

Impacts of Telework on the Perception of Public Servants in a Brazilian Federal Agency

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Abstract

Since the COVID-19 pandemic, one of the working methods that has been gaining notoriety is telework. In this context, this study analyzes the perception of public servants in a Brazilian federal agency about changes resulting from the implementation of telework. This was a qualitative and descriptive piece of research, using a case study strategy. Semi-structured interviews were conducted with 10 teleworkers from public agencies in the State of Ceará, with most of the participants being women. Content analysis showed that telework offers workers a better quality of life due to flexible working hours. This study contributes to understanding the impacts of telework, such as the restructuring of jobs and new organizational configurations, as well as making contributions by presenting empirical data on the subject of practices that favor remote working and new debates.

Keywords: telework, public service, restructuring of work.

Impactos do Teletrabalho na Percepção de Servidores Públicos de uma Autarquia Federal Brasileira

Resumo

A partir da pandemia do COVID-19, uma das modalidades de trabalho que ganhou notoriedade é o teletrabalho. Nesse contexto, nesse estudo é analisada a percepção dos servidores públicos de uma autarquia federal brasileira sobre mudanças decorrentes da implantação do teletrabalho. Trata-se de uma pesquisa qualitativa e descritiva, na qual se utilizou como estratégia o estudo de caso. Foram realizadas entrevistas semiestruturadas com 10 teletrabalhadores de agências localizadas no estado do Ceará, sendo a maioria desses participantes composta por mulheres. A partir da análise de conteúdo, evidenciou-se que o teletrabalho oferece maior qualidade de vida aos trabalhadores devido à flexibilidade de horários. Portanto, esse estudo colabora para a compreensão dos impactos decorrentes do teletrabalho, como a reestruturação dos postos de trabalho e novas configurações organizacionais. Outras contribuições dessa pesquisa são a apresentação de dados empíricos sobre o tema, de práticas que favoreçam o trabalho remoto e de novos debates.

Palavras-chave: teletrabalho, serviço público, reestruturação do trabalho.

Impactos del Teletrabajo en la Percepción de los Servidores Públicos de una Agencia Federal Brasileña

Resumen

A partir de la pandemia del COVID-19, una de las modalidades de trabajo que viene ganando mucho espacio es el teletrabajo. En este contexto, este estudio analiza la percepción de los servidores públicos de una agencia federal brasileña sobre los cambios resultantes de la implantación del teletrabajo. Se trata de una investigación cualitativa y descriptiva, en la cual se utilizó como estrategia el estudio de caso. Se realizaron entrevistas semiestruturadas a 10 teletrabajadores de agencias ubicadas en el estado de Ceará, siendo la mayoría de la muestra compuesta por mujeres. El análisis de contenido mostró que el teletrabajo ofrece a los trabajadores una mejor calidad de vida debido a la flexibilidad del horario de trabajo. Por lo tanto, este estudio contribuye a la comprensión de los impactos del teletrabajo, como la reestructuración de los puestos de trabajo y las nuevas configuraciones organizacionales, además de hacer una contribución teórica con datos empíricos sobre el tema, presentando prácticas que favorecen el trabajo a distancia y nuevos debates.

Palabras clave: teletrabajo, servicio público, reestructuración del trabajo.

Among the work modalities that currently stand out the most is telework. The International Labor Organization (ILO) defines the telework model as a form of work far from the office and the production center, which allows physical separation and involves using a new technology that facilitates communication (EUR-Lex, 2005). According to the joint report of the European Foundation for the Improvement of Living and Working Conditions and ILO, telework has been increasing since the beginning of the 21st century in several countries. The European Union already has an average of about 17% of teleworkers, with some countries in Northern Europe, such as Denmark, Sweden, and the Netherlands, where the percentage is around 30%. However, countries like Greece, Italy, Spain, and Portugal, which show values well below average suggest contexts of difficult adoption of telework (Figueiredo et al., 2021).

The advance of new information and communication technologies has fostered discussions about the transformations in working, presenting positive prognostics for expanding the home office modality (Moreno, 2021). With the arrival of the health crisis caused by the coronavirus in late 2019, social distancing was imperiled in a global amplitude, a fact that drastically boosted the need for the implementation of telework. Considering the scope of the problem, several studies highlight the importance of understanding the impacts and consequences of this type of work, which is becoming increasingly widespread internationally.

