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Relationship between remote e-working and burnout symptoms: The mediating role of work-family conflict and perceived psychological contract breach- a study with international workers

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Master in International management

Supervisor:

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October,2022



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Resumo

Embora os efeitos da pandemia ainda se façam sentir, o mundo tem vindo a adaptar-se a uma nova forma de vida e de trabalho. O trabalho remoto é agora visto como parte integrante do presente e futuro das organizações. Estudos demonstraram que o trabalho remoto pode ter efeitos positivos na vida dos trabalhadores e que efetivamente, existem dimensões durante o trabalho remoto que podem levar os indivíduos a experienciar mais emoções positivas do que negativas. Este estudo avaliou a relação de três dimensões do trabalho remoto - confiança organizacional, flexibilidade e interferência trabalho-vida - com a exaustão através do efeito mediador do conflito trabalho-família e através do efeito mediador da percepção de quebra do contrato psicológico. Para tal, foi desenvolvido um estudo quantitativo ($N = 146$) dirigido aos trabalhadores que em algum momento experienciaram trabalho remoto, em regime total ou parcial, independentemente da sua nacionalidade ou localização geográfica. Todas as hipóteses foram suportadas pelos resultados, exceto as hipóteses de que a interferência trabalho-vida em trabalho remoto está negativamente relacionada com a exaustão e que conflito trabalho-família medeia a relação entre a interferência trabalho-vida em trabalho remoto e a exaustão. Os resultados indicaram que a flexibilidade e a confiança organizacional em trabalho remoto estão negativamente relacionadas com a exaustão e que o conflito trabalho-família medeia a relação entre estas dimensões do trabalho remoto e a exaustão. Os resultados indicaram que a percepção de quebra do contrato psicológico medeia a relação entre as três dimensões do trabalho remoto e a exaustão.

Palavras-chave: trabalho remoto, conflito trabalho família, contrato psicológico e exaustão

Classificações JEL: O15 - Recursos Humanos; I31: Bem-Estar Geral, Bem-estar

Abstract

Although the effects of the pandemic are still being felt, the world has been adapting to a new way of living and working. Remote e-work is now seen as an integral part of the present and future of organisations. Studies have shown that remote e-work can have positive effects on employees lives and there are dimensions during remote e-work that can lead individuals to experience more positive emotions than negative ones. This study assessed the relationship of three dimensions of remote e-work - organisational trust, flexibility, and work-life interference - with exhaustion through the mediating effect of the work-family conflict and through the mediating effect of perceived psychological contract breach. For this purpose, a quantitative study (N = 146) was developed, targeting employees who have at some point experienced remote e-work, either fully or partially, regardless of their nationality or geographic location. All hypotheses were supported, except the hypotheses that work-life interference in remote e-work is negatively related to exhaustion and that work-family conflict mediates the relationship between work-life interference in remote e-work and exhaustion. The results suggested that flexibility and organisational trust in remote e-work are negatively related to exhaustion and that work-family conflict mediates the relationship between these dimensions of remote e-work and exhaustion. The results suggested that perceived psychological contract breach mediates the relationship between the three dimensions of remote e-work and exhaustion.

Keywords: remote e-work, work-family conflict, psychological contract and exhaustion

JEL Classification System: O15 - Human Resources; I31: General Welfare, Well-being

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1. Introduction

The shift to remote e-work and the push for digitalization in response to COVID-19 constraints has had an unprecedented impact on everyday life. Even though remote e-work has grown in recent decades, it is known to have always been at a slower pace than expected due to various organisational reasons (Nakrošienė et al., 2019). Yet the impact of COVID-19 on the way we work, even though it has also been a time of social upheaval, racial inequality, ongoing digital disruption, political division, and climate change, arguably represents the most drastic and rapid change to the global workforce we have seen since World War II (Ozimek, 2020). There is no return to the pre-pandemic workplace, digital transformation plans have been implemented over a few months that in other situations might take a few years (Copulsky & Et al., 2021). It should be noted that for these implementations, information and communication technology (ICT) has provided employees to work anywhere and anytime (Braukmann et al., 2018), thus leading most knowledge workers to experience remote e-work daily (Wang et al., 2020).

Although there are positive results for both individuals and organisations resulting from this new way of working such as the absence of travelling, fewer meetings, reduce stress while increasing both productivity and flexibility (Grant et al., 2013), this was found to be related to work intensification, where constant access to ICTs contributed to longer working hours. (Chesley, 2010; Kelliher & Anderson, 2010). Remote e-work also allows people to collaborate across geographical, physical, and organisational boundaries (Ozimek, 2020), however it was found that in organisation perspective the pandemic uncovered challenges in areas like innovation, culture, starting new projects, mentoring and coaching (Copulsky & Et al., 2021). According to a systematic review of the literature, there are positive effects of remote e-work, such as increased flexibility, autonomy job satisfaction and better work-life balance, but also negative effects such as social and professional isolation, perceived threats to career advancement, increased emotional exhaustion, limited supervisor supervision, and musculoskeletal health problems (Bailey & Kurland, 2002a; Baruch, 2000; Charalampous et al., 2018; Morgan, 2004).

There is a greater consensus towards a beneficial impact of remote e-work in employee's well-being (Charalampous et al., 2019). It was found that employees are willing to continue e-working remotely even when it is no longer necessary, on top of that "it is not always easy for supervisors to trust that their employees are doing what they are supposed to be doing when they are not observed, ceding control can create greater capacity for work" (George et al., 2022, p.7).

The main innovation of this research is to perceive if particular dimensions of remote e-work - trust, flexibility, and work-life interference (WLI) – can lead to decreased exhaustion of employees. Considering that those who e-worked remotely, and experienced high work-family conflict (WFC) were found to be the most emotionally exhausted (Poghosyan et al., 2009) and that work-life balance were considered as key factors when exploring the impact of remote e-working on individuals, supervisors and organisations (Grant et al., 2013), this study focused on analysing the mediating role of WFC in the relationship between the three dimensions of remote e-work and exhaustion.

Psychological contract breach has an adverse effect on emotional well-being and has been linked to negative emotions, sick leave and burnout (Cassar & Catherine Buttigieg, 2015; Conway et al., 2011; Conway & Briner, 2002; Deery et al., 2006; Jamil et al., 2013; Jiang et al., 2017). Another goal of this study is to analyse perceived psychological contract breach as mediator of the relationship between the three dimensions of remote e-work and exhaustion. By analysing organisational trust, flexibility and WLI in remote e-work, it becomes possible to understand if the workers consider that the organization have fulfilled its obligations and consequently improve their wellbeing at work.

This study aims to access the relationship of three dimensions of remote e-work - organisational trust, flexibility, and WLI - with exhaustion through the mediating effect of WFC and through the mediating effect of perceived psychological contract breach. Also, the research was conducted among employees who had at some point experienced remote e-work, either fully or partially, regardless of their nationality or geographic location.

The following sections provide an overview of existing research findings and empirical evidence on the main themes of this study, including the presentation of the investigation model and related hypotheses. Additionally, the methodology used is described and the results are analysed. To conclude, a discussion based on the results and conclusions of this study is presented.

2. Literature Review

2.1 Remote e-work

2.1.1. Origin and definition of remote e-work

While there is currently no obligation to stay at home, it is well known that the pandemic has affected and continues to affect people's daily lives. Working outside the traditional workplace or remotely has become a phenomenon, with more people working in multiple locations in recent years (Boehmer et al., 2017). How and where people work is changing, and during COVID-19, 37% of work was found to be done at home (Dingel & Neiman, 2020).

Working from home is something that dates to the pre-industrial era where large numbers of people worked primarily in or near their homes in places such as craft workshops and on local land, later, with the Industrial Revolution in the 18th century people lost some autonomy over their work (Baruch, 2000). Knowing still that home-based work still existed as old-fashioned manufacturing (Hakim 1987, as cited in Baruch 2000; Boris and Prugl 1996, as cited in Baruch, 2000). Working from home through telecommunications combined with computer technology began to emerge in this age (Baruch, 2000, 2001; Gajendran & Harrison, 2007). The terms remote working, and telecommuting are used interchangeably in the literature and is not something new. The term “telecommuting” first appeared in 1972, when NASA provided one of its own media with the ability to work remotely on a complex communication system (Avery & Zabel, 2001, as cited in T. D. Allen, Golden, et al., 2015a; Nilles, 1975; Nilles, 1998, as cited in Narayanan et al., 2017). In the early 1990s, as personal computing devices became more available, the concept of telecommuting advanced as researchers sought to study the impact of telecommuting on family life and the potential for professional isolation (Haddon & Silverstone, 1993). In the US both “telecommuting” and “telework” have been the terms used (Madsen, 2001, as cited in Charalampous et al., 2019), whereas in Europe the term “e-work” has generally been used to describe work that is performed virtually (Charalampous et al., 2019).

While home-based telework has traditionally been the most common type of remote work (Halford, 2005), e-workers were defined as full-time workers who work and communicate primarily through electronic means having very little face-to-face interaction with their headquarters location or with their colleagues and supervisors (Kirk & Belovics, 2006). "Electronic

remote working" is a broader term that describes working anywhere, anytime and expanding the use of technology to support flexible work practices (Grant et al., 2013). According to this definition, work can be performed from anywhere, could be from home, company locations, hotels, airports, or any other location. Remote e-working was chosen over the well-used term of telecommuting, as telecommuting does not include employees who are very mobile (Allen et al., 2015). Having in mind that there is a wide diversity of terms that can be used to define it, for example, teleworking, telecommuting, e-working and agile working (Grant et al., 2019), the term used from now on is based on Grant et al. (2013) definition of "remote e-work".

2.1.2. The implications of remote e-work

During the pandemic some were in favour of returning to the office and others were not, it is important to understand how people have managed to balance their personal and professional lives and the impact this management has on their health. The impact of distance working can be categorized at individual, organizational and social levels (Baruch, 2000).

Considering the impact caused by distance working on society, there are positive aspects to mention such as less air pollution due to less commuting and more safety roads because less commuting can mean less accidents and road congestion (Bailey & Kurland, 2002; Baruch, 2000). Remote e-working can also provide more employment opportunities for people with disabilities or those who must care for children or the elderly (Baruch, 2000).

On the other hand, remote e-work holds possible disadvantages such as fewer interactions with other individual and the increased isolation from social institutions (Baruch, 2000). Isolation can be a source of stress, as workers are deprived of access to valuable social resources. These consequences can be serious, as they can lead to disengagement, lower job satisfaction and reduced performance and well-being (Garcia et al., 2017; Marshall et al., 2007). Although the effective use of ICT can counteract the negative consequences of social isolation (Williams, 2009, as cited in Charalampous, 2021), it has also been stated that individuals who use ICT for work matters, during hours of inactivity, may not be able to mentally disconnect from work and may be caught in a negative cycle (Charalampous et al., 2019; Sewell & Taskin, 2015). This is related to the concept of technostress that refers to the stress experienced by end-users resulting from the extensive use of ICT and has been defined as "a modern disease of adaptation caused by an inability to cope with

new computer technologies in a healthy manner” (Brod 1984, as cited in Tarafdar et al., 2008, p.418).

Regarding organisational level, distance working can provide strategic advantages to help organisations achieve better results. As workers are at home, the company has the possibility to save money (Baruch, 2001; Morgan, 2004), in addition it has been found that due to flexible hours and overtime work it is possible for productivity to increase (Mann & Holdsworth, 2003). There is known to be less absenteeism (Baruch, 2001; Mann & Holdsworth, 2003; Morgan, 2004), less turnover associated with higher levels of satisfaction and loyalty provided by employees and the possibility of obtaining future employees from elsewhere (Morgan, 2004). The company's image can improve, being seen as an innovative employer by demonstrating its trust and support for employees' well-being (Morgan, 2004). While e-working remotely, it is known that communication between colleagues and managers can become more difficult (Dambrin, 2004).

There are also disadvantages at the organisational level, one of them being implementation costs, as the company has costs associated with providing tools and conditions for all employees to work effectively (Bailey & Kurland, 2002; Morgan, 2004). There may be resistance to change that often comes from managers (Mann & Holdsworth, 2003) and associated also with managers it may be more difficult to control their subordinates who work outside the office (Dimitrova & Wagner, 2003; Mann & Holdsworth, 2003).

On an individual level there are advantages that can be addressed. In this way of working there is autonomy and flexibility to work from home, which allows employees to better organize their working time (Bailey & Kurland, 2002; Baruch, 2000; Charalampous et al., 2019; Golden, 2006; Mann & Holdsworth, 2003; Morgan, 2004). With this, it is possible to reduce or eliminate associated costs and save time (Bailey & Kurland, 2002; Baruch, 2000; Golden, 2006; Mann & Holdsworth, 2003; Morgan, 2004). The fact that it is possible for employees to work without interruptions can lead to better performance (Bailey & Kurland, 2002; Baruch, 2000; Golden, 2006; Mann & Holdsworth, 2003; Morgan, n.d.). There are also no geographical barriers and because of this there may be more opportunities to work (Morgan, n.d.). The ability to balance work and family commitments, particularly among women with young children at home and the possible reduction of stress from travel and traditional daily work activities are also advantages (Bailey & Kurland, 2002; Baruch, 2000).

There are drawbacks associated with e-working remotely for individuals, such as increased work intensification (Demerouti et al., 2014; Kelliher & Anderson, 2010) and less time devoted to recovery due to the constant use of technology (Demerouti et al., 2014). It is important to mention that sometimes it is not possible to establish clear boundaries between work and personal life (Grant et al., 2013, 2019; Moen et al., 2016). Sometimes employees are unable to fully disconnect from work due to constant access to technology (Charalampous et al., 2019; Grant et al., 2013; Kossek, 2016).

