U.PORTO

**MASTER**
MANAGEMENT

# The Four-Day Workweek: Assessing Individual Readiness

Ana Carolina Faim

**M**

**2024**

FACULDADE DE **ECONOMIA**

U.PORTO
FEP FACULDADE DE ECONOMIA
UNIVERSIDADE DO PORTO

# The Four-Day Workweek: Assessing Individual Readiness

Ana Carolina Lourenço Faim

Master in Management

Supervised by
**Prof. Dr. Maria Teresa Proença**

2023/2024

## Acknowledgements

Primarily, I would like to thank Professor Maria Teresa Proença for her generous sharing of knowledge, continuous support, and availability over the past months.

To my family, particularly my parents and brother, for their unwavering support and unified efforts that have brought me to this moment. To my mother, for flawlessly playing the role of my best friend. To my father, for always showing his pride and support. And to my brother, for serving as an exemplary figure in my life.

To my friends, thank you for always believing in me, even when I doubted myself. Your consistent support, words of encouragement, and motivation have been crucial throughout this journey. I sincerely appreciate all the encouragement and strength you gave me.

To my grandparents, whose memory continues to inspire me.

Finally, I express my profound gratitude to everyone who contributed in any way to this research, especially to the participants who generously dedicated their time to respond to the questionnaire.

## Abstract

Over the past few years, there has been an increasing need to change how weekly working hours are distributed. This is because today's society has different objectives. Due to a growing interest more and more organizations have been experimenting this model in an attempt to understand the results it can produce.

In this study, we sought to identify the key factors influencing readiness for a four-day workweek, determine the differences between those with managerial responsibilities and those without, and assess the impact of age on this readiness. To do this, we used a quantitative methodology by distributing questionnaires through social media and our personal network. We focused on five main indicators: productivity, health, well-being, work-life balance, and engagement. Additionally, we aimed to understand how openness to experience could influence the relationship between these indicators and individuals' readiness for a four-day workweek. With 400 valid responses, we used a structural equation modeling approach via *SmartPLS* to analyze the data.

The results indicate that the expectation of maintaining or increasing productivity, obtaining health benefits, and improving work-life balance are positively associated with readiness for a four-day workweek. However, there was no clear link between the expectation of improvement in well-being or work engagement and this readiness. Furthermore, openness to experience does not appear to affect these relationships. Additionally, leaders and older employees showed less readiness for the transition.

The results clarify individuals' expectations about the four-day workweek, enabling organizations to develop effective strategies to implement this change in a way that aligns with employee expectations.

**Key-words: Four-day workweek; work-life balance; well-being; engagement; health; productivity; readiness for change; openness to experience.**

## Resumo

Ao longo dos últimos anos, tem-se verificado uma crescente necessidade de alterar a forma como as horas de trabalho semanais são distribuídas. Isto deve-se ao facto de a sociedade atual ter objetivos diferentes. Devido a um crescente interesse, cada vez mais organizações têm experimentado a adoção deste modelo na tentativa de compreender os resultados que pode produzir.

Com este estudo, procurámos perceber os principais indicadores que influenciam a prontidão para uma semana de trabalho de quatro dias, determinar as diferenças entre aqueles que têm responsabilidades de chefia e os que não têm, e avaliar o impacto da idade nessa prontidão. Para tal, utilizámos uma metodologia quantitativa, através da distribuição de questionários por redes sociais e pela nossa rede pessoal. Focámo-nos em cinco indicadores: produtividade, saúde, bem-estar, equilíbrio entre vida pessoal e profissional e envolvimento. Além disso, procurámos entender de que forma a abertura à experiência poderia influenciar a relação entre estes indicadores e a prontidão dos indivíduos para a semana de trabalho de quatro dias. Com 400 respostas válidas, utilizámos um modelo de equações estruturais via *SmartPLS* para a análise dos dados.

Os resultados indicam que a expectativa de manter ou aumentar a produtividade, obter benefícios para a saúde e melhorar o equilíbrio entre trabalho e vida pessoal estão positivamente associadas à prontidão para a semana de trabalho de quatro dias. No entanto, não houve uma ligação clara entre a expectativa de melhoria no bem-estar ou no envolvimento no trabalho e essa prontidão. Além disso, a abertura à experiência não parece afetar essas relações. Verificou-se também que líderes e funcionários mais velhos demonstraram menor prontidão para a transição.

Os resultados clarificam as expectativas dos indivíduos em relação à semana de trabalho de quatro dias, permitindo que as organizações desenvolvam estratégias eficazes para implementar essa mudança de forma alinhada às expectativas dos funcionários.



**Key-words: Semana de trabalho de quatro dias; equilíbrio entre a vida pessoal e profissional; bem-estar; comprometimento; saúde; produtividade; prontidão para a mudança; abertura à experiência.**

## List of contents

## List of figures



## List of tables

# 1. Introduction

Over the years, the working time duration has been changing: in the 19th century the practice was fundamentally of 6 working days with 10 hours of daily work, and this was reduced in the mid-20th century to 8 hours of daily work (Cross, 1989; Hunnicutt, 1988). Across the years, the 5/40 model, corresponding to 5 work days and 8 hours daily was gradually achieved in different countries (Hunnicutt, 1984). Having been initiated in 1926 by Henry Ford (Hunnicutt, 1984), this model was discussed and analyzed during the 1930s in the United Kingdom in experiments similar to those adopted today to assess the possibility of the four-day workweek (Veal, 2022). The five-day workweek model was largely established on the belief that worker fatigue was the primary contributor to workplace accidents and productivity reduction (Hedges, 1971).

According to Campbell (2023), interest in the four-day workweek peaked between 2008 and 2012, and has experienced a resurgence more recently around 2019. We are dealing with a society increasingly concerned with people's mental health and the balance between personal and professional life has been receiving greater attention (Pasamar, 2020). Increased productivity, health benefits, improved work-life balance, enhanced engagement, and better well-being are some of the benefits highlighted by supporters of the four-day workweek (Jacob, 2020; Pang, 2020; Chakraborty, Bhatnagar, Biswas, & Dash, 2022; Cuello, 2023). The advent of new AI-derived technological tools, such as ChatGPT, has intensified the belief that it is possible to reduce working hours (Jahal, Bardoel, & Hopkins, 2023). According to these authors, this has led to greater attention and demand for more flexible work alternatives, underscoring the importance of further research on this topic.

Therefore, this dissertation seeks to understand the motivators of the four-day workweek model to the individuals. According to Jahal et al. (2023), one of the most relevant aspects of the four-day workweek focuses on worker acceptance, with findings indicating a mixture of both rejection and acceptance of the model. Taking this into account, to understand if this is a viable model, organizations and their employees need to prepared to the experience. The purpose of this dissertation is essentially to analyze which are the barriers/drivers in the adherence to this model, that is, to understand the factors that contribute to agree or not agree with joining the experiment.