Aroles et al. (2021) sought to offer a reflection and contribution to a deeper understanding of the continuous flexibilization, virtualization, and mediation of work practices. In their study, Silva and Medeiros (2021) examined how public employees perceived the connection between telework and their home environment during the pandemic. Quintão et al. (2021) put forward a discussion on the topics of gender and employment, exploring the various forms of telework in the present-day setting, just as Bispo et al. (2023) presented reports of the experience of mothers working remotely at home during the pandemic period. Moreno (2021) researched the working conditions in the Information Technology (IT) sector. Their study utilized both quantitative and qualitative approaches and focused on the labor market and the impact of the COVID-19 epidemic crisis in São Paulo, covering the period between 2019 and 2020. These studies confirm the relevance of the theme of work restructuring and the new work configurations that are emerging.

However, the present research investigates the changes promoted by implementing telework in a federal public institution that adopted this way of working before the pandemic, being a pioneering institution in the regional context, and in the environment of a law implementation that regulates it. Moreover, the legislation that regulates telework in Brazil is still very incipient, because it was not until 2022 that a federal decree was published regulating the adoption of telework in the federal public service (BRASIL, 2022a). Thus, it is noteworthy to analyze the perception of civil employees of a federal government agency about the changes that occurred after the implementation of telework. Given this context, the following question arises: how do the civil employees of a federal government agency perceive the changes generated by the implementation of telework?

To answer this question a qualitative and descriptive case study was developed. The tools used were document examination and semi-structured interviews. From the analysis of the data and interviews, it was possible to codify the results

into seven categories: working conditions, technology, tasks, working hours, communication, the context of the COVID-19 pandemic, and telework. They are further considered in this article that follows presenting the theoretical framework, methodology, findings, and a brief discussion and concluding remarks.

Based on the results of this analysis, it seeks to provide a theoretical contribution to the progress of the literature under study, through empirical data on the subject, as well as information about telework in the post-pandemic context (Schulze et al., 2023).

Productive Restructuring and Telework

Social development, technological advances, new configurations of work bonds, and the redefinition of the demands of professional skills in the current labor market context are the basis for many scholars' understanding of the restructuring of work (Druck, 1999; Tosta, 2008). Productive restructuring has been characterized, especially in recent decades, as a global process that generates a significant impact on the world of work because companies reduce their staff, restructure jobs, and readjust the attributions and skills for the effective exercise of activities. The market will adopt mechanisms for adjusting to these new configurations (Oltamari & Piccinini, 2006).

In a broad sense, productive restructuring involves the economic structure with its regulatory entities (legislation and regulation of markets, labor rights, consumer rights, role of the state, financial market) and the relations inside and outside the firms themselves (Salerno, 1999). It started around 1970 in the major capitalist countries. It spread in Brazil in a restricted way in the 1980s with the Taylorist/Fordist scientific administration of production organization and management, and later, from the 1990s and 2000s, with a systemic characteristic (Pereira et al., 2021).

Nowadays, the construction of a social system in which the normative and standardized model of work is characterized by being salaried, permanent, full-time, with direct supervision by the employer, and protected by a set of rights and guarantees seems to be the common sense. However, one must consider the continuous and preponderant social development with all its advances that the structures and bonds of work are redefined constantly from more rigid characteristics to the freedom operation of the markets (Araújo & Morais, 2017; Colbari, 2007; Tosta, 2008).

Observing the various aspects that accompany productive restructuring is not a recent activity. Bresciani (1997) already stated that amid the contemporary crisis involving the "worlds of work," flexibility occupies a prominent space in the context of the time. Many companies were redefining their structures by adopting flexible staffing. Workers, who used to be directly hired, were being replaced by service purchases. These arrangements facilitated by the market could involve the delegation or subcontracting of different tasks or responsibilities, thus generating a consequent precariousness of labor with temporary workers or under conditions of informality and weak ties (Clinton, 1997). Given the transformations and the new worker profiles, some work and production organization models have emerged. One of the best-known and cited by several authors is the Japanese Toyota production model, which is considered a symbol of flexibilization because of the characteristics of high productivity and competitiveness it employs (Coriat, 1994; Druck, 1999).