Regarding physical impact it was found that prolonged sedentary behaviour combined with lack of breaks were prominent risk factors for psychosomatic health (Charalampous et al., 2021). This is a common aspect of remote e-work and was found to be associated with many health risks, musculoskeletal complaints such as the body becoming very stiff, shoulder pain and upper body pain were reported (Thompson, 2020, as cited in Charalampous et al., 2021). It has also been found that visibility and office information still impact career prospects and therefore there are fewer possibilities for internal career development (Baruch, 2000; Mann & Holdsworth, 2003).

To conclude, it is known that there are positives and negatives while e-working remotely and as such, it is necessary for both employees and organisations to be aware of this. It is particularly important to highlight the benefits of remote e-working and mitigate the challenges that exist. It has been found that when e-working remotely, individuals tend to experience more positive emotions than negative emotions (Anderson et al., 2015), although it also can act as a challenging stressor that is positively linked to both burnout and engagement (Crawford et al., 2002).

This study aims to investigate the effects of remote e-work dimensions on exhaustion considering variables such as WFC and perceived psychological contract breach. It has been suggested that perceptions of WFC may act as mediators of the relationship between remote e-work and employee outcomes (Allen et al., 2003). It is also known that a perceived breach of the psychological contract, diminishes their perceived predictability and control (Shore & Tetrick, 1994; Tetrick & Larocco, 1987) and is likely to generate exhaustion because it destroys the belief of reciprocity that is fundamental to maintaining employee well-being (Maslach et al., 2000). Thus, I intend to use WFC and perceived psychological contract breach as a mediator of the relationship between remote e-work and employee outcomes.

2.1.3. The dimensions of remote e-work

Working effectively with technology remains a priority for many organisations (Madsen,2003, as cited in Gajendran & Harrison, 2007). Developments in technology imply changes for employees in terms of work practices, behaviours, skills, and competencies (Baruch, 2000; Kowalski & Swanson, 2005), and when it comes to creating measures of remote e-working there has been a gap in the literature. There have been several authors who have addressed the topic through the development and subsequent modifications of the E-Work Life (EWL) scale. The used scale was developed by Grant et al. (2019) and refined by Charalampous (2020) in her PHD, covering organisational trust, work-life interference and flexibility.

2.1.3.1. Organisational trust in remote e-work

Managers should be aware that employees are able to perform their work effectively when working outside the office and that employees should be engaged within a culture of trust since it has been found that good management support and a formal policy is critical to the success of remote e-working (Kowalski & Swanson, 2005). According to Grant (2019, p.9), trust is related to the level of autonomy and responsibility afforded to the individuals whilst e-working and can be a means of prompting individuals to be more committed to their organisation, to work for the organisation and can also help employees to increase their ability to manage their working hours more flexibly.

Considering individual preferences, it is possible to state that e-work policies can be fundamental to the success of the organisations that adopt them (Grant et al., 2013). In addition, the organisation's management team should consider the culture and how the effective use of remote technology can impact the whole organisation, it is well known that remote e-work relies on remote supervision and employee honesty (Kowalski & Swanson, 2005). Using informal and formal communication, training skills and frequent communication and mentoring can improve trust according to Titman (2017) and this is very important in terms of developing effective working relationships as this has been found to be essential for effective e-working (den Dulk et al., 2013; Golden and Raghuram, 2010, as cited in Tønnessen et al., 2021). Despite the lack of physical interaction, managers should think that employees will have self-control and autonomy in

properly managing their work tasks (Cascio ,2000). Being focused on long-term outcomes and the creation of shared goals can also provide support for these effects (Titman et al., 2017). It is important to relate the trust to the fact that we are living within an always-on culture where contact may be needed at any time of the day or night. The use of ICT has become exacerbated by a global culture (Grant et al., 2013), thus the level of autonomy and responsibility that is provided to individuals while working online will be crucial in managing them outside the traditional office and essential in driving those to be more productive and engaged (Richardson, 2010).

Finally, it is important to mention that clarifying expectations, namely through psychological contract, helps both managers and employees to understand what is expected by each party (Titman et al., 2017). This trusting relationship with managers can improve work-life balance (Grant et al., 2019).

2.1.3.2. Work-Life Interference in remote e-work

It should be noted that initially the areas of e-well-being and work-life balance collapsed into a single fourth factor of work-life interference. The terms e-well-being, work-life integration, role/conflict management and boundary management culminated in work-life interference which is define as "the ability to integrate work and non-work demands effectively, to switch between differing roles and to manage boundaries between work and non-work activities and how e-workers positively manage their health and well-being whilst working remotely, being aware of issues such as when to switch off from e-working" (Grant et al., 2019, p.9). According to Hornung & Glaser (2009) is generally conceived as an employee-oriented human resource practice and it is thought that by promoting a better work-life balance, remote e-working reduces the perceived friction between private life and work (Beauregard & Henry, 2009; Gorman & Et al., 2012).

The literature is not consistent in discussing the implications of remote e-working on work-life balance. Although there is a growing awareness of the possible negative effects of remote working, this area of research and practice is still developing being necessary more research on the effects of working in different remote locations other than home (Hislop & Axtell, 2007). It is possible to say that we have both sides of the coin since there are negative and positive effects while integrating work and non-work demands while working remotely. It is mentioned that workers control over the spatio-temporal context of work increases, improving the quality of organisational activities

(Palumbo, 2020). It was found that people e-working remotely are likely to have higher productivity and experience with less work-life confrontations through the opportunity to work in a familiar and comfortable environment (Hill et al., 2003). Although some scholars doubt the positive implications of remote e-working (Liao et al., 2019), it has been maintained that is able to reduce perceptions of exhaustion (te Brummelhuis & Bakker, 2012). Greater autonomy in the organisation of individual working conditions has a huge contribution on this issue (De Spiegelaere et al., 2016, as cited in Palumbo, 2020). It was also found that remote e-working is expected to have positive effects on work engagement (Steffens et al., 2014). On the other hand, according to Wheatley (2012) the juxtaposition of private life and work-related duties is considered to generate stress and time allocation challenges. In line with this there will be less gains of e-working in terms of work-life balance and fuel work-life conflict (Madsen, 2006). Individuals were found to have different styles in managing work-family boundaries and those who separated work-family boundaries and had control over where and when they worked reported positive individual wellbeing (Kossek et al., 2006 Kossek & Lautsch, 2012). There are positive factors associated with remote e-working for both employer and employee, however it can be argued that the time saved may, in some cases, be redirected to more work as opposed to recovery or extra leisure activities (Grant et al., 2013)

In terms of advantages and disadvantages for individuals, it was found that having a quiet private space to work without interruptions was seen as an advantage (Grant et al., 2013), while there are related negative aspects such as lack of human and social contact (Mann et al. 2000, as cited in Grant et al., 2013). There are advantages such as improvements in productivity and reduced stress levels, personal relationships could be improved, identification of specific areas of individual differences, skills and competencies plus positive environmental impacts (Grant et al., 2019). It is known that over time the boundaries between personal and work life are lessened there can be a negotiation between employees and their manager regarding working time and lack of time off. (Allvin et al., n.d.).

The negative effects include intensification of work with 24/7 access to technology, leading to long hours with little time off work. It was also found that the inability to fully disconnect from work affect health and potentially induce burnout (Grant et al., 2013).

In terms of sex, a similar number of advantages are reported regarding remote e-work. Women report the advantage of managing their household chores and childcare situations, while men report having quality time to spend with their family (Hilbrecht et al., 2008, as cited in Grant et al., 2013; Sullivan & Lewis, 2001). In turn, a better work-life balance involves positive direct and indirect implications for organisations, including improved social exchange processes, reduced turnover, and increased productivity (Beauregard & Henry, 2009). Although organisations can reduce management costs (Raiborn and Butler, 2009, as cited in Palumbo, 2020) it has been an issue to retain skilled workers (Grant et al., 2019). Indeed, remote e-working can bring some advantages and disadvantages because it may occur an overlap between work-related commitments and everyday personal matters (Allen et al., 2012, as cited in Charalampous et al., 2021).

2.1.3.3. Flexibility in remote e-work

As predicted in the past the organisations now offer more flexibility than ever before in the form of distance working arrangements (Salomon & Shamir, 1985). Flexibility in remote e-work can be defined as " the ability of workers to make choices influencing when, where, and for how long they engage in work-related tasks." (Hill et al., 2008, p.152). Remote e-workers have been found to report high levels of satisfaction, and this may be related to the flexibility of e-working remotely compared to more static offices (Wheatley, 2012). Such flexible working practices have become widespread within organisations and are often used as part of human resource strategy to attract, motivate and retain key talent (Richman et al., 2008). In flexible working conditions, employees are assisted in their control over how they can work to mitigate the effects of work stress on their work (Halpern, 2005). Derived from the perception of flexible work policies, including the ability to manage work demand and family affairs, helping employees to balance their work and family life, it is possible to strongly relate this dimension to higher levels of organisational commitment (Dex & Smith, 2002; Lim & Teo, 2000; maxwell, 2007; Richman et al., 2008). It was concluded that flexible working practices and policies are an indicator of lower intentions to leave the company and creates favourable impacts on employee wellbeing (Glass & Finley, 2002; Vaiman, 2007). This use of technology is also seen as a way for organisations to reduce costs and improve productivity (Lewis & Cooper, 2005).

Although there are some research that has studied the relationship between flexible working arrangements and work-family conflict, there is little consensus regarding the findings (Shockley & Allen, 2007). It has been explained in some studies that flexible work is related to less work-family conflict (Hammer et al., 1997; Hill et al., 2004). On the other hand, other studies also reported that there was no relationship between the two variables (Anderson et al., 2002; Bond & Kossek, n.d.; Thomas, 1991). Glass & Finley (2002) concluded that flexible work organisation not only has a favourable impact on well-being but also helps to control and reduce work-family conflict. Managing boundaries is also very important concept to understand employee's flexibility since it is defined as being able to switch effectively between work and non-work activities based on establishing clear boundaries for non-work tasks when working online or for work when completing non-work tasks (Charalampous et al., 2018). While the physical location of work and family may be integrated for distance workers, some may still manipulate the boundary between work and family. It should be noted that remote e-workers may deliberately suppress one role to transition to the other. Those seeking greater segmentation deliberately suppress the unwanted transfer of thoughts, feelings, and behaviours from one domain to the other (Eddleston & Mulki, 2017).

It was identified that many remote workers sought to create a tangible boundary within the home by establishing a home office and designating specific times for work and family (Eddleston & Mulki, 2017). On the other hand, not all remote e-workers have sought to segment work and family. It has been identified that some use the physical integration of work and family to further integrate the two roles. The integration of role boundaries allows individuals to accommodate multiple roles and transition more easily between them (Ashforth, 2000). This reveals that boundaries reflect personal preferences (Kossek & Lautsch, n.d, Wotschack, 2014, as cited in Eddleston & Mulki, 2017). Since neither integration nor segmentation is an absolute strategy, remote e-workers value their ability to control the boundary between work and family knowing where, when and the total time they would spend or devote to work-related tasks.

2.2. Remote e-work and exhaustion

The ability to e-work remotely is now available through smart technologies and is seen as a way for organisations to offer flexibility and consider the well-being of staff. This enables a better work-life balance, associated with higher productivity and reduced costs. (Lewis & Cooper, 2005). Not all individuals benefit to the same extent from remote e-work, and personality traits play an important role in the type of emotions each individual experiences (Anderson et al., 2015). The individual's family situation has also been found to have an influence on feelings of emotional exhaustion, as those who worked remotely and experienced high work-family conflict were found to be the most emotionally exhausted (Poghosyan et al., 2009). It is not always easy to effectively manage your work and life as such work-life balance, work effectiveness and well-being were considered as key factors when exploring the impact of remote e-working on individuals, supervisors and organisations (Grant et al., 2013).

As previously stated, remote e-working can simultaneously relieve and create stress regarding employee well-being (de Menezes & Kelliher, 2011). The negative effects of remote e-work include intensification of work with constant access to technology and blurring of boundaries between work and home while the positive ones are increased productivity, flexibility and in some cases, reduced stress levels and increased well-being (Grant et al., 2013). The literature mentions that remote e-working is linked to stress reduction (Gajendran & Harrison, 2007; Grant et al., 2013; Hartig et al., 2007, as cited in Grant et al., 2013; Kelliher & Anderson, 2010; Mann & Holdsworth, 2003; Raghuram et al., 2003; Stephens & Szajna, 1998). It was also explored that job stressors are related to the lack of positive job characteristics as well as the presence of negative factors. It has been found that continuous exposure to job stressors is usually followed by negative reactions of individuals, and with that, individuals may suffer burnout (Demerouti et al., 2001; Etzion & Eden, 1998).

Although burnout syndrome emerged in the 1970s, it is still a global issue such that the 11th revision of the World Health Organization's International Classification of Diseases defines it as an occupational phenomenon with a risk of harming health (World Health Organization, 2020). Specifically, Burnout is defined by the World Health Organization (2020) as a syndrome resulting from chronic workplace stress that has not been successfully managed, characterized by mood

disturbances, depressive symptoms, energy depletion and mental detachment from work, producing feelings of negativity and cynicism, and reduced professional effectiveness, and associated with higher rates of substance abuse, depression, and suicide (Alessandri et al., 2018; Dyrbye et al., 2014, Valeras, 2020). The adopted definition of burnout in ICD-11 comprises three dimensions, such as exhaustion, cynicism, and reduced professional efficacy (Maslach et al., 2000).

Exhaustion is considered the most fundamental dimension of burnout and can be described as "a serious and severe loss of energy, both physical and mental" (Schaufeli et al., 2020, p.4). It describes the overall level of psychological and affective energy for performing work-related tasks and closely related to physical and psychological health. It can also have a motivational component, such as disengagement and dissatisfaction, however all are related to performance and turnover (Christian et al., 2011; Halbesleben & Buckley, 2004). Research suggests that there is a negative relationship between the extent of remote e-work and both exhaustion and disengagement and that autonomy and other resources are mediators of this relationship (Sardeshmukh et al., 2012). It was suggested that individuals who had less social support experienced higher levels of emotional exhaustion as they could not share their problems and get emotional support from colleagues. This finding highlights the increasing importance of social support in a remote e-workers (Charalampous et al., 2018; van den Broeck et al., 2017). Golden (2006) suggested that remote e-workers can store their resources by avoiding travel, being flexible to meet family needs and reducing the emotional drain coming from traditional day-to-day work activities.

