The Double-Edged Sword of Telework:
Insights into Work Intensity During Portugal's COVID-19 Lockdown

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Abstract: The expansion of teleworking and the digital transition movement have given companies and workers great flexibility, albeit with significant organisational consequences. The recent COVID19 pandemic further reinforced the scale of this impact. Thus, the current research aims to understand whether the multiple dimensions of telework have impacted upon workers' time management and work intensity through the unprecedented experiences during the pandemic and, in particular, to assess whether telework intensifies work, in what ways and the main reasons for this. The article analyses the literature on teleworking and work intensity and presents a documentary analysis on the subject, in addition to presenting the results of an exploratory study carried out in 2021 in Portugal which investigates the impact of teleworking on workers' time management. The article underlines that although teleworking can increase a worker's well-being by eliminating travel time, it presents several risks, and namely it can intensify work through increased pressure to meet objectives and targets. Therefore, it is essential to develop research on the effects of telework, particularly assessing the relationship between telework and work intensification, as well as its effects on working conditions and workers' well-being. This research will be an important resource for regulating labour laws and designing human resource management policies.

Keywords: Digital Transition; Working Time Flexibility; Work Intensity; Telework; Individualism at Work

Introduction

Telework and Flexibility at Work

In the 1970s in the USA, Nilles developed the term 'telecommuting' because ICTs enabled companies to relocate their activities away from big cities. This new possibility benefited both employers and employees. Employers benefitted in terms of costs (property, equipment and electricity costs), and employees in terms of time saved on daily commuting (Nilles 1988, 1991). Later 'telecommuting' was generalised to the term telework (Ellison 1999). In the EU, the expression used—maxime by the European Commission and Eurofound—has been "telework" (Eurofound 1995, 1997b; Pennings 1997; European Commission 1998).

Therefore, telework is the form of work carried out from a place that is distant from the company and/or establishment, which allows the physical separation between the place the work is carried out and the place the company operates through the use of information and communication technologies (ICTs). The increase of telework over the last three decades is due to the rapid spread of technologies such as the mobile computer, the Internet and mobile phones (Eurofound 2017, 2018; Eurofound and The International Labour Office 2017). It is important to note that the implementation of teleworking can allow for alternating periods of remote work and face-to-face work.

Telework is essentially based on the logic of labour flexibility aimed at promoting the flexibility of spatial management provided by ICTs. The trend towards more flexible work has increased the need to hire workers remotely in order to carry out work—previously done by workers on the company premises—or at another location chosen by the employee (a coffee shop, a library). The expansion of telework is due to the increase of ICTs and the development of the Internet to replace centralised structures with network structures (web). In this sense, Castells analyses the implications of the Internet, examining the problems and conflicts in the network society (Castells 2002).

The best-known forms of telework—and identified as such—point to organisational modalities designed according to various criteria. Their development is associated with the movement towards flexibility at work. Thus, telework is the result of the labour flexibility movement which sought to

reduce some of the constraints imposed on face-to-face economic activity (Eurofound 1997a; Felstead and Jewson 1999; ILO 2005; Commission of the European Communities 2008). For companies, it corresponds to the desire to make the workplace more flexible by relocating the place of activity and allowing them to gain advantages concerning rental costs. On the other hand, for workers, it may mean access to the labour market through a new way of working, which may be favourable to the worker because it reduces travel time (and frees up time) and increases job satisfaction levels.

Literature shows how telework carried out from home, in addition to promoting the geographic flexibility of workers, is also associated with the promotion of conciliation with family life, allowing to simultaneously ensure the assistance to children or other family members and the performance of domestic tasks (Eurofound 1995, 2015; Fagan et al. 2012; Eddleston and Mulki 2017).

It should also be noted, along with part-time work, teleworking is also linked to the preferences of specific groups of workers, such as disabled workers, those suffering from chronic health problems or those with reduced working capacity when considering the advantage of the elimination of travel (Bosua et al. 2013; Eurofound 2018).

In Europe in the 1990s, it was difficult to do a comparative analysis of telework. Firstly, there was no common definition of a teleworker, but rather a diversity of concepts which highlighted the complexity of this figure (European Commission 1998). In order to delimit the scope of teleworking, there is now considered to be several key elements, namely the geographical extent between the place of production and the place of work, the organisation of work and the use of computer equipment (Rosensohn and Schneider 1997). Furthermore, telework corresponded to very diverse practices, such as teleworking in telecentres in which activities are carried out in a centre equipped with computers where employees of several companies work; telework at home, during which the worker completes their tasks at home using their own computer equipment and technologies; and telework à la carte, for which work is undertaken at home, in the company's office or at the client's premises, depending on his or her preference or that of the employer.