The current discussion shows that jobs protected by rigid regulation of labor relations will be an exception, and flexibility will govern labor relations, work processes, and consumption patterns. It manifests itself under the guise of job creation due to reducing production costs, especially labor (Lazzareschi, 2018). In the context of competitiveness and scarcity of more binding opportunities, the restructuring of jobs occurs more intensely because it considers, especially, the new patterns of management (Cerdeira, 2004) and the flexibilization of labor relations (Clinton, 1997). This has a direct impact on the competencies required for the jobs and on the multifunctionality and polyvalence of professionals (Longhi et al., 2015). Issues concerning the process of work reorganization, such as flexibilization, intensification, productivism, technological innovations, and new forms of worker control for maximizing profits, represent some of the many concerns currently discussed. Telework stands out among the forms of work that have emerged in this scenario of productive restructuring.

The variety of wireless utilities, the Internet, and its technologies have transcended borders and brought further connectivity between people, culturally, economically, and administratively. Globalization has instituted a new challenging work model in which strategies and activities are no longer thought of and conducted locally, evolving to an even greater complexity when it comes to work. Although it is a very current topic, the concept of telework appeared in 1973, introduced by Nilles (1997). According to them, telework consists of moving the work instead of the workers. It is performing the job outside the central office, at home, or a service center using computers and telecommunications in tasks outside the company premises.

This kind of work activity has been regulated by Law N^o. 13,467/2017, in Brazil. The law changed the status quo of the generic equalization established by Article 6 of the Consolidation of Labor Laws - CLT between remote work and face-to-face work. Through the context of a much broader labor reform, a chapter was opened to accommodate the regulation of telework. There are also two other references to telework in the CLT: Articles 62, III and 611-A, VIII. The first article considers telework among the forms of subordinate service excluded from the control of the duration of the workday and the second mentions that it is a subject feasible of collective bargaining (Stürmer & Fincato, 2019).

The recent COVID-19 pandemic, experienced worldwide, impacted, in a very expressive way, a context of reflections, ways of acting, and universal thinking (Beni, 2020). Its implications are economic, political, and social and involve other sectors such as health, education, and tourism. In Brazil, by March 2020, the number of infected persons by COVID-19 increased significantly, and the contagion in several states became communal. As a result, most states in Brazil began to adopt measures to restrict social contact, such as closing shops, reducing crowds, and social distancing. Under the initial guidance of the Ministry of Health, the population started to stay at home to stop the increase in cases of the disease (Recuero & Soares, 2021). This state of public health emergency of international importance has forced the Brazilian public administration to make efforts to put approximately 64.16% of servants on telework, a percentage that was previously only 3.54% (Souza, 2020).

Large corporations such as Amazon, American Express, Microsoft, and Siemens forced to implement telework during the health crisis announced several times that they want to expand this kind of work after the pandemic. It indicates that the accumulated experience has overcome resistance and that the

possibility of expanding this work practice is real (Howington, 2023). Lund et al. (2021) found that approximately 25% of the workforce in advanced economies performs activities that can be performed at home. In Brazil, it is considered that 22.7% of jobs are feasible to be developed from home offices, with considerable differences between states (Góes et al., 2020). In the Latin America and Caribbean region alone, 23 million professionals went through the modality in the second half of 2020 (Maurizio, 2021).

Studies that have researched the motivations for telework have established that the main reasons for its adherence are to reduce daily commuting trips, to increase flexibility during the day, to care for dependent children, to manage family commitments, to avoid interruptions in the office and to increase productivity at work (Bailey & Kurland, 2002). Benefits reported by employers included increased productivity, reduced accommodation costs, reduced absenteeism, and adequate staff recruitment and retention (Maruyama & Tietze, 2012).

Recent research continues to show numerous benefits identified by individuals, such as working anywhere in the world, perceived higher quality of life, proximity to family, and reduced costs (Choudhury, 2020). The discussion on telework also covers its challenges, as it finds workers a way to perform their work tasks within what used to be their space for resting (Lhuillier, 2020). Losekann and Mourão (2020) question how to reconcile productivity and mental health in the face of such transformations in the way that the work is done.

The growing number of empirical studies conducted in many countries demonstrates the relevance and timeliness of the topic. In Japan, Kazekami (2020) conducted a study to explore the mechanisms that contribute to the impact of telework on labor productivity. Raghavan et al. (2021) presented the general trends of how organizations and employees adapted to the pandemic, the lessons they learned, and how they will change to a new post-COVID-19 reality. These authors argue that there is an overall trend of organizations and employees increasing their flexibility in adopting new solutions, making them more open to innovation. Schulze et al. (2023) conducted a study in Germany during the COVID-19 pandemic, using a quantitative survey to examine how the level of telework is related to various aspects of jobs. In another study by Goñi-Legaz et al. (2023), they focused on the impact of home-based telework (HBT) on job stress among European workers. Their findings revealed that HBT does not pose risks in terms of increasing job stress, as long as factors like working during free time and presenteeism are controlled. By managing these factors, the effects of HBT on stress levels can be minimized. Labrecque et al. (2023) conducted a qualitative study in Canada to explore how workers perceive telework and its effects on their well-being during the COVID-19 pandemic.