2.3. The mediating role of work-family conflict

It is important to first establish that it was found that "blurring of work-life boundaries makes it more difficult for employees to sustain a healthy lifestyle in terms of sleep, nutrition, physical activity and relaxation" (Pluut & Wonders, 2020, p.12), and that this may result in WFC (Schieman & Young, 2010). WFC is a specific form of work-life conflict, both are "forms of interprofessional conflict that occur when the energy, time, or behavioural demands of work conflict with family or personal life roles" (Greenhaus & Beutell, 1985, as cited in Kossek & Turner, 2017, p.2). It is known that this interference can occur in two directions, it can be from work to family or family to work (Kossek & Ozeki, 1998), and it can also be asymmetric (Byron, 2005).

Although its theoretical roots are most attributed to role theory, resource conservation, resource demands and perspectives, and life cycle have also been used to understand WFC. Based on role theory, WFC results from incompatible work-family demands of time, stress or behaviour (Ott et al., 2015). Time-based role conflict occurs when the temporal demands of work and family compete, strain-based conflict occurs when strain in one role limits individuals' ability to perform another role and behaviour-based conflict occurs when patterns of behaviour at work and family are not compatible (Greenhaus & Beutell, 1985, as cited in Kossek & Turner, 2017). According to resource conservation theory, there are several mechanisms for dealing with WFC. Individuals may feel that they must invest more resources in a problem area as such a mechanism is related to cross-investment of resources to avoid resource losses (Grandey & Cropanzano, 1999; Halbesleben et al., 2009). A second mechanism refers to when individuals invest large amounts of resources to work or experience chronic losses without any return resource gains (Hobfoll, 1989). And the last mechanism occurs when individuals try to guard against future resource losses through proactive reaction (Aspinwall & Taylor, 1997). The resources and demands approaches emphasise the need to examine demands and resources to understand job strain and assumes that job demands can deplete individual resources. On the other hand, job resources have the potential to motivate individuals to perform better, as social support, autonomy, and supervisor feedback can act as a buffer between demands and job strain (Bakker et al., 2003; Demerouti et al., n.d.; Voydanoff, 2005). The life cycle perspective provides a unique framework and concepts such as, transitions, historical time, or connected lives to examine WFC (Elder, 1998). The concept of transition that demonstrates that over time there is a change in family demands, an example of this is the needs of a new-born and an adolescent requiring different types of resources (Dentinger & Clarkberg, 2002). The concept of historical time and social context captures the changes in the workforce since we know that contemporary workers are more likely to personalise their retirement hours, to seek flexible work formulas such as workload reduction and remote e-working seeking work-family balance (Greenhaus & Kossek, 2014). The concept of connected lives allows researchers to examine the cross-effect of tension between family members due to WFC (Westman et al., 2001).

WFC has a growing importance in society and is related to critical outcomes in employment, family and personal life. It is possible to highlight job satisfaction, organisational commitment, turnover, marital and family satisfaction, and physical and psychological health (Grandey & Cropanzano, 1999; Kossek et al., 2006; Netemeyer et al., 1996; T. D. Allen et al., 2000; T. D. Allen

& Armstrong, 2006). The consequences of WFC can be divided into three main groups - work-related, non-work-related, and stress-related (Allen et al., 2000). WFC was found to lead to emotional exhaustion which in turn resulted in lower levels of job satisfaction (Bacharach et al., 1991). More recently, derived from the pandemic, the increased demands on remote e-workers related to virtual schooling, financial challenges, and coping with illness and death, mixed with the inability to separate work and home, resulted in increased stress and strain on mental health (Budnick et al., 2020; Rogers Communications Reports Third Quarter 2021 Results, 2021).

Work to family conflict and family to work conflict have unique antecedents and require different interventions or solutions to prevent or reduce their occurrence. Importantly, work factors are more strongly related to work to family, and some non-work factors, such as marital conflict, number of hours spent on housework or childcare, and age of the youngest child, were more strongly related to or family to work. On the other hand, demographic factors, such as an employee's gender and marital status, tended to relate weakly to both (Byron, 2005).

WFC directly and indirectly affects most of the world's population, as even those who are single and childless may live with friends or family members (Casper et al., 2007). While it may affect everyone, it is crucial to mention that gender is a key variable to fully understand WFC, women were found to spend more time on family than on work and men more time on work than on family. Additionally, it was also found that women were less likely than men to be meaningfully engaged in their jobs (Blanch & Aluja, 2012; Greenhaus et al., 1997). It was found that social support from family and spouse was negatively associated with WFC and that variables concerns family and household structure, including the number of children, age of children and marital status should be considered (Byron, 2005; Michel & Clark, 2011). Having more children and having young children tended to be related to increased WFC (Byron, 2005; Michel & Clark, 2011). Parents with more children reported more family to work conflict than work to family conflict. There is no difference between married and single employees in their experience of work to family and family to work conflict. Additionally, it was found that single parents have more WFC than parents who are married and employees without children tend to have similar levels of WFC (Byron, 2005).

Variables such as organisational occupation, salary, working hours, job autonomy, job authority and job position should not be seen in isolation but together and family and work

involvement should be measured simultaneously (Byron, 2005; Dierdorff & Ellington, 2008; Michel & Clark, 2011; Voydanoff, 2005). There are contradictory findings regarding some variables, such as a higher salary may be related to less WFC, but a higher salary is also highly related to higher professional status and more responsibilities (Michel & Clark, 2011). When it comes to organisational and occupational level variables, the best indication of family supportive work environment is the perceived access to work-family policy rather than the number of policies available (Kossek et al., 2011). General support from supervisors and co-workers was found to be negatively associated with both and family to work conflict. It was found that the association was stronger with work to family conflict than with family to work conflict in meta-analysis studies (Byron, 2005; Kossek et al., 2011; Michel & Clark, 2011). Specific work-family support from supervisors was also found to be more strongly associated with WFC than with general support from supervisors (Kossek et al., 2011). The number of work-family policies available have been the most common indicators of family-supportive work environments. It is possible to highlight as such, the flexible arrangements, family leave and dependent care assistant (Denicolis Bragger et al., 2005; Kossek et al., 2011; Kossek & Lee, 2017; Kossek & Ozeki, 1998; Kossek & Turner, 2022; Mesmer-Magnus & Viswesvaran, 2006).

Regarding national/cultural variables, it is well known that the structure and culture of countries are important contexts in understanding WFC (Ollier-Malaterre & Foucreault, 2017). Organisations in countries that value work as central to individuals and society have adopted fewer family-supportive policies than those in countries with lower levels of cultural centrality of work (den Dulk et al., 2013; Kossek & Turner, 2022).

Although there is currently little knowledge about how work boundary management relates to WFC (Bulger et al., 2007), balancing work and family demands is a critical challenge for most employees. Boundary management strategies refer to the strategies, principles and practices that people use to organize and separate role demands and expectations in specific domains of home and work (Nippert-Eng, 1996). It is known that effective work-family boundary management does not depend only on organisations or individuals but occurs in harmony (Kossek & Lautsch, 2012), and that measures such as remote e-work, flexible hours, compressed working week, part-time hours, and job sharing should be implemented (Frye & Breugh, 2004; Sutton & Noe, 2005, as cited in W. Casper et al., 2012). Many of these organisational initiatives have led to outcomes such

as increased family satisfaction and reduced WFC (Aryee & Luk, 1999; Baltes, 2009; Frye & Breugh, 2004; Thompson et al., 1999).

2.4. The mediating role of perceived psychological contract breach

The relationship between employee and organisation is critical to employees and has been examined from a variety of disciplines and theoretical perspectives (Coyle-Shapiro et al., 2004). Considering this, it is important to make some conceptual distinctions to better understand the role of the perceived psychological contract breach as a mediator. Contracts are defined as a set of promises that commit to future actions are a necessary component of employment relationships (Farnsworth, 1982, as cited in Rousseau, 1989; Murray, 1975). Without the promise of future exchange, neither party has an incentive to contribute something to the other and in this way the relationship may end. The sum of the promise and the consideration exchanged for it form the contract (Farnsworth, 1982, as cited in Rousseau, 1989). There are two types of contracts, distinct from each other by their nature, which are the transactional contract and the relational contract. The transactional contract presents a more rational view of the employment relationship where maximum economic benefits are to be received in return for high job performance (Robinson & Rousseau, 1994). The relational contract has distinct characteristics in that it promotes a social exchange relationship where the employee gives his loyalty and expects to receive job security in return (Robinson & Rousseau, 1994). In the former, competitive salaries, little commitment to the organisation, and sometimes a temporary job are characteristics that define the transactional nature of the psychological contract. In the latter, it goes beyond monetary reward, and a socio-emotional reward is also expected (Rousseau, 1989).

The psychological contract emerged as a concept in the psychological literature almost fifty years ago as a footnote in “Understanding Organizational Behaviour” (Argyris, 1960, as cited in Barling et al., 2008) and should be investigated as being a set of dynamic processes (Bankins, 2015; Solinger et al., 2016). The psychological contract refers to implicit ideas about the employee-organisation relationship and has been defined as an “individual's belief regarding the terms and conditions of a reciprocal exchange agreement between that focal person and another party” (Rousseau, 1989, p.123). Crucially, it can also be understood as fulfilled or broken from the perspective of the employee (Robinson et al., 1996), the employer (Coyle-Shapiro & Kessler,

2010), or both (Dabos & Rousseau, 2004). It can be stated that the psychological contract and its fulfilment relates positively to employees attitudes and behaviours, while its violation has a negative impact (de Cuyper et al., 2008). The psychological contract is distinct from expectations since expectations simply refer to what the employee expects to receive from their employer, in other words, the perceived probabilities of outcomes resulting from employee behaviour (Mitchell & Bulletin, 1974). The psychological contract, unlike formal employment contracts, is not made once, but is reviewed throughout the employees tenure with the organisation (Parks & Rousseau, 1993). Since relationships are expected to be long-lasting, the longer the relationship lasts and the more the two parties interact, the greater the range of contributions and incentives that can be included in the contract. Plus, it was found that employees developed psychological contracts during the recruitment process (Rousseau, 1989). They are subjective and arise when one party believes that a promise of future return has been made, that a contribution has been made, which can be defined as beliefs in paid commitments or reciprocal obligations and that an obligation to provide future benefits has been created (Robinson & Rousseau, 1994). Each party merely believes that they share the same interpretation of the contract, and it is important to note that these are beliefs or perceptions regarding promises and acceptance. Thus, it does not necessarily mean that both parties share a common understanding of all contractual terms (Robinson & Rousseau, 1994; Rousseau, 1989). An individual can draw on their interpretations of observations and conversations with supervisors, recruiters, mentors, and colleagues in their organisation to shape their own psychological contract (Rousseau, 1995). Consequently, employers and employees may have different opinions as well as disagreements regarding the degree to which they believe each party has fulfilled their obligations (Coyle-Shapiro et al., 2019). Psychological contracts change over time, and it was found that during the first two years of employment, employees came to perceive that they owed their employer less while their employers owed them more (Robinson & Rousseau, 1994).

There are many ways of conceptualising psychological contracts. An important distinction in this regard is the distinction between a unilateral and a bilateral perspective. In the unilateral view, the psychological contract is limited to an intra-individual perception as it consists of the employee's perspective on the expectations and obligations of the employee and the organisation (Rousseau, 1989). The bilateral view on psychological contracts considers the contract as the totality of the employer as well as the employees perceptions of the obligations exchanged (Herriot

& Pemberton, 1995, as cited in Schneider et al., 1998). As a form of measurement, a unilateral view is preferable because the psychological contract is literally psychological and is therefore an individual perception. The bilateral view of psychological contracts can be problematic because the organisation side consists of many actors who do not necessarily communicate a uniform set of expectations (Freese & Schalk, 1993, as cited in Robinson & Rousseau, 1994). Psychological contract fulfilment is defined as one party of the contract considering that the other has fulfilled its obligations (Rousseau et.al, 2011).

(Morrison & Robinson, 1997) suggested a distinction between psychological contract breach and violation. It was found that breach involves perception of a broken promise while violation involves the emotional reaction to this breach. Psychological contract breach is defined as the cognition that one's organization has failed to meet one or more obligations within one's psychological contract in a manner commensurate with one's contributions (Morrison & Robinson, 1997). The perception of contract breach will not necessarily lead to the intense emotional reaction often equated with the term psychological contract violation, this violation was described as an intense reaction of outrage, shock, resentment, and anger (Rousseau, 1989). A breach of psychological contract may occur when the workers consider the organisation to have failed fulfilling its obligations and can be more strongly related to cognitive cynicism (Coyle-Shapiro & Kessler, 2000; Robinson et al., 1996; Rousseau, 1989,1995). Violation of the psychological contract is also distinct from unmet expectations and perceptions of inequity. It is possible that employees expectations are unrealistic and when they are not met, they may become dissatisfied, perform worse and be more likely to leave their employer (Wanous et al., 1992), however when a psychological contract is violated, the responses are likely to be more intense than in this case (Robinson & Rousseau, 1994).

Morrison & Robinson (1997) maintained that perceptions of psychological contract breach do not necessarily lead to feelings of violation and that renegeing, and incongruence are two root causes of perceived psychological contract breach. Renegeing occurs when the agents of the organization recognize that an obligation exists but knowingly do not fulfil that obligation, while incongruence occurs when the employee and the agents of the organisation have a different understanding of the existence or nature of the obligation (Robinson, 2000). This breach has negative consequences, and these consequences are primarily directed toward the organisation. There are explanations for the breach-outcome relationship, these are the social exchange theory and the reciprocity norm (Blau

1964, as cited in Coyle-Shapiro et al., 2019) when the organisation fails to meet its obligations, employees reciprocate accordingly, and this response is generally organization oriented. Organizational identification provides another explanation for employees responses to violation. Violation reduces their organisational identification and in turn employees have been found to be reluctant to try for the benefit of the organisation (Restubog et al., 2008; Wei & Si 2013, as cited in Coyle-Shapiro et al., 2019; Zagenczyk et al., 2011).