Taking this into account, the research question of this dissertation is:

**"What factors influence readiness for the four-day workweek?"**

Given the research question, the research objectives are essentially to identify the factors that impact the readiness of workers to the four-day workweek and the impact that each of them has (or not) on the position of the individuals. We seek to ascertain: 1) which indicators have the greatest influence on individuals' readiness for a four-day workweek, 2) whether there are significant differences between workers in leadership positions and non-leadership positions, and 3) if age influences the willingness for a four-day workweek.

This dissertation is organized in five chapters. In this chapter we present the purpose, the relevance, and the presentation of the research question. In the next chapter, we proceed to the theoretical framework, which explains the themes of the study and formulate the research hypotheses. The third chapter focuses on the methodology, which includes the investigation plan. The results are analyzed in the fourth chapter. Finally, the fifth chapter includes the discussion of the results and their implications for the management, as well as the limitations and suggestions for future research.

# 1. Theoretical framework and hypothesis

The literature review is a crucial step in any research project (Machi & McEvoy, 2016). It serves multiple purposes: providing background knowledge on the topic, identifying existing research, supporting theoretical and methodological frameworks, and refining research questions to guide the study effectively (Machi & McEvoy, 2016). Taking these considerations into account, this chapter will encompass the comprehensive review of relevant literature, aligning with the outlined purposes to establish a solid foundation for the research project.

## 2.1 Readiness to change

Over the years, the need for change in workplaces and organizations has increased (Savickas et al, 2009), and it is important to bear in mind that these changes can affect the workers in various ways (Chadi & Hetschko, 2018; Fløvik, Knardahl, & Christensen, 2019; Jensen, Flachs, Skakon, Rod, & Bonde, 2019). Change can be defined as the introduction of different new mindsets, behaviors, and practices in order to achieve specific goals within an organization (Schalk, Campbell, & Freese, 1998). According to the authors, organizational change often involves the implementation of new processes, technologies, structures, or cultures to improve efficiency, innovation and adaptation to new demands that may arise. Baesu and Bejinaru (2014) also argue that change can be seen as the movement from a certain state to another one.

Given that adhering to the four-day workweek model implies changes not only in professional life but also in personal life, one of the points we will also address relates to the responses of the indivuals to change. According to Pan and Sun (2017), the success of implementing a change depends heavily on the ability of employees to adapt to it, thus understanding how individuals perceive a change is crucial for a smooth transition.

In an attempt to understand employee reactions to organizational change, a number of concepts have been explored, namely: resistance for change, readiness for change, openness to change, commitment to change and cynicism (Rafferty & Minbashian, 2018). However, two of these concepts have become more important in the study of employee attitudes and behaviors towards change: resistance for change and readiness for change. Also, when we analyze employee responses to change, there are four categories into which we can classify them - cognitive, affective, intentional, and behavioral (Repovš, Drnovšek, & Kaše, 2019).

According to Oreg (2006), when we talk about resistance for change we can consider a model that incorporates behavioral, affective, and cognitive factors that result in a general structure of what resistance to change is. These factors consist in the following: routine seeking - a search for stability, focused on routine, capable of offering a stable atmosphere; emotional reaction to imposed change - the level of the emotional reaction, resulting from the inconvenience and stress that can arise from the change; short-term focus - the level of concern of workers with short-term challenges, compared to the advantages and benefits that emerge in the long term; cognitive rigidity - it consists of the resistance, inflexibility or hesitation to experiment and test new models, concepts, visions, among others. Regarding the concept of readiness for change, this is a concept that was developed later and was defined by Armenakis, Harris and Mossholder (1993) as the willingness and readiness of employees to actively participate in a process of change. When we talk about "readiness" we mean a state of both behavioral and psychological willingness to act (Weiner, 2009).

Even though resistance to change can coexist with readiness for change, it is the latter that offers us the basis for dealing with the challenges related to individual readiness for change in organizations (Heim & Sardar-Drenda, 2020). Therefore, readiness for change is the concept that will be used as the theoretical basis for this study.

Focusing on readiness for change, this concept is defined as the behavior that can be influenced by four distinct factors - the process, content and context of change, and the individuals involved (Holt, Armenakis, Feild & Harris, 2007). Thus, according to the authors, when we measure the level of readiness for change, we can do so through four different perspectives: the change process - a dimension referring to the implementation of change; change content - focuses on the characteristics of the change to be implemented (it can be technological, administrative, structural or procedural); organizational context - consists of the organization's environmental characteristics; individual characteristics - there are differences between individuals that can lead to some being more receptive to change than others.

Given that changes are implemented and developed by individuals within organizations, Holt et al. (2007) developed a measuring instrument consisting of a questionnaire that allows readiness to be assessed at an individual level. They concluded that the factors that most influence readiness for change are: appropriateness, management support, change efficacy and personal valence. Appropriateness is related to the perception of the existence or not of legitimate reasons and needs to make the proposed change.

Management support refers to individuals' beliefs about the support and commitment of their leaders in implementing the change. Change efficacy consists of the belief that the change could be successfully implemented. Finally, personal valence refers to the expectations individuals have regarding the benefit they may or may not obtain from the organizational change in view.

Later, Armenakis, Bernerth, Pitts and Walker (2007) worked on the aforementioned measuring instrument and developed five important factors for readiness for change. These five factors are seen as beliefs that determine the level of adherence of those who receipt change. The authors called the individuals being evaluated "change recipients". A self-report questionnaire was therefore designed. According to Armenakis et al. (2007), a belief is an idea that a person believes to be true, even if it is not evident or can be verified. The authors defined the following precursors of readiness for change: discrepancy, appropriateness, efficacy, principal support, and valence. Discrepancy refers to the belief that change is necessary. Appropriateness refers to the need for a specific organizational change to eliminate the discrepancy. Efficacy refers to the ability of individuals to implement the change successfully. Principal support refers to employees' perceptions of how leaders do or do not support and commit to change. Valence consists of the change recipients' expectations about the benefits they may or may not get from the change. Based on this, Armenakis et al. (2007) then designed a questionnaire with a 24-item scale called the *Organizational Change Recipients Beliefs Scale*.

Having said this, Holt et al. (2007) created a scale capable of measuring the level of individual readiness, and Armenakis et al. (2007) developed a scale that makes it possible to define, through five underlying beliefs, the level of fitness of an organizational change.

More recently, Gräfe and Kauffeld (2024) sought to develop a questionnaire capable of measuring readiness for change. In doing so, they considered the definition of readiness for change, which asserts that individuals' willingness to engage and commit to organizational change depends on their readiness at the cognitive, affective, and behavioral levels, influenced by the context, content, and process of change, as well as individual characteristics (Armenakis et al., 2007; Holt et al., 2007). For the cognitive construct, Gräfe and Kauffeld (2024) considered the characteristics of discrepancy, appropriateness, change self-efficacy, top management support, and personal valence from Armenakis et al. (2007) and Holt et al. (2007). For the affective and behavioral constructs, they utilized the affect-based model by Oreg et al. (2018), which explores how individuals perceive organizational change, their

perspectives and opinions, and how they align, or not, with their individual goals. This results in positive or negative feelings that, consequently, translate into behavioral responses to change.