Being a recent event, the issue of the pandemic and the consequent compulsory migration to telework, it is noticeable the existence of concerns and interest in understanding this phenomenon and its developments. In this sense, it is relevant to understand how an agency of the Brazilian public sector presents itself before the pandemic pressures. And, especially after the Decree N^o 11.072 of May 17, 2022, which regulates the adoption of telework in the federal public service (BRASIL, 2022a). Given this context, this study proposes to investigate and describe how the adoption of telework modality in a public institution is adopted with its impacts and consequences.

Method

This study has a methodological approach of a qualitative nature (Collis & Hussey, 2014) which is especially suitable for understanding the dynamics that operate in a single setting (Eisenhardt, 1989). As for the purposes, it is considered descriptive research because it exposes the various characteristics of the investigated object (Vergara, 2009). The strategy adopted in this work is the single case study because it seeks to explore, in its actual circumstances, a current phenomenon in depth through an empirical investigation (Yin, 2016).

The case is developed at a national institute, the federal autarchy of the Government of Brazil linked to the Ministry of Labor and Welfare. This autarchy receives contributions for the maintenance of the General Regime of Social Security, responsible for the payment of pensions, maternity salary, death pension, sickness, accident, and confinement aid. Telework activities are the unit of analysis considering the particularities of the Brazilian public service, the national scope of the investigated institution, and the respective implementation of the modality before the emergence of the COVID-19 pandemic. Investigating it, before and after the pandemic, in a comparative historical analysis may lead us to a better understanding of the phenomenon.

On May 23, 2019, Ordinance N° 241 was published in the Official Gazette of the Union, which authorized the national institute, that was investigated in this study, to integrate the management program, as a pilot experience, in the telework modality (INSS, 2019). From this authorization, internal selection processes were carried out to recruit a limited number of public employees for the execution of this new way of working in the organization. In early 2020, due to the emergence of the COVID-19 pandemic in Brazil, the number of teleworkers grew exponentially in the institute. In this scenario, many changes happened in the institution and provided impacts that remain even after the end of the health crisis.

Participants

The research subjects are ten public employees who entered the institution through a public competition. They are stationed in the state of Ceará, with three analysts, six technicians, and one head of service management. The characterization of the subjects is shown in Table 1. The selection criteria were accessibility and availability (Creswell, 2009; Flick, 2009).

Instruments

The primary data were collected through semi-structured interviews with the participants involved in the research, conducted through previously prepared question scripts with an average duration of forty minutes. The interview script had fifteen questions about the object and other questions about personal information. It was divided into eight blocks of questions: interviewee profile, working conditions, technology and access to systems, procedures, tasks, training; working hours, productivity, routine; relationships and communication; telework in the context of the pandemic (COVID-19) and changes in telework. The secondary data were collected from websites and official documents of the investigated institution.

Data Collection Procedures and Ethical Considerations

The documentary research technique allows the collection of materials that have not yet had any analytical treatment or that can still be reworked according to the research objectives. From this perspective, company documents and complementary information on the Internet are essential sources to examine (Gil, 2017).

Data gathering took place from June 28 to July 12, 2022. The data was collected through video call interviews. Before the interviews began, consent and authorization were obtained from the participants to record them. The anonymity of the interviewees and the organization in which they work was guaranteed.

Data Analysis Procedures

All the interviews were recorded and transcribed to be analyzed using the content analysis technique. This technique allows us to apprehend, in a critical way, the meaning of explicit and implicit communications (Chizzotti, 2017). In this sense, the data analysis kept an eye on Eisenhardt (1989), which recommends being within the case, gaining familiarity with data and generating preliminary theory, searching for patterns, establishing the categories of exploration, formatting propositions through interactive tabulation of evidence for each construct, and the search for the "whys" behind the relationships. Furthermore, comparing conflicting and similar literature to discuss the findings and concluding remarks were also performed.