The year 1998 marked a turning point in the development of new working practices (Nilles 1991). However, it was the European Framework Agreement on Telework in 2002 when social partners were made aware of the need to develop policies on telework in the various countries. At the beginning of this century, telework was already significant in relation to the total employment in the Netherlands, Denmark and Finland. The decision taken in 2002 by the European social partners to approve the Framework Agreement on Telework was innovative in three main aspects. Firstly, its content regarding teleworkers' working conditions proposed to ensure a basis for negotiation for inter-professional and sectoral organisations. Secondly, the procedures to be adopted by national and European organisations to create a decentralised negotiating dynamic, and finally, its geographical scope, since the content of the agreement also extended to inter-branch and sectoral organisations in EU candidate countries.

This Framework Agreement on Telework was conceived as fundamental for achieving the objectives of the Lisbon Strategy, particularly for the modernisation of labour markets and the development of the information society (European Commission 1998). Thus, teleworking has been considered a central contract in the Information Society, as it can be adapted to the needs for the better management of time and places of work, in addition to solving problems arising from workers' daily commutes and the space costs of the companies.

Since then, the expansion of telework was due to four factors: the improvement of information technology and telecommunications; the reorganisation of companies in order to outsource and/or subcontract peripheral functions; the growth of the services sector (and the information technology applied to it); and the desire of organisations to create work that seeks greater autonomy on the part of its workers which offers them greater well-being (European Commission 2015; Vander Elst et al. 2017).

Since work-life balance is an objective and a challenge for companies, and society in general, telework has also been at the heart of European social policies. This is also because companies have started to consider central issues in their human resources management, such as work organisation associated with work-life balance or workers' health (Eurofound 2009, 2018; Eurofound and The International Labour Office 2017; European Commission 2020). In this context, teleworking emerges as a widely advantageous phenomenon for companies, not only due to cost reduction (namely, space, maintenance, furniture, parking and energy), but also because of the potential increase in workers' performance. Consequently, employers benefit since teleworking allows an increased proximity to the

client, reduced hierarchical levels within the company and a reduction in the surface of workplaces (for example, from the office to the shop), making investments more profitable. In addition, telework—through the use of ICTs—facilitates communication, boosting labour productivity and, consequently, the competitiveness of companies. Nevertheless, telework may also bring disadvantages for employers since this form of work organisation may imply a profound change in the exercise of employers' management power.

For the worker, the advantages include a reduction in travelling time (and inconvenience) and associated costs, better management of working hours (i.e., less interruptions and harmonisation between personal and professional interests) and possibly higher levels of job satisfaction (Eurofound 1995; Pennings 1997). Thus, telework allows greater flexibility and a sense of control over their work, which makes work more productive and allows a better balance between work and family life (Bosua et al. 2013).

Considering the expansion of the use of telework since the COVID-19 pandemic, this research aims to evaluate the relationship between telework and work intensity, through the identification of boundary conditions and multidimensional analysis.

Eurofound (2009) has produced several studies on what intensity means, linking duration, flexibility and intensity and understanding that there is no straightforward definition of labour intensity due to the variety of perspectives of the actors and forms of work. Therefore, in this study, work intensity will be operationalised as the number of hours worked (and not the type of job, which can also be an indicator of work intensity).

Telework and Work Intensity

Studying the relationship between telework and working time is especially important for labour regulation. For Supiot, telework dismantles the relationship between workplace and time (Supiot 2008). This is especially relevant for labour law since, as Supiot points out, the employment contract is primarily conceived in terms of the employer–servant relationship (i.e., subordination), and working hours are an important limit to activity. Hence teleworking has advantages and disadvantages for employees. The literature has associated the benefits of teleworking with greater autonomy for employees to manage their time (Morgan 2004; Fagan et al. 2012; Henke et al. 2016; Vander Elst et al. 2017).

However, the literature identifies that the impact of long working hours on workers is conditional and that, despite the widespread belief that working long hours is harmful to workers, a strong direct causal effect has not been proven, as the impact of long hours can vary depending on several factors, including working conditions (Ganster et al. 2018). Thus, analysing the relationship between telework and work intensity becomes crucial for assessing the impact of telework on workers' well-being. Some authors maintain that telework as a "virtual place" is also a form of electronic-mediated (dis)incorporation, with consequences such as the intensification of work (Golden and Raghuram 2010; Kelliher and Anderson 2010).