## 2.2 The four-day workweek

A four-day workweek model represents four working days with 8h, 9h or 10 hours of daily work being, therefore, an alternative work arrangement (Bird, 2010). However, if we consider a work week with 8 or 9 hours of work per day, we are dealing with a reduction of the weekly workload, which is known as a reduced working week (Veal, 2022). A working week of 4 days and 10 hours a day, in which people work more each day in order to compensate for the extra day of rest and thus maintain the weekly workload of 40 hours, is called a compressed working week (Kossek & Michel, 2011). The extra day of rest that results from this work model does not necessarily have to be next to the weekend - it could be in the middle of the week or rotating (Kossek & Michel, 2011). See table 1 with the alternative work arrangements.

| **Alternative work arrangements** | **Four working days: 8h/9h/10h of daily work** | **Bird (2010)** |
|---|---|---|
| Reduced working week | Work four days a week with 8h or 9h of daily work, reducing the weekly workload. | Veal (2022) |
| Compressed working week | Work four days a week with 10h of daily work, maintaining the weekly workload. | Kossek and Michel (2011) |

*Table 1 - Alternative work arrangements*

In the 1980s and 1990s, compressed workweeks became more common. Smith (1986) concluded that the compressed workweek model grew rapidly; however, it still remained relatively small compared to the traditional five-day workweek. This compressed workweek model yielded numerous benefits, including reduced absenteeism, increased productivity, job satisfaction, lower commuting costs, organizational recruitment, turnover, among others (Moores, 1990). However, according to Martens, Nijhuis, Van Boxtel, and Knottnerus (1999), individuals working under a compressed workweek model reported a higher number of health complaints, along with reports of increased sleep problems and a greater incidence of emotional or psychological issues.

According to Veal (2022), the 4/32 model, with 4 working days and 8h daily, is a phenomenon of the 21st century, and has been a topic enhanced by the changes arising from the COVID-19 pandemic in 2020. Moreover, the fact that there is an increasing need for changing the way working hours are more frequently distributed - 5 days a week, 8 hours a day – to a reduced working week is essentially due to the fact that today's society pays greater attention to different aspects (Kuron, Lyons, Schweitzer, & Ng, 2015). A large proportion of young workers nowadays is engaged by new ambitions such as work-life balance, security, career progression, feedback, self-growth, and connection between the parts of organizations (Man & Ling, 2014). The main objective of this work model is to achieve a clearer and more coordinated organization of the different activities and resources of companies, while also enabling greater employee engagement (Collewet & Sauermann, 2017).

A four-day workweek brings several promises, such as giving employees the possibility to rest, be creative, improve their skills, learn other subjects in the free day and consequently be more motivated and enthusiastic in both their personal and professional life (Chakraborty, Bhatnagar, Biswas, & Dash, 2022).

Some companies have moved forward with the trial of testing the model. In the next paragraphs we present some of the information collected about the trials made around the world.

According to Haraldsson and Kellam (2021) in 2015, the Icelandic government started the experimentation process, in a trial that lasted about four years and involved approximately 2500 workers, which corresponds to 1% of Iceland's active population. This working model implied a redesign of work activities, which included the elimination of less significant tasks and a greater adherence to technology. During the trial, the workweek was reduced from 40 hours to 35-36 hours per week. According to the research, there were no changes at the productivity level and workers showed a reduction on stress levels, increasing well-being. Enhancements in work-life balance were also significant. In 2021, about 86% of workers already work in a reduced hours model.

In 2019, Microsoft Japan adopted the 4/32 model for a few weeks and reported very positive results, with increased productivity by 40% and higher worker satisfaction (Chappell, 2019). According to the author, the company also denoted other benefits such as electricity consumption reduced by 25%, the number of printed pages reduced by 59% and an increase in employee well-being by 92%.

Unilever New Zealand and Australia are another example of the adoption of this work model. The trial began in New Zealand with an 18-month pilot project, where employees worked an average of 32 hours per week, which resulted in revenue growth, improved well-being, and better work-life balance. Once again, reports found that better use of technology was essential to the success of the trial, as well as the modification of individual and team work plans. Given the satisfactory results in New Zealand, Unilever decided to extend the trial to Australia, with an initial 12-month trial (Unilever, 2022).

According to Ferreira (2023), in Portugal, the implementation of the four-day workweek model is already arriving, with the company 360IMPRIMIR being the first to adopt its experimentation in a project that will last at least 2 years. The workers had the power of choice and may or may not adhere to the model, however, the adhesion was almost total. Furthermore, the project was only implemented in the team responsible for customer service and employees would benefit from the extra day off through a rotation system. Recently, a pilot project was conducted with the aim of testing the four-day workweek in 41 companies, involving over a 1000 employees (Gomes & Fontinha, 2024). According to a survey conducted with 200 workers, the reduction in working hours led to a decrease in symptoms such as anxiety and insomnia, as well as improved work-family balance and enhanced well-being.

### 2.2.1. Results of four-day workweek

The implementation of reduced workweek models has been widely discussed in the literature, with authors like Jacob (2020) and Pang (2020) emphasizing the potential benefits of this initiative for productivity and employee engagement. Also, according to De Spiegelaere and Piasna (2017) the discussion positions the reduced workweek as a key initiative in addressing contemporary challenges related to worker health and well-being. Lehndorff (2014) highlights the positive impact of reducing work hours on achieving a better balance between work and personal life. Similarly, Chakraborty et al. (2022) emphasize that individuals seek work environments where they can find a satisfying balance between work and personal life. Therefore, the number of weekly working hours may influence outcomes related to both the organization and the employees, such as productivity, health, well-being, work-life balance, and engagement. Taking this into account, these are the concepts that we will approach.

As we said before, reducing the working hours consist in four working days, working eight or nine hours a day (Veal, 2022) and that is the alternative work arrangement we will investigate. From now on, whenever we use the term " four-day workweek" we are referring to the reduced workweek.

#### 2.2.1.1. Productivity

According to Bernolak (1997) the quantity and quality of what is produced from the available resources is what defines productivity. If more goods are produced with fewer resources or if better quality goods are produced with the same resources, productivity increases. The term "resources" can refer to both physical and human resources. With this definition, we realize that productivity depends on the availability and adequacy of resources (Tangen, 2005). The productivity of a worker therefore refers to the amount of goods/services that a worker can produce during a given period of time. We can then conclude that productivity ultimately depends on the workers - their skills, their way of working, their concentration, etc. (De Spiegelaere & Piasna, 2017).

