordinates are emerging competencies of remote and hybrid team leaders (Mourão et al., 2021; Resende & Faria, 2022). Managers with telework should demonstrate warmth through nonverbal communication and body language in their socio-professional relationships. And this yet can be especially difficult in a hybrid and sometimes even fully remote context. Yet, we contend that those changes require the development of innovative organizational practices to effectively follow and support public servants' affective states and well-being.

Another challenging point, according to top managers, is the increase in managers' workload, as highlighted by Participants 7 and 5. Managerial work has expanded in both scope and reach, requiring managers to coordinate with employees who are dispersed across various geographic locations and time zones. The emergence of this topic exclusively in the discussions of top managers reflects the very nature of the tasks they perform, as well as the breadth of their responsibilities and the number of teams they supervise. This reflects findings from studies that highlight the socio-temporal scaling of managerial work (Sewell & Taskin, 2015), which ultimately limits managers' flexibility in organizing their daily tasks, highlighting another fact of the intensification of their work.

The themes that emerged exclusively among the line managers are the digital platforms and software for productivity monitoring and time management, paradigm shifts in public administration, and legal constraints. The digital tools have become essential for managing hybrid and remote teams (Brondarouk & Brewster, 2016). These technologies allow visibility and continuous monitoring of employees' activities, providing real-time data that supports constant feedback and managerial decision-making, as illustrated by participants 12 and 13. It is an operational aspect primarily experienced by those on the front line of team supervision.

Line managers also advocate for paradigm shifts in public administration and legal constraints. Public organizations are usually governed by rigid structures designed around strict legal requirements. The implementation of telework challenges institutionalized work arrangements and paradigms, pushing organizations to embrace new routines, innovative technological solutions, and greater flexibility. We believe such topics arose in interviews with line managers because they have been largely left alone in negotiating new work modalities with their collaborators, often without guidance from their companies and the regulator.

In this study, line managers reported experiencing tensions between the increased focus on results linked with the enhanced employees' flexibility and the legislative frameworks that govern supervisory and managerial control practices in public organizations. These contents are illustrated in participants' 10 and 11 statements. The public sector's bureaucratic culture and rigid organizational structure can exacerbate these tensions, potentially leading to insecurity in managerial decision-making (Legentil et al., 2022; Palumbo 2020). Therefore, legitimizing telework in the public sector and developing supportive regulatory frameworks for management practices are emerging as necessary responses to these paradigm shifts.

## 4.2 Main changes in relationships and interactions at work according to managers

Although the topic of relationships emerged spontaneously when top and line managers discussed the main changes brought about by telework, focus group facilitators asked participants to

elaborate on these changes in more details, following the question guide and predefined categories. We intended to explore relationships and interactions in detail as a subcategory of these broader transformations. Chart 3 summarizes the themes that surfaced and their respective sample quotes.

**Chart 3 – Main themes and sample quotes on the changes in relationships and interactions at work**

Theme	Job Position	Sample Quotes
Informal and spontaneous nature of communication and interaction		<p><i>"I had some news to share, so I had to tell it, no kidding, about five times. I talked to those who were in the office one day, and called a meeting to talk to the team members working remotely the day after. Then, a consequence of this news occurred and I had to call them again in person and then through an online meeting. And then you still must think about who was there, who was not, who am I going to call, what time am I going to call them? So, it is like this, I think the communication and interactions require more effort, no doubt about it" (R4)".</i></p>
	Top managers	<p><i>"About these informal exchanges... birthdays of month, for instance... you have people in the team that buy a cake and send it to the person's house... It's kind, it's fun... They have already tried to sing Happy Birthday in a remote group. It's horrible, right? Because the sound cuts out, so everybody gets disjointed. So, there are things that don't work well" (R6).</i></p>
	Line managers	<p><i>"Before telework, the interactions occurred more naturally in the team. One of the main changes we have noticed is that for me to interact with someone, talk to someone, or better understand someone's work, I must have an intention. Do you understand? I can't be there in the organization, meet the person in the coffee area and start talking...how your life is going, how your work is going, have you have spent the day, and so forth. In the office, you get closer to some people you have contacts with... Before, these interactions were more spontaneous, when you met in the elevator or at the coffee area, or when you went to the other persons' desks to ask if they could help you. So, the interactions used to happen more organically. And today I realize that to allow these exchanges, I have to go after certain information. It will not come to me naturally" (R7).</i></p>
Closeness and sense of belonging	Top managers	<p><i>"What we have been discussing a lot is the sense of belonging. And in my organization, we have this additional issue of people coming from other organizations, and now there is also the temporary hiring... Before remote work, we had lunch together, exchanged ideas at the coffee area, and met in the hallways. We reinforced the bonds with the people we met face to face... It is tough to create bonds with people we just know virtually. So, I think that today what is missing the most is the stimulus for this interaction. Note that it is not necessarily related to work or face-to-face work meetings. I am talking about creating an identity with the organization and team. Sometimes it is like I am just a work machine piece" (R10).</i></p>
	Line managers	<p><i>"I noticed the increase in distance between the manager and the team. In the face-to-face world, we used to solve things right there. My organization has a very relational culture, so we used to go to each other's desks, talk and exchange. The manager could see the whole team and build a good climate that was useful to solve problems more quickly... So, I think managers and their teams are getting distant from each other" (R5).</i></p>