Other studies show that teleworking is associated with specific psychosocial and health effects (Huuhtanen 1997; Hill et al. 2010; Grant et al. 2013; Charalampous et al. 2018), namely psychological problems resulting from isolation, loss of organisational identity and degradation of skills as well as daily workload (Crompton et al. 1996; ILO 2005; Lautsch and Kossek 2011; Grant et al. 2013; Henke et al. 2016). Other studies acknowledge that the working hours of teleworkers are typically longer than those of other workers and that with teleworking there is a risk of work–life overlap due to longer working hours and the mixing of work and domestic activities (Sewell and Taskin 2015; Eurofound 2020a, 2020b).

This idea of work intensification associated with teleworking is also related to the amount of specific business knowledge which can be developed and shared informally through this form of work (Barker and Christensen 1998), since the powers of direction and control over the provision of teleworking work are exercised by means of equipment and ICT assigned to the worker's activity. However, the employer's control of the provision of work must respect the principles of proportionality and transparency, and permanent connection cannot be imposed.

Teleworking facilitates access to employment, but there is a risk that employers perceive teleworkers at home as less committed. On the other hand, since employers tend to resist work processes that are difficult to supervise, many companies consider teleworking as a benefit for

employees. Paradoxically workers may feel that they benefit from teleworking and, to compensate, they may tolerate more working time. Recent literature (Bathini and Kandathil 2019) indicates that at companies in which managers use telework as a benefit for employees, in return, they tend to consent to an intensification of telework, despite opposing intensification of work in the face-to-face regime.

It is also worth mentioning that other authors associate long working hours (60 or more hours per week) with the performance of the ideal worker and ahead of other life responsibilities (Reid 2015). Reid's research shows that men and women have identical problems with working time, revealing their inability to be 'truly ideal workers' by consequently being disadvantaged in performance. Other studies indicate that management style and corporate culture play an essential role in the impact that teleworking has on workers and their work intensity and work–life balance (Fagan et al. 2012; Eurofound and The International Labour Office 2017; Berniell and Bientenbeck 2017; Casper et al. 2018). These studies provided important information for a global analysis of the theme of this article. Thus, seeking to complement these studies, this article aims to find out the perspective of workers—through the unprecedented experiences of the COVID-19 pandemic—on telework, specifically assessing the impact of telework on working time. It should also be noted that studies conducted during the pandemic also offered relevant information for our analysis, particularly about the impact of teleworking on the health and well-being of workers (Charalampous et al. 2021; Hadi et al. 2021; Nagata et al. 2021; Forte et al. 2021; Beckel and Fisher 2022; Petcu et al. 2023).

Thus, the added value of this article is twofold. Firstly, it identifies in recent literature the most pertinent topics of analysis on the relationship between telework and work intensity at a social and legal level. The COVID-19 pandemic offered a unique opportunity to analyse this impact. On one hand, the study was designed to understand whether employed people teleworking during the pandemic perceived that they had more time available for themselves. On the other hand, we wanted to identify employees who perceived a greater intensity of telework and the main reasons that led to this intensification. After analysing the literature, the material and methods section will focus on the methodology based on a desk review and on developing exploratory research on the topic in Portugal. Section 3 presents the results of the survey conducted in Portugal on the working conditions of teleworkers during the COVID-19 pandemic, and their discussions. The final section presents the main conclusions and discusses the policy implications of the findings, highlighting the importance of further studies into the relationship between teleworking and work intensity. We emphasise that the study of this topic represents a significant challenge not only for human resource management but also for labour law in the digital age.

Material and Methods

As mentioned in the Introduction, this article presents a theoretical framework on telework and work intensity and discusses the empirical results of an exploratory study conducted in Portugal. Furthermore, in addition to being an exploratory study, this article offers recommendations for future research on the impact of telework on workers' working conditions, mainly by studying the relationship between telework and work intensification. The empirical analysis of this study is based on the information gathered from analysing the literature and documents. The research strategy was defined in order to apply a quantitative approach, which identifies the risks generated by telework in terms of intensification of working time. Being an exploratory study, this article aims to identify topics of analysis for future research on the subject.

