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**The relationship between work regime, work-family balance, job satisfaction and sex on job performance during the Covid-19 pandemic: a moderated mediation model**

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October, 2021





CIÊNCIAS SOCIAIS  
E HUMANAS

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## **Abstract**

To fight the spread of the Covid-19 pandemic across the globe, most countries have installed a mandatory telework regime. Given the abrupt transition to this work reality, it is important to understand teleworkers and on-site worker's perceptions of work-family balance, job satisfaction and job performance during the pandemic. Simultaneously, due to the closing of schools and other services (e.g., babysitting or housecleaning), and the increase of household chores, it is relevant to understand how the work-family balance of female and male workers was affected. The purpose of this study is to analyze the mediating role of work-family balance and job satisfaction on the relationship between work regime and job performance, as well as to understand the moderating role of sex in the said relationship. A study was conducted with a total of 265 participants that completed an online questionnaire shared through social media. The results showed no differences between teleworkers and on-site workers on their work-family balance, job satisfaction and job performance. Furthermore, there was no significant mediating effect of work-family balance and job satisfaction on the relationship between work regime and job performance and sex did not moderate the relationship. Nevertheless, there was a positive correlation between work-family balance, job satisfaction and job performance. This study contributes to the existing literature concerning the role of work regime on job performance during the pandemic, with the main goal of showcasing the importance of work-family balance practices for male and female workers by organizations to increase their job satisfaction and performance.

Keywords: Work regime, job performance, job satisfaction, work-family balance, participant's sex

**APA Classification Code:** 3600 Industrial and Organizational Psychology;  
3660 Organizational Behavior





## Resumo

Para combater a propagação da pandemia por Covid-19 no mundo, a maioria dos países instalou um regime de teletrabalho obrigatório. Devido à abrupta transição para esta nova realidade de trabalho, é importante compreender as percepções dos/as teletrabalhadores/as e trabalhadores/as em regime presencial quanto ao seu equilíbrio trabalho-família, satisfação no trabalho e desempenho no trabalho durante a pandemia. Simultaneamente, devido ao encerramento das escolas e outros serviços (*babysitting* ou limpeza de casa), e ao aumento das tarefas domésticas, é relevante compreender como o equilíbrio trabalho-família dos/as trabalhadores/as foi afetado. O objetivo deste estudo é analisar o papel mediador do equilíbrio trabalho-família e da satisfação no trabalho na relação entre o regime de trabalho e o desempenho no trabalho, assim como perceber o papel moderador do sexo na mesma relação. Foi conduzido um estudo com um total de 265 participantes que completaram um questionário *online*, partilhado através das redes sociais. Os resultados não mostraram diferenças entre teletrabalhadores/as em regime presencial, no seu equilíbrio trabalho-família, satisfação e desempenho no trabalho. Adicionalmente, não houve efeito mediador do equilíbrio trabalho-família e da satisfação no trabalho na relação entre regime de trabalho e desempenho no trabalho e o sexo dos/as participantes não moderou esta relação. O presente estudo contribui para a literatura existente acerca do papel do regime do trabalho no desempenho no trabalho durante a pandemia, demonstrando a importância de práticas de equilíbrio trabalho-família para trabalhadores e trabalhadoras dadas pelas organizações para aumentar a satisfação e desempenho dos/as trabalhadores/as no seu trabalho.

Palavras-chave: Regime de trabalho, desempenho no trabalho, satisfação no trabalho, equilíbrio trabalho-família, sexo dos/as participantes

**Código de Classificação APA:** 3600 Psicologia Social e Organizacional; 3660 Comportamento Organizacional



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## Introduction

Telework is a flexible style of working, present since the mid-1970s, which gained a more prevalent use with the development of information and communication technologies during the 1990s (Shin et al., 2000). Nevertheless, its use is still uncommon in many European countries such as Italy, Greece, or Spain (Belzunegui-Eraso & Erro, 2020). A Eurofound report (2017) showcased that only 3% of workers worked regularly from home and until 2020, only 15% of workers had ever worked from home (Eurofound, 2020). Before the Covid-19 pandemic, Portugal was placed in the middle of the scale, when compared with other European countries, with a telework rate ranging from 15 to 24% (Eurofound, 2020).

Several studies have accounted for the benefits of teleworking both for organizations and for workers. One of the most studied variables is job performance (Bloom et al., 2004). Previous studies show that teleworkers experience an increase in their performance comparing to on-site workers due to several factors like a higher flexibility and autonomy in work (Gajendran & Harrison, 2007), better work-family balance (Hill et al., 2003) and higher job satisfaction (Caillier, 2014). Consequently, nowadays more and more organizations started to promote and encourage flexible work arrangements (i.e., telework) and consequently telework has become a widespread way of working than ever before (Belzunegui-Eraso & Erro, 2020).

This has been even more frequent due to pandemic confinements. On March 11, 2020, the World Health Organization declared the new coronavirus, originated in Wuhan China, in December 2019, as a global pandemic. Since its spread in more than 200 countries, governments instituted a series of social distancing measures to protect the health of its citizens, such as lockdowns and transition to a teleworking or remote work regime (Pedersen & Favero, 2020). In mid-January 2021, Portugal experienced the most severe stage of the pandemic which lead to the government instituting and renewing several states of emergency, with restrictive measures of circulation and mandatory social distancing (lockdown) (Decreto n°3-A/2021). Furthermore, all presential academic activities in kindergartens, schools and universities were suspended (Decreto n°3-C, 2021) and a mandatory telework regime was installed for workers who could perform their tasks at home (Decreto n° 3-A/ 2021), that lasted until 30<sup>th</sup> April 2021, being thereafter not compulsory but still recommended whenever possible.

The pandemic also brought new challenges mainly for female workers (Manzo & Minello, 2020). In Portugal, the reality shared by most couples is characterized by both men and women performing work-related activities in the labor world, but also by an unequal share of responsibility in domestic tasks, with women doing most of the work in this sphere (Torres,

2005). During the pandemic, because of lockdown measures, (such as online schooling for children and mandatory telework), childcare and domestic responsibilities have increased even more for women (Adisa et al., 2021). Even though male partners have increased their participation and contribution to domestic and childcare tasks, it was not enough to balance responsibilities for both members of the couple (Shafer et al., 2020). Consequently, women found it harder to attain work-family balance and manage both work and domestic responsibilities in the pandemic context (Savage, 2020).

Presently, few studies have focused on the relationship between work regime (telework vs. on-site work) and job performance in the context of Covid-19, as well as the role of work-family balance and job satisfaction in this relationship. Furthermore, the differences between male and female teleworkers in terms of their work-family balance and potential relationship with job-related variables such as job satisfaction and work-family balance during the pandemic remains yet unclear.

This way, the present study strives to identify the mediating role of work-family balance and job satisfaction in the relationship between work regime (telework vs. on-site work) and job performance, as well as to identify the moderating role of worker's sex in an telework and on-site regime in the same relationship. Therefore, the main goal is to understand the relationship between work regime (telework vs. on-site work) and job performance, with the specific goals of understanding in what way worker's work-family balance, job satisfaction and participant's sex influence this relationship.

The structure of the dissertation is divided in four chapters. The first chapter will focus on the literature review of the main variables of the study and will identify the main topics that originated the proposed hypotheses. The second chapter will describe the methodology used to measure the variables and to collect data, as well the characterization of the sample. The third chapter will present the main results of the study, and the fourth and final chapter will focus on the discussion of the results obtained and final considerations, showcasing potentials limitations of the study and new directions of future research on the topic.

## Chapter I. Literature Review

### Work regime

Telework has been one of the most prominent new realities in the labor world. It first emerged in the 1970s, alongside the information and communication technology development (Tremblay et al., 2006), with the goal of solving individual, social, and organizational problems (Galv ez et al., 2020). Although there is no consensual definition of telework due to its complex nature, there are two common elements in most definitions: workplace outside of the traditional on-site and use of communication technology. For example, Bailey and Kurland (2002) define telework as working outside the workplace and communicating with it by using telecommunications or computer-based technology.

In terms of the location aspect, some researchers consider telework as the context or environment in which individuals carry their work, and not as an aspect of work itself (B elanger et al., 2013). Although telework has been traditionally conceptualized as working from home (Sullivan & Lewis, 2001), recently, this definition has changed to include a variety of work locations, remote from the main on-site (Baruch, 2001), that give rise to different sub-types of remote work (Huws, 1997). For example, Rosenfield and Alves (2011) conceptualized telework according to different locations: work at home, mobile work, work in remote on-sites, work in satellite on-sites, informal work, and telecentre work.

In the present dissertation, we conceptualize telework as a type of work that takes place at home, with the use of telecommunications, internet, or a computer (Kossek et al., 2006), which gives the employee flexibility and autonomy over their time schedule and place of work (Troup & Rose, 2012).

Research on the potential benefits of telework are mixed. On the one hand, it can bring negative consequences specially in a work-related level (Nicklin et al., 2016). For example, telework can negatively affect the teleworker's relation with coworkers and supervisors over time, due to a feeling of social and professional isolation from the organization (Gajendran & Harrison, 2007). Furthermore, teleworking can lead to career stagnation and lack of career opportunities due to a reduced visibility to the organization (Maruyama & Tietze, 2012). According to Cooper and Kurland (2002), teleworkers perceive less opportunities to promotion, rewards, and positive job reviews since they are away from the organization and from the supervisor's side. Other studies show that telework brings negative consequences for the workers' health. For example, Mann and Holdsworth (2003) found that teleworkers experienced poorer mental and physical health symptoms than on-site workers. These researchers have also shown that teleworking can increase work stress, especially for workers

who have a long experience in face-to-face work practices, because they have to cope with technological changes in the work environment (Fonner & Roloff, 2012).

On the other hand, telework can lead to several positive outcomes. It can reduce traffic and pollution in larger cities, since workers do not have to drive to work and also give equal employment opportunities to every worker to access the labor market (Baruch, 2001). For organizations, it reduces the overall employment costs and for workers it promotes a heightened morale, job satisfaction and increased work-family balance (Allen et al., 2015; Baker et al., 2006). The positive outcomes that workers experience arise from the sense of work autonomy they get from working from home (Clear & Dickson, 2005). Because workers have a more flexible work system and subsequent supervisory changes (worker is remote from the supervisor, so they cannot be directly monitored by them), they experience an increased control over their work situation and freedom to determine several task elements such as: method and pace of work, scheduling and working hours, work criteria and goals, and the amount of work (Dimitrova, 2003).

Finally, it is relevant to mention that one of the most important factors that determine whether teleworkers choose to work from home or not is having proper work conditions to do so, which includes an adequate workspace. Studies show that workers are more reluctant to choose to work from home, when given the choice, if they do not have a separate workspace at home, such as a home office, that allows for a clear division of work and living areas of the house (Iscan & Naktiyok, 2005). This may happen because workspace negatively impacts individual's ability to separate work and family domains, causing both domains to intrude into another (Greer & Payne, 2014).

### **Work regime and job performance**

Job performance is one of the variables frequently studied in the context of work regime, both in telework and traditional on-site settings (Martin & Mesler, 2013). There are two different approaches in the literature to conceptualize job performance: the process of performance (behavioral) and the outcome of performance (output-based) (Demerouti & Cropanzano, 2010). The process approach defines job performance as the behaviors or actions an individual does in the workplace, that are relevant to the organization's goals (Roe, 1999). Following this approach, Campbell (1990) states that individual work performance are the behaviors and actions that are relevant to the goals of the organization. However, only the actions or behaviors that can be scaled or measured are considered apart of performance (e.g., teaching skills, assembling parts of an engine, selling items, programming a software, etc.) (Campbell et al.,



1993). As for the outcome approach, it refers to the consequences of said behaviors or actions, in the form of products or services produced that are consistent with the organization's goals (Roe, 1999; Sonnentag & Frese, 2001).

Most researchers have agreed that performance is a multi-dimensional concept (Pandey, 2018). Traditionally, it has been divided into two dimensions: task performance and contextual performance (Rotundo & Sackett, 2002). Task performance is the ability that individuals have to perform the main tasks of their jobs (Campbell, 1990). Williams and Karau (1991) define it as the actions (technical core), that meet the requirements specified in job descriptions. As for contextual performance, it is composed of the behaviors that support the organizational, social, and psychological environment but that do not contribute (in a direct way) to the organization's performance (e.g., communication and cooperation between colleagues, extra effort and fulfillment of organizational policies and rules) (Borman & Motowidlo, 1993). According to Spector and Fox (2002), those are the voluntary and positive work behaviors that go beyond job tasks and that contribute to the functioning of the organization. Nevertheless, some authors defend the inclusion of another dimension to job performance: counterproductive work behaviors (Viswesvaran & Ones, 2000). These are behaviors that damage the well-being of the organization (Rotundo & Scakett, 2002) which may include absenteeism, theft, substance abuse or off-task behavior, amongst others (Koopmans et al., 2013). The present study follows the definition of performance suggested by Campbell (1990) and Campbell and colleagues (1993) and therefore regards performance through its behavioral aspect or the "process approach". Additionally, it follows the conceptualization of Koopmans and colleagues (2013) that divide it amongst three dimensions: task performance, contextual performance, and counterproductive work behaviors.

In telework literature, numerous studies have reported a positive relationship between telework and worker's individual performance in their job (Kurland & Bailey, 1999; Crandall & Gao, 2005). For example, Hill and colleagues (1998) analyzed the performance of 248 workers and found that teleworker's performance was higher compared to on-site workers. Similar results by Bloom and colleagues (2014) showed that call center workers from a Chinese travel agency who were home-based had an increase of 13% in their performance, comparing to those who worked on an on-site work regime. In a within-subjects design study, Veiga and Kaplan (2015) found that workers had significant higher levels of self-rated job performance when teleworking.