**Source:** elaborated by the authors.

First, top and line managers emphasized that they are now required to proactively plan efforts to gather personal and spontaneous information from employees and to put extra effort into ensuring alignment within the group, as Participants 4, 6, and 7 noted. These relational drawbacks potentially affect team performance. Structured and formal communication primarily involves detailed and planned discussions on work-related issues (Marlow et al., 2017; Park, 2022; Stöckl & Struck, 2022). This formality facilitates official and documented exchanges through pre-established channels, such as emails, scheduled meetings and reports. Conversely, spontaneous communications occur quickly and informally during daily work routines, enabling dynamic and more reactive interactions. This kind of communication often involves unplanned but valuable approaches to solving urgent issues or enhancing relationships among team members (Marlow et al., 2017; Park, 2022; Stöckl & Struck, 2022). Informal communication can also positively influence team creativity and effectiveness (Park, 2022; Stöckl & Struck, 2022). Hence, our results indicate that balancing formal and informal interactions with telework remains challenging for top managers, who must devise effective strategies to deal with these changes.

Also, according to top and line managers, the changes in the spontaneous and informal nature of communication can result in a diminished sense of closeness to both managers and colleagues. This challenge becomes even more evident regarding new hires who must be socialized to learn the organizational culture, as Participants 10 highlighted. Managers noted that telework can hinder the onboarding and integration of new employees into the organizational culture, and the lack of in-person and informal interaction with colleagues and supervisors can result in feelings of isolation and disconnection, echoing previous research (Allen et al., 2015; Palumbo et al., 2022). In this sense, telework can pose specific challenges for young people at the beginning of their careers. According to Cappelli (2021), new professionals often rely on direct interaction and guidance from more experienced colleagues to acquire informal skills and knowledge. In remote and hybrid environments, these opportunities for informal learning tend to be reduced and must be recreated and promoted through conscious efforts enacted by managers. These efforts include proactively creating opportunities for new employees to connect and interact with their colleagues and mentors, even with hybrid and remote modes (Cappelli, 2021; Russo et al., 2023; Resende & Faria, 2023).

The challenges arising from these changes do not mean telework is ineffective or unsuitable for the public sector. Rather, implementing telework brought this discussion to a new dimension. New changes can lead to better management practices tailored to current working contexts and workers' demands. It should also be noted that changes related to the nature of relationships and communication are not exclusive to work and organizational contexts. Over the last few decades, society has undergone profound transformations driven by advances in information and communication technologies that have also introduced more digitalization and flexibility



into social relations (Baym, 2015; Cappelli, 2021). Adopting flexible work arrangements is part of this broader trajectory of change, which is unlikely to reverse.