Table 1

Characterization of the research subjects

Subject	Sex	Age	Time in the institution	Telework time	Education	Position
Interviewee 1	F	51	18 years	1 year and 8 months	Specialization	Analyst
Interviewee 2	F	39	10 years	2 years	Specialization	Technician
Interviewee 3	M	37	12 years	2 years and 3 months	Undergraduate	Technician
Interviewee 4	F	40	10 years	2 years	Undergraduate	Technician
Interviewee 5	F	40	12 years	1 year and 10 months	Specialization	Analyst
Interviewee 6	F	37	9 years	2 years	Undergraduate	Technician
Interviewee 7	F	40	12 years	1 year and 6 months	Undergraduate	Technician
Interviewee 8	M	45	14 years	2 years	Undergraduate	Head of Service Management
Interviewee 9	F	35	9 years	2 years	Undergraduate	Technician
Interviewee 10	F	39	12 years	4 months	Undergraduate	Analyst

Results

Table 2 presents the codification of seven categories of analysis, units of context, and the respective units of record, obtained in the content analysis. The categories of analysis used are working conditions; technology; tasks; working hours; communication; pandemic context (COVID-19); and telework.

Table 2

Coding obtained in the content analysis

Analysis category	Context unit	Recording unit
Working conditions	Infrastructure	Adequacy of physical space Furniture Equipment Own investment
Technology	Systems	Scan Technical Support Access Limitation
Tasks	Procedures	Maintaining Tasks Training
Working day	Control	Frequency Productivity Control by Goal Flexible Working Hours Management follow-up
Communication	Relationship	Interaction with peers and management Physical distance
Context of the COVID-19 pandemic	Impacts	Work from home
Telework	Change	Task Scope Structure and organization Changes in the institution Changes for society Changes for the worker

Regarding the working conditions of the interviewees, the infrastructure was considered fundamental. All reported the need for adequacy of the physical space for the execution of telework at home. Some reported having organized a specific space, such as a bedroom or a bench, to perform their professional activities, seeking adequate lighting, ventilation, and comfort. Others mentioned the lack of a fixed place, working in different areas of the house, such as the living or the children's room. Some interviewees mentioned having built additional rooms or adapted spaces to create a home office, while others discussed the possibility of using a shared space in the condominium.

As for furniture and equipment, the interviewees answered that they use a desk, chair, notebook, mouse, Internet, and, in some cases, a second screen and an additional keyboard. All the resources were acquired through their investment, with no contribution from the institution. However, during the COVID-19 pandemic, employees who were initially unable to afford the necessary equipment were temporarily given a computer by the institution for home use. After the health crisis abated, the borrowed equipment had to be returned to the institution.

Subsequently, the respondents highlighted the technological issues necessary for the execution of telework. Some interviewees mentioned that technical support is provided by the company hired by the institute to deal with

specific system problems. In contrast, others stated that they must solve problems related to the tool. A large state-owned company, Dataprev was mentioned as responsible for processing Social Security data, but the technical support they provided was described as time-consuming in some cases. In addition, it was mentioned that the institute servers count on mutual support, sharing knowledge and solutions among

themselves. In general, the interviewees expressed the need for improvement in the technical support offered, highlighting the lack of agility and effectiveness in answering the calls and the need for more support in installation and security issues of the systems.

Still in the technology category, the issue of limited access to institute systems through telework was quite evident in the responses. Some interviewees mentioned that having a quality internet connection and a digital certificate is necessary to access the system. This restriction is considered essential to ensure data security and avoid information theft. Access to the systems is done through a Virtual Private Network (VPN) installed on the interviewees' computers. The VPN allows work to be done as if they were physically on the institute premises. However, access to the systems is limited to the authorized computer, and it is necessary to perform the installation process again if it is necessary to change computers. Some interviewees mentioned that the access restriction is a security measure for the institution since they deal with personal data processing.

In the next block of questions, the respondents highlighted the creation of new procedures and tasks after the implementation of telework. However, the analysis of processes at a distance already occurred before the pandemic but was expanded during this period. The systems and working methods were maintained, with some specific changes for the pandemic context. In the same category of tasks, some interviewees reported the lack of specific training for telework

or the superficiality of the training received. Some mentioned that, due to the pandemic, it was not possible to have face-to-face training and that the learning took place through videos, instruction manuals, or materials made available online. There are also reports of interviewees who claim not to have received any training from the institute, resorting to colleagues and other communication tools.