It was argued that broken promises have an impact on daily mood (Coyle-Shapiro et al., 2019), however breach of psychological contract has an adverse effect on emotional well-being and has been linked to negative emotions, sick leave and burnout (Cassar & Catherine Buttigieg, 2015; Conway et al., 2011; Conway & Briner, 2002; Deery et al., 2006; Jamil et al., 2013; Jiang et al., 2017). It is associated with decreased attitudes towards the organisation, such as lower job satisfaction (Raja, 2004; Robinson & Rousseau, 1994), lower organisational trust (Robinson et al., 1996), lower confidence (Netemeyer et al., 1996; Zhao et al., 2007) lower commitment (Coyle-Shapiro & Kessler, 2000) and more cynical attitudes towards the organisation (Johnson & O’leary-Kelly, 2003).

Scholars argue that preventing contract breach has become extremely difficult and it was found to be the norm rather than the exception within organisations (Coyle-Shapiro et al., 2019). It has been found that previous work situations will influence the future since employees who experience breach with one employer are more likely to experience breach with a subsequent employer (Robinson, 2000). Cognitive style, sex, race and job insecurity have been examined as antecedents of psychological contract breach (Suazo et al., 2008; Coyle-Shapiro & Kessler, 2000; Kiewitz et al., 2016; Piccoli & de Witte, 2015). Initial trust in the employer (Robinson et al., 1996), incongruence between the employee and the organisation (Guest, 2002), employer renegeing (Robinson et al., 1996), perceived organisational support (Dulac et al., 2008), organisational change (Johnson & O’leary-Kelly, 2003; Robinson et al., 1996), organisational politics (Rosen et al., 2009), fairness (Ng et al., 2016; Rosen et al., 2009) and job resources and demands (Griep et al., 2015) are important in explaining breach of psychological contract.

Psychological needs are the basis of psychological contracts (Levinson et al. 1962, as cited in Meckler et al., 2003) and organisations are advised to build trusting relationships with their employees (Robinson et al., 1996). It has been reported that organisations should also provide

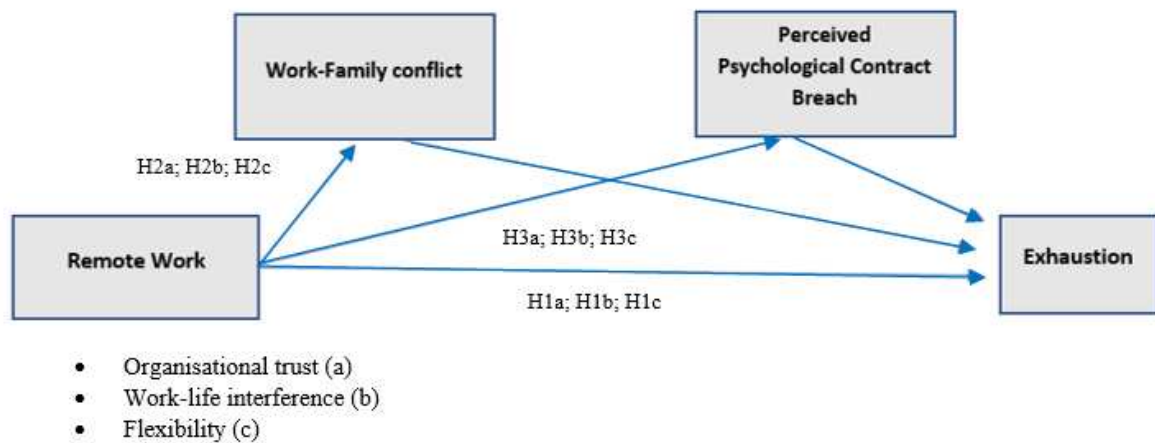
organisational support (Dulac et al., 2008), balancing work demands and resources (Griep et al., 2015). Organisations must consider not only individual differences but also the cultural context, and managers must be culturally aware to fully understand needs and expectations given the potentially positive impact of effective supervision and guidance on the perception of the psychological contract (Kiewitz, 2009). Organisations need to constantly monitor and periodically reassess the extent to which employees and the organisation are aligned, and employees should be given realistic expectations rather than unrealistic promises from the beginning of the employment relationship (Tekleab & Susan Taylor, 2003).

3. Investigation Model

3.1. Background

The main objective of this study is to understand the relationship between the components of remote e-work (organisational trust, flexibility, and work-life interference) and exhaustion. Consequently, I aim to understand the relationship between the components of remote e-work and exhaustion through the mediation effect of WFC and perceived psychological contract breach. Thus, hypotheses were formulated to test the relationship between the concepts. The hypotheses are represented in figure 3.1 investigation model. In this research four concepts were studied: remote e-work, work-family conflict, perceived psychological contract breach and exhaustion. A definition of each concept and the respective bibliographic references are presented, as well as the three dimensions of remote e-work (See Annex A).

FIGURE 3.1 INVESTIGATIONAL MODEL



3.2 RESEARCH HYPOTHESES

Several hypotheses were formulated, based on previously conducted studies and on previously formulated hypotheses, to be able to achieve the study's objectives and interpret the results. The hypotheses are as follows:

H1a: Organisational trust in remote e-work is negatively related to exhaustion

It is known that in the digital environment the employees face different challenges from those that workers are used to face in the physical environment (Roman et al., 2019). As the challenges are different, it is essential that there is trust from managers in remote e-work, furthermore, this sense of trust can mitigate the lack of physical face-to-face interaction between colleagues that has been identified as key in remote e-work (Bijlsma & van de Bunt, n.d.).

When feelings of exhaustion were explicitly explored, individuals again suggested that the nature of their work, such as excessive demands and impending deadlines, played a central role in these feelings (Charalampous et al., 2021). Remote e-working could improve feelings of emotional exhaustion since it is known that “the more e-workers consider that e-work supports their productivity and is conducted within a supportive and trustful organisation, the better is their self-reported mental health and vitality” (Grant et al., 2019, p.21).

H1b: Work-life interference in remote e-work is negatively related to exhaustion

According to Golden (2006) e-working remotely can lead to fewer interruptions and pressures in the office and allow the employees to devote more time and energy to family members. Many individuals suggested that taking breaks from their work allowed them to think of solutions, however, not switching off and being connected all the time seemed to make individuals cognitively fatigued (Charalampous et al., 2021). WLI takes remote e-work to a different level, where work and life are not separate entities and workers try to live a normal life while completing their work (Pasini, 2019). In addition, employees who can establish clear boundaries between work and non-work activities and gain control over when and where they work may experience positive individual well-being (Kossek et al., 2006).

H1c: Flexibility in remote e-work is negatively related to exhaustion

Within this reality, employees will feel empowered to establish their own routines, making choices influencing when, where, and for how long they engage in work-related tasks (Hill et al., 2008, p.152). Being able to manage their working hours more flexibly through confinement relationships with managers can improve work-life balance (Grant et al., 2019). By providing this balance, employees will be able to control their work and balance both professional and personal life (Kossek et al., 2006). While facilitating the blurring of boundaries between work and home, being able to work flexibly and from different locations in some cases can reduce stress levels and greater well-being (Grant et al., 2013).

H2a: Work-family conflict mediates the relationship between organisational trust in remote e-work and exhaustion.

A key challenge facing many workers today is how to manage the relationship between work and family role responsibilities. Family support elements should be introduced in workplaces to reduce the WFC problem and managers should play a more active role in providing emotional and instrumental support to their subordinates through measures such as childcare, flexitime, information services and family leave (Baltes, 2009).

It was found that perceived “superior trust positively influences employees work-family promotion and negatively influences employees WFC, thus promoting the work-family balance of employees” (Yang, 2022, p.87). Additionally, WFC is of increasing importance in society and is directly related to psychological health (Grandey & Cropanzano, 1999; Kossek et al., 2006; Netemeyer et al., 1996; T. D. Allen et al., 2000; T. D. Allen & Armstrong, 2006). By this I mean to state that it is critical to understand how WFC can mediate the relationship between organisational trust and exhaustion.

H2b: Work-family conflict mediates the relationship between work-life interference in remote e-work and exhaustion.

Greater integration in the form of greater permeability between work and non-work was known to be linked to more WFC (Bulger et al., 2007; Donohue, 2006; Kossek et al., 2006; T. W. H. Ng & Feldman, 2013). Blurring the lines between work and family is a stressor that can reduce the focus and energy a person assigns to each role (Glavin & Schieman, n.d.). Both this conflict and role ambiguity are related to employees' perceptions of emotional exhaustion (Singh et al., 1994, n.d.; Jackson et al., 1986). It has been found that there is a significant link between work-family conflict and emotional exhaustion (Bacharach et al., 1991). That being said, it is critical to understand how the conflict that occurs when the energy, time or behavioural demands of work conflict with family or personal life roles can mediate the relationship between individuals' work-life interference and exhaustion.

H2c: Work-family conflict mediates the relationship between flexibility in remote e-work and exhaustion.

Regarding the relationship between flexibility and WFC, there is no consensus in the literature. Some studies have found that flexibility leads to lower levels of WFC (e.g., Hammer et al., 1997; Hill et al., 2004) while others have found no relationship between them (e.g., Anderson et al., 2002; Greenhaus et al., n.d.; Thomas, 1991). More recently, the discrepancy in findings has been illustrated by two meta-analyses, one of which found a relationship between flexibility and WFC (Byron, 2005) and one of which did not (Mesmer-Magnus & Viswesvaran, 2006).

As mentioned earlier WFC is directly related to psychological health (Grandey & Cropanzano, 1999; Kossek et al., 2006; Netemeyer et al., 1996; T. D. Allen et al., 2000; T. D. Allen & Armstrong, 2006). Given that e-working flexibly and from different locations in some cases can reduce stress levels and greater well-being (Grant et al., 2013) and that it has been found in some studies that flexibility leads to lower levels of WFC it is crucial to understand how WFC can act as a mediator in the relationship between flexibility and exhaustion.

H3a: The Perceived psychological contract breach mediates the relationship between organisational trust in remote e-work and exhaustion

The developments in technology have created opportunities and challenges and have changed the structure and nature of work for both organisations and individuals (Aderibigbe, 2021). There is not much literature linking perceived psychological contract breach to organisational trust in remote e-work. However, Robinson et al., (1996) suggested that effectively managing employees trust, may lead to avoid the negative ramifications of perceived psychological contract breach.

As previously mentioned, employees report improvements in mental health when they feel trusted by their organisation (Grant et al., 2019). It is important to understand how perceived psychological contract breach mediates the relationship between remote work variables and exhaustion since has been demonstrated that exhaustion is an outcome of contract breach (Costa & Neves, 2017; Gakovic & Tetrick, 2003; Johnson & O'leary-Kelly, 2003; Lapointe et al., 2013).

H3b: The Perceived psychological contract breach mediates the relationship between work-life interference in remote e-work and exhaustion

There is not much literature linking perceived psychological contract breach to WLI, however, it has been found that there is a positive relationship between perceived psychological contract breach and conflict that occurs when demands of work conflict with personal life roles (Garcia et al. 2007, as cited in Coyle-Shapiro et al., 2019; Jiang et al., 2017), and that the absence of balance between work and family tasks can trigger employees' perceptions of psychological contract breach (Kaya & Karatepe, 2020).

Discrepancies between what is promised and what has been experienced can arise when work-related pressures and stresses interfere with and impair individuals' ability to meet their family demands and responsibilities (Bhave et al., 2010, as cited in Abdelmoteleb, 2019; Netemeyer et al., 1996). We also know that this discrepancy can result in contract breach leading to the existence of exhaustion symptoms (Costa & Neves, 2017; Johnson & O'leary-Kelly, 2003; Lapointe et al., 2013).

The desire to better combine work with domestic responsibilities leads to a strong desire to e-work remotely (Moore & Crosbie, 2004; Tietze et al., 2006, as cited in Wheatley, 2017), additionally, the greater proximity of work and home spheres allowed people to exercise greater control, such that work had less impact on their home life (Tietze et al., 2006, as cited in Wheatley, 2017). Having this said it is important to understand how perceived psychological contract breach mediates the relationship between WLI and exhaustion.

H3c: The perceived psychological contract breach mediates the relationship between flexibility in remote e-work and exhaustion

There is not much literature linking perceived psychological contract breach to flexibility, however, Collins (2013) showed that flexibility in remote e-work was an important sign of balance, which was associated with the fulfilment of psychological contract. By allowing flexible schedules the employees can reduce the work-life conflict (Alegre et. al, 2016; las Heras et al., 2015) and with this the individual's judgment of breach will be lower (Coyle-Shapiro et al., 2019).

Coyle-Shapiro et al., (2019) showed that perceived psychological contract breach negatively affects employees health and additionally (Grant et al., 2013) stated that being able to work flexibly can reduce stress levels and improve employees well-being. In line with this it is important to understand how perceived psychological contract breach mediates the relationship between flexibility and exhaustion.

4. Method

4.1. Participants and procedures

This study was carried out during a pandemic, although there is still a part of the world population that remains in remote e-work, there are also many people who returned to their workplaces either in a full-time regime or in a hybrid regime. An online questionnaire was created and sent remotely to people identified as the target population. This questionnaire was conducted in English, as it is for any worker residing either in Portugal or abroad, of any sex, older than 18 years old. In the end, the responses were analysed using the SPSS program.