## 5. CONCLUDING REMARKS

This study provided a description of how telework is changing the work in public organizations from the managers' point of view. Results enabled comparisons with prior empirical research and examined the unique experiences of Brazilian public managers. It became evident that telework has altered aspects such as communication and socio-professional relationships, performance and results management practices, management tools, and paradigms of public sector management. Particularities of the Brazilian public managers' perspective include the increased reliance on various software and platforms for performance management, which has spurred improvements in management practices and tools. At the same time, telework has uncovered long-standing management issues due to traditional paradigms in the Brazilian public sector. In this sense, these challenges, often attributed to telework, are rooted in deeper work organization dysfunctions and require managers and organizations to evolve their responsibilities in both on-site and remote settings.

While prior research has documented the effects of telework on employee well-being, communication, and performance monitoring, our findings reveal how these dynamics are shaped by the Brazilian public administration's institutional logics and managerial paradigms. In particular, results show, for instance, that telework has not only accelerated the adoption of digital tools for performance management, improving monitoring and reporting practices, but has also exposed long-standing structural inefficiencies embedded in traditional bureaucratic models. This duality, technological advancement alongside the conventional management paradigms, adds nuance to international evidence, suggesting that telework can function both as a driver of modernization and as a magnifier of pre-existing organizational dysfunctions. Furthermore, the study highlights the critical yet underexplored role of informal communication and socio-professional relationships in sustaining collaboration and trust within distributed public sector teams.

Regarding limitations, the sampling in this study is non-probabilistic, intentional, and limited to the participation of managers who accepted the invitation to join the focus groups. While this sampling choice contributed to the feasibility of the research, it also limits the possibility of generalizations to populations. Consequently, the results are more suited for articulating theoretical propositions rather than broad generalizations. Despite this limitation, the findings are valuable for exploring new or under-researched subjects, raising issues that can be tested in future studies.

Building on the findings, several dimensions emerge as promising candidates for future quantitative research in public sector telework contexts. Variables such as the quality and frequency

of informal communication, levels of interpersonal trust, the strength of socio-professional relationships, and shifts in managerial roles and responsibilities could be operationalized to examine their effects on team cohesion, performance, and organizational culture over time. Future research should investigate issues such as how informal communication channels are developed and maintained in remote teams, the long-term impact of informal communication on team cohesion, trust, and collaboration, how socio-professional relationships are formed and sustained in remote settings, and how culture is transmitted and perceived in virtual environments. Researchers should also conduct longitudinal studies to observe how informal communication and socio-professional relationships evolve in remote teams and their long-term trends and effects.

Finally, researchers in organizational behavior and human resources should question whether traditional theories and concepts must be revisited. The shift to telework has brought about profound changes in how organizations operate, affecting communication, performance management, and organizational culture. These changes are reshaping the future of work, driving organizations to innovate and adapt to a more flexible and digital work environment. Therefore, the transition to new ways of working presents opportunities to either develop new theoretical frameworks or enhance existing ones. Changes brought about by telework are indeed a promising area of study for researchers in business and public administration.

From a practitioner's perspective, the findings guide the design of managerial practices that respond to the specific challenges of telework in the Brazilian public sector. First, the recurrent emphasis on communication aspects highlights the need for managers to deliberately create opportunities for informal and spontaneous exchanges. This may involve encouraging open-ended conversations in addition to formal meetings, and using collaborative platforms not only for task monitoring but also for fostering socio-professional bonds. Second, the findings underscore the importance of strengthening performance management practices under telework. Public managers should be supported in adopting digital monitoring and feedback tools. Training programs are needed to develop skills in defining performance indicators, setting clear goals, and providing constructive feedback. In this sense, organizations should institutionalize capacity-building initiatives tailored to remote performance management.

Third, managers reported increased responsibility for employees' well-being. This finding suggests that leadership development in the public sector must go beyond technical skills and include socioemotional competencies such as empathy, active listening, and the ability to identify early signs of strain. Organizations should create formal support protocols, such as well-being checklists for managers or referral systems to psychological support services. Finally, the legal and bureaucratic constraints findings indicate that managers need more explicit institutional guidance when negotiating telework arrangements. The absence of explicit frameworks leaves line managers to individually interpret norms and adopt practices, which can generate insecurity. Therefore,

public organizations should periodically revise regulatory guidelines and internal policies that clarify the scope of managerial autonomy in hybrid and remote contexts. This institutional support is essential to legitimize managerial decisions and reduce the tensions between flexibility and formal rules.