Gajendran and colleagues (2014) used field data from both workers and employers to access their job performance in several organizations and found that telework has beneficial

outcomes for worker's job performance (task and contextual performance). Results from this study also showed that perceived autonomy plays a mediating role in the relationship. In fact, several scholars have theorized that, through perceived autonomy, teleworkers have more time flexibility and control to schedule work routines to better fit their work style or productivity rhythm, as well as to meet job demands more easily (Kossek et al., 2006; Fonner & Roloff, 2010).

Nevertheless, several other factors can account for the positive relationship between telework and job performance. First, studies show that teleworkers put in longer hours of work than on-site workers (Peters & van der Lippe, 2007) and use half of the saved time commuting to work, performing work-related tasks (Hill et al., 1998). According to Gajendran and Harrison (2007), teleworkers may choose to work extra hours or work harder to reciprocate the flexibility provided by the organization. Furthermore, teleworkers can use the extra time and flexible scheduling not only to accomplish work tasks but also to manage and attend to both work and family needs, which increases their ability to accomplish work tasks (Baruch, 2001).

Teleworkers can also focus more deeply on their job tasks, especially on those that involve a need to think and ponder, because there is a lack of distractions and interruptions when working from home (Allen et al., 2003; Fonner & Roloff, 2010). For example, Kelliher and Anderson (2010) showed that teleworkers put more effort in their work tasks (mainly analyzing data and writing documents) because of the absence of distractions from the workplace.

However, telework can also lead to negative outcomes such as a decrease in work performance, mainly due to a feeling of isolation (Beauregard et al., 2019). Golden and colleagues (2008) found that telework negatively impacts the relationship between professional isolation and job performance. Evidence show that telework leads to social and professional isolation, where workers have limited opportunities to acquire information from colleagues in an informal way and consequently become less confident in their work skills and work-related knowledge (Allen et al., 2015; Kurland & Bailey, 1999). These negative outcomes can also extend to the team's performance. For example, Watson-Manheim and colleagues (2006) conducted a study on team virtuality and performance and found that several aspects that can negatively influence team's performance such as: lack of communication and trust, and the ability to fulfill deadlines and deliver objectives on time. Additionally, some studies show telework extent can affect teleworker's productivity. Results from a study by Kazekami (2019) showed that full-time teleworking decreases work productivity, and Riley and McCloskey (1997) emphasized that teleworking ideal schedule to improve productivity is from one to three times a week.

In the context of the Covid-19 pandemic, there are still very few studies that analyze the performance of workers when teleworking and the ones who were available showed mixed results. Some studies show a negative aspect of teleworking on worker's performance. For example, Kumar and colleagues (2021) collected data from 433 professionals in Delhi during the third and fourth lockdown and showed that the difficult implementation of a sudden work from home policy by organizations (operational discomfort) and the home-related distractions during work contributed to higher levels of distress in worker's which negatively impacted their job performance. In Portugal, a study by Tavares and colleagues (2020) strived to characterize the telework experience during lockdown in Portugal and results showed that 44% of participants worked late on their work to compensate the productivity losses during the day, and 29,8% worked during the weekend to compensate the productivity losses during the week.

The context of lockdowns that teleworkers worked in also created challenges for virtual team's performance. Virtual teams had to work virtually for the first time, most of the time without any pre-advance preparations to do so from their organization (i.e., training, design, etc.), which may undermine a successful transition to a digital way of working. Furthermore, the work environment could affect the success of team's results because of a lack of appropriate work conditions such as lack of an adequate and separate workspace in the house and lack of equipment and tools (Costa et al., 2021).

Nevertheless, other studies suggest an improvement in their performance. Summit and colleagues (2021) found a positive association between the telework frequency and their hourly productivity, showing that teleworking increased their working hours, an indicator of work effort during the pandemic. A study by Costa and colleagues (2021) focused on team perceived virtuality (the perceived distance between team members) during lockdown and results evidenced that workers with scheduling autonomy alongside high interdependency (degree to which a task's fulfillment requires the interaction of other team members) experienced stronger outcomes in terms of their perceived team virtuality. Additional results highlight the fact that even though some teams may experience feelings of distance between each other, the effectiveness of the information transmitted is not affected and that the feeling of closeness is not enough to produce changes in task communication. In sum, these results showcase that workers can maintain a performance, similar to those in physical teams, with low satisfaction levels (Costa et al., 2021).

## **Work regime and work-family balance**

The work and family interface has been a subject of particular interest between psychologists, traditionally divided into two domains - work and family – that can impact one another (Netemeyer et al., 1996). Research literature on work-family interface is mixed, with some streams considering it as compatible domains, so that the individual's participation in multiple roles leads to rewards and growth and to work-family balance (Greenhaus et al., 2003), and other streams regarding it as incompatible domains since the participation in both roles leads to stress and strain, originating work-family conflict (Amstad et al., 2011).

There is no general agreement in the literature between a definition of work-family balance (Duncan & Pettigrew, 2012) and the construct can be considered under various theoretical frameworks. For example, under *role balance theory*, work-family balance is defined as a positive commitment to multiple roles, for individuals to lead satisfying, healthy and productive lives (Greenhaus et al., 2003). On the other hand, according to *person-environment fit theory*, Voydanoff (2005) defines the construct as when work and family resources are sufficient to meet work and family demands, promoting an effective participation in both domains. Nevertheless, the most common definition utilized by researchers implies that work-family balance has both positive and negative experiences (Liu et al., 2019) and translates into an absence or low work-family conflict alongside an increased work-family enrichment (O'Driscoll et al., 2006). From this perspective, work-family conflict is defined as the frequency and intensity by which work interferes with family or vice-versa (Grzywacz & Carlson, 2007) and work-family enrichment as the extent to which participation in one role (e.g., work) improves the quality of life in another role (e.g., family) or vice-versa (Greenhaus & Powell, 2006). Both these constructs have a bidirectional nature, where work can benefit the family domain (work-to-family enrichment) or family can benefit the work domain (family-to-work enrichment) (Frone, 2003). At the same time, work demands can make the fulfillment of family responsibilities harder (work-to-family conflict) or family demands can limit the ability to perform work-related tasks (family-to-work conflict) (Voydanoff, 2005).

In a study by Wayne and colleagues (2017), results showed that the work-family conflict and enrichment definition is the most predictive of certain work outcomes (such as job satisfaction). Therefore, since this conception is the most well accepted and well known in the work-family balance literature and since one of the aims of this study is understanding the relationship between work-family balance and certain work outcomes (job satisfaction and performance) it is going to be utilized as the main definition for work-family balance.

Telework has been regarded as solution to solve the work-family conflict and, in turn, improve work-family balance because it facilitates childcare and the organization of household chores (Barber et al., 2015; Hilbrecht et al., 2008). However, working from home has been proven to bring both negative and positive consequences to work-family balance (Towers et al., 2006). From one point of view, working from home causes the blurring of boundaries between life and work domains, causing one to intrude in the other, potentially leading to work-family conflict (Troup & Rose, 2012). For example, Russel and colleagues (2009) studied the influence of flexible work arrangements (such as teleworking) on work pressure and overall work-life conflict and found that working from home is associated with higher levels of work pressure and work-life conflict. Golden (2012) studied the moderator role of telework in the relationship between work-family conflict and family-work conflict and exhaustion and found that both work-family conflict and family-work conflict were associated with more exhaustion, and that this relationship was worse for workers who extensively telecommuted during normal or extra working hours.

However, from another point of view, telework contributes to work and family balance since it gives workers boundary flexibility (i.e., the extent to which workers have control over their work location and schedule) between work and family domains, where they can regulate work and family demands and reduce conflict in both domains (Gajendran & Harrison, 2006). In fact, when working from home, teleworkers can regulate family and work demands through the flexible scheduling of work around family needs and creation of a detached workspace in the house to minimize interferences and interruptions from family (Ashford et al., 2000).

Additionally, they can gain more time, otherwise spent telecommuting to work, that could be dedicated to family responsibilities and activities, diminishing time-based conflict (Greenhaus & Beutell, 1985). For example, in a study by Tremblay (2003) it was found that workers viewed telework as a good alternative comparing to a standard work form because they could reduce travel time, be more time at home, and achieve a good work and family balance. Hill and colleagues (2003) found that home-based workers had more balance and success in both work and family domains, compared to traditional on-site workers and mobile workers. Additionally, other studies focused on telework extent to show that extensive telework has better outcomes for work-family balance and decreases work-family conflict, in comparison to less extensive teleworking (Maruyama et al., 2009). A study by Madsen (2006) found that teleworkers had lower perceptions of various dimensions of work-family conflict than non-teleworkers did. Results showed that because teleworkers had time flexibility to rearrange their

work schedule to work around family commitments, they exhibited lower levels of time-based family-work conflict (interference from the time demands of family role to the work role).

Apart from this, because working from home brings a substantial positive outcome to the teleworker's lives, results also showed a diminished perception of strain-based work-family conflict and family-work conflict (certain behaviors being inappropriately transferred from the work to the family domains and vice versa). Finally, teleworkers also perceived lower levels of behavioral-based work-family conflict (certain behaviors being inappropriately transferred from the work to the family domain).

It is important, nevertheless, to examine the extent of the literature of telework and work-family interface during the Covid-19 pandemic, when workers transitioned from a full-time telework regime and even had family members (e.g., husband/wife and children) all in the same place coexisting, during lockdowns. Blaskó (2020) analyzed the data from the Eurofound's Living, Working and Covid-19 survey, where 62.677 participants, from several countries in Europe and working during the pandemic, responded to questions about their work and family conflict. The results were in line with previous studies showing that teleworking during the pandemic was negatively associated with work interference with family but positively associated with family interference with work. Additionally, parental status and children's ages played a role in this relationship since both work-family conflict and family-work conflict were most frequent amongst parents than non-parents and amongst those who had younger children (less than 12 years old).

Schieman and colleagues (2021) utilized a Canadian national survey and showed that work-life conflict levels decreased significantly from the September 2019 to June 2020. However, when analyzing the role of children's age in the said relationship, results found that teleworkers with children under the age of 13 years old at home had no decrease in work-life conflict, as opposed to workers without children, where their work-life conflict decreased. Similar results from a study in Indonesia during 2020 showed that telework has a significant positive effect on work-life balance, so that the more teleworkers work from home, the higher their work-life balance level (Putri & Amran, 2020).

In a study by Tavares and colleagues (2021) during the lockdown in Portugal, results showed that overall teleworkers considered the adaptation to telework easy or very easy (53,7%) and that, in general, they remained focused in their jobs. Nonetheless, from those participants who reported feeling dispersed in the job, the most mentioned activities considered distracting were: household chores (51,5%) and taking care of minor children (33,1%), evidencing a certain degree of family interference with work-related tasks.

### **The role of sex on the relationship between work regime and work-family balance**

The professional insertion and work conditions of women and men are not equal (Torres et al., 2005). Prior to women's introduction in the labor world and their participation in the workforce, there was a prevalent "masculine model of breadwinning" that stated that men were the responsible member for the income in the family and the childcare and household tasks were assigned to the member of the couple that did not work (i.e., women) (Aboim, 2010). When women were fully integrated in the labor world, there was a shift to a "dual earner couple job model" and both men and women took up work responsibilities (Amâncio & Correia, 2019; Saraceno, 1992). Nevertheless, this change was not accompanied by significant changes in family practices and a more equal task distribution in the household between men and women (Wall et al., 2010). Several authors argue that these inequalities in women's and men's family roles could be explained by dominant gender norms in society that still defend women's traditional role in the family domain, in charge of household and childcare tasks, besides their work role (Bagger et al., 2008; Trappe et al., 2015).

This is the case in Portugal, a reality characterized by prevalent gender inequality, which is aggravated by women's participation in the workforce, leading to a disadvantaged position in gender relationships (Amâncio & Correia, 2019). In a qualitative study, Rosa (2013) interviewed qualified Portuguese women such as doctors, professors, and researchers, with results showing an unequal family division of labor, which sets on the women doing the household chores, and focusing on "male career priority and the primate of family", thus abdicated from their profession in detriment of family centrality. A survey by Perista and colleagues (2016) showed that women worked a total of 4 hours and 23 minutes per day in unpaid work, which is almost double the number of tasks that men performed per day. They concluded that women are still performing a role responsible for household tasks, with a varying degree of collaboration from the husband or partner and that men are simply regarded as a form of help or support. Other studies corroborate these results demonstrating that women perform more housework than men and men are more likely to perform tasks that are already planned and pleasurable than dealing with household tasks and childcare emergencies (Sullivan & Lewis, 2006).

Considering what has been mentioned above, telework can be harmful towards female workers because it reinforces the traditional views of gender norms around family and work responsibilities and confirms women's traditional gender identity (Huws et al., 1996). Although female teleworkers don't recognize, in an explicit manner, that telework can perpetuate women's gender roles in the household, they still agree to said working conditions at home

(Phizacklea & Wolkowitz, 1995). This happens because of the said internalized gender norms that leads them to consider their role as responsible for family duties (on top of the work role) and the male role as mainly responsible for work-related tasks (Trappe et al., 2015).

Diamond (2002) defends that although telework grants male workers the opportunity to help more with domestic tasks like childcare, there is no clear evidence that they do the following and that there is a change in the traditional division of tasks. In this view, telework does not encourage men to do more work in the household and they contribute less to household responsibilities (Sullivan & Lewis, 2001). Said view is supported by Sullivan and *Lewis's exploitation model*, that defends that women are exploited by teleworking in terms of their “work and domestic burden of responsibility” (p. 2). Similarly, Silver (1993) states that teleworking women feel more socially isolated and controlled by their husbands, as well as exploited in terms of combining demands of family and work.

Studies also show that teleworking women suffer from the blurring of boundaries (spatial and temporal) between work and family due to gendered expectations around domestic responsibilities (Ammons & Markham, 2004). In terms of temporal boundaries, women readjust their working schedule around their family member's schedule, which leads to more fragmented working hours and/or working at a more intense pace (Gálvez et al., 2012). Also, the time saved from commuting from and to work every day is spent attending to childcare and housework responsibilities (Hillbrecht et al., 2008). As for spatial boundaries, they often work in a shared area of the house (e.g., kitchen or living room), simultaneously taking care of children to prevent any family-related distraction from the male worker's side, which makes them constantly available to family members (Huws et al., 1990). As for teleworking men, they draw distinction and fully separate said boundaries, having the ability to work longer hours, according to their original work schedule (temporal) and in a separate space in the house (spatial) (Holloway, 2007).