It was defined as a mandatory condition for the completion of the questionnaire to have already experienced or be experiencing working remotely, however, throughout the questionnaire when asked about this subject some respondents reveal that they have not done so. It may have happened by mistake or because the respondents do not consider internships as work, even so to obtain the best possible sample I decided to remove from the analysis all respondents who have never experienced working remotely reducing my sample from 200 to 146 participants. The data of people who are unemployed will be taken into consideration as this may be a temporary condition.

The results have shown that 69,9% of the respondents are female (see Annex B) and 30,1% are male. Around 84,2% of the respondents are aged between 18 and 25 years old. The overwhelming majority of people are Portuguese (80.8%), and most respondents are located in Portugal (80.8%). Most of the respondents have a university degree (54.1%) and 85.6% of the respondents are currently working. In relation to work experience, 53,4% of respondents replied that they have between 1 to 5 years' experience. The sector in which more people work is the Business Services sector (52,7%) and most people answered "no" when asked about managerial responsibilities (69.9%). Questions were also asked regarding the number of people working in the company and the number of hours worked per week. It was found that the average number of people in each organization is 10344.38 and the average number of hours worked per week is 40 hours. Of those who have experienced this type of work, 45.9% said they have done it part-time and 54.1% full-time.

4.2 Measures

4.2.1 Remote e-work

To assess remote e-work, the items from E-work life (EWL) scale developed by Grant et al. (2019) and refined by Charalampous (2020) in her PHD were used. From the twenty-two items in the original scale, only eighteen were used, corresponding to the used dimensions. In addition, one of the items was inverted (“My relationships suffer when I am e-working remotely”) as the scale indicated (Charalampous, 2020). The eighteen items used comprise three dimensions of remote work: Organisational trust (six items; e.g., “My organization provides training in e-working skills and behaviours”); Work-life interference (seven items; e.g., “My e-working does not take up time that I would like to spend with my family/friends or on other non-work activities”); Flexibility (five items; e.g., “My work is so flexible I could easily take time off e-working remotely, if and when I want to”). It should be noted that, the way the questions were asked, a higher value of work-life interference corresponds to less interference between personal and professional life. Responses to the items were scored on a five-point Likert scale from 1 (“Strongly disagree”) to 5 (“Strongly agree”). The Cronbach’s α value was 0.80, 0.73 and 0.85 - organisational trust, work-life interference, and flexibility, respectively.

4.2.2 Work-family conflict

To measure work-family conflict, the eighteen-item measure by Carlson et al., (2000) was used. This interference can occur in two directions, from work to family or from family to work (Kossek & Ozeki, 1998) and as such in this study both were studied and analysed together based on time, strain and behaviour (Carlson et al., 2000). These items were measured with a five-point Likert scale from 1 (“Strongly disagree”) to 5 (“Strongly agree”). Two examples of sample items are “My work keeps me from my family activities more than I would like” and “The time I spend on family responsibilities often interfere with my work responsibilities”. The Cronbach’s α value was 0.93.

4.2.3 Perceived Psychological Contract Breach

To measure the perception of psychological contract breach, the five-item scale developed by Robinson & Morrison (2000) was used. Through these five questions, the fulfilment of obligations by the employer was assessed. These items were measured with a five-point Likert scale from 1 (“Strongly disagree”) to 5 (“Strongly agree”). In addition, there was a need to reverse the first three questions conducted as the scale indicated (e.g., “So far, almost all the promises made by my organization during my recruitment have been fulfilled”, “I feel that my organization has fulfilled the promises they made to me when I was hired” and “So far, my organization has done an excellent job in fulfilling the promises they made to me”) (Robinson & Morrison, 2000). The Cronbach’s α value was 0.92.

4.2.4 Exhaustion

The scale to measure employees exhaustion was developed by Schaufeli and his colleagues (Sinval et al., 2022). These items were measured with a five-point Likert scale from 1 (“Strongly disagree”) to 5 (“Strongly agree”). Two examples of sample items are “At work, I feel mentally exhausted” and “Everything I do at work requires a great deal of effort”. The Cronbach’s α value was 0.82.

4.3 Data Analysis

Descriptive statistics and measures of association (Person’s Correlation) were calculated for the variables under study. All Hypotheses concerning mediation were tested using PROCESS macro. (Igartua & Hayes, 2021). The hypotheses were studied using the Model 4, to assess the indirect effects a bootstrap estimation was performed supported by 5,000 bootstrap samples, and confidence intervals at 95% were computed.

5. Results

5.1. Descriptive statistics and correlation analysis

Table 5.1 reports descriptive statistics and correlations. Organisational trust provided to employees in remote e-work was negatively correlated with perceived psychological contract breach, work-family conflict and exhaustion ($r = -.50, p < .01, r = -.20, p < .05$ and $r = -.29, p < .01$ respectively). In this sense when the organisational trust is higher, we find lower levels of perceived contract breach, work-family conflict and exhaustion.

Flexibility in remote e-work was negatively correlated with perceived psychological contract breach, work-family conflict and exhaustion ($r = -.31, p < .01, r = -.26, p < .01$ and $r = -.38, p < .01$ respectively). In this sense when flexibility is higher, we find lower levels of perceived contract breach, work-family conflict and exhaustion.

Work-life interference in remote e-work was negatively correlated with perceived psychological contract breach ($r = -.23, p < .01$). Higher values of work-life interference mean that there is less interference, meaning that the less interference between personal and work life, the less perceived breach of psychological contract. Correlations of work-life interference in remote work with work-family conflict and exhaustion were not significant ($r = -.08, p > .05$ and $r = -.13, p > .05$).

Moreover, perceived psychological contract breach is positively correlated with work-family conflict and exhaustion ($r = .20, p < .01$ and $r = .37, p < .01$), meaning that high levels of perceived psychological contract breach are associated with higher work-family conflict and exhaustion.

Finally, work-family conflict is positively correlated with exhaustion ($r = -.56, p < .01$), which means that when work-family conflict is higher, the levels of exhaustion are lower.

TABLE 5.1 MEANS, STANDARD DEVIATIONS AND CORRELATIONS BETWEEN THE VARIABLES

Variables	Mean	SD	1	2	3	4	5
1. Organisational trust in remote e-work	3,92	0,79					
2. Flexibility in remote e-work	3,36	1,007	0,59**				
3. Work-life Interference in remote e-work	3,36	0,72	0,38**	0,36**			
4. Perceived Psychological contract breach	2,45	1,04	-0,50**	-0,31**	-0,23**		
5. Work-Family conflict	2,54	0,82	-0,20*	-0,26**	-0,08	0,20*	
6 Exhaustion	2,92	0,77	-0,29**	-0,38**	-0,13	0,37**	0,56**

*P<.05 **P<.01

140 < N < 144

5.2. Hypothesis Results

Hypothesis H1a, regarding the negative relationship between organisational trust in remote e-work and exhaustion, was supported ($B = -.28$, $t = -3.48$, $p < .001$), which means that organisational trust in remote e-work was a predictor of exhaustion (See Annex C). The results regarding hypothesis H2a, work-family conflict mediates the relationship between organisational trust in remote e-work and exhaustion, indicated that there was a negative relationship between organisational trust in remote e-work and work-family conflict ($B = -.24$, $t = -2.76$, $p < .05$), meaning that organisational trust provided to employees in remote e-work was a significant predictor of work-family conflict. Simultaneously, work-family conflict was a significant predictor of exhaustion in a positive way ($B = .49$, $t = 7.22$, $p < .05$). The 95% confidence interval for the indirect effect of organisation trust in remote e-work on exhaustion through work-family conflict ($B = -.12$) did not include zero ($-.22$ to $-.03$), suggesting a significant indirect effect. Thus, hypothesis H2a was supported (see Table 5.2).

TABLE 5.2 RESULTS OF THE RELATIONSHIP BETWEEN ORGANISATIONAL TRUST IN REMOTE E-WORK AND EXHAUSTION VIA WORK-FAMILY CONFLICT

Mediator Variable Model		Outcome:	Work-Family conflict			R-sq
		Coeff.	SE	t	P	
	Organisational trust	-.24	.09	-2.76	<.05	.053
Outcome Variable Model		Outcome:	Exhaustion			
		Coeff.	SE	t	P	.34
	Organisational trust	-.16	.07	-2.31	<.05	
	Work-Family conflict	.49	.07	7.22	<.05	
		Bootstrapping results for the indirect effect				
		Effect	SE	LL 95% CI	UL 95% CI	
	Indirect effect of Organisational trust on Exhaustion via Work-Family conflict	-.12	.05	-0.22	-0.03	

Note. N = 139. Unstandardized regression coefficients are reported. Bootstrap sample size = 5000 LL lower limit, CI confidence interval, UL upper limit

Regarding hypothesis H3a, perceived psychological contract breach mediates the relationship between organisational trust in remote e-work and exhaustion, the results indicated that there was a negative relationship between organisational trust in remote e-work and perceived psychological contract breach ($B = -.65$, $t = -6.64$, $p < .05$), meaning that organisational trust provided to employees in remote e-work was a significant predictor of perceived psychological contract breach. Simultaneously, perceived psychological contract breach was a significant predictor of exhaustion in a positive way ($B = .22$, $t = 3.23$, $p < .05$). The 95% confidence interval for the indirect effect of organisational trust on exhaustion through perceived psychological contract breach ($B = -.15$) did not include zero ($-.28$ to $-.05$), suggesting a significant indirect effect. Thus, hypothesis H3a was supported (see Table 5.3).

TABLE 5.3 RESULTS OF THE RELATIONSHIP BETWEEN ORGANISATIONAL TRUST IN REMOTE E-WORK AND EXHAUSTION VIA PERCEIVED PSYCHOLOGICAL CONTRACT BREACH

					R-sq
Mediator Variable Model		Outcome:	Perceived psychological contract breach		.25
		Coeff.	SE	t	P
	Organisational trust	-.65	.10	-6.64	<.05
Outcome Variable Model		Outcome:	Exhaustion		.15
		Coeff.	SE	t	P
	Organisational trust	-.14	.09	-1.52	.13
	Perceived psychological contract breach	.22	.07	3.23	<.05
Bootstrapping results for the indirect effect					
	Effect	SE	CI	LL 95%	UL 95% CI
	Indirect effect of Organisational trust on Exhaustion via perceived psychological contract breach	-.14	.06	-.28	-.05

Note. N = 137. Unstandardized regression coefficients are reported. Bootstrap sample size = 5000 LL lower limit, CI confidence interval, UL upper limit

The hypothesis H1b (See Annex D) regarding the negative relationship between work-life interference in remote e-work and exhaustion, was not supported ($B = -.13$, $t = -1.47$, $p = .14$). The results regarding hypothesis H2b, work-family conflict mediates the relationship between work-life interference in remote e-work and exhaustion, indicated that work-life interference in remote e-work has no influence on the mediator work-family conflict ($B = -.11$, $t = -1.34$, $p = .26$). Therefore, hypothesis H2b was not supported (see Table 5.4).

TABLE 5.4 RESULTS OF THE RELATIONSHIP BETWEEN WORK-LIFE INTERFERENCE IN REMOTE E-WORK AND EXHAUSTION VIA WORK-FAMILY CONFLICT

Mediator Variable Model		Outcome:	Work-Family conflict			R-sq
	Work-life interference	Coeff.	SE	t	P	
		-.11	.10	-1.13	.26	.01
Outcome Variable Model		Outcome:	Exhaustion			
	Work-life interference	Coeff.	SE	t	P	
		-.08	.08	-1.01	.32	
	Work-Family conflict	.52	.07	7.71	<.05	.31
Bootstrapping results for the indirect effect						
	Indirect effect of work-life interference on Exhaustion via Work-Family conflict	Effect	SE	CI	LL 95%	UL 95% CI
		-.06	.06		-.17	.06

Note. N = 139. Unstandardized regression coefficients are reported. Bootstrap sample size = 5000 LL lower limit, CI confidence interval, UL upper limit

Regarding hypothesis H3b, perceived psychological contract breach mediates the relationship between work-life interference in remote e-work and exhaustion, the results indicated that there was a negative relationship between work-life interference in remote e-work and perceived psychological contract breach ($B = -.31, t = -2.58, p < .05$), meaning that work-life interference in remote e-work was a significant predictor of Perceived contract breach. Simultaneously, perceived psychological contract breach was a significant predictor of exhaustion in a positive way ($B = .27, t = 4.34, p < .05$). The 95% confidence interval for the indirect effect of work-life interference on exhaustion through perceived psychological contract breach ($B = -.08$) did not include zero (-.16 to -.02), suggesting a significant indirect effect. Thus, hypothesis H3b was supported (see Table 5.5).

TABLE 5.5 RESULTS OF THE RELATIONSHIP BETWEEN WORK-LIFE INTERFERENCE IN REMOTE E-WORK AND EXHAUSTION VIA PERCEIVED CONTRACT BREACH

Mediator Variable Model		Outcome:	Perceived psychological contract breach			R-sq
		Coeff.	SE	t	P	
	Work-life interference	-.31	.12	-2.58	<.05	.05
Outcome Variable Model		Outcome:	Exhaustion			R-sq
		Coeff.	SE	t	P	
	Work-life interference	-.04	.09	-.47	.64	.14
	Perceived psychological contract breach	.27	.06	4.34	<.05	
Bootstrapping results for the indirect effect						
	Effect	SE	CI	LL 95%	UL 95% CI	
	Indirect effect of work-life interference on Exhaustion via perceived psychological contract breach	-.08	.04		-.16	-.02

Note. N = 137. Unstandardized regression coefficients are reported. Bootstrap sample size = 5000 LL lower limit, CI confidence interval, UL upper limit

Hypothesis (H1c), regarding the negative relationship between flexibility in remote e-work and exhaustion, was supported ($B = -.29$, $t = -4.77$, $p < .05$), which means that flexibility in remote e-work was a predictor of exhaustion (See Annex E). The results regarding hypothesis H2c, work-family conflict mediates the relationship between flexibility in remote e-work and exhaustion, indicated that there was a negative relationship between flexibility in remote e-work and work-family conflict ($B = -.22$, $t = -3.37$, $p < .05$), meaning that flexibility in remote e-work was a significant predictor of work-family conflict. Simultaneously, work-family conflict was a significant predictor of exhaustion in a positive way ($B = .46$, $t = 6.88$, $p < .05$). The 95% confidence interval for the indirect effect of flexibility in remote e-work on exhaustion through work-family conflict ($B = -.10$) did not include zero ($-.18$ to $-.04$), suggesting a significant indirect effect. Thus, hypothesis H2c was supported (see Table 5.6).