Regarding the working day, the results were that attendance is based on productivity to achieve a monthly goal in full telework. There is no electronic time record. In the semi-attendance regime, the employee must appear at the agency on working days, clock in electronically, and fulfill a monthly workload of 40 hours. In the partial regime, the electronic timecard is recorded only in the hours the employees go to the agency. Productivity is counted monthly, and if the goal is not reached for three months, the employee can be disqualified from the telework program. Telework offers schedule flexibility, allowing employees to choose their workdays and times.

During the pandemic, some employees worked at times when their children were sleeping. There are no fixed hours, and access to the system is possible 24 hours a day. However, the transition to the virtual format has affected productivity due to the use of digital technologies. Telework is controlled by goals and monitored by a coordinator. It is necessary to meet at least 80% of the monthly goals to remain in the program. Productivity is evaluated by the management employing virtual scoring systems. The employees use the "Facilita" system to keep track of their daily scores, in addition to a personal spreadsheet.

Communication among the employees did not occur frequently, mainly through WhatsApp for informal questions and e-mail for legal issues. WhatsApp causes a sense of isolation but also allows the creation of virtual friendships. Face-to-face management meetings occurred regularly but less frequently, being replaced by video meetings. WhatsApp groups play an essential role in mutual help between colleagues. The loss of physical contact due to telework affects social interaction. The lack of interaction with colleagues and the public is seen as a disadvantage, as is the absence of monthly meetings. Physical distance is perceived as inevitable, but there was some significant contact between people in the same regime and nature of work.

During the pandemic, the transition to telework occurred more quickly, requiring much adaptation. In this period, the whole family was forced to be at home, and the difficulties were significant because concentration was impaired when there were many people at home. The family does not always understand the work at home, requiring organization and consistency to achieve goals. After the pandemic, the employees managed to adjust, and currently, with the return of the other family members to their routines outside the house, they have a better work experience. They can plan their schedules better.

Telework allows us to find what works best for each person, but it can also lead to more mistakes and stress on the part of workers due to increasing demands. There have been mental health problems due to stress and lack of distinction between work and personal life. Some negative aspects include unavailable systems and the need to make up for lost time. However, the accelerated transition to telework also brought benefits such as agility and cost savings. In general, the procedural routine of telework remained almost the same as that of face-to-face work. There were advantages and challenges related to schedule flexibility and work-life balance.

After the implementation of telework in the institute, there were changes in the tasks of the employees, who began to perform their activities digitally. This transition, already being studied before the pandemic, brought organizational challenges and adaptation to new systems. But, it resulted in greater agility in the processes. The institute underwent a comprehensive restructuring, with norms, procedures, and sector changes. Telework has expanded, leading to a decrease in the number of employees in the agencies and the centralization of human resources. Despite this, there is still a lack of adequate equipment and technological difficulties in some agencies.

The employees interviewed believe telework has greatly benefited the institution, provided technological upgrades, and reduced costs. On the other hand, challenges of disorganization and repressed processes were also mentioned, which require constant monitoring by managers. Telework also brought benefits to society, such as greater availability of digital services and consequent flexibility in service hours to the public. However, some citizens had difficulties dealing with the necessary technology and access to free information provided. The quality of life improved for teleworkers, but there were challenges in disconnecting from work at home and with the lack of socialization. Schedule flexibility, time with family, and savings were advantages highlighted by the interviewees, but there was also mention of increased mental health problems.

The secondary data analysis found that the agency's management forwarded a project of organizational restructuring for consideration by the federal government in 2020 through Technical Note N° 24/CGPEI_PRES (INSS, 2020). The note indicated the need for organizational modernization considering all the new processes brought with the institute's digital system and its "new way of serving," as it highlighted the centralization of the current structure and the reduction of face-to-face services. The proposal aimed to promote workflow reorganization, favoring processes' centralization, specialization, and deterritorialization. Furthermore, it previews greater efficiency, increased productivity, standardization, improved management, and technical quality of procedures. To this end, a redistribution of competencies, reduction of management, reformulation of the organizational chart, and remodeling of positions and functions, among other actions, were suggested.

In 2022, the republic's president approved the new structure through decree N° 10.995 of March 14, 2022 (BRASIL, 2022b). According to data in Table 3, available in the public management reports of the agency (INSS, 2021, 2022) the implementation of telework, in line with the digital transformation experienced by the institute in recent years, has favored the overall restructuring of the institution. There was a reduction of executive managers and branch offices and the addition of one regional superintendency.