However, measuring productivity at an individual level is often very difficult due to the associated costs, so performance scales are commonly used as an alternative (Sauermann, 2023). Employee performance refers to the behaviors and actions they undertake to achieve the organization's objectives (Campbell & Wiernik, 2015) and is crucial for improving productivity. This enhancement is fundamental for achieving a sustainable economy, which has led to growing interest in this topic (Okazaki et al., 2019).

Working hours are pointed out as an important factor in labor productivity, as they have some influence on the overall structure of the organization (Collewet & Sauermann, 2017). It is generally recognized that working longer hours contributes to an increase in productivity, as more time spent working means more output. However, more hours worked make workers feel more tired, which can hinder productivity (Collewet & Sauermann, 2017). Some studies carried out by Lee and Lim (2014) and Collewet and Sauermann (2017), in different areas of work, obtained similar results, stating that workers became less productive as working hours increased, due to the fatigue they caused. However, somewhat contradictory, Pencavel (2014) states that productivity is proportional to the hours worked up to 48 hours a week; after this limit, the amount of work done per extra hour decreases. Moreover, Vallo and Mashau (2020) state that most workers do not think that long working hours encourage them to work better. Nevertheless, the authors observed that when faced with normal working hours (40h/week), workers say they feel more motivated to work better

and believe that the number of hours is sufficient to do their job, which means that, for the most part, workers are satisfied with the number of hours they work per week. However, regarding the specific topic of the four-day workweek, it is important to highlight that, according to Veal (2022), workers knowing they have less time to complete their tasks, become more concentrated and focused, thus potentially maintaining productivity levels.

Therefore, we can realize that there are inconsistent results in the research on the relationship between productivity and hours worked. However, the most common conclusion is that reducing working hours does not have a significant impact on productivity (Vallo & Mashau, 2020). In addition, in countries where the four-day workweek has already been tested (as seen in section 2.1), productivity has not been negatively impacted, with productivity either remaining the same or increasing. Given this, and primarily considering the results obtained from companies that have already tested the four-day workweek, individuals who are ready to adopt the four-day workweek model are expected to be those who believe that productivity will not suffer a negative impact, either remaining the same or even improving. Thus, the first hypothesis of this research emerges.

**H1: Expectations that productivity will either remain constant or increase are positively associated readiness for the four-day workweek.**

#### 2.2.1.2 Health

The World Health Organization (WHO, n.d.) defines health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

According to Afonso, Fonseca, and Pires (2017) the European Working Time Directive stipulates general minimum health and safety requirements at work, such as that employees must work a maximum of 48 hours a week, including any extra hours. This is because the number of hours that employees work has an impact on their physical and mental health (Afonso et al., 2017). It has also been proven by several studies that working too many hours is directly related to heart disease, sleep disturbance, depression, and anxiety, which ultimately leads to a less healthy lifestyle (De Spiegelaere & Piasna, 2017). In more serious cases, excessive working hours have also been associated with some deaths caused by cardiovascular diseases, and have even been termed in Japan as *karoshi*, meaning "death from overwork" (Shields, 2021). Data has shown that mental health problems significantly impact work performance. According to the Organization for Economic Cooperation and Development (2015) 69% of individuals with moderate mental health problems exhibit lower job performance, whereas only 26% of those with difficulties in job performance have no

mental health problems. Moreover, there is also evidence that people who work too many hours experience a decrease in sleep quality, ultimately showing a decrease in job performance (Roth, 2007).

In addition, mental health problems have increased exponentially around the world (WHO, 2022). Scientific research has concluded that symptoms of anxiety and depression are the most common, and are often associated with the presence of stress (Barrera-Herrera et al., 2023). A study by Ahn (2015) found that when people work less, they are more likely to exercise regularly and less likely to smoke, especially if they are heavy smokers. However, working fewer hours seems to lead to increased alcohol consumption, although it does not affect how often people drink, whether it is occasionally or daily. These findings suggest a complex relationship between work hours and lifestyle habits, highlighting the need for a balanced approach to work and health.

In any case, the reduction of working hours does not mean that the health of workers improves immediately, especially because it depends on several other factors, however, it is more likely to happen, especially if it is combined with a restructuration of the organization, in order to avoid the feelings of stress and pressure (Piasna, 2015).

Taking all of this into account, we believe that the expectation of health improvements may be linked to a greater willingness among individuals to adopt the four-day workweek. This leads to our second research hypothesis.

**H2: Expectations of health benefits are positively associated with readiness for the four-day workweek.**

#### 2.2.1.3 Well-being

As defined by the World Health Organization (WHO, n.d.) well-being encompasses the overall quality of life and the ability of both individuals and communities to contribute to the world with a sense of meaning and purpose. According to the International Labour Organization (ILO, n.d.) well-being at work involves all aspects that relate to working life, namely the characteristics of the physical environment in which they work, employees' feelings towards their work, the organization, and the working climate. Well-being should consist of a secure, healthy, satisfied and committed worker. Well-being at work was also defined by Warr (2007) as positive affect at work prevailing over negative affect, associated with the development of individual potential and personal fulfilment, resulting in a state of happiness and satisfaction with life at work. Moreover, an organization that shows concern

for the conditions in which workers are involved generates a positive feeling among workers, making them more motivated, satisfied, and active at work (Shaffer et al., 2016).

There has been an increased interest in the topic of well-being, due to the expectations placed on the positive impact that employee well-being can have both at individual and organizational level (Wright & Huang, 2012). Leščevica and Gusta (2022) pointed out that well-being is a key driver of productivity, contributing to the growth of companies.

The number of working hours is related to workers' well-being (Chung, 2022), since a number of working hours considered excessive may imply demands that go beyond workers' tolerance and capacity, which may reduce workers' level of job satisfaction and, consequently, their level of well-being (Dong, Wu, Ni, and Lu, 2021). In addition, according to the authors, more hours working implies less time for activities unrelated to work. The adoption of a four-day workweek would grant employees extra time to rejuvenate their minds and their skills, and, overall, evolve, both personally and professionally. Such a shift would strengthen their well-being and contentment, enabling them to re-enter the workplace with zeal, pride, determination, drive, and dedication, as advocated by Chakraborty and Biswas (2019) and Streimikiene and Grundey (2009).

All of this led us to formulate the third research hypothesis, which posits that individuals who show greater readiness to try a four-day workweek expect an improvement in their well-being.