TABLE 5.6 RESULTS OF THE RELATIONSHIP BETWEEN FLEXIBILITY IN REMOTE E-WORK AND EXHAUSTION VIA WORK-FAMILY CONFLICT

					R-sq
Mediator Variable Model	Outcome:	Work-Family conflict			.08
	Coeff.	SE	t	P	
Flexibility	-.22	.07	-3.37	<.05	
Outcome Variable Model	Outcome:	Exhaustion			.36
	Coeff.	SE	t	P	
Flexibility	-.18	.05	-3.40	<.05	
Work-Family conflict	.46	.07	6.88	<.05	
Bootstrapping results for the indirect effect					
	Effect	SE	LL 95% CI	UL 95% CI	
Indirect effect of Flexibility on Exhaustion via Work-Family conflict	-.10	.03	-.18	-.04	

Note. N = 139. Unstandardized regression coefficients are reported. Bootstrap sample size = 5000 LL lower limit, CI confidence interval, UL upper limit

Regarding hypothesis H3c, perceived psychological contract breach mediates the relationship between flexibility in remote e-work and exhaustion, the results indicated that there was a negative relationship between flexibility in remote e-work and perceived psychological contract breach ($B = -.30$, $t = -3.64$, $p < .05$), meaning that flexibility in remote e-work was a predictor of perceived psychological contract breach. Simultaneously, perceived psychological contract breach was a significant predictor of exhaustion in a positive way ($B = .21$, $t = 3.46$, $p < .05$). The 95% confidence interval for the indirect effect of flexibility on exhaustion through perceived psychological contract breach ($B = -.06$) did not include zero ($-.13$ to $-.02$), suggesting a significant indirect effect. Thus, hypothesis H3c was supported (see Table 5.7).

TABLE 5.7. RESULTS OF THE RELATIONSHIP BETWEEN FLEXIBILITY IN REMOTE E-WORK AND EXHAUSTION VIA PERCEIVED CONTRACT BREACH

				R-sq	
Mediator Variable Model		Outcome:	Perceived psychological contract breach		.09
		Coeff.	SE	t	P
	Flexibility	-.30	.08	-3.64	<.05
Outcome Variable Model		Outcome:	Exhaustion		.21
		Coeff.	SE	t	P
	Flexibility	-.22	.06	-3.62	<.05
	Perceived psychological contract breach	.21	.06	3.46	<.05
Bootstrapping results for the indirect effect					
		Effect	SE	CI	LL 95% UL 95% CI
	Indirect effect of Flexibility on Exhaustion via perceived psychological contract breach	-.06	.03		-0.13 -.02

Note. N = 137. Unstandardized regression coefficients are reported. Bootstrap sample size = 5000 LL lower limit, CI confidence interval, UL upper limit

6. Discussion and Conclusion

6.1. General discussion

The pandemic that we are still experiencing today, as well as the rapid adaptation that people have experienced, made interesting wanting to study how e-work remotely can influence mental health. The main aim of this research was to understand if certain remote e-work characteristics such as organisational trust, flexibility and work-life interference could lead to employee exhaustion. Synthesizing the results presented earlier, trust and flexibility in remote e-work were found to be negatively related to exhaustion. On the other hand, the hypothesis that work-life interference in remote e-work is negatively related to exhaustion was not supported. In other words, when organisational trust and flexibility in remote e-work increase, exhaustion levels decrease. As for work-life interference in remote e-work this statement could not be proven. The relationship between remote e-work characteristics and employee exhaustion was further studied using WFC and perceived psychological contract breach as mediators. The study of the mediation of WFC revealed that there is a mediating effect in both the relationship between organisational trust in remote e-work and exhaustion and the relationship between flexibility in remote e-work and

exhaustion. However, WFC does not have a mediating effect on the relationship between work-life interference in remote e-work and exhaustion, this is because the predictor variable does not influence the mediator. With the mediator's study it is again found that when organisational trust in remote e-work and flexibility in remote e-work increase exhaustion decreases. The study of the mediation of perceived psychological contract breach revealed that there is a mediating effect in the relationship between organisational trust, flexibility and work-life interference in remote e-work and exhaustion. With the mediator's study it is again found that when organisational trust in remote e-work and flexibility in remote e-work increase exhaustion decreases. It was also possible to verify, that the increase of work-life interference, i.e. less interference between work and non-work tasks, leads to less perceived contract breach and as such leads to lower levels of exhaustion.

Now explaining the results summarized above, it has been confirmed that when employees feel more flexibility and trust in performing tasks remotely, they tend to experience less emotional exhaustion (Bentley et al. n.d.; Sardeshmukh et al., 2012). It was found that when organisational trust and flexibility in remote e-work increase, exhaustion levels decrease which means that the present study is aligned with the literature since it was found by Sardeshmukh et al. (2012) and by Charalampous et al. (2021) that there is a negative relationship between the extent of remote e-work and exhaustion.

This study is aligned with Grant et al., (2019) since it was stated that building relationships with managers based on trust can help employees increase their ability to manage their working hours improving work-life balance, this way it may experience better levels of psychological health. Concerning flexibility, the results of this study are consistent with former research. It was confirmed a negative relationship between flexibility in remote e-work and exhaustion. This negative relationship can be explained by the fact that trusting and giving employees some autonomy over their work arrangements can give them a sense of independence (Tietze & Musson, n.d.). Having the possibility to decide not only the work schedule but also the location where they are going to work (ter Hoeven & van Zoonen, 2015) as well as being able to satisfy family needs without compromising their work tasks (Mann & Holdsworth, 2003, as cited in Charalampous et al., 2019) was found crucial and it is argued that flexibility perceived by employees has a positive impact on mental health (Grant et al., 2019).

This research stated that remote e-working may decrease how emotionally exhausted individuals feel (Golden, 2006; Redman & Wilkinson, 2009) and that organisational culture and environment play a pivotal role in remote e-worker's well-being (Gálvez et al., 2011, as cited in C. A. Grant et al., 2019). However, the boundaries between work and life became blurred (Wepfer et al., n.d.) and this can have either positive or negative consequences. People tend to be always available, work late, and check work during their time off (Park & Fritz, 2011), this may lead to being emotionally exhausted (Derks et al., 2014). Although the work can become more intense (Wepfer et al., n.d.), this blur gives freedom to integrate work and non-work life to suit employees' needs (Wepfer et al., n.d.). The results regarding the negative relationship between organisational trust and flexibility in remote e-work are aligned with the literature, on the other hand, it was not possible to support that work-life interference is negatively related to exhaustion.

This study analysed the mediating role of WFC in the relationship between each dimension of remote e-work and exhaustion. The results are aligned with previous research since some studies have indicated that flexibility in remote e-work relates to less WFC (Hammer et al., 1997; Hill et al., 2004) and is known that a higher level of autonomy provided by the organisation trust in remote e-work can reduce WFC (Goldstein 2003, as cited Andrade & Lousã, 2021; Prottas & Kopelman, 2009; Voydanoff, 2005). This WFC reduction may be because employees believe that they have the necessary competence and capabilities to achieve their job performance (Saragih 2011, as cited in Andrade & Lousã, 2021; Chung, 2017). The results are aligned with the literature since exhaustion was found to be a work-related stressor (Amstad et al., 2011; Bellavia and Frone 2005, as cited in Barling, 2008; Allen et al., 2000), and that lower levels of WFC lead to lower levels of exhaustion (Bacharach et al., 1991). WFC is related to critical employment, family, physical and psychological health (Grandey & Cropanzano, 1999; Kossek et al., 2006; Netemeyer et al., 1996; T. D. Allen et al., 2000; T. D. Allen & Armstrong, 2006). It is possible to mention that, according to the literature and the results of this study, general support from supervisors, namely through trust and flexibility in remote e-work, was found to be negatively associated with WFC (Byron, 2005b; Kossek, 2011; Michel, n.d.). On the other hand, regarding the influence of WLI on exhaustion through WFC, the results indicated that, the predictor variable does not influence the moderator variable. In other words, WLI does not influence the WFC, as such WLI will have no indirect effect on exhaustion. As stated earlier, the correlations of WLI with WFC and exhaustion were not significant.

It is known that individuals' family situation influenced feelings of emotional exhaustion, as those who worked extensively remotely and experienced high WFC were the most emotionally exhausted as they experience negative blurring of home and work boundaries (Sardeshmukh et al., 2012). According to the mentioned information it was expected that WLI would be related to WFC however this relation was not supported and there are a few reasons to explain this. One reason to explain this result could be that the sample consisted of only 146 participants. In addition to the above it is worth to emphasize that most respondents are female (69.9%). The fact that the sample is not homogeneous may influence the results since sex is a key variable in the total understanding of WFC (Blanch & Aluja, n.d.). Also, other questions that could have been included in the questionnaire is whether respondents have children, the number of children, age of children and marital status as these are variables that relate to family and household structure as having more children and having young children tends to be related to increased work-family and family-work conflict (Byron, 2005). It is also known that variables such as organisational occupation, salary, working hours, work autonomy, working authority and working position should be measured simultaneously and have direct impact (Byron, 2005; Dierdorff & Ellington, 2008; Michel, n.d.; Voydanoff, 2005). Another reason to explain this result is the scale that was used to measure WFC since there are questions regarding all forms of conflict combined with the directions (Carlson et al., 2000). The fact that each direction was not studied separately may contribute to the results obtained, this limitation will be explained later in the respective chapter. Besides that, and according to literature there's tendency that respondents may answer the questions provided based on what is considered as more favourable to the current social norms and standards regardless of their true feelings (Sekaran & Bougie, 2009, as cited in Ng, n.d.).

While it is known that it was also considered difficult to disconnect in an "always-on" culture, the fear of missing out was overcome and it was found that one of the most important benefits expressed was the greater experience of autonomy and flexibility (Molina-Sánchez et al., 2021). It was then discovered as major benefits that there was more time for reflection and to integrate physical activities into workdays, more time to be with family, to take care of household chores, to be with animals, and to spend more time with children (Molina-Sánchez et al., 2021). Knowing that e-working remotely has both sides of the coin and that each person integrates roles according to individual preferences, it is possible to state that employees may have integrated work and non-

work demands effectively avoiding conflicts and that may be one reason to explain why it was not possible to relate work-life interference and WFC.

It was also studied the mediating role of psychological contract in the relationship between each characteristic of remote e-work and exhaustion. Firstly, regarding the influence of organisational trust in remote e-work on exhaustion through the mediating effect of perceived psychological contract breach, the results demonstrated that organisational trust contributes to decrease exhaustion. This means that, more committed to their organization and to work for the organisation with managers support, the less their perceived breach and feelings of breach and, consequently, lower levels of exhaustion. The relationship between the organisational trust provided to employees in remote e-work and the perceived psychological contract breach was expected because as stated in the literature, the psychological contract refers to implicit ideas about the employee-organisation relationship (Rousseau, 1989), in line with this it was expected that better relationship with the organisation lead to lower levels of perceived breach and feelings of violation. More trust has been appreciated and have a lot of benefits as showed by the results so organisations should build trusting relationships with their employees (Robinson et al., 1996). Lower levels of trust in remote e-work led to higher levels of perceived psychological contract breach, which consequently, led to higher levels of exhaustion. These results showed something that the literature mentioned, breach of psychological contract has an adverse effect on emotional well-being and has been linked to negative emotions, sick leave and burnout (Cassar & Catherine Buttigieg, n.d.; Conway & Briner, 2002; Conway, 2011; Deery 2006; Jamil, 2013; Jiang, 2017).

Regarding the influence of work-life interference in remote e-work on exhaustion through perceived psychological contract breach, the results demonstrated that, work-life interference contributes to decrease exhaustion. This means that, the higher the observed values of work-life interference in remote e-work, the lower the interference between personal and professional activities. In this case less interference leads to lower perceived psychological contract breach, and consequently lower levels of exhaustion. The results are aligned with the literature since there is a positive relationship between contract breach and the existence of interference (Jiang et al., 2017). With this it can be stated that it was expected that individuals who can integrate different tasks and roles would be able to reduce their perception of psychological contract breach, i.e. the fact that employees can integrate tasks makes them perceived that the organisation itself fulfils the obligations within the psychological contract itself in a manner commensurate with their

contributions. Consequently, the fact that the employee believes the organisation fulfils the obligations within the psychological contract itself leads to fewer symptoms of exhaustion being aligned with the literature that suggests that the ability of an individual to integrate work and non-work demands, being able to find a good balance between work and life domains will have a positive impact on health (Charalampous, 2019; Kowalski & Swanson, n.d.). According to Coyle-Shapiro et al. (2019) it is known that employers and employees may have different opinions regarding the degree to which they believe each party has fulfilled their obligations so, it is clear in this study that being able to integrate different roles and trust both parties lead to lower levels of psychological contract breach and that these lower levels lead to less adverse effects on emotional well-being (Cassar & Catherine Buttigieg, n.d.; Conway & Briner, 2002; Conway 2011; Deery, 2006).