Table 3

Changes in the institute's organizational structure

Organizational Structure	Decree N° 9,746 of April 8, 2019	Decree N° 10,995 of March 14, 2022
Directorships	5	5
Sectional Organs	3	3
Regional Superintendencies	5	6
Executive Managers	104	98
Social Security Branch Offices	1693	1644

From the analysis of the results of this research, a structure of comparative analysis between the characteristics before and after the implementation of telework in the organization investigated was prepared, to present the main impacts identified in this process and summarize the most relevant findings of this case study, as shown in Table 4.

Table 4

The framework of analysis of the main impacts generated from the implementation of telework in the federal autarchy investigated

Analysis Category	Before Telework	X	After Telework
Working conditions	Face-to-face work in physical branches Organization office furniture The organization's old equipment Organization Investment	→	Remote work at home Workers' home furnishings Modern Worker Equipment Worker investment
Technology	Partial digitization of processes On-site technical support Limiting access to systems	→	Total digitalization of the processes Remote technical support Expanding access to the systems
Tasks	Standardized tasks for face-to-face service (partially physical documents)	→	Maintaining tasks for remote service (digital documents)
Working day	Frequency recorded in electronic point system at the branches Productivity without measurement Rigid work schedule (predefined days and times)	→	Frequency partially or not recorded in the electronic point system Productivity measured by monthly target Flexible Working Hours
Interaction	Face-to-face accompaniment by the manager Increased interaction with peers, management, and the public Predominance of oral communication Physical Proximity	→	Remote support from your manager Low interaction with peers, management, and the public Predominance of virtual communication Physical distance
Organizational Structure	Decentralized structure with pulverized decision-making process	→	Greater centralization, specialization, and deterritorialization of processes

Discussion

Working Conditions, Technology, and Tasks

Telework conditions are fundamental to productivity and occupational health. However, the civil employees interviewed in this research mentioned the need for adequacy of the physical space and the difficulties with the slowness of the systems used in telework, affecting productivity. Problems related to ergonomics were also mentioned, such as uncomfortable chairs and equipment that do not meet basic security requirements, as pointed out by Moreno (2021).

Another point highlighted in the interviews was their investment in equipment for telework. Some mentioned that the institution provided no financial support for energy or Internet expenses. In contrast, others said they initially received equipment from the institution but had to return it later. Several interviewees reported buying their equipment to ensure the quality of work, corroborating the study's results by Silva and Medeiros (2021).

According to the data collected in this case study, the transition from the physical to the digital work format occurred when the employees still worked exclusively in the face-to-face modality, which considerably facilitated the subsequent implementation of telework in the institution. Aroles et al. (2021) indicated that this process might be called "digital transformation" or just "digitalization" and that, recently, it was driven by the COVID-19 pandemic. After the implementation of telework, the need for remote technical support and the limitation of access to employees authorized to use the institutional systems on their personal computers arose.

Regarding work procedures, the interviewees perceive that there has been a specialization in the employees' tasks. The institute public started to use the institute's digital system

application to make and follow the progress of the requests, reducing the need to go in person to the agencies. Tasks were generally updated, and work became more computerized, with online interactions. The operationalization of the working day in telework is based on the frequency of workers' productivity to achieve monthly goals, and there is no electronic time record

in the full-time modality, only in the partial telework regime. A coordinator does the control, and virtual scoring systems monitor the goals.

Working Day, Interaction, and Organizational Structure

Flexibility for work performance is a characteristic that was highly valued by the interviewees (as per the interview excerpt highlighted below), which has been occupying a space of evidence in the labor context (Bresciani, 1997) and confirming the idea of Lazzareschi (2018) by arguing that flexibility will come to govern work processes and labor relations. The forms of work and the connections between people are, in this way, changing to better adapt to the needs of the market, allowing more freedom and flexibility, differentiating themselves from the normative and standardized model of work (Araújo & Morais, 2017; Colbari, 2007; Tosta, 2008) and stressed by the interviewed seven.

Due to the physical distance inherent to telework, communication has changed concerning face-to-face work between workers and between them and the organization, especially with the public. It was found that contact between the employees is not frequent, mainly through tools such as WhatsApp and e-mail. The frequency of face-to-face meetings has decreased, being replaced by videoconferences. Thus, the lack of physical contact can affect social interaction, as emphasized by interviewee three when saying "I see the lack of socialization with colleagues, the very common get-togethers, the human contact with the public and the employees".