**H3: Expectations of well-being benefits are positively associated with readiness for the four-day workweek.**

#### 2.2.1.4 Work-life balance

Family and work roles are connected and therefore interact with each other. It can create both a work-family struggle and a family-work conflict (Cinamon & Rich, 2002; Frone, Russell & Cooper, 1997). According to Taşdelen-Karçkay and Bakalım (2017), if we talk about events at work that affect family life, we associate them with work-family conflict. These events can result from inflexible working hours, interpersonal conflicts, work overload, lack of support at work, among others. Family-work conflict, on the other hand, refers to the interference of family problems in professional activities. This can be due, for example, to heavy responsibilities with family members or lack of family support (Chernyak-Hai & Tziner, 2016; Greenhaus & Beutell, 1985). In the process of investigating this concept,

a new one emerged - work-life balance - which replaced the concept of work-family balance, extending the analysis not only to family life but to everything beyond work (Carlson, Grzywacz, & Zivnuska, 2009; Haar, 2013)

According to Greenhaus, Collins, and Shaw (2003) work-life balance can be described as the equitable distribution of time and emotional resources between work and non-work domains. It allows individuals to experience a sense of fulfillment and contentment in both areas, which involves an effective management of the demands and expectations of both work and personal life, without sacrificing one for the other. Many authors believe that the balance between work and general life responsibilities is very important: a poor management of these areas can cause some conflicts (Lingard & Francis, 2009) and a good balance between both areas positively influences the performance of employees (Rego & Cunha, 2009).

Sirgy and Lee (2018) state that there are two important concepts, and these are: commitment to work and personal life, separately; and a conflict-free balance between both - that is, in order to reach a good work-life balance, workers should aim to be as active and commited in personal life activities as in work-life activities.

There are some studies done that seek to understand the relationship between work-life balance and the number of hours worked (Bauer, Huber, Jenny, Müller, & Hämmig, 2009; Li et al., 2015). A study conducted by Hsu et al. (2019) concluded that work-life balance was negatively affected by long working hours, weakening the performance of individuals. It has been concluded that longer working hours necessarily imply less time for non-work related activities, leading to more unsatisfactory lifestyles, deteriorating the work-life balance (Hsu et al., 2019). Related to this, some studies have also concluded that workers believe that more flexible working practices contribute to a better work-life balance (Tipping, Chanfreau, Perry, & Tait, 2012). The authors state that employers have the possibility to influence this flexibility - offering such schedules can contribute to a better work-life balance and, consequently, an increased well-being, as workers have more availability for extra-work activities (Shagvaliyeva & Yazdanifard, 2014).

Additionally, a poor work-life balance resulting from long working hours also has consequences for workers' health, such as poor diet, excessive alcohol consumption, lack of physical exercise and also sleeping difficulties and mental problems resulting from a lack of time to recover from working hours (Baptiste, 2008; Kossek, Kalliath, & Kalliath, 2012). De Spiegelaere and Piasna (2017) reinforce that by stating that working combined with

household responsibilities, social commitments and hobbies is challenging and can affect work-life balance. Therefore, it is important to understand the necessity of having enough time to recover from the time and effort applied during working hours and, for this, they should have adequate leisure time - an essential aspect for individual well-being (Sonnentag, 2001).

Despite all this, working time is not the only aspect influencing work-life balance and, consequently, a decrease in weekly working time can have benefits, however it can also result in poor time management, leading to more time devoted to non leisure activities such as domestic activities (De Spiegelaere & Piasna, 2017).

However, we must consider the previously reported facts to formulate the fourth research hypothesis, which suggests that higher expectations of improved work-life balance may lead to greater readiness among individuals to adopt a four-day workweek.

**H4: Expectations of work-life balance benefits are positively associated with readiness for the four-day workweek.**

#### 2.2.1.5 Engagement

Involvement, commitment, enthusiasm, energy, focused effort, passion, and absorption are concepts often associated with engagement (Schaufeli & Bakker, 2010). The terms "employee engagement" and "work engagement" are frequently used synonymously (Gifford & Young, 2021). According to Shaufeli and Bakker (2010), work engagement is more appropriate when we want to study an employee's relationship with their work, however, to facilitate communication, whenever the term "engagement" is mentioned, it should be understood as referring to work engagement.

Bakker and Leiter (2010) state that engagement at work is related to workers' feelings of satisfaction, positivity and motivation towards their work and can be identified as the opposite side of burnout. According to Schaufeli et al. (2002) work engagement can be defined as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption". Strong energy levels, mental strength, preparation, and willingness to put effort into work and persistence in the face of difficulties are the characteristics that reflect vigor. Work associated with feelings of pride, significance, inspiration, challenge, and enthusiasm is part of the dedication component. Absorption relates to a state of complete and happy immersion in work, associated with great focus and some difficulty in disconnecting from work.

Work engagement is related to good physical and mental health, low levels of absenteeism and accidents at work, which results in a decrease in counterproductive behavior (Schaufeli, 2016). According to Attridge (2009) work engagement is susceptible to improvement through some changes, which may be related to new working practices, supervision, or communication (Attridge, 2009). The sense of involvement of the tasks and in decision making makes them stay committed, providing a sense of stimulation of their abilities (Farndale & Murrer, 2015). It can also be seen as a consequence of reward management (Presbitero, 2017), being that intangible rewards have more impact on the engagement that employees feel towards the company (Dow, McMullen, Royal, & Stark, 2010).

Delaney and Casey (2022) conducted an experiment applied in a company that reduced the working time from 5 to 4 days, to 32 hours per week, with no wage reduction. They concluded that the workers felt that the change in the working hours model implied the importance that the company gave to their well-being and so they felt the extra day-off as a gift. Therefore, we can conclude that it is important that leaders provide employees with an environment and tools that empower and motivate employees to be more committed to the company (Dagher, Chapa, & Junaid, 2015), since an engaged employee works more enthusiastically, striving for the best of the company (Nguyen, Nguyen, Doan, & Tran, 2021).

As a result, we can formulate the fifth research hypothesis, which is based on the idea that expectations of benefits in work engagement positively impact individuals' readiness for a four-day workweek.

**H5: Expectations of engagement benefits are positively associated with readiness for the four-day workweek.**

## 2.3 Openness to experience

Openness to experience is a personality trait that has been extensively researched in psychology and relates to a person's willingness to experiment new ideas, situations, and feelings (McCrae & Costa, 1987). It is a dimension of personality, part of the *Big Five model*. The *Big Five model* catalogues personality traits into five dimensions: extroversion, agreeableness, conscientiousness, neuroticism, and openness to experience (Costa & McCrae, 1992a).

According to Pedroso-Lima et al. (2014), the *Big Five Model* is represented by the NEO-PI-R (revised version), which measures these five dimensions of personality, allowing

for a comprehensive assessment of adult personality. Developed by Costa and McCrae (1992b), the NEO-PI-R is the latest version of the NEO-PI. Although it has many advantages, the fact that the instrument consists of 240 items results in a time-consuming and inflexible process. Due to this limitation, shorter versions have been created such as the NEO-FFI or NEO-FFI-R, in the case of the revised version (Costa & McCrae, 1989; McCrae & Costa, 2004). This is a more compact version, with 60 items, where 12 items are assigned to each of the 5 dimensions. Despite the brevity of this version, it is able to provide a reliable measurement of the five model dimensions.