Regarding the influence of flexibility in remote e-work on exhaustion through perceived psychological contract breach, the results demonstrated that, the flexibility contributes to decrease exhaustion. This means that, the greater the flexibility provided to employees in remote e-work, the less their perceived psychological contract breach and, consequently, lower levels of exhaustion. The employee-organisation relationship is a fundamental relationship for employees and flexibility seems to be a win-win situation for both parties (Collins, 2013). The results showed that this flexibility towards work contributes to the employee well-being. In line with this, the results showed that this flexibility led to lower levels of perceived psychological contract breach, additionally, the ability to work flexibly and from different locations without the time constraints, can lead to lower levels of exhaustion and in some cases to reduced stress levels and greater well-being. (Grant et al., n.d.). As final note it is possible to state that regarding perceived psychological contract breach, it is possible to say that the results are in line with what is referred in the literature, since the employee perception of a psychological contract breach affects their well-being. (Cassar & Catherine Buttigieg, n.d.; Conway & Briner, 2002; Conway, 2011; Deery, 2006; Jamil, 2013; Jiang, 2017).

6.2. Theoretical implications

The main contribution of this study is the research model. This study analysed four different concepts: Remote e-work, Burnout, WFC, the Perceived psychological contract breach and the relationship between them. It is a complete model that gives an idea of how remote e-work dimensions (organisational trust, work-life interference and flexibility) influence exhaustion, considering the mediating effect of both work-family conflict and the perceived psychological contract breach.

During the same period, there were some studies conducted investigating the effects of remote e-work on wellbeing. Mihalca et al., (2021) studied the link between work overload and employee wellbeing considering role clarity as a mediator, and task interdependence and self-efficacy as two potential boundary conditions. The effects of work and technology during and after lockdown were analysed and how they relate to their sense of emotional exhaustion (D. Anderson & Kelliher, n.d.; Journal et al., n.d.; Sandoval-Reyes et al., 2021). (Parra et al., 2022) studied the personality traits and their likelihood of experiencing remote e-work exhaustion and Hadi et al., (2021) based on Job Demands-Resources model analysed the relationship between job demands, home demands and emotional exhaustion during remote e-work. Giaque et al., (2022) used the same model to examine the impact of work modalities, job-related, relational, and organisational climate variables on employees engagement, exhaustion, and perceived performance. In this study, a diverse sample of workers who are or have experienced full or partial remote e-work was used, and their combined responses allowed me to identify whether e-working remotely has an impact on mental health. This study contributes to the literature since this study was conducted simultaneously with the return to "normal life" post-pandemic. Thus, for many remote e-work is no longer mandatory and the level of exhaustion is certainly different from what was felt before and/or during the pandemic. It should be noted that the scales used to measure remote e-work and exhaustion were redefined in 2020 and 2022 respectively, and as such allowed a more accurate and careful analysis.

During the same period, there were some studies conducted that investigated how the transition to remote e-work was experienced and to what extent stressors are related to WFC (Lange & Kayser, 2022; van Zoonen et al., 2021). Studying WFC is always interesting because it allows the

concept to be increasingly recognized, and consequently, for organisations to understand that their success depends on how their employees manage their emotions and manage to balance their personal and professional lives. In this research it was considered the mediating effect of work-family conflict between remote e-work dimensions and exhaustion.

Other researchers studied the relationship between the perceived psychological contract breach and their indirect impact through emotional exhaustion, organisational distrust, and turnover intention (Abdalla et al., 2021; Anthony et al., 2021). It was also proposed a research model where perceived psychological contract breach mediates the influence of work-life balance on propensity to leave work early, propensity to be late for work task performance, and voice behaviour (Kaya & Karatepe, 2020). The concept of perceived psychological contract breach is a great contribution of this study since there is a very rare literature that relates the characteristics of remote e-work and exhaustion having as mediator the perceived psychological contract breach.

6.3. Practical implications

This study was developed with the purpose of contributing to the development of human resources practices and to help organisations to face a new work regime that is increasingly becoming a hybrid regime. Although the pandemic is still being felt, it is important to note that companies are increasingly seeking to reconcile face-to-face work with remote e-work. This research highlights the fact that it is important to pay attention to flexibility, organisational trust and the existence of a work-life interference with a positive impact on their wellbeing. Bearing in mind that the world is constantly changing and that what is "normal" today will no longer be so tomorrow, organisations must remain alert and prepared to act. It is important to know the market where you operate, have conversations with your employees and meet expectations. While “it is not always easy for supervisors to trust that their employees are doing what they are supposed to be doing when they are not observed, ceding control can actually create greater capacity for work” (George et al., 2022, p.7). Having this said, it is important to trust, keep your employees motivated and pay attention to the preferences of each employee. For some people it is more advantageous to work 100% from home, for some the remote e-work is not an advantage while for others the hybrid regime would be ideal, my suggestion is that managers keep track of this information and preferences.

The results show that both flexibility and organisational trust led to lower levels of exhaustion and managers should have this in mind. As had been mentioned, there is autonomy and flexibility of working from home, which allows employees to better organise their working time (Bailey & Kurland, 2002; Golden, 2006, as cited in Dulebohn, n.d.; Grant, 2013; Morgan, 2004, as cited in Holdsworth & Beauregard, 2003; Nakrošienė, n.d.). It is important to keep the employees under managers radar however flexibility, and trust should be given since it plays a key role in both employee satisfaction and promoting well-being (Gajendran & Harrison, 2007; Hornung & Glaser, 2009; Sardeshmukh, 2012; Wiktorsson, 2015). The results shown regarding WLI, specifically when studied with perceived psychological contract breach, may be since individuals feel obliged to be available all the time and that many organisations now expect employees to use remote technologies to keep in touch with work both in and out of working time (Vernon, 2005, as cited in Grant et al., 2013). In my point of view measures should be implemented by the company so that there is a complete disconnection of employees after working hours. I suggest measures such as reducing contact and communication with employees outside of working hours to unavoidable situations, talking to employees so that they do not access platforms such as Teams or Email on personal devices and avoiding assigning deadlines that cannot be fulfilled within working hours. The role of managers should consider that WLI in remote e-work is an essential determinant of health. Employees should not have to be placed in situations of conflict, i.e., there are no-win situations when the employee must make a choice between a family emergency and a deadline at work. These types of situations lead to physical stress, burnout, depression, and anxiety (Doyle et al., 2019).

The study reveals that WFC have a mediating effect between trust and flexibility in remote e-work and exhaustion, so, and knowing that WFC is associated with negative outcomes such as exhaustion it is important to highlight that managers play a fundamental role since they can encourage hard breaks and clear break times so that employees can disconnect from work (Chen & Fulmer, 2018, as cited in Lott & Abendroth, 2022). It is important to rethink strategies that can create remote e-work scenarios without harming their employees work and family relationships, it is known that managers should have open dialogues about caregiving responsibilities, regarding flexibility and whether there is a loss of boundaries between work and family domains while e-working remotely (Hammer, 2005, as cited in Andrade & Lousã, 2021). The results also show that e-working remotely does not impact each person in the same way, having said this and considering

the literature, compulsory remote e-work in contrast to optional remote e-work may be problematic for employees (Andrade & Lousã, 2021).

It is known that perceived psychological contract breach might be a problem for some employees, so it is mandatory that organisations take a step forward in terms of guaranteeing to employees that the expectations for managing their careers, future steps and feelings are discussed with their managers. Managers should therefore bear in mind that exhaustion is the consequence of breach of psychological contract (Vandenberghe et al., 1999). As such the relationship with employees must be transparent. It is also important to highlight the fact that the necessary conditions should be created for the employee to express his opinion on opportunities for growth and career advancement. This perceived psychological contract breach is associated with decreased attitudes towards the organisation, lower commitment and with more cynical attitudes towards the organisation and as such it is important to maintain a positive relationship so that this does not occur (Coyle-Shapiro & Kessler, 2000; Johnson & O’leary-Kelly, 2003; Raja, 2004, as cited in Jamil, 2013; Robinson, 1996; Robinson & Rousseau, 1994, as cited in Gakovic & Tetrick, 2003).

Sex, race, and cognitive style have been examined as antecedents of psychological contract breach (Suazo et al., 2008). I would like to add to this list the flexibility, organisational trust and WLI since it was found that the perceived levels of breach will be lower if the employee feel that there is more flexibility within their organisation and higher levels of organisational trust. It is also worth mentioning that the organisation should try that their employees do not feel too high levels of WFC because even working outside the office this will make the employees feel more comfortable and that their expectations are being met. It is crucial for companies to realize that how their employees feel mentally will also depend on how they feel in their workplace. E-working remotely brings new challenges, so it is crucial to balance the tasks required with the resources available, plus, the employee needs to feel supported and feel that they are treated fairly (Dulac, n.d.; Johnson & O’leary-Kelly, 2003; Peng 2016, as cited in Cao, 2013, C.E.; Robinson, 1996; Rosen, 2009).

Although remote e-working is no longer a novelty for most people there are still some changes in this rapidly changing phenomenon. Managers should improve communication with subordinates to ensure regular checks on their productivity, workload and burnout (Grant et al., 2013). This communication should be based on the word efficiency as managers should assess not only

productivity but also efficiency as a parameter. In other words, performing the task taking as little time as possible, using the remaining time for tasks that employees consider pertinent, whether of a personal or professional nature. The obvious recommendation for organisational leaders includes undoubtedly to share more with employees, develop even if at a distance interaction between colleagues fostering a good team spirit, take advantage of the hybrid system and leave some meetings for the day when they are in the office whenever possible.

While the future of remote e-working is still unknown, it will undoubtedly passed through the creation of a hybrid regime since being present will bring benefits regarding culture creation, mentoring, coaching (Alexander & Et al., 2021). Companies must work in a way that motivates, engages and works their resources to extract the best from each individual both in terms of well-being and performance (Caligiuri & de Cieri, n.d.). Another suggestion, is the creation of a booking or reservation system trying to maximise in-person interactions by identifying who will be in the office at the same time, promoting interaction between different teams and departments. It is worth to mention that identify the reduction of working days and/or the existence of shorter working weeks could be a measure that leaders can test to understand the receptivity and productivity, increasing the flexibility. It is important to highlight that this topic is now being explored. Communicating about the future can drive performance outcomes today and in fact, flexibility, trust and better time management will improve the mental well-being of employees thus bringing benefits to the company.

6.4. Limitations and future research

There is always room for improvement and as such there is space for future research. This study had some limitations that should be raised. The main limitation of the study is that it was not possible to prove the negative relationship between work-life interference in remote e-work and exhaustion. The reason to explain this result may be the scale used to measure remote e-work since it was used the EWL scale developed by Grant et al. (2019) and refined by Charalampous (2020) that measures four dimensions of remote e-work (productivity, organisational confidence, flexibility, and work-life interference). Regarding WLI, the scale included items belonging to both areas of work-life balance and e-well-being. The e-well-being component is not adequately covered, which enunciates a limitation and the desirability of a new measure that directly assesses

e-well-being. (Charalampous, 2020). Although it was decided in this study to use only the EWL scale because more research has been done and there are more consolidated studies on this topic, future research should include E-well-being (EWW) scale covering more detailed aspects of well-being. The EWW scale “provides individuals, supervisors and organisations a means to measure in one scale the well-being of their remote e-workers” (Charalampous, 2020, p.13). Knowing that EWL scale and EWW scale are complementary to each other, they should be used together allowing a holistic view of the e-work experience (Charalampous, 2020).

When the effect of the predictor variable on the mediator variable was studied, that is, the relationship between interference in professional life and WFC, it was not possible to relate them to each other. As previously stated analysing the WFC scale, it is known that work-related variables are more likely to be related to work to family conflict and family-related variables are more likely to be associated to family to work conflict (Byron, 2005; Frone et al., 1997; Michel et al., 2011) and as such the fact that each direction was not studied separately may contribute to the results obtained since there is asymmetry in the impact on well-being and overall health (MacDermid & Harvey, 2006, as cited in Voydanoff, 2005). Future research should include a WFC scale that combines four new constructs that describe four types of role conflict (work-family, work-personal, family-family, personal-family conflict) to have a better understanding of the topic (Wilson and Baumann's, 2015, as cited in Kossek & Lee, 2017).

The scale for measuring WLI included items belonging to both areas of work-life balance and e-well-being and to measure WFC it is known that the impact is different in each direction. Therefore, in my opinion, there should be future research that relates these two variables, bearing in mind that the EWL and EWW scales should be used together to measure remote e-work and WFC should be measured using new constructs to measure different types of conflict.

In the future, the sample should be larger and more homogeneous, that is, include a larger number of respondents and consider specific occupations and organisations to better understand the effects of remote e-working on well-being in certain sectors of activity. Most respondents are Portuguese, in the future the study should be conducted including a wider number of nationalities so that comparative analyses can be made between different countries. Another limitation is the fact that the survey was posted on several social networks which limits the results to my network of contacts limiting the sample in terms of age and occupations. In the future, other strategies can

be used such as using company databases. The results may be affected by common biases as individuals tend to consider the most socially acceptable response and, in my view, other questions could be included such as whether respondents have children, number of children, age of children and marital status as these are variables that relate to family and household structure.

There is always going to be a difference between what executives think they are offering their employees and how those employees feel. As such in the future it would be important to include in this study the relationship between perceived psychological contract breach and workaholism as well as the impact it has on employee mental health as the effect of workaholism has been found to drive technology and high levels of authoritative leadership to improve this relationship (Alexander & Et al., 2021).

As a suggestion for further research, it may be significant to conduct a study after the pandemic to assess the impact of remote e-working on mental health including the role of managers. Knowing that a leader's behaviours towards workers who alternate between remote e-working and office work may be or at least perceived by workers to be less intrusive (Topa et al., 2020). It may be also suggested, in a hybrid regime context, consider how mental health will be affected by considering the role of managers in assessing their ability to provide support to remote e-workers regarding work-life boundaries (Grant et al., 2013). Future research should also bear in mind that post-pandemic work should involve a shift in the gravitational centre of work and how we spend our time in our post-pandemic world should be priorities in their discussions of the social determinants of health (Mcneill Brown, 2021). It has been found that when workers and teams have more flexibility, we can observe higher levels of well-being. What remains to be seen is whether this flexibility of a decentralised working lifestyle that is disconnected from any specific geography, allowing employees to work in the office, a public place, or someone's home has a medium/long term impact on their career progression and how it is related to employee well-being. Finally, it may be suggested that WFC should also be studied as a predictor of exhaustion once the pandemic is over or at least once the hybrid system is in place by most companies. The focus of this research should be on families with children since it is known that the challenges and exhaustion that parents experienced during the pandemic will dissipate as children return to school without requiring parents to return to daily work in the office, having the possibility to see the benefits of e-working remotely (Mcneill Brown, 2021).