In this sense, it became evident that telework can potentiate the emergence of problems that impact professionals' mental health, such as depression, stress, and anxiety, as some interviewees mentioned. The harm to empathy between people can also occur and, consequently, affect work efficiency. These

inferences are shared by Losekann and Mourão (2020), who question how to reconcile productivity and mental health in the face of new times. The change in the work routine presents advantages and challenges, especially regarding the balance between work and personal life.

During the COVID-19 pandemic, there was an acceleration in the spread of telework, already previously implemented in the investigated institution. In this period of a global health crisis, interviewees stressed that concentration on work was greatly affected by the family environment, as presented by Lhuilier (2020) when stating that, “in telework, professional activities are merged with domestic and family affairs, sharing the same space of time and place”. Moreover, most of the interviewed women emphasized motherhood's influence on telework issues, in line with the reflections made by Quintão et al. (2021) and Bispo et al. (2023). Often the family does not fully understand the work at home, requiring more outstanding organization, resilience, and setting of limits by the workers.

Telework in the institute brought some relevant changes, such as in the tasks of the employees, with digital execution and challenges of adaptation of this new way of working, as discussed by Clinton (1997), Cerdeira (2004), and Longhi et al. (2015), arguing that the restructuring of jobs occurs more extremely by considering especially the new management patterns and the flexibilization of labor relations, impacting directly on the skills required for the positions and also in the predominant emphasis on multifunctionality and polyvalence of professionals.

There was a comprehensive restructuring in the institution, with the redistribution of activities among the employees nationwide, changes in the organization chart, and regionalization of services. We observed these changes' aspects presented by Oltramari and Piccinini (2006) when they observed that productive restructuring can present job restructuring, readjustment of attributions and competencies, and, consequently, the market adjustment of its mechanisms to these new configurations.

Regarding the impacts of telework on public employees, in the views of the interviewees, society has benefited from the greater availability of digital services and agility in service. However, they also stressed that it also faces access difficulties, as was the case of people with lower education and restrictions on technology. For teleworkers, the main changes perceived, following the findings of Choudhury (2020), were improved quality of life, proximity to the family, and cost reduction. However, they also recognized the difficulties of developing work from home, the lack of socialization, and the mental health problems created by telework.

From the discussion of the results of this research with the literature, it is possible to obtain some practical contributions for organizations that want to implement or are implementing telework. Some positive points were highlighted by the workers, such as flexibility, more effective conciliation between personal and professional activities, and generating more quality of life for everyone. On the other hand, some needs emerged and were perceived by the employees, such as interacting more with the people involved in the work, taking care of mental health, and having adequate equipment. From a managerial perspective, for organizations to ensure greater worker productivity, they need to find ways to measure their performance. In this sense, investment in systems for the digitalization of processes is essential, since digital transformation is considered a key factor for the implementation of telework because it also allows the creation of goal-based controls.

Conclusions

This research aimed to analyze the perception of civil employees of a federal government agency about the changes generated by the implementation of telework. It was observed that an excellent appreciation for the flexibility of schedules provided workers with more possibilities for reconciling their family responsibilities with work activities. However, this new routine required, and still does, the need for good personal organization so that all tasks are adequately fulfilled, in a way that may not affect professionals' mental health.

The perception of the workers showed that, for the institution, the changes generated by the implementation of telework were very advantageous, since these changes reduced operating costs, increased the productivity of employees, and provided greater agility in meeting demands, despite the difficulties in using the technology by a portion of the population served. However, the lack of institutional investment in appropriate equipment for telework is a matter of concern because the workers themselves pay for it and can present occupational risks.

The results of this study contribute to understanding the changes generated by the implementation of telework, such as the restructuring of jobs, the readjustment of attributions and competencies of professionals, and, consequently, the emergence of new organizational configurations. Positive and negative impacts for stakeholders (workers, managers, institutions, society) were considered, providing a relevant and current panorama about this work modality boosted by the COVID-19 pandemic. From this perspective, this article provides subsidies for public and private organizations that wish to implement or better develop telework.

The limitations of this work are related to the restriction of data collection, which was done in a regionalized manner, and focused on the perception of the interviewed workers and the public sector. Therefore, it cannot be generalized to the entire institution studied as well as other federal organizations. A survey covering the view of more people from different levels, regions, and sectors, including the private sector and worker predisposition to remote work, may provide more information about the object investigated. Therefore, future studies can complement the data presented and generate new perspectives on the theme.

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