Within the five dimensions that comprise the *Big Five Model*, openness to experience covers a broad range of traits related to creativity, curiosity, and openness to new experiences. A greater capacity to tolerate ambivalence, flexibility, an esteem for diversity, a predisposition for the unconventional, a search for intellectual knowledge, intuition, and the ability to absorb new information are some of the traits that embody the dimension of openness to experience (McCrae, 2004).

Individuals considered open tend to have an innate curiosity for diverse experiences and have a clear flexibility in their way of thinking (McCrae, 2004). This can be hereditary and tends to stabilize during adulthood. Creativity and adaptability are inherent characteristics of individuals who are more open. They are more receptive to experiencing new things and reflecting more on themselves and their own feelings and values. Within the *Big Five* personality traits, openness to experience stands out as the strongest driver of innovation. These attributes empower individuals with high openness to immerse themselves in new experiences and challenge established concepts (Rossberger, 2014). In contrast, more closed individuals tend to be more realistic and pragmatic. They prefer what is familiar and try to separate their feelings and thoughts (McCrae, 2004).

With this in mind, we have reasons to believe that individuals who are more open to experience may be more likely to see a positive potential in the four-day workweek and, consequently, more likely to believe in improvements in well-being, health, engagement, productivity, and work-life balance. In other words, the level of openness to experience can influence the intensity of the relationship between the independent variables and the dependent variable. Thus, the following hypothesis emerges:

**H6: Openness to experience is a moderator of the relationship between the independent variables ( a - productivity, b - health, c - well-being, d - work-life**

**balance, e -engagement) and the dependent variable (receptiveness to the four-day workweek).**

## 2.4 Objectives and conceptual model

The main objective of this study is to understand how expectations regarding productivity, health, work-life balance, engagement, and well-being can influence individuals' readiness for a four-day workweek. Additionally, it seeks to understand the moderating role of openness to experience in the relationship between the mentioned factors and readiness for a four-day workweek. That is, it aims to examine how the propensity for seeking new experiences influences individuals' receptiveness, considering expectations regarding levels of productivity, health, work-life balance, engagement, and well-being. Based on these considerations and the literature review presented, the conceptual model is presented (figure 1).

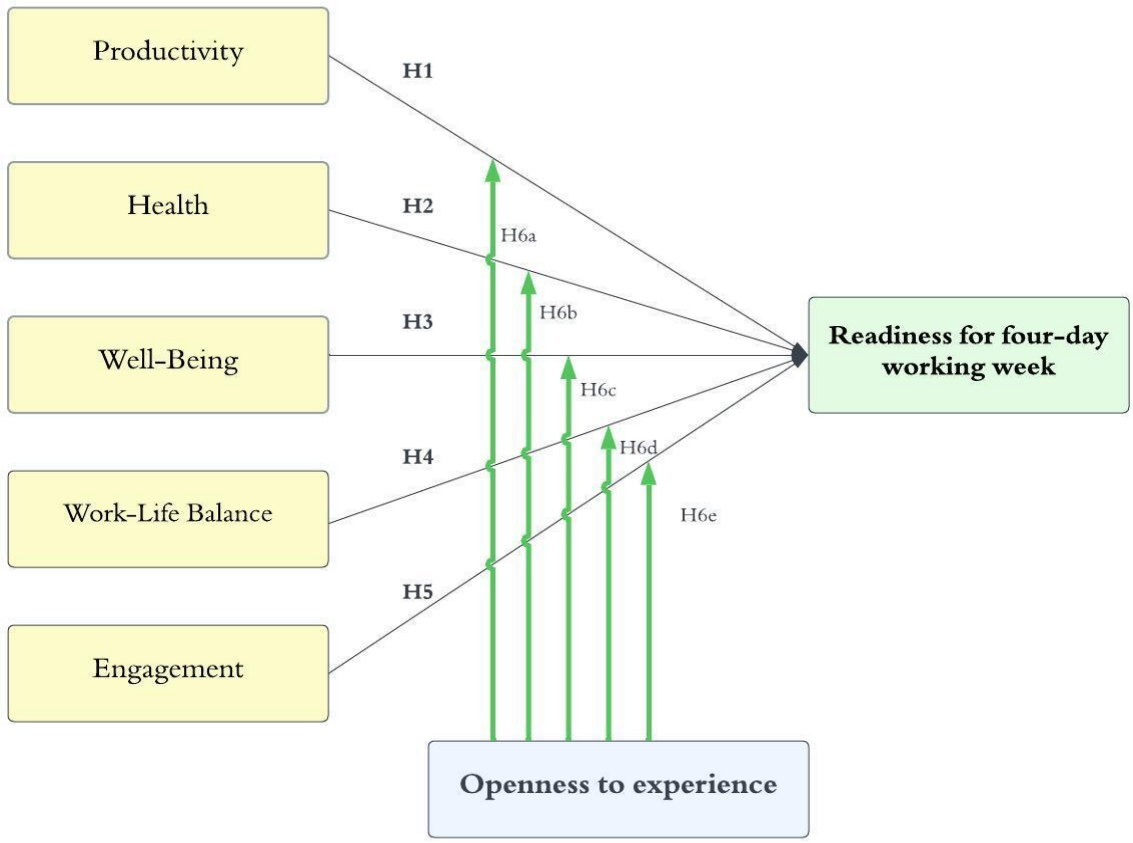


*Figure 1 - Conceptual model*

(personal elaboration)

H1: Expectations that productivity will either remain constant or increase are positively associated readiness for the four-day workweek.

H2: Expectations of health benefits are positively associated with readiness for the four-day workweek.

H3: Expectations of well-being benefits are positively associated with readiness for the four-day workweek.

H4: Expectations of work-life balance benefits are positively associated with readiness for the four-day workweek.

H5: Expectations of engagement benefits are positively associated with readiness for the four-day workweek.

H6: Openness to experience is a moderator of the relationship between the independent variables ( a - productivity, b - health, c - well-being, d - work-life balance, e -engagement) and the dependent variable (receptiveness to the four-day workweek).

# 2. Methodology

Following the thorough exploration and organization of essential concepts in the literature review, this section proceeds to outline the methodology adopted for investigating and testing the established hypotheses. It details the chosen research methodology and how the study was operationalized, explains the process of forming the questionnaire, and describes the sociodemographic and professional characteristics of the sample.

## 3.1 Methodology and operationalization of the study

Quantitative methodology was selected because it allows for the testing of objective theories through the analysis of relationships among variables. These variables can be quantified with instruments, enabling the use of statistical procedures to interpret the numerical data (Creswell & Creswell, 2018). Within this methodology, the survey strategy was selected for its efficiency in providing a quantitative explanation of tendencies, attitudes, or opinions of a population by studying a sample of that population (Fowler, 2008).