In order to examine the nexus between teleworking and work intensity from different angles, we chose to include only workers with an employment contract, since the average working period/time is a fundamental legal element of this contract.

It is also important to note that the timing of the research was crucial, since teleworking was widely implemented during the pandemic and introduced relevant challenges to the management of companies. The main research question that guided this study was to find out whether the exercise of teleworking intensified work, and if so, in what way. In particular, the following research questions were considered: RQ1—During the period of the pandemic when they were teleworking, did the employees feel more availability for family and personal life? RQ2—If they had a work schedule, did they work overtime? RQ3—If yes, what was the frequency of overtime? RQ4—What were the reasons for these overtime hours?

With the goal of identifying new relevant research topics on the relationship between teleworking and working time, priority was given to the collection of data on the perceptions of the survey respondents. If, partially, the results of this exploratory study confirm a set of aspects also identified in other studies on the subject mentioned in the Introduction of this article, some topics proved innovative, allowing the exploration of new lines of research.

Documentary Analysis on Telework in Portugal

To frame this theme in the context of the Portuguese labour market, it is worth mentioning several studies recently carried out on working conditions and telework. First, in 2018 the ILO published a study on the various problems of the labour market in Portugal, particularly analysing the increase in normal working periods from 2008 to 2018 (ILO 2018). Later, another ILO study sought to assess the impact of COVID-19 on the Portuguese economy and labour market, in particular the use of telework (ILO 2020). In addition, there was a noteworthy study conducted in Portugal in 2020 (Rebelo et al. 2020) based on interviews conducted with employers' confederations and trade union confederations. This study into the repercussions of teleworking during the pandemic was based on semistructured interviews with employer confederations and trade union confederations in Portugal and sought to understand how social actors assess the effects of teleworking on worker's well-being.

The recommendations of the 2002 Framework Agreement on Telework have strongly impacted several European countries. In 2003 Portugal was one of Europe's first countries to introduce provisions in labour law on telework. The legal regime has remained practically unchanged since 2003—except for some changes in 2015—until 2021. Recently Law no. 83/2021, of 6 December, significantly changed this regime.

In line with the proposal made by the European Commission (European Commission 2020) before the pandemic, in Portugal, the Resolution of the Council of Ministers No. 30/2020 created an Action Plan for Digital Transition, considering that this is one of the essential instruments of the country's development strategy. With the COVID-19 pandemic, the generalisation of teleworking became a unique challenge because it accelerated the implementation of these objectives. What is observed is that today many more employees work remotely or are in a mixed regime, alternating face-to-face and remote work during the week.

In Portuguese law, telework is currently defined as "the provision of work under legal subordination of the employee to an employer, in a place not determined by the latter, through the use of information and communication technologies" (Article 165, paragraph 1 of the Labour Code). On this subject, Portuguese labour law highlights that the employer must ensure that the conditions for the provision of telework are met, ensuring the use of working tools, namely for communication purposes (Article 168, paragraph 1 of the Labour Code).

During the COVID-19 pandemic, the element of volunteerism disappeared. Teleworking became mandatory in Portugal as long as it was compatible with the worker's activity and was adopted by organisations to remain productive.

As stated in the Portuguese Green Book Future of Work, from the Portuguese Ministry of Labour, the massive adoption of this form of work has highlighted the potential advantages of telework, but also the risks associated with it, especially regarding safety and health conditions or the working time (MTSSS 2021). As this Green Book points out, telework also presents the risk of isolation, which is reflected in the lack of social interaction. This isolation tends to increase individualism at work and reduce the worker's power of claim. The worker, feeling more isolated, tends to accept working conditions that he would not have accepted in the past. To this extent, it becomes evident that organisations should implement measures to reduce these risks, namely by preventing situations of isolation or excessive pressure (MTSSS 2021).

An exploratory Study in Portugal

Most studies conducted on teleworking during the pandemic sought to understand the advantages or disadvantages of teleworking. This article focuses, in particular, on the relationship between working time intensity and teleworking. The survey design was also influenced by a study conducted in Portugal in 2020 and based on interviews with social partners and the global assessment of the impact of telework, as well as the ILO study on the impact of COVID-19 on the economy and labour

market in Portugal (ILO 2020). After analysing the literature on teleworking and work intensity, we looked at documents that are a reference for the Portuguese labour market. As we mentioned, the aim was to understand the multiple dimensions of the impact of telework on workers' working time, particularly in terms of work intensity.