It is also important to consider the role of children in women's work-family interface when working from home. Several studies show that the division of housework between men and women is aggravated after childbirth (Scheiner, 2014) and is consolidated as the children grow up (Grunow et al., 2012). Therefore, when female teleworkers have children, they have an increased volume of family-related work and more responsibility burden (Peters et al., 2004). Furthermore, these added responsibilities for women take so much of their time, that they are unable to have leisure activities of their own (Hillbrecht et al., 2008). Several studies have supported these perspectives. For example, Powell and Craig (2015) studied gender differences in the relationship between telework and time use, and results showed that women who worked



from home regularly spent less time on work activities and more time on domestic and childcare tasks, and also more time multi-tasking work and childcare tasks than men. Johnson and colleagues (2007) conducted in-depths interviews of female teleworkers, suggesting that teleworking mothers of young children tended to organize their working schedules to accommodate their children's needs, and those with older children or with no children were at higher risk of working longer hours, leading to a higher work-family conflict.

Nevertheless, telework can also be beneficial to female workers because of the inherent spatial and temporal flexibility and better management of family needs (Maruyama et al., 2009; Musson & Tietze, 2004). Due to the inequality of domestic responsibilities' division between men and women, workplace flexibility (telework and flexible schedule) has been considered an important resource for women to manage work and home tasks (Blair & Lichter, 1991). Huws (1997) defends a *model of flexibility* in telework that facilitates women's management of work and family domains and promotes an increase in male participation in domestic activities because of a lack of spatial segregation from the family at home (Silver, 1993). In fact, studies suggest that women value flexibility policies (e.g., telework) and are more likely to effectively use these types of policies to accommodate demands from home and work more so than men (Powell & Craig, 2015). Another study by Carlson and colleagues (2010) showed that schedule flexibility played a bigger role in reducing conflict between work and family for women more so than for men. This may happen since women have more family-related demands and are more likely to experience conflict and thus can perceive flexibility as a valuable resource in dealing with both responsibilities.

As for teleworking mothers in particular, several authors defend that flexitime and telework allows mothers to blend or integrate boundaries between work and family domains and combine both responsibilities more easily (e.g., taking care of a sick child while working) (Chung & van der Horst, 2018). For example, Shaw and colleagues (2011) interviewed teleworking women with the goal of examining their everyday lives and work-family responsibilities. The findings showed that female teleworkers reported that their housework and household responsibilities became more manageable, and they had increase time available to spend with children, which contributed to a positive way to balance life. A qualitative study by Hillbrecht and colleagues (2008) found that teleworking mothers report that working at home allows them to better manage work and family demands, through organizing their work schedule according to their children's needs. For example, female workers can arrange their work schedule so that they work when their children are at school or sleeping (Fagan & Press, 2008).

In this light it seems that telework can simultaneously reinforce but also challenge gender norms. Results from a study by Casaca (2002) further evidence this global perspective showcasing that female teleworkers report mixed opinions about telework. While some report advantages such as a better ability to combine work and childcare responsibilities, other point to the loss of professional status and consequently the reinforcement of gender norms.

However, with the rising of Covid pandemic in the globe, there were changes in the work and family lives of men and women, as result of numerous factors, including lockdown and teleworking (Chung et al., 2021). Several studies showcase an unbalanced reorganization of domestic tasks for women during Covid-19, which increases gender inequality (Manzo & Minello, 2020). For example, Adisa and colleagues (2021) interviewed British women about the effect of Covid on their work-family balance. Women mentioned experiencing an increase in domestic workload and that they helped more often children in schoolwork (performing a role like that of a teacher). They also exhibited some degree of role conflict because they had to perform multiple roles at the same time, which contributed to more frustration, putting their work-life balance on hold (Savage, 2020). Similarly, results from a study by Santos and colleagues (2021) in Portugal during the pandemic showed that female workers perceived themselves to dedicate more hours to childcare tasks in comparison to men and that the overall amount of time devoted to non-labor tasks (i.e. household and childcare tasks) was not perceived as fair by them.

Nevertheless, Covid also increased male worker's participation in family duties and responsibilities (Nguyen & Armoogum, 2021). Ayuso and colleagues (2020) found that childcare time increased for both men and women during the pandemic (2.4 hours to 3.1 for men and 3.6 and 4.3 for women) in Spain. Similarly, Shafer and Milkie (2020) state that men perform more family-related duties during the pandemic as opposed to before. However, this does not compensate for the total increase of domestic burden and makes it difficult to balance work and family lives, mainly so for women (Nguyen & Armoogum, 2021). Finally, a Brazilian study by Lemos and colleagues (2021) focused on work-family conflict in a pandemic setting, conducting interviews to female workers. The results suggest that women had an increased corporate workload and family responsibilities, although men helped more at home. In turn, this accumulation of activities had a big impact on their work-family conflict. Additionally, several women reported that despite the workload, they had better balance between work and family and satisfaction, since they could more flexibly combine tasks and spend quality time with family members.

## **Work regime and job satisfaction**

Job satisfaction is one of the most studied constructs in Organizational Psychology (Judge et al., 2017) and has been proven to be connected to several organizational behaviors like task performance, turnover or counterproductive work behaviors (Judge & Kammeyer-Mueller, 2012). Most definitions of job satisfaction incorporate the affective component (Armstrong, 2006). For example, Vroom (1964) defines job satisfaction as an affective orientation from the individual towards his/her current work role. Similarly, Locke (1976) defines job satisfaction as a kind of pleasant or positive affective state, which increases as individuals evaluate their work experience. Brief and Weiss (2002) include the motivational aspect of the construct, stating that it relates to the person's feelings of satisfaction towards their job, that acts as a motivational factor to work. Additionally, other authors consider it as an attitude towards the job. For example, Ilies and colleagues (2009) define it as an employee general attitude towards the job, that if it is positive leads to job satisfaction and if it is negative leads to job dissatisfaction. On another note, some authors like Brown and colleagues (2012) englobe the cognitive aspects of job satisfaction such as the expectations and norms an individual has over objective characteristics of the job.

In the present dissertation, we follow the definition proposed by Judge and Kammeyer-Mueller (2012) that englobes both affective and cognitive components. According to the authors, job satisfaction is an evaluative state of the degree of contentment (cognitive) and positive feelings (affective) towards one's job (in global).

Telecommuting literature has shown mixed evidence linking telework and job satisfaction (Bailey & Kurland, 2002). One stream of studies defends that extensive teleworking leads to a decrease in job satisfaction (Cooper & Kurland, 2002). For example, a study by Golden and Veiga (2005) found that there is a curvilinear relationship between telework extent and job satisfaction, where initially job satisfaction increases as the extent of telecommuting also increases, but at higher levels of telecommuting it levels off and decreases slightly. Additional results showed that when comparing high-levels and low-levels of teleworking, workers who spend a smaller proportion of time telecommuting and a greater proportion at the on-site work have more job satisfaction since they can interact face-to-face with colleagues and minimize isolation. On the other hand, workers who spend a greater amount of time telecommuting and less time at the on-site, feel more socially isolated from the organization, and therefore demonstrate lower levels of job satisfaction (Golden & Veiga, 2006).

In fact, as mentioned in this study, several studies have shown that social isolation plays an important role in explaining the negative relationship between telework and job satisfaction

(e.g., Morganson et al., 2010). For example, Campione (2008) found that teleworkers are more prone to be depressed due to social isolation and lack of face-to-face contact with coworkers. Similarly, a study on team virtuality with a sample from 33 countries showed that social isolation has a negative impact on job satisfaction (Orhan et al., 2016). Workers with a diminished presence in the on-site and relying on technology experience less chances for appropriate communication, sharing of information and discussion of ideas with colleagues or supervisors, which can increase the feeling of social isolation (Lowry et al., 2006). Furthermore, thanks to this feeling of isolation, teleworkers feel excluded from the workplace and lack a sense of belonging to the organization, therefore feeling less satisfaction in their jobs (Golden, 2006).

Another factor that can influence teleworker's decrease in job satisfaction is psychological strain (Bentley et al., 2016). Telework brings with it several stressors, job or non-job related that affect worker's emotional state and subjective experiences of the job, therefore negatively influencing their job satisfaction (Bentley et al., 2016). For example, Suh and Lee (2017) conducted a survey of 258 teleworkers from two global Information Technology (IT) corporations to examine the relationship between technology-induced stressors (i.e., work overload, invasion of privacy and role ambiguity), work strain and job satisfaction in teleworkers. The results demonstrate that techno stressors were positively associated with work strain, which in turn, reduced teleworker's job satisfaction.

On the other hand, telework can also contribute to worker's being more satisfied in their jobs (Fonner & Roloff, 2010). For example, Caillier (2014) found that teleworkers reported higher job satisfaction in comparison to on-site-based workers, confirming past results of a positive association between job satisfaction and telework. A meta-analysis by Gajendran and Harrison (2007) highlighted the positive relationship between telework and job satisfaction, where the advantages globally outweighed the disadvantages of telework. Vega and colleagues (2014) examined the effects of telework level on several variables, including job satisfaction at a within-person and day-to-day level. For this, levels of job satisfaction were measured on five consecutive days, in which workers were working from home or at the on-site. The results showed that workers reported higher daily job satisfaction when teleworking than when working at the on-site. The authors suggest that teleworking could be used to increase or maintain daily satisfaction and that even working one day per pay could influence job satisfaction in that given day.

As mentioned before, one factor that could contribute to teleworker's success is autonomy (Origo & Pagani, 2006). Job autonomy causes worker's to be more satisfied with their jobs

because they feel less supervised by their supervisors and colleagues (due to the physical distancing) and have more autonomy in how many hours they work and how they define their work patterns (Shamir & Solomon, 1985). Additionally, teleworkers more easily avoid workplace distractions and interruptions from work-tasks and disengage from certain on-site policies, which contributes to the fall of stress levels and increase of satisfaction (Nardi & Whittaker, 2002).

A different factor that could help teleworker's satisfaction in their job is organizational social support such as perceived supervisor, co-worker, and organizational support (Bentley et al., 2016). The support from the organization and quality of management style can decrease teleworker's psychological and work strain and, in turn, increase their job satisfaction (Bentley et al., 2016). According to Brunelle and Fortin (2021), teleworking can provide worker's a sense of belonging to the organization if the organization ensures them proper work conditions to fulfill their tasks at home.

In the context of Covid-19, several changes in the work regime transition impacted several work-related variables such as job satisfaction (Nyanga & Chindanya, 2020). The studies conducted on telework and job satisfaction during the pandemic are limited and reach inconclusive findings. For example, a study by Mahringer and colleagues (2021) explored how the satisfaction of work and well-being has changed during the Covid-19 lockdown in Germany and found that remote work did not harm work satisfaction.

On the other hand, Dang and Hong (2020) used qualitative and quantitative methods to examine job satisfaction and perceived advantages and challenges of working from home in 100 teleworkers in Vietnam during social distancing. The findings point to a higher level of job satisfaction (more than 60%) between teleworkers. One possible explanation is the fact that workloads remained the same or just slightly reduced compared to before social distancing. In terms of perceived challenges, participants pointed to distractions in housework (specially for female workers), lack of interaction with the organization and colleagues, ineffective and insufficient working conditions.

Regarding lack of interaction and social isolation, Toscano and Zappala (2020) conducted a quantitative study in the pandemic setting to examine its relationship with perceived remote work satisfaction, among other variables, in Italian workers. The main findings show that social isolation was negatively associated with remote work satisfaction and that the relationship was stronger for workers more concerned with Covid-19. Taken together, social isolation and concern about the pandemic can have a strong effect on remote work satisfaction. Therefore, the authors highlight the importance of interaction with colleagues or supervisors since they

could counterbalance the negative effects of the pandemic concern so that workers appreciate their work more.

Finally, Bulinksa-Stangrecka and Bagienska (2021) studied the impact of two factors on worker's job satisfaction: employee relationships and interpersonal trust during Covid-19 pandemic on 220 Polish IT professionals. Results showed that employee relations have a positive relationship with job satisfaction. Trust in managers and colleagues mediates this relationship, in which interpersonal trust reinforces expectations in the group and colleagues' attitudes that in turn have a positive effect on job satisfaction. In sum, this study highlights the importance of giving space for interaction when doing remote work, since it directly contributes to worker's job satisfaction.

### **The mediating role of work-family balance and job satisfaction**

As mentioned before, telework grants workers a higher sense of autonomy and flexibility as to let them decide how and when their work is completed. A higher control and autonomy at work is proved to have an impact on work to family balance, therefore making worker's family participation easier through more given opportunities, skills, or experiences in that domain (Gryzywacz & Butler, 2005).

In turn, work-family balance can influence individual's attitudes toward non-job and job-related aspects (Haar & Bardoel, 2008), such as their job satisfaction (Rogers & May, 2003). Several studies show that there is a positive relationship between work-family balance and job satisfaction (e.g., Oosthuizen et al., 2016). For example, Wayne and colleagues (2004) evidenced that work-family facilitation was positively correlated with job satisfaction and with effort. Some authors have proposed an explanation to why work-family balance produces positive outcomes on the work domain that lies on the fact that individuals attribute benefits experienced in the receiving role (i.e., family role) to the sending role (i.e., work role) (Carlson et al., 2006). The attribution of benefits to the work role result in more positive affect and behavioral investment in that same role (Wayne et al., 2004). Therefore, it is expected that workers who experience work-family balance will attribute the benefits received in the family role to the originating work role and consequently increase their affect towards that role in the form of an increase in their job satisfaction.