6.5. Conclusion

The first goal was to understand the relationship between the components of remote e-work (organisational trust, flexibility and work-life interference) and exhaustion. The second goal was to understand the relationship between the components of remote e-work and exhaustion through the mediation effect of WFC and perceived psychological contract breach. The findings indicated that flexibility and trust provided to employees in remote e-work have a negative relationship with exhaustion and it was not possible to support the relationship between WLI in remote e-work with exhaustion.

Organisational trust and flexibility in remote e-work keep the same relationship with exhaustion through the mediation effect of WFC. With the WFC as a mediator, it was found that higher levels of organisational trust and flexibility in remote e-work led to lower levels of WFC and consequently lower levels of exhaustion.

With the perceived psychological contract breach as a mediator, it was found that higher levels of organisational trust, WLI and flexibility in remote e-work led to lower levels of exhaustion. It is important to highlight that, higher levels of WLI, means less interference between work and non-work tasks, which means that less interference led to less perceived psychological contract breach and consequently less exhaustion.

This research demonstrates that remote e-work through organisational trust and flexibility contributes to decreased exhaustion. As for the WLI, it was not supported the negative relationship with exhaustion. It also provides evidence that when included the WFC effect the results does not change and that organisational trust, WLI and flexibility in remote e-work contribute to reduce perceived psychological contract breach and, consequently, decreased exhaustion.

To conclude, at this point and two years of the pandemic have passed, and much has been studied about e-working remotely and its benefits and drawbacks, it can be said that managers and organisations should really pay attention to the well-being of their employees. As a final note, it is worth to mention that remote e-work, WFC and psychological contract breach has an adverse effect on emotional well-being and has been linked to negative emotions and burnout. As such, the psychological contract and managing the expectations and the characteristics of each person is very important to keep an employee motivated and mentally well-adjusted.

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8. Annexes

8.1. Annex A- Concepts and dimensions used in investigation model

Concepts	Definition	References
Remote e-work	Work done anywhere and anytime, regardless of location and for extending the use of technology to aid flexible working practices.	(Grant et al., 2013, p. 529)
Organisational Trust in remote e-work	Trust is related to the level of autonomy and responsibility afforded to the individuals whilst e-working.	(C. Grant et al., 2019, p.9)
Flexibility in remote e-work	The ability of workers to make choices influencing when, where, and for how long they engage in work-related tasks.	(Hill et al., 2008, p.152)
Work-life Interference in remote e-work	The ability to integrate work and non-work demands effectively, to switch between differing roles and to manage boundaries between work and non-work activities and how e-workers positively manage their health and well-being whilst working remotely, being aware of issues such as when to switch off from e-working.	(Grant et al., 2019, p.9)
Work-Family conflict	WFC is a specific form of work-life conflict, is a form of interprofessional conflict that occur when the energy, time, or behavioural demands of work conflict with family or personal life roles.	(Greenhaus & Beutell, 1985, as cited in Kossek & Turner, 2017, p.2)
Perceived Psychological contract breach	The cognition that one's organization has failed to meet one or more obligations within one's psychological contract in a manner commensurate with one's contributions.	(Morrison & Robinson, 1997, p.230)

Exhaustion	Exhaustion is considered the most fundamental dimension of burnout and can be described as a serious and severe loss of energy, both physical and mental.	(Schaufeli et al., 2020, p.4)
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8.2. Annex B-Descriptive Characteristics

Variables		N	%
Sex	Male	44	30,1
	Female	102	69,9
Educational level	Secondary School	13	8,9
	University Degree	79	54,1
	Master's degree	51	34,9
	Non-Specified	3	2,1
Nationality	Portuguese	118	80,8
	African	4	2,7
	Turkish	2	1,4
	Swiss	1	0,7
	Spanish	1	0,7
	Kazakhs	1	0,7
	Italian	1	0,7
	Indian	1	0,7
	German	1	0,7
	American	1	0,7
Prefer not to say	15	10,3	
Location	Portuguese	118	80,8
	African	4	2,7
	Turkish	2	1,4
	Swiss	1	0,7
	Spanish	1	0,7
	Kazakhs	1	0,7
	Italian	1	0,7
	Indian	1	0,7

	German	1	0,7
	American	1	0,7
	Prefer not to say	15	10,3
Currently Employed	Yes	125	85,6
	No	20	13,7
	Prefer not to say	1	0,7
Managerial responsibilities	Yes	38	26
	No	102	69,9
	Prefer not to say	6	4,1

8.3. Annex C- Results of the negative relationship between organisational trust in remote e-work and exhaustion

Total effect of X on Y					
Effect	se	t	p	LLCI	ULCI
-.28	.08	-3.48	<.05	-.44	-.12

Note. N = 139. Unstandardized regression coefficients are reported. Bootstrap sample size = 5000 LL lower limit, CI confidence interval, UL upper limit

8.4. Annex D- Results of the negative relationship between work-life interference in remote e-work and exhaustion

Total effect of X on Y					
Effect	se	t	p	LLCI	ULCI
-.13	.09	-1.47	.14	-.31	.05

Note. N = 139. Unstandardized regression coefficients are reported. Bootstrap sample size = 5000 LL lower limit, CI confidence interval, UL upper limit

8.5. Annex E- Results of the negative relationship between flexibility in remote e-work and exhaustion

Total effect of X on Y					
Effect	se	t	p	LLCI	ULCI
-.29	.06	-4.77	<.05	-.40	-.17

Note. N = 139. Unstandardized regression coefficients are reported. Bootstrap sample size = 5000 LL lower limit, CI confidence interval, UL upper limit

8.6. Annex F-Survey

Relationship between remote e-working and burnout symptoms: The mediating role of work-family conflict and perceived psychological contract breach- a study with international workers

In the context of the Master's in International Management at Iscte-Instituto Universitário de Lisboa, I would like to invite you to participate in a survey, which will take approximately 8 minutes. This study is being conducted by João Fernandes and supervised by Professor Silvia da Silva. By participating in this study, you are contributing to the advancement of knowledge in the area of remote working and how it may be related to the existence of Burnout symptoms. The purpose is to better understand your ideas and opinions about remote working, work-family conflict, the relationship with your employer and the possible existence of Burnout symptoms. To participate, you must be 18 years of age or older and have already experienced working remotely at some point in your life, either full or part-time. In accordance with the National Commission for Data Protection and the guidelines of the Ethics Committee of Iscte-Instituto Universitário de Lisboa, your participation is voluntary and your answers are confidential and anonymous. This means that no participation is associated with identifying information and no analysis will be made based on individual responses. Some questions are not mandatory to answer, you may decide to skip these and continue with your participation. If you have any questions or comments, you can contact the following email: Jpbfs1@iscte-iul.pt. By continuing with the survey, you indicate that you have understood all the information previously mentioned and that you are agreeing to participate in this study.

- I understand and agree to participate

- I do not agree to participate

1. Employment History

The following questions aim to understand if you are currently employed and whether or not you have experienced working remotely.

1.1 Are you currently employed?

- Yes
- No
- Another

1.2. Since you started your professional activity have you experienced working remotely?

- Yes
- No
- Another

1.2.1 If you answered yes to the previous question, please indicate in which way you worked remotely.

- Full-time remote working
- Part-time remote working
- Another

1.3. The following questions refer to the relationship you have with your organization, the flexibility you have and how you manage to combine work and personal life when working remotely. Please select the option that best suits you.

(Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree)

- My organization provides training in e-working skills and behaviours
- I trust my organization to provide good e-working facilities to allow me to e-work effectively
- My organization trusts me to be effective in my role when I work remotely
- My manager does not micro-manage me when working remotely

- I trust my manager to provide me with career professional development opportunities when working remotely
- When I'm not invisible working remotely, my manager trusts me to work effectively
- My work is so flexible I could easily take time off working remotely, if and when I want to
- My line manager allows me to flex my hours to meet my needs, providing all the work is completed
- My supervisor gives me total control over when and how I get my work completed when e-working
- There are no constraints on the location where I work
- I work flexible hours across the day breaking down my hours to suit my work and non-work commitments
- My e-working does not take up time that I would like to spend with my family/friends or on other non-work activities
- When working remotely I do not often think about work-related problems outside of my normal working hours
- I am happy with my work-life balance when working remotely
- Constant access to work through e-working is not very tiring
- When working from home I do know when to switch off so that I can recuperate effectively
- My relationships suffer when I am working remotely
- I can cope with work demands more effectively when I work remotely

2. Employee-organisation relationship

To better understand the employee-organization relationship it is important to define the psychological contract as the unwritten and intangible agreement between an employee and their employer that describes the informal commitments, expectations and understandings that constitute their relationship. The following questions aim to understand and measure the psychological contract. Please select the option that best suits you.

2.1 Employee obligations. (Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree)

- To what extent do you believe you owe your employer working overtime
- To what extent do you believe you owe loyalty to your employer
- To what extent do you believe you should offer to do the tasks not required at work
- To what extent do you believe you should pre-advise your employer if you take a job in another place
- To what extent do you believe you should be willing to accept a transfer
- To what extent do you believe you should refuse to support the employer's competitors
- To what extent do you believe you should protect employer information
- To what extent do you believe you should stay a minimum of two years in the organization after signing a contract

2.2 Employer Obligations. (Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree)

- To what extent do you believe the organization is obliged to consider the interests of employees when making decisions that affect them
- To what extent do you believe the organization is obliged to give you challenging work
- To what extent do you believe the organization is obliged to provide stable employment
- To what extent do you believe the organization is obliged to provide a comfortable workplace
- To what extent do you believe that the organization is obliged to provide a reasonable workload
- To what extent do you believe that the organization is obliged to provide training and development
- To what extent do you believe that the organization is obliged to award fair remuneration compared to other employees doing a similar job in other organizations.
- To what extent do you believe that the organization is obliged to provide health care

- To what extent do you believe that the organization is obliged to provide adequate resources to get the work done
- To what extent do you believe that the organization is obliged to provide the necessary training to get the job done.
- To what extent do you believe that the organization is obliged to leave adequate time for personal life
- To what extent do you believe that the organization is obliged to give fair remuneration for the responsibilities that employees have
- To what extent do you believe that the organization is obliged to assign clear work responsibilities

2.3 Fulfilment of obligations, by the employer. (Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree)

- So far, almost all the promises made by my organization during my recruitment have been fulfilled
- I feel that my organization has fulfilled the promises they made to me when I was hired
- So far, my organization has done an excellent job in fulfilling the promises they made to me
- I have not received all that was promised to me in Exchange for my contributions to the cause
- My organization has not fulfilled many of the promises made to me, although i have fulfilled my part of the commitment

3 Work-Family conflict

The following questions aim by measuring the work-family conflict based on time, stress and behaviour to understand how you manage to balance work with your personal life. (Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree)

- My work keeps me from my family activities more than i would like
- The time I must devote to my job keeps me from participating equally in household responsibilities and activities

- I must miss family activities due to the amount of time i must spend on work responsibilities
- The time I spend on family responsibility often interfere with my work responsibility
- The time I spend with my family often causes me not to spend time in activities at work that could be helpful to my career
- I must miss work activities due to the amount of time i must spend on family responsibility
- When I get home from work, I am often too frazzled to participate in family activities/responsibilities
- I am often so emotionally drained when I get home from work that it prevents me from contributing to my family
- Due to all the pressures at work, sometimes when I come home, I am too stressed to do the things I enjoy
- Due to stress at home, I am often preoccupied with family matters at work
- Because I am often stressed from family responsibilities, I have a hard time concentrating on my work
- Tension and anxiety from my family life often weakens my ability to do my job
- The problem-solving behaviours I use in my job are not effective in resolving problems at home
- Behaviour that is effective and necessary for me at work would be counterproductive at home
- The behaviours I perform that make me effective at work do not help me to be a better parent and spouse
- The behaviours that work for me at home do not seem to be effective at work
- Behaviour that is effective and necessary for me at home would be counterproductive at work
- The problem-solving behaviour that works for me at home does not seem to be as useful at work

4 Burnout Symptoms

The following questions aim to measure exhaustion and how you feel during and after your working day. Please select the option that best suits you. (Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree).

- At work, I feel mentally exhausted
- Everything I do at work requires a great deal of effort
- After a day at work, I find it hard to recover my energy
- At work, I feel physically exhausted
- When I get up in the morning, I lack the energy to start a new day at work
- I want to be active at work, but somehow, I am unable to manage
- When I exert me at work, I get tired quicker than normal
- After a day at work, I feel mentally exhausted and drained

5 Socio-demographic description

The following questions aim to understand and profile the overall sample of participants. Please select the option that best suits you

5.1 Age

< 18

18-25

26-35

35-45

46-55

>55

5.2. Gender

Male

Female

Other

Prefer not to say

5.3 Educational level (level of education completed)

Primary school/ Elementary school

Secondary School

University Degree

Master's degree

Doctorate

Other

5.4. Nationality

5.5. Location (country)

5.6. What is your work experience (in years)

<1

1-5

5-10

10-15

>20

5.7. What is the economic sector of your profession?

Agriculture, forestry and fishing

Manufacturing

Construction

Wholesale, retail and repair trade

Hotels

Banking, real estate and financial services

Transport, storage and distribution

Business services (e.g., UCT, consulting)

Public administration and governance

Education

Health care, social services, and penal enforcement

5.8. Do you have managerial responsibilities?

Yes

No

5.9. How many people approximately work in your organisation?

5.10. How many hours do you work during the week?