As for the instruments and measures of this study, a questionnaire was designed to collect responses on the perceptions of teleworkers, particularly on the issue of overtime. This questionnaire was based mainly on closed questions to facilitate the information analysis. As for the selection criteria, since we only considered it pertinent to apply a survey to teleworkers with an employment contract (and not self-employed workers), the introduction of our survey expressly stated who should be the only ones answering it. We considered this element important, as we tried to understand who, in teleworking, identified the need to remain working beyond the working hours fixed in the employment contract.

All participants were volunteers and were informed about the study's purposes. Informed consent was obtained from all the participants on the understanding that their participation in the study was voluntary, that they could end their participation at any time without consequences and that their information would remain confidential. Data collection took place between November 1st and December 2nd, 2021. An online survey was applied to employees who had teleworked during the COVID-19 pandemic. The survey was structured in two parts, the first with a personal and contractual profile and the other part on working time and working conditions in teleworking. Respondents with employment contracts answered the survey. This "telework survey 2021" with 14 questions (mostly closed, with "yes" and "no" answers, but some of them allowing multiple answers). The first part of the questionnaire refers to the personal and contractual profile of the respondents: gender (Q.1), age (Q.2), marital status (Q.3), number of children (Q.4), education level (Q.5), work category (Q.6), employment contract (Q.7) and seniority at work (Q.8). In the second part of the questionnaire, we assessed working time in particular: availability for family and personal life in teleworking (Q.9), availability reduced and reasons for it (Q.10), type of difficulties of teleworkers in career progression (Q.11), overtime in teleworking (Q.12), frequency of overtime (Q.13) and reasons for overtime (Q.14).

The survey (a non-probability sample) sought to understand if the respondents could reconcile work with personal and family life and assess other dimensions of the impact of telework on workers' time management. In this sense, an individual self-administered questionnaire was developed regarding the following topics: personal profile of respondents (gender, age, marital status, education, children), contractual and professional profile of respondents (professional category, employment relationship and seniority) and also the perception of respondents on the working conditions of teleworking, particularly concerning working time.

Data analysis was restricted to those who self-reported teleworking in 2020 and 2021. Therefore, the analysis focused only on individuals who answered "Yes" to the question, "Were you teleworking in 2020 and 2021?" The final sample size was 167 participants. Hence, the results presented in this section are based on these respondents.

Results and Discussion

In this study the multidimensional nature of the relationship between telework and working time management was considered. The aim was to collect comprehensive information on workers' perceptions of mandatory teleworking time in Portugal during the COVID-19 pandemic. In delimiting the research objectives, the aim was to relate telework to work intensity.

Regarding the personal profile (Q.1, Q.2, Q.3 and Q.4), 71.3% of participants were women; 40.7% of respondents were between 36 and 50 years old (40.1% between 18 to 35 years old, and 19.2% were 51 years or older); 56.9% of respondents were married or in a union; 41.9% of participants have no children (31.1% have two children, 21.0% have one child and 6.0% have three or more children). As to the contractual/professional profile (Q.5, Q.6, Q.7 and Q.8), 39.5% of the respondents are graduates (29.9% are postgraduate, master's or doctorate degrees, 29.9% have up to 12th-grade education and 0.6% have up to the 9th grade); 44.3% of participants are technicians (19.2% of respondents are administrative, 18.0% are directors or managers, 14.4% are other categories not defined and 4.2% are teachers and researchers); 81.4% of people surveyed have a

permanent work contract; and 40.7% of the respondents have seniority up to 5 years (24.0% have more than 20 years, 19.8% have between 11 and 20 years and 15.6% between 5 and 10 years).

The majority of respondents (64.1%) answered that during the period they were teleworking, they felt more availability for family and personal life than previously in face-to-face (Q.9). Although the reason for this greater availability was not asked in the survey, this increase in availability is likely to be related to the elimination of commuting, which allows workers to increase their available time. These results support the thesis that telework fosters employee well-being (Bosua et al. 2013).

Of the respondents who answered "No" to Q.9, recognising that teleworking affords them less availability for their personal and family life, most respondents (65.9%) said it was because they could not disconnect from their activity, 23.2% replied that it was because they had small children, 18.3% of the respondents did not answer or did not know, 14.6% considered to be from working hours and 1.2% because they had a fixed or temporary term (Q.10). This high percentage of respondents answering "not being able to disconnect from the activity" (65.9%) reveals the intensification of work resulting from changes in the organisation of work. It is also of note that only 23.2% of respondents associate this lower availability with childcare-related family demands.