Furthermore, it has been established that job satisfaction can lead to a better performance (e.g., Wyland et al., 2015). Drawing on social psychology theories (Ajzen & Fishbein, 1980), attitudes are important predictors of behaviors directed to one's role (Eagly & Chaiken, 1993). Workers evaluate attitudes in function of the satisfaction of their needs in the organization

(Vroom, 1964) and engage in behaviors that express and match said attitude (Harrison et al., 2006). This way, workers who evaluate their attitudes as positive and favorable to the organization, tend to engage in behaviors to support them (Eagly & Chaiken, 1993). Therefore, affective attitudes towards a job (job satisfaction) should be related to positive job behaviors such as an increased performance (Judge et al., 2001). Several studies support this perspective. For example, Judge and colleagues (2001) reviewed 312 samples from 254 quantitative and qualitative studies and found a moderate correlation between job satisfaction and job performance. Similar results from a smaller meta-analysis from 12 studies from 1971 to 2008 found a moderate correlation between job satisfaction and job performance (Davar & Bala, 2012). Moreover, previous studies show that work-family conflict mediates the relationship between telework and job satisfaction (e.g., Choi & Kim, 2012) and that job satisfaction mediates the relationship between work-family balance and job performance (Hornug & Glaser, 2009).

Taking the previous information into consideration, we argue that a teleworking regime enhances worker's sense of personal work autonomy and flexibility. Through these perceptions, workers receive more work-related opportunities and resources to improve their functioning in the family role and manage both domains, therefore increasing their work-family balance. Furthermore, workers attribute the benefits gained in the family role towards the work role and increase their affect in it through the display of satisfaction in their job. Finally, workers evaluate their job satisfaction as a positive and favorable attitude towards the organization and consequently display behaviors that support that attitude (i.e., display positive behaviors to match positive attitudes) in the form of a better performance.

### **Overall model: the role of sex**

The above model can also be seen in terms of differences between both women and men. In telework literature, very few studies have approached men and women's work-related outcomes such as job satisfaction and performance. A study by Bae and Kim (2016) showed that female workers present lower job satisfaction when their organization adopts teleworking program but does not implement it to its workers. Another study by Feng and Savani (2020) focused on gender gaps in a work context during the Covid-19 pandemic. The results showed that women reported being less satisfied in their jobs and less productive compared to before the pandemic.

The pandemic brought new realities such as lockdowns and school's closing causing women to work from home all day long, with children at home, which increased their home-related responsibilities (Savage, 2020). Additionally, working from home during the pandemic

has also been associated with longer working hours and increased workload (Wang et al., 2020). According to Gutek and colleagues (1991), the more hours a person works in paid work and family roles, the more they will perceive work-family conflict.

Additionally, considering *gender role theory*, women perceive their family role as central to their identity more so than men, which consequently increases their family responsibilities (e.g., childcare and household chores) (Gutek et al., 1991). Carlson and Kacmar (2000) stated that when individuals perceive their relevant or central roles as threatened, they tend to evaluate the source of the threat in a negative manner. Therefore, women who perceive work-family conflict are more likely than men to develop a negative attitude toward their job because they see it as a threat towards their central identity – their family role (Feng & Savani, 2020). Furthermore, these negative attitudes towards their job can be translated into lower levels of job satisfaction and work productivity (Kossek & Ozeki, 1998). Supporting this hypothesis, Feng and Savani (2020) state women’s lack of ability to balance work and family demands can make job satisfaction and performance difficult to maintain.

In sum, it can be argued that although teleworking female workers have autonomy and flexibility to manage work and family duties, they also experience an increase workload both in their job and in their family prevention of the Covid-19 pandemic constraints (i.e, lockdowns, shutdown of schools, telework). Due to this workload, they face more difficulties in juggling responsibilities leading to a decrease in their work-family balance (consequently increasing work-family conflict). As their family role is crucial for their identity, they perceive their job as a threat towards their identity and negatively appraise it. Consequently, they form a negative attitude towards the job in the form of a lower job satisfaction and performance.

Based on the information mentioned above, the following hypotheses can be proposed:

H1: Teleworkers have a higher job performance than on-site workers.

H2: Teleworkers have a higher work-family balance than on-site workers.

H3: Teleworkers have a higher job satisfaction than on-site workers.

H4: Participant’s sex moderates the positive relationship between work regime and work-family balance, so that the relationship is weaker for women than for men.

H5: Work-family balance and job satisfaction sequentially mediate the relationship between work regime and perceived job performance.

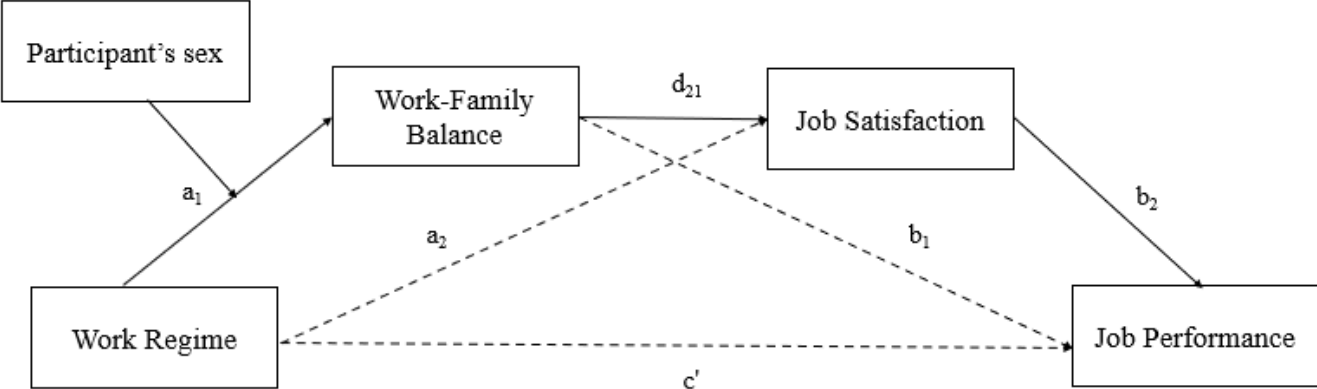


H6: Participant’s sex moderates the indirect relationship between work regime and perceived job performance through work-family balance and job satisfaction, so that the indirect positive relationship is weaker for women than for men.

The moderation is expected to occur in the first path, associating work regime with the first mediator (work-family balance). See Figure 1.1 for a conceptual model.

**Figure 1.1**

*Conceptual model*





## Chapter II. Method

### Participants

The current study has a sample of 265 participants. These were selected through a convenience sample method according to the following inclusion criteria: be more than 18 years of age, currently employed and living together in a heterosexual couple. About 25% of participants were male ( $n=65$ ) and 76% were female ( $n=200$ ). The average age of participants was 39 years ( $SD = 12.3$ ), with a minimum age of 19 and a maximum of age of 73 years. Men had an average age of 43 years ( $SD = 1.30$ ) and women an average age of 38 years ( $SD = 0.70$ ). Forty percent of participants were married and 29% had children under the age of 12 living with them. Approximately 25% of participants had a pre-Bologna bachelor's degree ( $n=65$ ) and 87% were employed workers, on behalf of an organization. Sixty two percent ( $n=165$ ) of participants were teleworking and 38% ( $n=100$ ) were working in an on-site regime. About 86% worked in the services sector, and 68% hold a technical position (or equivalent) within the organization. From those who were teleworking, 35 were male, 130 were female and 60% worked in the services sector. From the on-site workers, 30 were male, 70 were female and 40% worked in the services industry (see Appendix B). Sixteen percent of teleworkers ( $n=42$ ) reported being remote working for about 10 months and 37% ( $n=98$ ) reported having a space to work at home.

### Procedure

To collect the data, an online questionnaire was developed in Qualtrics software (Qualtrics, Provo, UT) with an estimated duration of about 6 minutes. The questionnaire was divided in three parts. The first part contained the informed consent, conditional to proceeding, which included contact information, as well as information regarding expected duration, tasks required, absence of risks, voluntary participation, and confidential and anonymous treatment of information. In the second part, they responded to the scales mentioned below and to their respective socio-demographic information (e.g., sex, age, work regime, etc.). Finally, in the third part, they were shown the debriefing form that gave information about the studies' goal and provided some contact information for further questions or comments about the study. The questionnaire was shared online through social media (i.e., Facebook, LinkedIn, Twitter) and informal contacts. Before its sharing, the following was submitted to ISCTE Ethical Committee for evaluation of ethical and scientific guidelines and subsequently approved. Data collection took place for about 2 months (from January 5<sup>th</sup> until March 17<sup>th</sup> 2021) and the collected data were subsequently analyzed with *IBM SPSS Statistics 27* and the Macro – PROCESS, version 3.4 (Hayes, 2018).

## **Instruments**

### ***Work-Life Balance Scale***

Work-family balance was measured through Hayman's *work-life balance scale* (2005), designed to measure work-life balance in organizations. This scale is composed of 15 items, divided into three main subscales. The first is *work interference with personal life*, which includes work-related factors that can impact an individual's personal life, in a total of seven items. One example of an item is "My personal life suffers because of work". The second one is *personal life interference with work*, measuring the impact of personal life on individual's work, with four items (e.g., "My personal life drains me energy for work"). The third one is *work personal life enhancement*, the way through which work and personal life can enhance each other, with four items (e.g., I have a better mood at work because of personal life; I have a better mood because of my job). All the items are measured in a Likert scale, ranging from 1 (never) to 7 (always) and were translated to Portuguese through the method of back-to-back translation (Behling & Law, 2000). The associated internal consistency of the scale was high ( $\alpha = .83$ ).

Work-family balance has been measured in the literature through several approaches such as the "components approach", which incorporates work-family enrichment and work-family conflict scales and both directions of the relationship (work-to-family and family-to-work), which is the case of the *work-family balance scale* (Tetrick & Buffardi, 2006). This way, the construct was measured through the overall three different subscales, not requiring performing a principal components analysis.

### ***Short Index of Job Satisfaction***

Job satisfaction was measured through a validated Portuguese version (Sinval & Marôco, 2020) of the *Short Index of Job Satisfaction* (SIJS) first developed by Brayfield and Rothe (1951). It was designed as an overall measure of job satisfaction, rather than a measure specific dimensions of the construct (Brayfield & Rothe, 1951). It consists of a total of five items from the original 18 items scale, measured in a 5-point *Likert* scale from 1 (Strongly Disagree) to 5 (Strongly Agree). One example of an item is "I feel fairly well satisfied with my present job". Previous studies show that it has a good internal consistency ranging from .89 to .82 (Judge & Bono, 2000). Here, the scale had a good internal consistency ( $\alpha = .78$ ).

### ***Individual Work Performance Questionnaire***

Work performance was measured through the validated English version of the *Individual Work Performance Questionnaire* (IWPQ) (Koopmans et al., 2016), originally developed by Koopmans and colleagues (2013). It is a measure of perceived individual work performance based on individual self-reports of workers (Koopmans et al., 2016). In total, it is composed of 18 items, divided into three subscales. The first subscale is task performance with a total of five items (e.g., “I was able to plan my work so that I finished it on time”). The second one is contextual performance with eight items (e.g., “On my own initiative, I started new tasks when old tasks were completed”). The third one is counterproductive work behaviors with five items (“I made problems at work bigger than they were”). Both task and contextual performance are measured through a 5-point *Likert* scale from 1 (seldom) to 5 (always) and counterproductive work behaviors is measured through a 5-point *Likert* scale ranging from 1 (never) to 5 (often). The English adaption of the questionnaire presents very good internal consistency for task performance ( $\alpha = .79$ ), for contextual performance ( $\alpha = .83$ ) and for counterproductive work behaviors ( $\alpha = .89$ ). All the scales were translated to Portuguese through the method of back-to-back translation (Behling & Law, 2000).

Even though job performance has been considered a multi-dimensional measure in the literature, some studies have also provided cues for a composite measure, with a larger general factor (Viswesvaran et al., 2005). To clarify this matter, a principal components analysis (PCA) was conducted, revealing three main components of job performance. After rotation, results showed that the first factor explained 25.7% of the variance and had strong loadings in the first eight items, the second factor explained 18.3% of variance and had strong loadings in items 9-13 and the third factor explained 15.1% and had strong loadings in items 14-18 (see Appendix A).

Two items: “On my own initiative, I started new tasks when old tasks were completed” (*Por iniciativa própria, comecei novas tarefas quando as antigas foram concluídas.*) and “I was able to carry out my work efficiently” (*Consegui desempenhar o meu trabalho de forma eficiente*) had adequate loadings in the first and second factor ( $> .30$ ). The first item had the highest loading in the first factor (.59) and the second item in the second factor (.69). Each factor’s items correspond to the original dimensions proposed in the scale IWPQ (Koopmans et al., 2013). Therefore, factor 1 represents task performance, factor 2 contextual performance and factor 3 counterproductive work behaviors.

Taking into account previous literature regarding a composite measure of job performance, alongside a good internal consistency of the three subscales combined ( $\alpha = .89$ ) and considering

technical issues related to the analysis tool (Process's Macro, Hayes, 2018) only allows one dependent variable at the same time in the model), we opted to aggregate the previous subscales (task performance, contextual performance, and counterproductive work behaviors) into a single variable – job performance. Lastly, it is important to highlight that in order to conduct the principal component's analysis, counterproductive work behaviors scale's items were reversed.

### ***Socio-Demographic Variables***

Socio-demographic variables included participant's age, sex, education background, marital status, employment status, position in the organization, work regime type and duration of work in said regime. Age was measured through an open-ended question (in years). Participant's sex was measured through a nominal scale with two categories (1= male or 2= female) and education background was measured through a 9-point ordinal scale (from 1= 1<sup>st</sup> cycle of studies to 9 = PhD). Marital status was measured through a 5-point nominal scale (1 = single, 2= married, 3 = non-marital partnership, 4= divorced, 5= widow). Employment status was measured through a 3-point nominal scale (1= independent worker, 2= work on behalf of others and 3= mixed status). Position in the organization was measured through a 3-point ordinal scale (1= director, 2= middle manager and 3 = technician or equivalent). Finally, work regime was measured through a 3-point nominal scale (1 = telework regime, 2= on-site working or 3= a mixed regime<sup>1</sup>) with a follow-up open-ended question regarding the duration of time (in months) on the said work regime (telework or mixed).