Since telework can also magnify pre-existing organizational inefficiencies, managers should remain attentive to underlying structural issues rather than attributing them solely to the remote arrangement. Addressing these dimensions simultaneously can strengthen collaboration, improve performance monitoring, and support a more resilient organizational culture in virtual environments.

## REFERENCES


- Abbad, G. et al. (2019). Percepções de teletrabalhadores e trabalhadores presenciais sobre desenho do trabalho. *Revista Psicologia Organizações e Trabalho*, 19(4), 772-780. <https://doi.org/10.17652/rpot/2019.4.17501>
- Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science in the Public Interest*, 16(2), 40-68. <https://doi.org/10.1177/1529100615593273>
- Barber, L. K., & Santuzzi, A. M. (2015). Please respond ASAP: Workplace telepressure and employee recovery. *Journal of Occupational Health Psychology*, 20(2), 172-189. <https://doi.org/10.1037/a0038278>
- Barbour, R. S., & Kitzinger, J. (1999). *Developing focus group research: Politics, theory and practice*. Sage Publications.
- Bardin, L. (2016). *Análise de conteúdo*. Edições 70.
- Bartsch, S., Weber, E., Büttgen, M., & Huber, A. (2020). Leadership matters in crisis-induced digital transformation: How to lead service employees effectively during the COVID-19 pandemic. *Journal of Service Management*, 32(1), 71-85. <https://doi.org/10.1108/JOSM-06-2020-0261>
- Baym, N. K. (2015). *Personal Connections in the Digital Age*. Polity Press.
- Boell, S. K., Cecez-Kecmanovic, D., & Campbell, J. (2016). Telework paradoxes and practices: The importance of the nature of work. *New Technology, Work and Employment*, 31(2), 114-131. <https://doi.org/10.1111/ntwe.12063>
- Caillier, J. G. (2013). Are teleworkers less likely to report leave intentions in the United States Federal Government than non-teleworkers are? *The American Review of Public Administration*, 45(1), 72-88. <https://doi.org/10.1177/0275074011425084>
- Cappelli, P. (2021). *The future of the office: Work from home, remote work, and the hard choices we all face*. Wharton School Press.

- Carnevale J.B., & Hatak I. (2020). Employee adjustment and well-being in the era of COVID-19: Implications for human resource management. *Journal of Business Research*, 116, 183–187. <https://doi.org/10.1016/j.jbusres.2020.05.037>
- de Vries, H., Tummers, L., & Bekkers, V. (2019). The benefits of teleworking in the public sector: reality or rhetoric? *Review of Public Personnel Administration*, 39(4), 570–593. <https://doi.org/10.1177/0734371X18760124>
- Filardi, F., Castro, R. M. P. de, & Zanini, M. T. F. (2020). Vantagens e desvantagens do teletrabalho na administração pública: análise das experiências do Serpro e da Receita Federal. *Cadernos EBAPE. BR*, 18(1), 28–46. <https://doi.org/10.1590/1679-395174605>
- 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*, 92(6), 1524–1541. <https://doi.org/10.1037/0021-9010.92.6.1524>
- Golden, T. D., & Gajendran, R. S. (2019). Unpacking the role of a telecommuter's job in their performance: examining job complexity, problem solving, interdependence, and social support. *Journal of Business Psychology*, 34, 55–69. <https://doi.org/10.1007/s10869-018-9530-4>
- Golden, T. D., Veiga, J. F., & Simsek, Z. (2008). Dealing with the challenges of virtual work: A research agenda. *The Academy of Management Perspectives*, 22(3), 38–54. <https://doi.org/10.5465/amp.2008.34201176>
- Grant, C. A., Wallace, L. M., & Spurgeon, P. C. (2013). An exploration of the psychological factors affecting remote e-worker's job effectiveness, well-being and work-life balance. *Employee Relations*, 35(5), 527–546. <https://doi.org/10.1108/ER-08-2012-0059>
- Halford, S. (2005). Hybrid workspace: Re-spatialisations of work, organisation and management. *New Technology, Work and Employment*, 20(1), 19–33. <https://doi.org/10.1111/j.1468-005X.2005.00141.x>
- Hartog, K. L., Solimene, A., & Tufani, A. (2015). *The smart working book: L'età del lavoro agile è arrivata*. Seedble.
- Hirsch, P. B. (2021). Sustaining corporate culture in a world of hybrid work. *Journal of Business Strategy*, 42(5). <https://doi-org.ez54.periodicos.capes.gov.br/10.1108/JBS-06-2021-0100>
- Iannotta, M., Meret, C. & Marchetti, G. (2020). Defining leadership in smart working contexts: A concept synthesis. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.556933>
- Kattenbach, R., & Kump, B., & Moskaliuk, J. (2021). New work arrangements: A review of concepts and theories. *Management Revue – Socio-Economic Studies*, 32(4), 297-301. <https://doi.org/10.5771/0935-9915-2021-4-297>
- Keemink, J. R., Sharp, R. J., Dargan, A. K., & Forder, J. E. (2022). Reflections on the use of synchronous online focus groups in social care research. *International Journal of Qualitative Methods*, 21. <https://doi.org/10.1177/16094069221095314>
- Kowalski, T. H. P & Loretto, W. (2017) Well-being and HRM in the changing workplace. *The International Journal of Human Resource Management*, 28(16), 2229–2255. DOI: 10.1080/09585192.2017.1345205