With regard to the sampling method, non-probability sampling was selected, namely convenience sampling. Convenience sampling is the most prominent non-probability sampling technique used in development research (Bornstein, Jager, & Putnick, 2013) which uses an ad hoc method to choose accessible individuals (Jager, Putnick, & Bornstein, 2017). This method is considered the most practical option in terms of saving time, costs, and ease of access (Malhotra, Nunan, Birks, & Wills, 2017). According to the authors, despite being a method with many advantages, it also has some limitations, such as the fact that convenience samples do not fairly reflect any specific population, so the unclear generalizability of the sample is an important limitation.

We obtained the data for the study through online questionnaire. Online questionnaires offer convenience in several respects, such as allowing respondents to answer at a convenient time, take as long as necessary to answer the questions and complete the surveys in several sessions (Malhotra et al., 2017).

This questionnaire was developed on the basis of existing scales in the literature. It aimed to understand the impact of the expectations regarding productivity, health, well-being, work-life balance, and engagement on individuals' readiness for the four-day workweek and their openness to experience.

### 3.1.1. Questionnaire

The questionnaire presented in was made up of closed-ended, mandatory questions and was structured into different sections (appendix I). The first part served as an introduction, where the participants were made aware about the objectives of the study and the absolute confidentiality of their answers was guaranteed. It also included a question to obtain the participants' informed consent. The second part included questions related to the concepts being analyzed: openness to experience, well-being, work-life balance, health, productivity, engagement, and readiness for the four-day workweek. Finally, the third part of the questionnaire was used to collect demographic and professional data, which is fundamental for characterizing the sample. In addition, it is important to mention that two control questions were included in the questionnaire between the items, as these can be useful for identifying distracted participants (Malone & Lusk, 2018). The questionnaire was distributed in Portuguese, as we intended to focus on the Portuguese population.

It should be noted that, as we said earlier, in order to meet the proposed objectives, the questions were formulated on the basis of previously validated scientific scales backed up by the literature. As Bradburn, Sudman, & Wansink (2004) explain, this approach helps to minimize potential problems when formulating questions and facilitates the comparison of data, while also ensuring the validity of the study.

Thus, for the openness to experience construct, through which we sought to understand the level of willingness of individuals to new experiences, twelve items adapted from Lima and Simões (1997, 2006) were used. Next, regarding the work-life balance construct, eight questions adapted from Taşdelen-Karçkay and Bakalım (2017) were asked to the respondents. Engagement was also taken into account by adapting nine items from Schaufeli, Salanova, González-Romá, and Bakker (2002). An eight-item scale from Diener et al. (2009) was used to assess well-being. Also an eight-item scale adapted from Barrera-Herrera et al. (2023) was used to measure the health construct, evaluating mental and physical health. The productivity construct was developed using ten items from De Azevedo Andrade, Queiroga, and Valentini (2020). Finally, we adapted fifteen items from the Gräfe and Kauffeld (2024) scale for the construct of readiness for the four-day workweek. Table 2 provides a thorough explanation of the original scales employed.

The use of the Likert scale should also be noted in the construction of this questionnaire - a non-comparative, 5-point itemized rating scale. The fact that the Likert scale is easily constructed and administered, while also providing a quick understanding for

respondents, makes it a very viable option in the development of these types of questionnaires (Malhotra et al., 2017). In the construct regarding openness to experience and in the construct regarding readiness for the four-day workweek, a Likert scale in agreement format was used. In the remaining constructs, a Likert scale in probability format was employed.

The questions were adapted for this research, having undergone a translation process as they were originally written in English. Initially, the items were translated from English to Portuguese by an expert, followed by a second translation from Portuguese to English by another person. Subsequently, the research team compared and analyzed the translations. This process was important, as the questionnaire was made available in Portuguese. Beyond translation, there was also an adaptation to the theme. Specifically in the scale related to "Readiness for change", where the word "change" was replaced by "four-day workweek" or "implementation of the four-day workweek". The remaining scales were originally written with verbs in the first-person singular. To maintain consistency with the introductory phrase we used, we changed the verbs to the infinitive form. Regarding the Openness to Experience scale, we utilized the Portuguese version of the scale, which was originally developed by McCrae and Costa (2004), translated by Lima and Simões (1997, 2006), and validated by Magalhães et al. (2014). This is detailed in Appendix II.

To finalize the questionnaire construction, we conducted a pre-test involving the administration of the questionnaire to a small sample of respondents. The purpose is to identify any possible issues such as: question complexity, lack of precision in wording, unnecessary questions, respondent discomfort, and address inconsistencies (Gil, 2008). It was also important for gauging the average response time. Therefore, ten individuals were asked to respond to the questionnaire. This resulted in a better understanding of the necessary response time and allowed us to perceive if the respondents understood all the questions well. The removal of two items from the scale relating to readiness for the four-day workweek was one of the suggestions most mentioned by the participants, referring to their inadequacy. As we also agreed with this inadequacy, we proceeded with their removal. The items eliminated were: "I feel at the mercy of this change." and "If I do not like something about this change, I say so.". Thus, the questionnaire consisted of 70 items.

Furthermore, to ensure as diverse a sample as possible, the questionnaire was made available through personal networks and on various online platforms such as Instagram, WhatsApp, Facebook, and LinkedIn.

*Table 2 - Variables, items and respective resources*

| Variable | Original Scale Items | Authors and respectives Cronbach Alpha |
|---|---|---|
| **Openness to experience** | I seldom daydream.<br>Once I find the right way to do something, I stick to it.<br>I am intrigued by the patterns I find in art and nature.<br>I believe letting students hear controversial speakers can only confuse and mislead them.<br>Poetry has little or no effect on me.<br>I often try new and foreign foods.<br>I am seldom aware of the influence of different environments on people's behavior.<br>I believe we should look to our religious authorities for decisions on moral issues.<br>Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement.<br>I have little interest in speculating on the nature of the universe or the human condition.<br>I have a lot of intellectual curiosity.<br>I often enjoy playing with theories or abstract ideas. | **McCrae and Costa (2004)** |
| | Não gosto de perder tempo a sonhar acordado(a).<br>Quando encontro uma maneira correcta de fazer qualquer coisa não mudo mais.<br>Fico admirado(a) com os modelos que encontro na arte e na natureza.<br>Acredito que deixar os alunos ouvir pessoas, com ideias discutíveis, só os pode confundir e desorientar.<br>A poesia pouco ou nada me diz.<br>Frequentemente experimento comidas novas e desconhecidas.<br>Poucas vezes me dou conta da influência que diferentes ambientes produzem nas pessoas.<br>Acredito que devemos ter em conta a autoridade religiosa quando se trata de tomar decisões respeitantes à moral.<br>Às vezes ao ler poesia e ao olhar para uma obra de arte sinto um arrepio ou uma onda de emoção.<br>Gosto pouco de me pronunciar sobre a natureza do universo e da condição humana. ®<br>Tenho muita curiosidade intelectual.<br>Muitas vezes dá -me prazer brincar com teorias e ideias abstractas. | **Lima and Simões (1997, 2006)**<br>$\alpha = 0,71$ |