Further, some additional questions were included in the questionnaire, that acted as covariates in the data analyses. These included the presence of children under the age of 12 and a separate workspace in the house to work in when teleworking, through a question of yes/no. Previous studies show that there are significant differences between female and male workers in their work-family balance, when they have young children (Fagan & Press, 2008). A question about the participant's sector of work activity was also added and measured through a nominal scale from 1 to 7 (1 = Education, 2= Health, 3= Justice, 4= Hospitality, catering, and tourism industries, 5= Services, 6= Art and Culture, 7= Other).

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<sup>1</sup>The original sample had a total of 404 participants who worked either from home, in the office or in a mixed work regime. However, to serve the purpose of directly comparing telework vs. office work regimes, participants in a mixed work regime were excluded from the data analyses.

## Chapter III. Results

### Descriptive statistics and correlations

Table 3.1 presents the descriptive statistics (mean and standard deviation), internal consistencies and bivariate correlations for all constructs. Work-family balance and job satisfaction's average value are located above the respective scale's midpoint ( $M = 4.02$ ,  $SD = 1.34$ ;  $M = 3.77$ ,  $SD = 0.92$ , respectively) and job performance's average is located the scale's midpoint ( $M = 3.37$ ,  $SD = 0.77$ ).

A Pearson correlation coefficient revealed that work-family balance was positive and significantly correlated with job satisfaction ( $r_{(263)} = .30$ ,  $p < .001$ ) and with job performance ( $r_{(263)} = .18$ ,  $p = .004$ ). Additionally, job satisfaction was significantly correlated with job performance ( $r_{(263)} = .27$ ,  $p < .001$ ). Spearman correlation coefficients revealed that work regime was positively correlated with having children under 12 ( $r_s(263) = 0.16$ ,  $p = .01$ ) and negatively correlated with work sector ( $r_s(263) = -0.33$ ,  $p < .001$ ). Further, participant's sex was negatively correlated with children under 12 ( $r_s(263) = -0.13$ ,  $p = .03$ ).

Table 3.1.

*Construct means, standard deviations, correlations, and reliabilities*

Variable	M	SD	1	2	3	4	5	6	7
1. Work regime	-	-							
2. Work-family balance	4.02	1.34	.03	(.83)					
3. Job satisfaction	3.77	0.92	-.07	.30**	(.78)				
4. Job performance	3.37	0.77	.07	.18**	.27**	(.82)			
5. Participant's sex	-	-	-.10	-.12	-.08	-.06	1		
6. Children under 12	-	-	.16*	.05	-.07	.05	-.13*	1	
7. Work sector	-	-	-.33*	.07	-.01	-.01	-.06	-.07	1

\*  $p < .05$ , \*\*  $p < .01$

A non-parametric correlation coefficient (Spearman  $r_s$ ) was considered for the analysis of categorical variables (children under 12, participant's sex, work regime and work sector)

### Hypotheses' testing

Teleworkers showed lower levels of perceived job performance ( $M = 3.35, SD = 0.75$ ) than on-site workers ( $M = 3.40, SD = 0.81$ ). However, the One-way ANOVA test results showed that these differences were not significant ( $F_{(1, 263)} = 0.20, p = .66, \eta_p^2 = .001$ ). So, hypothesis H1 that teleworkers have a higher job performance than on-site workers was not supported.

Teleworkers showed lower levels of work-family balance ( $M = 4.00, SD = 1.34$ ) comparing to on-site workers ( $M = 4.07, SD = 1.34$ ). Results from the One-Way ANOVA revealed that this difference was not significant ( $F_{(1, 263)} = 0.18, p = .68, \eta_p^2 = .001$ ). Therefore, H2, proposing that teleworkers have a higher work-family balance than on-site workers was not supported.

Finally, teleworkers showed higher levels of job satisfaction ( $M = 3.82, SD = 0.90$ ) than on-site workers ( $M = 3.68, SD = 0.94$ ). The main effect of work regime on job satisfaction was not significant ( $F_{(1, 263)} = 1.42, p = .24, \eta_p^2 = .005$ ), evidencing that there were no significant differences between teleworkers and on-site workers (see Table 3.2). This way, H3 that teleworkers have a higher job satisfaction than on-site workers was not supported.

**Table 3. 2.**

*Descriptive statistics of work-family balance, job satisfaction and job performance depending on the work regime*

	Work regime groups					
	Telework			On-site		
	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>
Work-family balance	4.00	1.34	165	4.07	1.34	100
Job satisfaction	3.82	0.90	165	3.68	0.94	100
Job performance	3.35	0.75	165	3.40	0.81	100

Note: N=265.

Model 6 from Hayes's (2018) macro-PROCESS was used to test whether work-family balance would mediate the relationship between work regime and job performance (H5) and model 83 to test whether participant's sex would moderate the indirect effect (H6), with predictors centered and 10000 bootstrap samples requested to estimate indirect effects. Additionally, we chose to include the control variable "work sector" in both models as covariate, and the covariate "presence of children under the age of 12" in the moderated mediation model.



The sequential mediation model explained 5% ( $R^2 = .05$ ) of job performance variance and was significant ( $F_{(4,258)} = 3.62, p = .01$ ). The moderated mediation model explained 5% ( $R^2 = .05$ ) of job performance variance and was also significant ( $F_{(5,257)} = 2.93, p = .01$ ) (see Tables 3.3 and 3.4).

The interaction effect between work regime and participant's sex on work-family balance was negative and not significant ( $B = -0.51, t = -1.30, p = .19$ ), meaning that participant's sex did not significantly influence the relationship between work regime and work-family balance (see Table 3.4). In this way, H4 that participant's sex moderates the relationship between work regime and work-family balance was not supported.

The indirect effect of work regime on job performance through work-family balance and job satisfaction was positive but not significant ( $B = 0.004, 95\% CI [-0.01; 0.02]$ ) (see Table 3.3). Therefore, there is no statistical evidence to support H5 that work-family balance and job satisfaction sequentially mediate the relationship between work regime and job performance. However, the path between work-family balance and job satisfaction ( $B = 0.21, t = 5.13, p < .001$ ) and between job satisfaction and job performance was positive and significant ( $B = 0.13, t = 2.46, p < .01$ ).

Finally, results from the index of moderated mediation suggest that the conditional indirect effect of work regime on job performance via work-family balance and job satisfaction did not significantly differ according to participant's sex ( $B = -0.01, 95\% CI [-0.05; 0.01]$ ) (see Table 3.4). This way, H6 that participant's sex moderates the indirect relationship between work regime and job performance through work-family balance and job satisfaction, so that the positive indirect relationship is weaker for women than for men was not supported.

**Table 3. 3.**

*Result summary for Hypothesis 5 (Sequential Mediation)*

<i>Antecedent</i>	Work-family balance (M1)			Job Satisfaction (M2)			Job performance (Y)		
	<i>Coeff.</i>	<i>SE</i>	<i>p</i>	<i>Coeff.</i>	<i>SE</i>	<i>p</i>	<i>Coeff.</i>	<i>SE</i>	<i>p</i>
Work Regime (X)	0.15	0.18	.42	-0.17	0.12	.15	0.07	0.10	.49
Work-family balance (M1)	-	-	-	0.21	0.04	<.001***	0.07	0.04	.05**

Job Satisfaction (M2)	-	-	-	-	-	-	0.13	0.05	.01***
Work Sector (covariate)	0.05	0.04	.24	-0.02	0.03	.53	0.001	0.02	.10
Constant	3.59	0.38	<.001***	3.24	0.29	<.001***	2.48	0.30	<.001***
	$R^2 = .01$			$R^2 = .10$			$R^2 = .05$		
	$F_{(2,260)} = 0.79, p = .46$			$F_{(3,259)} = 9.25, p < .001***$			$F_{(4,258)} = 3.62, p = .01***$		

<i>Partially standardized relative indirect effects</i>	<i>Coeff.</i>	<i>Boot SE</i>	<i>Lower level Boot IC</i>	<i>Upper level Boot IC</i>
Indirect Effect via M1 (a <sub>1</sub> b <sub>1</sub> )	-0.01	0.03	[-0.07	0.05]
Indirect Effect via M2 (a <sub>2</sub> b <sub>2</sub> )	0.11	0.02	[-0.07	0.08]
Indirect Effect via M1 and M2 (a <sub>1</sub> d <sub>21</sub> b <sub>2</sub> )	0.004	0.01	[-0.01	0.02]

Note: N= 263. All estimates for the mediation were tested for significance using bias-corrected (BC) confidence interval from 10000 bootstrap samples.

\*\*  $p < .05$ , \*\*\*  $p < .01$

**Table 3. 4.**

*Result summary for Hypothesis 6 (Moderated Mediation)*

<i>Antecedent</i>	Work-family balance (M1)			Job Satisfaction (M2)			Job performance (Y)		
	<i>Coeff.</i>	<i>SE</i>	<i>p</i>	<i>Coeff.</i>	<i>SE</i>	<i>p</i>	<i>Coeff.</i>	<i>SE</i>	<i>p</i>
Work Regime (X)	0.97	0.70	.17	-0.15	0.12	.21	0.07	0.10	.53
Participant's sex (W)	0.42	0.60	.49	-	-	-	-	-	-
Work-family balance (M1)	-	-	-	0.21	0.04	<.001***	0.07	0.04	.06
Work regime x Participant's sex	-0.51	0.39	.19	-	-	-	-	-	-
Job Satisfaction (M2)	-	-	-	-	-	-	0.13	0.05	.01***
Children under the age of 12 (covariate)	0.15	0.19	.42	-0.15	0.12	.22	0.05	0.10	.64

Work sector (covariate)	0.04	0.04	.33	-0.02	0.03	.53	0.001	0.02	.95
Constant	2.73	1.21	.02	3.45	0.34	<.001***	2.40	0.34	<.001***
	$R^2 = .03$			$R^2 = .10$			$R^2 = .05$		
	$F_{(5,257)} = 1.33, p = .25$			$F_{(4,258)} = 7.32, p < .001***$			$F_{(5,257)} = 2.93, p = .01***$		
Change (X*W)	$R^2 = .01$								
	$F_{(1,257)} = 1.70, p = .19$								

<i>Conditional Indirect Effect</i>	<i>Coeff.</i>	<i>Boot SE</i>	<i>Lower level Boot IC</i>	<i>Upper level Boot IC</i>
<i>Indirect Effect via M1 (a<sub>1</sub> b<sub>1</sub>)</i>				
Men	0.03	0.03	[-0.01	0.01]
Women	-0.003	0.02	[-0.04	0.03]
Index of Moderated Mediation	-0.04	0.03	[-0.11	0.02]
<i>Indirect Effect via M1 and M2 (a<sub>1</sub> d<sub>21</sub> b<sub>2</sub>)</i>				
Men	0.01	0.01	[-0.004	0.04]
Women	-0.001	0.01	[-0.01	0.01]
Index of Moderated Mediation	-0.01	0.01	[-0.05	0.01]

N = 265. All estimates for the moderated mediation were tested for significance using bias-corrected (BC) confidence interval from 10000 bootstrap samples.

\*\*  $p < .05$ , \*\*\*  $p < .01$

## Additional Analyses

### *Task performance, contextual performance, and counterproductive work behaviors*

An additional analysis was performed to further investigate the relationship between work regime and the different aspects of job performance – task performance, contextual performance, and counterproductive work behaviors in the previous model.

The task performance model explained 8% ( $R^2 = .08$ ) of task performance variance and was significant ( $F_{(5,257)} = 4.72, p < .001$ ). Work regime did not predict task performance ( $B = -0.10, t = -0.89, p = .38$ ). Work-family balance positively predicted job satisfaction ( $B = 0.21, t = 5.19, p < .001$ ) and task performance ( $B = 0.15, t = 3.78, p < .001$ ), but job satisfaction did not predict task performance ( $B = 0.07, t = 1.21, p = .24$ ). The interaction effect between work regime and participant's sex on work-family balance was negative and not significant ( $B = -0.51, t = -1.30, p = .19$ ) as well as the index of moderated mediation ( $B = -0.01, 95\% CI [-0.03, 0.01]$ )

The contextual performance model explained 10% of contextual performance variance ( $R^2 = .10$ ) and is significant ( $F_{(5,257)} = 5.71, p < .001$ ). Work regime did not predict contextual

performance ( $B = 0.18, t = 1.52, p = .13$ ). Work-family balance significantly predicted job satisfaction ( $B = 0.21, t = 5.19, p < .001$ ) and job satisfaction predicted contextual performance ( $B = 0.30, t = 5.02, p < .001$ ). The index of moderated mediation was not significant ( $B = -0.03, 95\% CI [-0.09, 0.01]$ ).

The counterproductive work behaviors model explained 20% of counterproductive work behaviors variance ( $R^2 = .20$ ) and is significant ( $F_{(5,257)} = 13.01, p < .001$ ). Work regime does not predict counterproductive work behaviors ( $B = -0.09, t = -1.10, p = .27$ ). However, work-family balance positively predicts job satisfaction ( $B = 0.21, t = 5.19, p < .001$ ) and job satisfaction negatively predicts counterproductive work behaviors ( $B = -0.24, t = -5.69, p < .001$ ). The index of moderated mediation was not significant ( $B = 0.03, 95\% CI [-0.01, 0.07]$ ).