In Q.11 of the questionnaire (which allowed multiple answers) respondents were asked to identify the most significant difficulties in career progression experienced in teleworking. The data reveals that 61.1% of the respondents indicate that the greatest difficulty is related to the isolation of the teleworking worker, 41.9% of the respondents associate these difficulties with stereotypes related to teleworking, 14.4% say they do not know or cannot answer, 13.2% of the respondents associate these difficulties to a lower capacity of leadership, 9% of the respondents consider that it is due to a lower capacity of work and only 3.6% of the respondents associate it with a lower availability for work. The fact that 61.1% of the respondents attribute career difficulties to increased isolation supports our thesis that there is a tendency to increase the individualisation of work relationships, which may weaken the already unbalanced working relationship between employer and employee. These results confirm the position of several previous studies and show that teleworking changes traditional interactions and knowledge sharing within firms (Huuhtanen 1997; Golden and Raghuram 2010; Hill et al. 2010; Grant et al. 2013; Charalampous et al. 2018).

Moreover, as previous studies have suggested, work-family conflict is directly related to work-related well-being and employers should invest in creating favourable working environments in general, particularly in a context of increasing teleworking (Vander Elst et al. 2017). These results also confirm the thesis that there is a positive relationship between telework and well-being, and this form of work allows a better work-life balance to be achieved (Bosua et al. 2013).

Asked whether they had teleworked overtime, the majority of participants (71.9%) answered yes (Q.12). Women are more likely to work overtime (53.3%), whereas only 18.6% of men acknowledge having worked overtime. In addition, when surveyed about the frequency of overtime (Q.13), 54.2% responded that they did it every day, 25% 3 or 8 times a month, 17.5% once or twice a month and 3.3% every day (Figure 1).
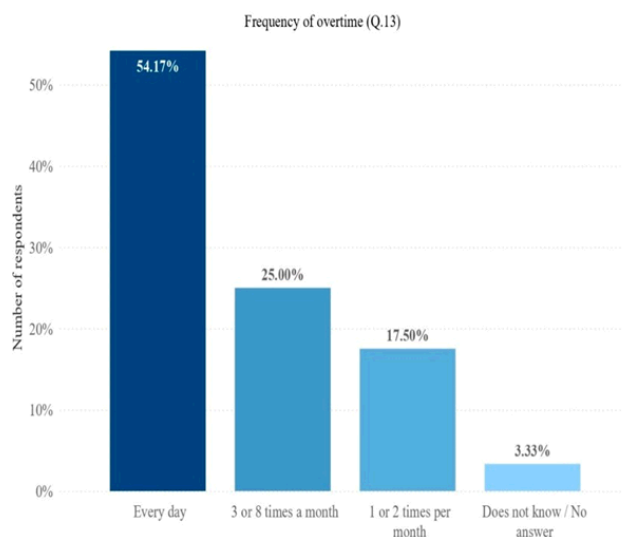

Figure 1. Frequency of overtime.

It is important to note that as to the reasons for this extra work in teleworking (Q.14), the vast majority of respondents (86.7%) answered that it was the sense of responsibility, given the tasks and objectives to be achieved, 9.2% of respondents indicated that it was for the dynamics of teamwork and 4.1% responded that it was due to direct pressure from superiors or employers (Figure 2).
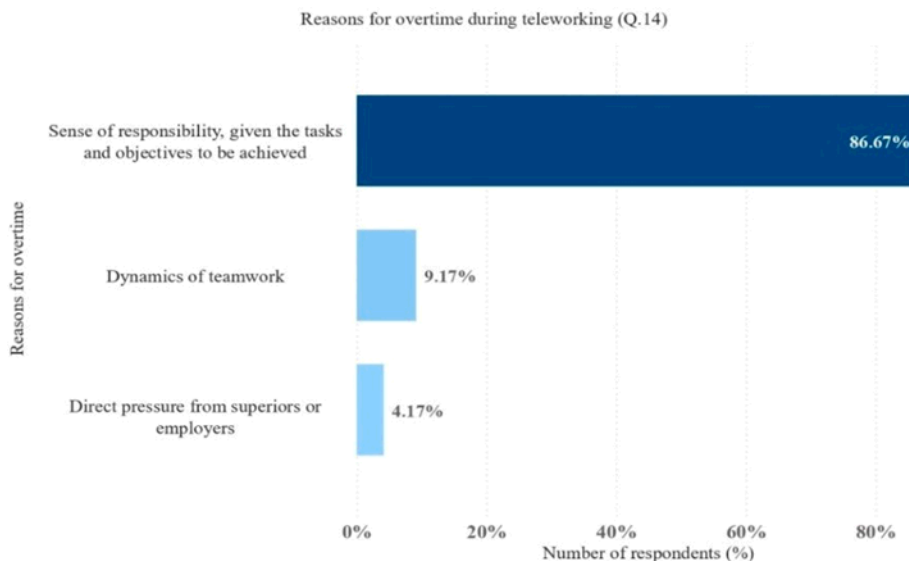