- Kwon, M., & Kim-Goh, M. (2023). The impacts of telework options on worker outcomes in local government: social exchange and social exclusion perspectives. *Review of Public Personnel Administration*, 43(4), 754–773. <https://doi.org/10.1177/0734371X221121051>
- Larson, B. Z., Vroman, S. R., & Makarius, E. E. (2020). A guide to managing your (newly) remote workers. *Harvard Business Review*, 97(2), 56–65. <<https://hbr.org/2020/03/a-guide-to-managing-your-newly-remote-workers>>.
- Legentil, J., Pojo, R., Cunha, W., & Faria L. (2022). Programa de gestão: Bastidores e perspectivas do teletrabalho no Executivo Federal. In Zavanella, F. & Pinto, L. O. C. (Org.), *A Evolução do Teletrabalho. Tomo II: Gestão* (pp. 7–152). Lacier Editora.
- Leite, A. L., & Da Cunha Lemos, D. (2021). Gestão de pessoas e o teletrabalho: desafios e possibilidades. *Revista Do Serviço Público*, 72(2), 330–359. <https://doi.org/10.21874/rsp.v72i2.4987>
- Manca, C. (2022). Tensions as a frame for managing work in collaborative workplaces: A literature review. *The International Journal of Management Reviews*, 24(3), 333–351. <https://doi.org/10.1111/ijmr.12280>
- Marlow, S. L., Lacerenza, C. N., & Salas, E. (2017). Communication in virtual teams: A conceptual framework and research agenda. *Human Resource Management Review*, 27(4), 575–589. <https://doi.org/10.1016/j.hrmr.2016.12.005>
- Melo, T. A., & Demo, G. (2024). Home sweet home? The mediating role of human resource management practices in the relationship between leadership and quality of life in teleworking in the public sector. *Sustainability*, 16. <https://doi.org/10.3390/su16125006>
- Morgan, D. L. (1996). Focus groups. *Annual Review of Sociology*, 22, 129–152. <https://doi.org/10.1146/annurev.soc.22.1.129>
- Mourão, L., Abbad, G. S., & Legentil, J. (2021). E-Leadership: Lessons learned from teleworking in the COVID-19 pandemic. In M. Mohiuddin, B. Khalid, M. S. A. Azad, & S. Ed-dafali (Org.), *Leadership in a Changing World*. IntechOpen. <https://doi.org/10.5772/intechopen.100634>
- Palumbo, R., Manesh, M. F., & Petrolo, D. (2022). What makes work smart in the public sector? Insights from a bibliometric analysis and interpretive literature review. *Public Management Review*. <https://doi.org/10.1080/14719037.2022.2152479>
- Park, J. (2022). Impact of informal communication on corporate creative performance. *Journal of Applied Business Research*, 38(1), 19–28. <https://doi.org/10.19030/jabr.v38i1.10411>
- Resende, M. M., & Faria, L. S. (2023). Engajamento e gestão de times em teletrabalho: Um olhar aprofundado na employee experience. In: Zavanella, F., Legentil, J., & Pinto, L. O. C. (Org.). *A evolução do teletrabalho. Tomo V: uma visão multidisciplinar* (pp. 262–272). Lacier Editora.
- Ribeiro, C. V. dos S., & Mancebo, D. (2013). O servidor público no mundo do trabalho do século XXI. *Psicologia: Ciência e Profissão*, 33(1), 192–207. <https://doi.org/10.1590/s1414-98932013000100015>
- Russo, M., Morandin, G., & Manca, C. (2023). How can organizations improve virtual onboarding? Key learnings from the pandemic. In Bergum, S., Peters, P., & Vold, T. (Org.), *Virtual Management and the New Normal* (pp. 203–221). Springer.