**Table 3.5.**

*Task Performance result summary*

	Work-family balance (M1)			Job Satisfaction (M2)			Task performance (Y)		
<i>Antecedent</i>	<i>Coeff.</i>	<i>SE</i>	<i>p</i>	<i>Coeff</i>	<i>SE</i>	<i>p</i>	<i>Coeff.</i>	<i>SE</i>	<i>p</i>
Work Regime (X)	0.97	0.70	.17	-0.15	0.12	.21	-0.10	0.11	.38
Participant's sex (W)	0.42	0.60	.49	-	-	-	-	-	-
Work-family balance (M1)	-	-	-	0.21	0.04	<.001***	0.15	0.04	<.001***
Work regime x Participant's sex	-0.51	0.39	.19	-	-	-	-	-	-
Job Satisfaction (M2)	-	-	-	-	-	-	0.07	0.06	.24
Children under the age of 12 (covariate)	0.15	0.19	.42	-0.15	0.12	.02	0.17	0.11	.13
Work Sector (covariate)	0.04	0.04	.33	-0.02	0.03	.53	-0.02	0.02	.35

Constant	2.73	1.21	.02	3.45	0.34	<.001***	2.71	0.37	<.001***
	$R^2 = .03$			$R^2 = .10$			$R^2 = .08$		
	$F_{(5,257)} = 1.33, p = .25$			$F_{(4,258)} = 7.32, p <.001***$			$F_{(5,257)} = 4.72, p <.001***$		
Change (X*W)	$R^2 = .01$								
	$F_{(1,257)} = 1.70, p = .19$								

<i>Conditional Indirect Effect</i>	<i>Coeff.</i>	<i>Boot SE</i>	<i>Lower level Boot IC</i>	<i>Upper level Boot IC</i>
Indirect Effect via M1 (a <sub>1</sub> b <sub>1</sub> )				
Men	0.07	0.05	[-0.02	0.18]
Women	-0.01	0.03	[-0.07	0.06]
Index of Moderated Mediation	-0.08	0.06	[-0.20	0.03]
Indirect Effect via M1 and M2 (a <sub>1</sub> d <sub>21</sub> b <sub>2</sub> )				
Men	0.01	0.01	[-0.01	0.03]
Women	-0.001	0.004	[-0.01	0.01]
Index of Moderated Mediation	-0.01	0.01	[-0.03	0.01]

N = 263. All estimates for the moderated mediation were tested for significance using bias-corrected (BC) confidence interval from 10000 bootstrap samples.

\*\*  $p < .05$ , \*\*\*  $p < .01$

**Table 3.6.**

*Contextual Performance result summary*

	Work-family balance (M1)			Job Satisfaction (M2)			Contextual Performance (Y)		
<i>Antecedent</i>	<i>Coeff.</i>	<i>SE</i>	<i>p</i>	<i>Coeff.</i>	<i>SE</i>	<i>p</i>	<i>Coeff.</i>	<i>SE</i>	<i>p</i>
Work Regime (X)	0.97	0.70	.17	-0.15	0.12	.21	0.18	0.12	.13
Participant's sex (W)	0.41	0.60	.49	-	-	-	-	-	-
Work-family balance (M1)	-	-	-	0.21	0.04	<.001***	-0.01	0.04	.74

Work regime x Participant's sex	-0.51	0.39	.19	-	-	-	-	-	-
Job Satisfaction (M2)	-	-	-	-	-	-	0.30	0.06	<.001***
Children under the age of 12 (covariate)	0.15	0.19	.42	-0.15	0.12	.22	-0.04	0.12	.71
Work sector (covariate)	0.04	0.04	.33	-0.02	0.03	.53	0.02	0.03	.51
Constant	2.73	1.21	.02	3.45	0.34	<.001***	2.26	0.39	<.001***
	$R^2 = .03$			$R^2 = .10$			$R^2 = .10$		
	$F_{(5,257)} = 1.33, p = .25$			$F_{(4,258)} = 7.32, p <.001***$			$F_{(5,257)} = 5.71, p = <.001***$		
Change (X*W)	$R^2 = .01$								
	$F_{(1,257)} = 1.70, p = .19$								

<i>Conditional Indirect Effect</i>	<i>Coeff.</i>	<i>Boot SE</i>	<i>Lower level Boot IC</i>	<i>Upper level Boot IC</i>
<i>Indirect Effect via M1 (a<sub>1</sub> b<sub>1</sub>)</i>				
Men	-0.01	0.02	[-0.07	0.04]
Women	-0.001	0.01	[-0.19	0.02]
Index of Moderated Mediation	-0.01	0.03	[-0.04	0.07]
<i>Indirect Effect via M1 and M2 (a<sub>1</sub> d<sub>21</sub> b<sub>2</sub>)</i>				
Men	0.03	0.02	[-0.01	0.08]
Women	-0.003	0.01	[-0.03	0.02]
Index of Moderated Mediation	-0.03	0.03	[-0.09	0.01]

N = 263. All estimates for the moderated mediation were tested for significance using bias-corrected (BC) confidence interval from 10000 bootstrap samples.

\*\*  $p < .05$ , \*\*\*  $p < .01$

**Table 3.7.***Counterproductive work behaviors result summary*

	Work-family balance (M1)			Job Satisfaction (M2)			Counterproductive work behaviours (Y)		
<i>Antecedent</i>	<i>Coeff.</i>	<i>SE</i>	<i>p</i>	<i>Coeff</i>	<i>SE</i>	<i>p</i>	<i>Coeff.</i>	<i>SE</i>	<i>p</i>
Work Regime (X)	0.97	0.70	.17	-0.15	0.12	.21	-0.09	0.08	.27
Participant's sex (W)	0.42	0.60	.49	-	-	-	-	-	-
Work-family balance (M1)	-	-	-	0.21	0.04	<.001***	-0.10	0.03	<.001***
Work regime x Participant's sex	-0.51	0.39	.19	-	-	-	-	-	-
Job Satisfaction (M2)	-	-	-	-	-	-	-0.24	0.04	<.001***
Children under the age of 12 (covariate)	0.15	0.19	.42	-0.15	0.12	.22	0.01	0.08	.89
Work sector (covariate)	0.15	0.19	.42	-0.02	0.03	.53	-0.01	0.02	.48
Constant	2.73	1.21	.02	3.45	0.33	<.001***	3.33	0.27	<.001***
		$R^2 = .03$			$R^2 = .10$			$R^2 = .20$	
		$F_{(5,257)} = 1.33, p = .25$			$F_{(4,258)} = 7.32, p <.001***$			$F_{(5,257)} = 13.01, p <.001***$	
Change (X*W)		$R^2 = .01$							
		$F_{(1,257)} = 1.70, p = .19$							
<b>Conditional Indirect Effect</b>				<b>Coeff.</b>	<b>Boot SE</b>	<b>Lower level Boot IC</b>	<b>Upper level Boot IC</b>		
						<b>IC</b>			

Indirect Effect via M1 (a <sub>1</sub> b <sub>1</sub> )				
Men	-0.05	0.04	[-0.13	0.02]
Women	-0.01	0.02	[-0.04	0.05]
Index of Moderated Mediation	-0.05	0.04	[-0.02	0.14]
Indirect Effect via M1 and M2 (a <sub>1</sub> d <sub>21</sub> b <sub>2</sub> )				
Men	-0.02	0.02	[-0.06	0.01]
Women	-0.002	0.01	[-0.02	0.03]
Index of Moderated Mediation	0.03	0.02	[-0.01	0.07]

N = 263. All estimates for the moderated mediation were tested for significance using bias-corrected (BC) confidence interval from 10000 bootstrap samples.

\*\*  $p < .05$ , \*\*\*  $p < .01$

### **Workspace**

An additional analysis was conducted in Process (model 6) to understand the role of an individual workspace on its relationship with job performance, through work-family balance and job satisfaction of teleworkers. As mentioned before, an adequate and separate workspace in the house when teleworking is an important factor that could impact worker's willingness to work from home. If workers do not possess such conditions, they could be affected by distractions and interruptions, which may have consequences for their ability to work successfully (Greer & Payne, 2014).

The workspace model explains 16% of job performance variance ( $R^2 = .16$ ) and is significant ( $F_{(4,159)} = 7.26, p < .001$ ). The individual workspace did not predict job performance ( $B = 0.18; t = 1.50, p = .14$ ), but positively predicted work-family balance ( $B = 0.80, t = 3.91, p < .001$ ) and job satisfaction ( $B = 0.40, t = 2.75, p = .01$ ). Work-family balance positively predicted job satisfaction ( $B = 0.13, t = 2.50, p = .01$ ) and job satisfaction positively predicts job performance ( $B = 0.17, t = 2.61, p = .01$ ).

The indirect effect between workspace and job performance through work-family balance and job satisfaction was significant ( $B = 0.02, 95\% CI [0.05, 0.002]$ ). This way, having an individual workspace at home promotes a higher work-family balance, which in turn, leads to a higher job satisfaction and higher job performance, specifically for those who work from home. Since the direct effect of workspace on job performance was not significant ( $B = 0.18, t = -1.50, p = .14$ ) and the indirect effect was significant ( $B = 0.02, 95\% CI [0.05, 0.002]$ ), there was a full mediation of work-family balance and job satisfaction on the relationship between workspace and job performance.







## Chapter IV. Discussion

### 4.1 Findings

The aim of the present study was to understand the relationship between work regime (telework vs. on-site work) and job performance, as well as the role of work-family balance, job satisfaction and the participant's sex in the said relationship.

The first hypothesis was not supported, meaning that job performance did not differ between teleworkers and on-site workers. These results are in line with previous investigation that found no differences between the daily level of job performance in workers when they were at the on-site and when they were teleworking (Delanoeije & Verbruggen, 2020). Similarly, results from a meta-analysis by Gajendran and Harrison (2007) found that teleworking was not positively associated with a higher performance, when the performance was self-rated. In this way, it seems that workers who had to adjust to a new work regime in a pandemic context (i.e., telework), did not suffer negative setbacks in their job performance levels, when compared to on-site workers.

During the pandemic, teleworkers reported an increase in their weekly working hours, compared to before transitioning to a remote work regime (Deole et al., 2021) as well as more dedication, vigor and absorption when performing work-related tasks (Palumbo et al., 2020). Nevertheless, results from other studies suggest that teleworkers experienced productivity losses throughout their workday, higher distress levels due to home-related distractions (i.e., household tasks and taking care of children or other family members) and overall worse communication and perceived feelings of distance between coworkers (Tavares et al., 2020; Costa et al., 2021),

To compensate for these losses, they often would have to work overtime in the evening or during the weekends (Tavares et al., 2020). Additionally, to give response to the working hours increase and the precarious situation from Covid-19, workers experienced sickness presenteeism and continued working even when feeling or being sick and unable to do so, consequently suffering losses in their productivity (Chang et al., 2021)

Therefore, it seems that although teleworkers experienced drawbacks in their performance when working from home, such as distractions, work interruptions and work when sick, they counteracted these negative effects by working harder during their normal schedule and by scheduling their work to meet job-related demands (by working overtime), resulting in an increase of their overall working hours. Because of this, teleworkers could maintain levels of job performance similar to those experienced in a traditional on-site work regime.

Additionally, even though workers suffer from lack or poor communication with colleagues and co-workers and from a consequent feeling of isolation, studies show that the quality of information shared between team-members when teleworking is not affected. So, teleworkers can maintain similar levels of performance comparing with being in an on-site regime, even when not displaying high levels of satisfaction (Geister et al., 2006; Costa et al., 2021).

Another factor that could help explain these results is the pandemic situation in Portugal. It is known in the literature that when the Covid-19 pandemic aggravated, teleworkers experience only a small increase in their working hours (Deole et al., 2021). In this case, the number of working hours seems to be maintained comparing to an on-site regime. This could be because, during emergency state, workers spent more time doing groceries or going out for a walk. From January until March 2021, Portugal experienced its most intense phase of the pandemic, with mandatory lockdown and state of calamity being declared. Therefore, it seems that Portuguese workers performed a similar number of hours as when they were on-site, due to restrictions imposed by the severity of the pandemic situation (such as queues in the supermarket, going to the pharmacy etc.), resulting in an also similar level of job performance.

The second hypothesis was not supported, meaning that teleworkers do not have a higher level of work-family balance in comparison to on-site workers. It seems that teleworkers and on-site workers do not exhibit significant changes in their work-family balance. Previous studies support this pattern of results. For example, a study by Morganson and colleagues (2010) showed that teleworkers and on-site workers reported similar levels of work-family balance. It seems that telework brought advantages and disadvantages which counteracted with one another, causing the levels of work-family balance to remain identical.

Working from home during the pandemic has showcased highlighted family-related responsibilities such as more childcare and household tasks (Schieman et al., 2021). More so, the lockdown measures that confined family members all in the same workspace during the day to perform their tasks (being children or adults), promoted an equally higher number of distractions inherent of family-related matters that negatively impacted teleworker's work as there was a higher chance for communication between individuals (Carvalho et al., 2021). However, even though teleworkers experience more family-related distractions, they also experience a reduction in the number of work-related distractions to their work. For example, they do not have opportunities to easily interact with colleagues or do coffee breaks during the workday (Blaskó, 2020). Considering the presented situation, it could be that the heightened family-related distractions and decrease work-related distractions could balance each other out

as to not promote significant differences in teleworker's experiences of work-family balance, when compared to office workers.

Further, as a response to this increased stress upon teleworkers, an inevitable renegotiation of boundaries took place between family members such as dividing family chores, defining time spend working and attending to family needs and putting physical boundaries on the working space (Boca, 2020). Studies show that during the Covid-19 pandemic, the distribution of domestic labor and childcare between both members of the couple tended to be more egalitarian (Chung et al., 2021). So, the equal distribution of domestic tasks between family members could also potentially alleviate the negative impact of the increase of household and childcare responsibilities on teleworker's work-family balance, causing them to maintain similar levels as on-site workers.

Additionally, previous evidence points to the fact that the instauration of a telework regime, in the short term, is not by itself a strong determinant of any impact on worker's level of work-family balance (Bellmann & Hubler, 2020). In fact, it is a situation where a worker has been working long term at home that could potentially affect his/her work-family balance (Bellman & Hubler, 2020). Thus, it could be that teleworkers do not report any increase or decrease in their work-family balance level compared to on-site workers since they have not had enough time working from home to change their ability to successfully manage work and family responsibilities.