Figure 2. Reasons for overtime during teleworking.

To balance the pre-processed data, the cross-validation method (folds = 10 random subsamples) was employed (Bose 2019). The dataset was divided into ten subsamples at random. All the others served as the training set, whereas one was chosen as the testing set. A separate subsample is then chosen to serve as the next testing set and the procedure is repeated to provide a correct prediction.

The following measures were used to evaluate the performance of the logistic regression classifier: F-measure and Receiver Operating Characteristic curve (ROC).

The former combines precision and recall to produce a classifier accuracy between 0 and 1, with 1 representing the highest level of prediction accuracy (Vickery 2021). The latter gauges a binary classifier's performance by combining true positive and false positive rates. The performance accuracy for the classifier is also provided, ranging from 0 to 100%. Results from the data analysis show how the model identified the factors associated with telework overtime at an 84.16% accuracy rate (F = 0.914 and ROC = 0.492).

Hence, the results show that most individuals worked overtime when teleworking due to their "Sense of responsibility, given the tasks and objectives to be achieved". Females have 3.76 times higher odds of working overtime compared to males. Individuals with less than a university degree have 3.33 times higher odds of working overtime compared to those with a bachelor's degree. Individuals aged 51 years or older have 1.79 times higher odds of working overtime compared to those aged 18 to 35 years. Participants who are divorced or separated have 7.91 times higher odds of working overtime compared to those who are single. Individuals with 3 or more children have 42.6 times higher odds of working overtime compared to those with no children (Table 1).

Again, it is important to note that in their teleworking activity these employees report having felt more pressured to meet targets (and to intensify their working hours). This supports the idea that telework tends to accentuate more goal-oriented activity (rather than working time), which may raise future legal issues.

Concerning the discussion of these results, it is worth stating that our survey specifically aimed to identify employees' perceptions regarding overtime in teleworking. In addition, it also sought to understand the main reasons for overtime in teleworking. As for the reasons for this extra work in teleworking, the vast majority of respondents answered that it was due to a sense of responsibility, given the tasks and objectives to be achieved.

In relation to our first research question, RQ1, which sought to find out if, during the pandemic period when they were teleworking, employees felt more available for their personal and family life,

research results seemed to confirm what other authors pointed out in their studies on how telework influences work-life balance (Fagan et al. 2012; Vander Elst et al. 2017). Our findings confirm that employees generally consider that teleworking allows workers more availability. On the other hand, it also corroborates the studies that identify some negative aspects of teleworking, such as work intensification for some workers (Kelliher and Anderson 2010; Huuhtanen 1997; Hill et al. 2010; Grant et al. 2013; Charalampous et al. 2018).

The results show that those who report increased intensification associate this with the employee's sense of responsibility towards achieving objectives, as identified in the research (Henke et al. 2016). Furthermore, the fact that 86.7% of respondents believe that overtime was due to a response to the proposed objectives points to the presence of a greater pressure at work, confirming other findings (Bathini and Kandathil 2019). This duality—between those who identify more availability of time and those who, on the contrary, quantify more intensification at work—also confirms Supiot's thesis that the new forms of work organisation associated with a flexibilisation of working time give rise to a new concept of working time, more heterogeneous and individualised (Supiot 2008).

Regarding overtime management, when we sought answers to QR2 about whether they worked overtime and how often (QR3) and what were the reasons for such overtime (QR4), the results show that the respondents who have worked overtime acknowledge that they do it every day. Concerning the reasons for this extra work in teleworking, the vast majority responded that it was due to a sense of responsibility, given the tasks and objectives to be achieved. On the other hand, in future studies it will be important to analyse whether the increased pressure on teleworking time increases work-related stress, confirming the results of other studies (Eddleston and Mulki 2017) on the stress generated by teleworking on family life in a pandemic context.