- Sarker, S., Ahuja, M., Sarker, S., & Kirkeby, S. (2011). The role of communication and trust in global virtual teams: A social network perspective. *Journal of Management Information Systems*, 28(1), 273–310. <http://dx.doi.org/10.2753/MIS0742-1222280109>
- Sewell, G., & Taskin, L. (2015). Out of sight, out of mind in a new world of work? Autonomy, control, and spatiotemporal scaling in telework. *Organization Studies*, 36(11), 1507–1529. <https://doi.org/10.1177/0170840615593587>
- Shockley, K. M., Allen, T. D., Dodd, H., & Waiwood, A. M. (2021). Remote worker communication during COVID-19: The role of quantity, quality, and supervisor expectation-setting. *Journal of Applied Psychology*, 106(10), 1466–1482. <https://doi.org/10.1037/apl0000970>
- Stewart, K., & Williams, M. (2005). Researching online populations: The use of online focus groups for social research. *Qualitative Research*, 5(4), 395–416. <https://doi.org/10.1177/1468794105056916>
- Stöckl A. & Struck, O. (2022). The impact of informal communication on the quality and productivity of digital collaborative work. *Work*, 72(4), 1655–1671. <https://doi.org/10.3233/WOR-211246>. PMID: 35723154.
- 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 & Organizational Studies*, 29(2), 208–218. <https://doi.org/10.1177/15480518211007452>
- Taskin, L. & Edwards, P. (2007). The possibilities and limits of telework in a bureaucratic environment: Lessons from the public sector. *New Technology, Work and Employment* 22(3), 195–207. <https://doi.org/10.1111/j.1468-005X.2007.00194.x>.
- Taskin, L., & Bridoux, F. (2010). Telework: A challenge to knowledge transfer in organizations. *The International Journal of Human Resource Management*, 21(13), 2503–2520. <https://doi.org/10.1080/09585192.2010.526258>
- Teixeira, C. G., & Bacinello, E. (2024). Desempenho e produtividade no serviço público: Um estudo a partir da implementação do Programa de Gestão e Desempenho (PGD). *Revista De Gestão E Secretariado*, 15(7), e4020. <https://doi.org/10.7769/gesec.v15i7.4020>
- van der Lippe, T., & Lippényi, Z. (2020). Co-workers working from home and individual and team performance. *New Technology, Work and Employment*, 35, 60–79.
- Vartiainen, M., & Hyrkkänen, U. (2010). Changing requirements and mental workload factors in mobile multi-locational work. *New Technology, Work and Employment*, 25(2), 117–135. <https://doi.org/10.1111/j.1468-005X.2010.00243.x>
- Wang, H.; Xiao, Y.; Wang, H.; Zhang, H.; Chen, X. (2023). Who knows me understands my needs: The effect of home-based telework on work engagement. *Psychology Research and Behavior Management*, 16, 619–635. <https://doi.org/10.2147/PRBM.S402159>
- Wang, Y., & Boell, S. (2021). Telework uptake and COVID: Will it be back to normal? A Preliminary International Comparison. *ACIS 2021 Proceedings*, 74. <https://aisel.aisnet.org/acis2021/74>


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