The third hypothesis was also not supported, meaning that the level of job satisfaction did not vary in teleworkers vs. on-site workers. Morganson and colleagues (2010) found similar results stating that job satisfaction did not change between teleworkers and on-site workers. Mahrng and colleagues (2021) found that telework is not significantly associated with work satisfaction. The authors concluded that remote work does not harm work satisfaction, even during lockdown but that at the same time, changing work locations is not enough to produce changes in the well-being and job satisfaction among workers if other factors are not also adapted.

A previous line of investigation showed that teleworkers experience several challenges working from home that could potentially negatively affect their job satisfaction (Gajendran & Harrison, 2006). First, they often report a lack of interaction with work colleagues, since teleworkers do not have the ability to easily interacted with them face-to-face as before (Tavares et al., 2020), therefore contributing to a feeling of social isolation (Bandara & Senanayaka, 2020). Second, in face of an eminent economic crisis and loss of monetary resources, organizations were forced to cut down on a significant number of workers. This brought a new

sense of job instability for many workers, who feared they could lose their jobs at any moment (Sefora et al., 2021). Third, the data collection time frame corresponded to the most severe stage of the pandemic in Portugal. Because of this, at the time, workers could have been more prone to experience an increase in fear of contracting the disease (Abd-Ellatif et al., in press).

Nevertheless, these negative outcomes could have been compensated by some positive outcomes teleworkers experienced working from home. In Portugal, studies show that the transition to telework was perceived as easy or normal for most workers, and also that fully adapting to this type of regime took in average just a matter of days or weeks (Tavares et al., 2020). Additionally, teleworkers report being satisfied with their overall working conditions, such as salary, workload, and responsibilities (Karacsony, 2021), which could indicate they did not experience major changes in them, since transitioning to telework (Dang & Hong, 2020). On top of this, workers gained more autonomy and flexibility in their jobs to perform work tasks when and how they want, because they have less opportunities for direct supervision during the working day. Taking this into consideration, the easy transition to telework may help explain why that teleworkers could maintain similar levels of job satisfaction comparing to on-site workers.

On another note, there is a reported curvilinear effect of telework extent on job satisfaction, where job satisfaction remains identical when workers are teleworking for around 15 hours or more per week (Golden & Veiga, 2005). In the context of the pandemic, teleworkers were working from home full-time (about 8 hours per day), which did not allow any chance to improve communication with colleagues and/or supervisors.

Another possible explanation for this pattern of results lies on Sparrow's (2000) concept of "perceptual framing". The author argues that when workers are faced with an unexpected event or change (in this case, transition from an on-site work regime to a mandatory telework regime), they adjust the expectations of said event and consequently do not significantly alter their perceptions about what they are experiencing at the moment. Applying the concept to the pandemic context, workers who are faced with a transition to a telework regime, can adjust the expectations of the said event and therefore not change drastically their perceptions about certain variables related to telework (such as job performance, work-family balance, and job satisfaction).

The fourth hypothesis was not supported so that the positive relationship between work regime and work-family balance is not moderated by participant's sex (where the effect is weaker for women than men). This way, the relationship between work regime and work-family balance remains the same, irrespective of the worker's sex. It is documented in the literature

that telework could bring advantages and disadvantages to women's ability to balance work and family demands. On one note, female teleworkers have work flexibility and save more time being home that would be spent telecommuting that could be used to attend to family and household tasks (Sullivan & Lewis, 2001). They also gained more opportunities to spend time with their partner or children and feel closer to them, contributing to a healthy family life (Adisa et al., 2021). Studies also show that during lockdown female workers received support from their organization such as incentives, allowing flexibility and instrumental and emotional support both from coworkers and supervisors (Uddin, 2021). Since workers who perceive their organization as supportive of their family needs, are more likely to experience reduced levels of work-family conflict (van der Lippe & Lippényi, 2020), it could be an important factor to explain why women have a better work-family balance. On another note, due to lockdown measures, women experienced an increase in domestic tasks (since schools closed and cleaning and babysitting services were put on hold) and frequent distractions from the family side (e.g., attending to children's needs in a meeting), that could compromise their ability to manage both domains successfully (Adisa et al., 2021).

In the case of male teleworkers, studies show that they started to significantly contribute to household tasks and childcare responsibilities, performing more daily hours during lockdown, compared to before the pandemic (Nguyen & Armoogum, 2021). For example, a study in Australia found that men increased their hours dedicated to family-related responsibilities such as household chores and childcare by 64%, compared to before the pandemic (Craig & Churchill, 2020).

Therefore, it seems that although women experienced setbacks such as an increase of domestic tasks and distractions from work (Santos et al., 2021), they also experienced more chances to be with family members and more help from their male partners, equally sharing responsibilities amongst each other (Lemos et al., 2021). Therefore, the positive and negative factors of working from home could balance themselves out and explain why the relationship between work regime and work-family balance was not weaker for female teleworkers. As for men, their number of family-related tasks and household chores seemed to come closer to those of women, comparing to before the pandemic, explaining why the relationship is also not stronger for them (Nguyen & Armoogum, 2021).

As for the role of children in the work-family balance of female and male teleworkers, studies show that mothers with young children have more difficulties obtaining work-family balance because of the unequal task distribution between the couple, which results in added responsibilities of childcare, beside household chores for them (Fagan & Press, 2008).

Nevertheless, since during lockdowns fathers took on a great share of these tasks with their partners, the amount of burden related to having a young child (time spent, energy) was more equally shared (Ayuso et al., 2020), and therefore the presence of a young child may not necessarily undermine one sex more than the other in terms of work-family balance. This explains why the moderated effect of participant's sex remained not significant, when controlling for the presence of children under the age of 12.

Another potential explanation could lie on women's gender role. Traditional gender roles associating the female as in charge of childcare and domestic responsibilities and the male as in charge of work-related activities contribute to the centralization of domestic roles in women's lives (Coban, 2021). Women view their gender role as a central part of their own identity (Feng & Savani, 2020) and perceive performing domestic work as an act that fulfills their gender-related expectations and confirms their femininity (West & Zimmerman, 2009). Studies show that even if the number of hours or tasks related to the female role increase, this is perceived by women as less of an imposition as opposed to spending more time in the other domain (such as work) (Guttek, 1991). In sum, women may disregard the negative consequences of lockdown such as an increased family tasks because for them performing this type of tasks symbolizes that they fulfilled their gender role expectations and maintained their identity as a woman. Consequently, they may not be aware of a decrease in their work-family balance because they are able to give response to these responsibilities as before. Additionally, teleworking during lockdowns could change gender roles for the male workers, since they may perceive childcare and household contributions as more normative and begin to share their tasks equally with female partners, therefore reducing the gender gap in work-family balance (Carli, 2020).

The last two hypotheses were not supported so that work-family balance and job satisfaction do not mediate the relationship between work regime and job performance (H5) and that this relationship does not differ between men and women (H6). Corroborating findings from previous studies, these results pointed to a positive relationship between work-family balance and job satisfaction, and between job satisfaction and job performance (Wayne et al., 2004). However, there was no significant relationship between work regime and work-family balance. This could be because the Social Exchange mechanism was not at play in the context of the pandemic. *Social Exchange Theory* (Blau, 1964) defends that individuals choose behaviors that maximize their gains and invest in a relationship depending on the benefits they expect to receive from it, so that the more a relationship is beneficial for an individual, the more he/she will be invested in that relationship (Kim, 2016). One of the concepts of this theory is the *norm of reciprocity* (Gouldner, 1960) that states that when individuals receive benefits from



one element of the exchange relationship, a sense of indebtedness arises which makes them feel obligated to retribute said benefits through social behaviors. Before the pandemic, some organizations installed formal flexibility policies which included the option to telework in order to improve worker's ability to balance work and family spheres (Kossek et al., 2006). In this scenario, workers may perceive flexibility policies as actions that benefit them in terms of improvement in work-family balance (Lapierre et al., 2008) and, in turn, feel the need to reciprocate with positive attitude towards the entity or individual who provided them with such benefits. Such actions or attitudes are documented in the literature to include, amongst others, a higher satisfaction with the job and higher job performance (Carlson et al., 2010). Despite what has been said, the current circumstances have forced organizations to implement a mandatory telework regime for most workers. On that account, workers may not perceive teleworking as a benefit that the organization provides which should be reciprocated with actions that could benefit it, since it was not their voluntary choice to do so.

As for job performance dimensions, the results showed a similar pattern so that work regime did not significantly predict task performance, contextual performance, or counterproductive work behaviors. The results also evidenced that work-family balance is positively associated with job satisfaction and job satisfaction, in turn, is positively associated with contextual performance and negatively associated with counterproductive work behaviors. Thus, when workers have work-family balance, they will be more satisfied in their jobs, which in turn, will make them have a higher contextual performance and lower counterproductive work behaviors.

However, these results do not apply to task performance. This could be explained by the very nature of task performance, contextual performance, and counterproductive work behaviors. Contextual performance corresponds to a specific type of extra-role performance behaviors that help shape the organizational, social, and psychological environment in which the work tasks and processes occur (Meyers et al., 2019). These behaviors are a way that workers can give back to their organization such as volunteering to perform extra tasks, support organizational goals, help colleagues, etc. (Edwards et al., 2008).

As for counterproductive work behaviors, these correspond to harmful behaviors to the interests of the organization and its members (Fox et al., 2001). When workers are satisfied and experience feelings of enjoyment in their jobs, they are less likely to break internal organizational rules and, instead, abide by them, therefore showcasing a decrease in their counterproductive work behaviors (Fatima et al., 2012). Considering *social exchange theory* (Blau, 1964), workers who perceive a good work-family balance and are satisfied with their

jobs will be more likely to retribute to the organization through their contextual performance (e.g., through extra- role tasks) and avoid performing behaviors that could potentially harm or damage the organization. However, the case for task performance may be different, since these are the behaviors that are prescribed and mandatory in a worker's work role, contributing for the organization's technical core (Campbell et al., 1993). Job satisfaction does not impact significantly task performance since these are prescribed tasks that are mandatory for the worker to do whether they are satisfied with their job or not (Edwards et al., 2008).

Finally, the analysis for the role of workspace on job performance revealed that teleworkers who have a separate workspace at home to work, exhibit a higher work-family balance and, in turn, a higher job satisfaction and job performance. Results from a study in Spain during Covid-19 (Cuerdo-Vilches et al., 2021) showed that only 27% of teleworkers had a specific space meant for teleworking and the majority worked in a shared space in the house with other family members. Previous studies also reveal that teleworkers who do not have a separate room to work experience more work-family conflict and job dissatisfaction (Marsh & Musson, 2008; Vischer, 2008). Working in a specific and separate workspace when teleworking is beneficial for work-family balance because it segregates workspace and family space and minimizes the home-based interruptions (Tietze & Musson, 2002). Taking this into account, teleworkers feel more satisfied with their jobs because they have conditions to perform their work and can acquire a good work-family balance (Nakrošienė et al., 2019). Moreover, without any distractions, they can focus on their job tasks more easily, specifically for those that involve a high degree of concentration (Fonner & Roloff, 2010), enhancing their job productivity (Nakrošienė et al., 2019).

In sum, teleworkers who have appropriate work conditions to perform their work tasks at home such as a designated space at home, separated from all possible family-related distractions, can acquire a better ability to manage their work and family responsibilities. When they have the perception that they can easily balance both set of responsibilities, they will be more satisfied and better perform their work tasks.

#### **4.2. Practical Implications and Limitations**

Previous studies have compared perceptions of teleworkers and on-site workers in terms of work-family balance, job satisfaction and job performance (Morganson et al., 2010; Gajendran and Harrison, 2007). Similarly, several studies have also strived to understand the difference between work-family balance of male and female workers (Fagan & Press, 2008). However, this is the first study that systematically analyzes these variables in the context of Covid-19

pandemic and considers the mediating role of work-family balance and job satisfaction, as well as the moderating role of participant's sex in the relationship between work regime and job performance. In general, this study contributes to the literature since it explores on-site workers and teleworkers' overall job performance, and more specifically according to its job dimensions (task performance, contextual performance, and counterproductive work behaviors). It also provides new information regarding the role of work-family balance and job satisfaction in the relationship between work regime and job performance at the time of the Covid-19 pandemic. Further, it contributes to the literature by exploring the experiences of male and female workers regarding their work-family balance, during the pandemic period. Taking the above into consideration, several practical implications can be drawn. Organizations should focus on developing high-quality work-family balance policies to improve their worker's management of work and family domains and to enhance their job satisfaction and performance (regardless of them being on a teleworking or on-site regime). These practices can include flexible work schedule or flexitime, shorter standard working weeks, better job conditions, childcare leave, etc. (Chaudhuri et al., 2020). Additionally, after the pandemic, organizations should take into consideration several factors when choosing if their workers will be working from home or working at the office such as verifying if workers who will be working from home have an adequate working space to easily perform their job tasks, without family or other sort of distractions and interruptions (separated from the shared spaces in the house). Finally, taking into account that telework does not undermine worker's work-family balance, job satisfaction or performance, organizations should provide chances for workers to work in an remote or hybrid work regime after the Covid-19 pandemic is over.

Nevertheless, the present investigation is not without some limitations. First, the sample is composed of mainly female participants (76%) and teleworkers (62%), and the participants were not equally divided by work regime and sex, so that the majority were teleworking females ( $n = 130$ ). Further, all participants were living and working in Portugal, so any future generalization of results should be taken with caution. Futures studies should use a representative sample of the Portuguese population (with equivalent participants per work regime and sex) and comparing it with workers from different countries.

Second, work-family balance, job satisfaction and job performance were evaluated through self-report measures, which can lead to *self-report bias* (Moorman & Podsakoff, 1992). Additionally, since all variables were based on one single method of measurement, all subsequent findings could be influenced by the *shared method variance* and therefore compromise the validity of the study (Donaldson & Grant-Vallone, 2002). Hence, future studies

should use different measures (e.g., supervisor-rated reports and self-rated measures) to ensure the studies' validity.