This study sought to understand the link between telework and work intensity during the COVID-19 pandemic. However, it is worth mentioning that some limitations associated with our study, namely the fact that the survey was conducted over the Internet, which may compromise the generalisation of its results. On the one hand, more women than men responded, which may generate a bias. In order to reduce the bias, we sampled the target population according to marital status, number of children and type of employment contract. Another constraint was that the study was conducted under a pandemic so many workers did not have a choice in relation to their teleworking, some exercising this modality involuntarily, which may influence the less favourable opinion for this work modality.

Additionally, in this exploratory study, the main results reveal that the majority of respondents consider that the work demands of pressure to meet objectives and targets are more significant when they are teleworking than when they are face-to-face. It will therefore be important to continue studying this topic, since this pandemic had a disruptive effect and many companies continue their business activity either through teleworking or through the hybrid model (mixed face-to-face and remote). Despite the limitations mentioned above, it should also be noted that the results of our study revealed that women felt greater pressure than men to intensify their work. Thus, these results do not follow research which shows that men and women have identical problems with working time (Reid 2015).

Conclusions and Further Work

The article aimed to assess the multiple dimensions of the impact of telework on workers' time management. It sought to understand whether telework—apart from the benefits already widely identified in the literature for both employers and workers—forces workers to deal with a more significant, intensified workload, and to know the reasons for this. Thus, after a documentary analysis on teleworking and working time, we analysed the relationship through a survey on the perceptions of employees during the significant experience of teleworking during the COVID-19 pandemic.

The survey inquired about the working conditions of Portuguese employees who were teleworking during the COVID-19 pandemic in 2020 and 2021, specifically seeking to understand the relationship between teleworking and intensity at work. Through this survey, we wanted to assess whether teleworking has intensified work and, if so, why and in what way, as well as the consequences. We concluded that the vast majority of employees recognised that, in teleworking, they have more availability for their personal and family life. The respondents who revealed that they had less availability for themselves and their families during the period they were teleworking associated the

intensification of work with their sense of responsibility for the tasks and objectives to be achieved. These results reinforce the idea that telework can put pressure on workers to intensify their work, since feeling more isolated within an organisation can make some workers feel more pressure to perform. This pressure is due to a sense of responsibility, given the tasks and objectives to be achieved, however it is also due to the fear, which is identified here, that their career progression will be harmed.

As for the general findings, it should be noted that more than half of the respondents (64.1%) consider that teleworking gives employees more available time. However, it should be noted that of the respondents who stated that they have less time for themselves— in comparison to face-to-face work—the majority of respondents state that they cannot disconnect from the activity.

Regarding this aspect, it should be mentioned that in 2022 Portuguese law enshrined the right to disconnect (in the form of the employer's duty to refrain from contact) in its Labour Code, both generically in article 199-A and, specifically for telework, in subparagraph b of paragraph 1 of article 169 of the Labour Code. Thus, in future studies, it will be crucial to understand if this new right is being observed by companies and if there are improvements at management level in this area. In addition, it is necessary to assess whether the rules adopted in companies relating to "working time" and "teleworking" are sufficient in order to protect workers, including measures to record, monitor and control their working time. The literature indicates that telecommuting, which reduces the home–work and work–home commute, may even be advantageous to the worker's well-being. However, if teleworking also leads to higher levels of work intensity, mainly due to the pressure exerted on meeting daily work objectives, it is crucial to assess the relationship between teleworking and work intensity. This is especially justified in countries with higher than average working hours, which will allow for the design of appropriate public policies and new labour regulations.

The data from this exploratory study also reveals that the majority of respondents acknowledged having more availability for themselves and their family when they were teleworking. Notably, the majority of those who answered that they did not have more availability, stated that this was due to the fact that they could not disconnect from their activity after working hours. Teleworking gives workers more availability for personal and family life but also puts pressure on their responsibility towards achieving tasks and objectives.

As we have mentioned, there are some limitations associated with our study, namely the fact that the survey was carried out over the Internet, which may compromise the generalisability of its results. Thus, it is recommended that the study of the relationship between telework and work intensity should continue and be developed in future research. Another aspect that should be studied, as highlighted in this article, is the risk associated with the isolation of telework, as it may imply working conditions that the worker cannot compare and control and thus increase individualism at work. This is also an important challenge not only for human resource management but also for labour law.

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