Third, most participants reported being in a telework regime for no longer than a year (10 months), which is not enough time for major changes of perceptions about job-related variables (Hill et al., 1998). In this case, a longitudinal study would be more appropriate to track the change of results over an extended period of time.

Fourth, data was collected during an unpredictable timeframe in which changes regarding the Covid-19 pandemic situation were constantly happening (whether in terms of new measures or the severity of new cases in Portugal) and where workers were non-voluntarily working from home. Therefore, future studies should replicate these results where workers would be working from home voluntarily, in a non-pandemic context.

In sum, the present investigation strived to understand the changes in several work-related variables arising from worker's transition to a telework regime during the pandemic and compare that experience to that of office workers, as well as compare the experience for female and male workers at this time. Contrary to what was expected, teleworkers and office workers reported similar experiences in their work-family balance, job satisfaction and job performance. Additionally, female and male workers did not show significant differences in their ability to manage work and family affairs, when working from home. Nevertheless, a set of conclusions could be taken from these results. It seems that the worker's work regime (telework vs. office work), by itself, does not produce positive or negative changes for their work-family balance, job satisfaction and performance. However, other factors can have an important impact on an improvement in their work experience. It was shown that work-family balance did significantly improve worker's satisfaction with their job and performance. Further, for teleworkers, an adequate working space, separate from the members of the family, also improved all the mentioned variables. Hence, the results from this study could guide organizations to help their employees' performance, by implementing wider choices of a work regime such as a remote or hybrid system, installing practices that support work-family balance and consequently their satisfaction (like flexible work scheduling and flexible workplace) and taking into consideration worker's conditions to telework, when making the decision if a certain employee will work from home (full-time or several days a week).

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## Appendix

### Appendix A.

*Results from the Principal Components Analysis for the IWPQ scale*

IWPQ itens	Factor Loadings		
	Factor 1	Factor 2	Factor 3
<b>Factor 1: Contextual Performance</b>			
Procurei continuamente novos desafios	<b>0.87</b>	0.01	-0.12
Encontrei soluções criativas para problemas	<b>0.81</b>	0.13	0.01
Trabalhei para manter conhecimento atualizado	<b>0.77</b>	0.25	-0.11
Assumi tarefas desafiantes	<b>0.74</b>	0.31	-0.08
Trabalhei para manter competências atualizadas	<b>0.75</b>	0.26	-0.06
Assumi responsabilidades extra	<b>0.72</b>	0.10	0.01
Participei ativamente em reuniões	<b>0.59</b>	0.03	-0.10
Por iniciativa própria comecei novas tarefas quando as antigas foram concluídas	<b>0.59</b>	<b>0.43</b>	-0.04
<b>Factor 2: Task Performance</b>			
Geri bem o meu tempo	0.16	<b>0.82</b>	-0.10
Consegui planear o meu trabalho de forma a terminá-lo a tempo	-0.02	<b>0.82</b>	-0.09
Consegui estabelecer prioridades	0.20	<b>0.78</b>	-0.02
Consegui desempenhar o meu trabalho de forma eficiente	<b>0.32</b>	<b>0.69</b>	-0.15
Tive em mente os resultados do trabalho que precisava atingir	0.21	<b>0.62</b>	-0.00
<b>Factor 3: Counterproductive work behaviours</b>			
Falei com colegas sobre aspetos negativos do meu trabalho (R)	-0.11	0.05	<b>0.78</b>
Concentrei-me nos aspetos negativo da situação do trabalho em vez de nos positivos (R)	-0.20	-0.12	<b>0.76</b>
Tornei os problemas do trabalho maiores do que eram (R)	-0.02	-0.13	<b>0.74</b>
Falei com pessoas fora da organização sobre aspetos negativos do meu trabalho (R)	-0.19	-0.07	<b>0.71</b>
Queixei-me no emprego de questões menores relacionadas com o trabalho (R)	0.15	-0.03	<b>0.64</b>
Eigenvalue	4.63	3.29	2.72
% of Total Variance	25.72	18.27	15.12
Total Variance			59.10%

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*Note.*  $N = 265$ . The extraction method was Principal Component Analysis with Varimax rotation (Kaiser normalization). Factor loadings above 0.30 are in bold. Reverse-scored items are denoted with (R).

## Appendix B.

*Distribution of participants according to work sector, type of service and work regime*

Work sector and type of service	<i>Telework</i>		<i>On-site work</i>		<i>Total</i>
	<i>n</i>	<i>%</i>	<i>n</i>	<i>%</i>	
Services (Tertiary activity)	134	59.5	91	40.4	225
Specific services					
Education	15	40.5%	22	59.5%	37
Health	7	21.2%	26	78.8%	33
Justice	3	60%	2	40%	5
Arts and Culture	3	42.9%	4	57.1%	7
Local administration	1	50%	1	50%	2
Public administration	1	100%	0	0%	1
Architecture	0	0%	1	100%	1
Bank	4	100%	0	100%	6
Finances	2	100%	0	0%	2
Construction	0	0%	1	100%	1
Consulting	7	100%	0	0%	7
Cork business	0	100%	1	0%	1
National Defense	0	0%	1	100%	1
Food distribution	1	100%	0	0%	1
Engineering	1	100%	0	0%	1
State affairs	1	100%	0	0%	1
Fabric business	0	0%	1	100%	1
Training	1	100%	0	0%	1
Lighting Services	1	100%	0	0%	1
Food Industry	0	0%	2	100%	2
IT	9	100%	0	0%	9
Auction	1	100%	0	0%	1
Maintenance	0	0%	1	100%	1
HR	1	100%	0	0%	1
Retail	2	100%	0	0%	2
Translation	1	100%	0	0%	1
TV	0	0%	1	100%	1
Transportation	1	100%	0	0%	1
Other	29	76%	9	24%	38

Note: To facilitate data interpretation, the previous work sector categories (Health, Justice, Tourism and Restauration, Arts and Culture) were classified under the services category, as well as the open-ended responses of participants. This classification follows Qureshi (2007) definition of services sector as involving the production and exchange of goods as well as its division of the service sector - tertiary activity - englobing the areas of trade and commerce, transport, communication, and services.

## **Appendix C.**

### *Qualtrics Questionnaire*

#### **Consentimento Informado**

Olá! O presente estudo surge no âmbito de uma dissertação do mestrado de Psicologia Social e das Organizações no ISCTE-IUL, sob a orientação científica das professoras: Miriam Rosa e Maria Helena dos Santos.

Este estudo destina-se a homens e mulheres com mais de 18 anos, heterossexuais, a viver em casal e a trabalhar atualmente, e tem como objetivo de perceber as vantagens ou desvantagens do teletrabalho nos(nas) colaboradores(as) portugueses(as), nomeadamente no seu desempenho no trabalho.

Este estudo é realizado por mim, Beatriz Martins e poderá contactar-me caso surja alguma questão ou comentário a apontar, através do email: bmmss@iscte-iul.pt

A sua participação neste estudo, que será extremamente valorizada por contribuir para o avanço do conhecimento científico na área, consiste no preenchimento de um questionário com duração estimada de 6 minutos.

Não existem quaisquer riscos associados à sua participação no estudo e esta é de natureza estritamente voluntária: pode escolher ou não participar no estudo.

Caso escolha participar, poderá interromper em qualquer momento a sua participação, sem dar quaisquer justificações.

Para além de voluntária, a sua participação é também anónima e confidencial, e por isso, nunca lhe será pedido que se identifique em qualquer momento do estudo.

Finalmente, todos os dados recolhidos serão apenas utilizados para fins de análise estatística e nenhuma resposta será analisada individualmente.

Concorda com os termos apresentados e pretende continuar?

- Sim
- Não

Muito obrigada pela sua participação neste estudo!

Mais uma vez, relembramos que não existem respostas certas ou erradas. Pedimos apenas que nos dê a sua opinião sincera quando responder às questões a serem apresentadas.

### Conciliação entre vida familiar e profissional

Seguidamente, serão apresentadas algumas questões relacionadas com a sua conciliação entre vida familiar e vida profissional. Por favor leia com atenção cada questão e indique numa escala de 1 (discordo fortemente) a 5 (concordo fortemente), o grau em que concorda com as seguintes afirmações:

	Discordo Fortemente	Discordo	Nem Concordo Nem Discordo	Concordo	Concordo Fortemente
A minha vida pessoal é prejudicada por causa do trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O trabalho torna a minha vida pessoal difícil	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Negligencio as minhas necessidades pessoais por causa do trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Coloco a minha vida pessoal em pausa por causa do trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Falto a atividades pessoais por causa do trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tenho dificuldades em gerir o trabalho e não-trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estou feliz com a quantidade de tempo que tenho para atividades não-laborais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A minha vida pessoal tira-me energias para o trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Estou demasiado(a) cansado(a) para ser eficaz no trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O meu trabalho é prejudicado por causa da minha vida pessoal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
É difícil trabalhar por causa de questões pessoais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A minha vida pessoal dá-me energias para realizar o trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

O meu trabalho dá-me energias para realizar atividades pessoais	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tenho melhor disposição no trabalho por causa da minha vida pessoal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tenho melhor disposição por causa do meu trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Satisfação no Trabalho

Em seguida, serão apresentadas questões relativas à **satisfação com o seu trabalho**. Por favor, leia cada questão com atenção e indique numa escala de **1** (discordo fortemente) a **5** (concordo fortemente), o grau em que **concorda** com as seguintes afirmações:

	Discordo fortemente	Discordo	Nem Concordo Nem Discordo	Concordo	Concordo Fortemente
Sinto-me razoavelmente satisfeito(a) com o meu emprego atual	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Na maioria dos dias, estou entusiasmado(a) com o meu trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cada dia no trabalho parece não ter fim	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sinto-me realmente satisfeito(a) no meu trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Considero que o meu emprego é particularmente desagradável	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Desempenho no trabalho

Abaixo serão apresentadas uma série de questões relativas ao seu **desempenho no trabalho**. Por favor, indique numa escala de **0** (raramente) a **4** (sempre), a **frequência** com que realizou as seguintes afirmações nos últimos 3 meses:

	Raramente	Às vezes	Regularmente	Muitas vezes	Sempre
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Consegui planejar o meu trabalho de forma a terminá-lo a tempo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tive em mente os resultados do trabalho que precisava de atingir	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consegui estabelecer prioridades	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Consegui desempenhar o meu trabalho de forma eficiente	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Geri bem o meu tempo	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Por iniciativa própria, comecei novas tarefas quando as antigas foram concluídas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assumi tarefas desafiantes quando elas estavam disponíveis	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trabalhei para manter o meu conhecimento sobre o trabalho atualizado	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trabalhei para manter as minhas competências de trabalho atualizadas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Encontrei soluções criativas para novos problemas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Assumi responsabilidades extra	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Procurei continuamente novos desafios no meu trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Participei ativamente em reuniões e/ou agendamentos.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Por favor indique numa escala de **0** (nunca) a **3** (muitas vezes), a **frequência** com que realizou as seguintes afirmações nos **últimos 3 meses**

	Nunca	Às vezes	Regularmente	Muitas vezes
Queixei-me no emprego de questões menores relacionadas com o trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tornei os problemas do trabalho maiores do que eram	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Concentrei-me nos aspetos negativos da situação no trabalho, em vez de nos aspetos positivos	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Falei com colegas sobre os aspetos negativos do meu trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Falei com pessoas fora da organização sobre os aspetos negativos do meu trabalho	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### Questões Sociodemográficas

Por favor leia com atenção as seguintes questões e preencha com os seus dados sociodemográficos:

Q9 Sexo

- Masculino
- Feminino

Q10 Idade (em anos)

\_\_\_\_\_

Q11 Habilitações Literárias

- Ensino Básico (1º ciclo)
- Ensino Básico (2º ciclo)
- Ensino Básico (3º ciclo)
- Ensino Secundário (ou equivalente)
- Licenciatura (Pré-Bolonha)
- Licenciatura (Pós-Bolonha)
- Pós-graduação
- Mestrado
- Doutoramento

Q12 Estado Civil

- Solteiro(a)
  - Casado(a)
  - União de Facto
  - Divorciado(a)
  - Viúvo(a)
- 

Q14 Tem atualmente filhos(as) **menores de 12 anos** a residir consigo?

- Sim
- Não

Q15 Tipo de trabalho

- Por conta própria
- Por conta de outrem
- Misto

Q16 Setor de Atividade da Empresa

- Educação
- Saúde
- Justiça
- Restauração, Hotelaria e Turismo
- Serviços
- Artes e Cultura

Outros \_\_\_\_\_

Q17 Posição na empresa

- Diretor(a) (ou equivalente)
- Chefia Intermédia (ou equivalente)
- Técnico(a) (ou equivalente)

Q18 Regime de Trabalho

- Teletrabalho
- Presencial
- Misto

Q19 Há quanto tempo está em regime de teletrabalho (meses)?

\_\_\_\_\_

Q20 Há quanto tempo está em regime misto (meses)?

\_\_\_\_\_

Q21 Tem um espaço de trabalho próprio em casa?

- Sim
- Não

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## Debriefing

Q25 Muito obrigada por ter participado no presente estudo.

Como indicado no princípio, este estudo foca-se nas vantagens do teletrabalho para os/as colaboradores/as e tem como objetivo perceber a relação entre o teletrabalho e o desempenho no trabalho dos/as mesmos/as. Mais especificamente, pretende-se saber qual é o **papel da conciliação entre trabalho e família, da satisfação com o trabalho e a relevância do género nesta relação**. Relembramos que os seguintes detalhes de contactos podem ser utilizados para quaisquer questões que tenha, comentários que queira fazer ou indicar o interesse em receber mais informação acerca dos principais resultados e conclusões do estudo (Beatriz Martins: [bmmss@iscte-iul.pt](mailto:bmmss@iscte-iul.pt)).

*Mais uma vez, agradecemos a sua participação.*