| | | | |
|---|---|---|---|
| **Engagement** | At my work, I feel bursting with energy.<br>At my job, I feel strong and vigorous.<br>I am enthusiastic about my job.<br>My job inspires me.<br>When I get up in the morning, I feel like going to work.<br>I feel happy when I am working intensely.<br>I am proud on the work that I do.<br>I am immersed in my work.<br>I get carried away when I am working. | | **Schaufeli et al. (2006)**<br>**α = 0,95** |
| **Well-being** | I lead a purposeful and meaningful life<br>My social relationships are supportive and rewarding<br>I am engaged and interested in my daily activities<br>I actively contribute to the happiness and well-being of others<br>I am competent and capable in the activities that are important to me<br>I am a good person and live a good life<br>I am optimistic about my future<br>People respect me | | **Diener et al. (2009)**<br>α = 0,87 |
| **Health** | Anxiety<br>Depression<br>Stress | Mental health | α = 0,746 |
| | Sleeping problems<br>Eating problems<br>Stomach problems<br>Sexual problems<br>Headaches | Physical health | **Barrera-Herrera et al. (2023)**<br>α = 0,701 |

| | | |
|---|---|---|
| **Productivity** | I perform hard tasks properly. (t)<br>I try to update my technical knowledge to do my job. (c)<br>I do my job according to what the organization expects from me. (c)<br>I plan the execution of my job by defining actions, deadlines and priorities. (c)<br>I plan actions according to my tasks and organizational routines. (t)<br>I take initiatives to improve my results at work. (c)<br>I seek new solutions for problems that may come up in my job. (c)<br>I work hard to do the tasks designated to me. (t)<br>I execute my tasks foreseeing their results. (t)<br>I seize opportunities that can improve my results at work. (c) | **De Azevedo Andrade and Valentini (2020)**<br>$\alpha = 0,88$<br>$\alpha = 0,82$ |
| **Work-life balance** | I can satisfy my own needs and the needs of the important people in my life.<br>I can manage my roles related to family life in a balanced manner.<br>I can make enough time for myself by preserving the balance between my professional life and family life.<br>I feel loyalty to my roles both in my professional life and my family.<br>I manage my professional and family life in a controlled manner.<br>I am successful at creating a balance between my multiple life roles (employee/ spouse/ mother, father,…).<br>I can deal with the situations that occur due to the conflict between my roles that are specific to my professional and family life.<br>I am equally content with my roles in my family and professional life. | **Taşdelen-Karçkay and Bakalım (2017)**<br>$\alpha = 0,92$ |

| | | | |
|---|---|---|---|
| **Readiness for change** | This change is important for our organization. | **Gräfe and Kauffeld (2024)** | $\alpha = 0{,}86$ |
| | There are good reasons for our organization to implement this change. | | |
| | Our organization will benefit from this change. | | |
| | This change will give me more opportunities for my professional development. | | |
| | I will grow personally due to this change. | | |
| | I will gain advantages by this change | | |
| | This change makes me feel enthusiastic | | |
| | Overall, I am happy about this change. | | |
| | I feel motivated by this change. | | |
| | I feel stressed by this change. | | |
| | Overall, I have a bad feeling about this change. | | |
| | I feel at the mercy of this change | | |
| | I actively inform myself about this change. | | |
| | I actively exchange information about this change with my colleagues. | | |
| | If I do not like something about this change, I say so. | | |

## 3.2 Sample's sociodemographic and professional characterization

The questionnaire was developed using *Microsoft Forms*. It was accessible between 9th April and 1st May 2024. In total, 465 responses were collected.

Out of the responses collected, 65 were rejected due to participants failing the control questions, indicating a lack of seriousness in completing the questionnaire. Consequently, we retained 400 valid responses, exceeding our initial target. Our aim was to gather a substantial volume of responses, ideally five times the number of items in the questionnaire, as recommended by Marôco (2014). With our questionnaire comprising 70 items, our target was set at a minimum of 350 responses.

Using the Statistical Package for the Social Sciences (SPSS), we conducted an analysis of the collected data to construct a comprehensive demographic profile of our sample.

In terms of gender distribution, a significant majority identified as female, constituting 73.6% of the responses (n=295). Outstandingly, one respondent chose not to disclose their gender, while another identified as non-binary. The remaining respondents indicated their gender as male (n=104, 25.90%). The age range of respondents spanned from 15 to 72 years, with the average age calculated at 33 years.

In the ambit of education, the majority of respondents held a bachelor's degree (n=167, 41.8%), followed by those with a master's degree (n=117, 29.3%) and high school graduates (n=100, 25%), while the remaining respondents indicated completion of the 2nd (n=6, 1.5%) and 3rd (n=9, 2,3%) cycles of education.

Occupationally, the sample was composed of employees (n=244, 61%), students (n=54, 13.5%), student-workers (n=50, 12.5%), self-employed individuals (n=32, 8%), unemployed individuals (n=12, 3%), and trainees (n=8, 2%). Respondents who indicated being students in the question regarding their professional situation terminated the questionnaire at that point, naturally not proceeding to answer questions related to professional characterization. Regarding activity sectors, the sectors of healthcare (n=41, 10.3%), administration (n=40, 10%), education (n=29, 7.2%), and manufacturing industries (n=26, 6.5%) stood out. A significant number of respondents selected the option "Other" (n=56, 13.6%).

The majority of respondents indicated that they had no managerial responsibility (n=245, 61.3%), followed by respondents with intermediate management responsibility (n=40, 10%), supervision (n=31, 7.8%) and director position (n=16, 4%). The administration level had the fewest number of respondents (n=14, 3.5%).

Regarding the organization's size, the majority reported being employed in organizations with over 250 employees (n=143, 38,5%). The second most common response was organizations with fewer than 10 employees (n=75, 18.8%). Additionally, 62 respondents (15,5%) reported working in companies with 10 to 15 employees, while another 66 were employed in organizations with 51 to 250 employees (16,5%).

All sociodemographic and professional characterization is detailed in Table 3.

*Table 3 - Sample's sociodemographic and professional characterization*

| Variable | | Mean | Min | Max |
|---|---|---|---|---|
| **Age** | | 33 years | 15 years | 72 years |
| **Variable** | | **Frequency** | **Percentage** | |
| **Gender** | Male | 104 | 25,90% | |
| | Female | 295 | 73,60% | |
| | Non-Binary | 1 | 0,20% | |
| | Prefer not to say | 1 | 0,20% | |
| **Nationality** | Portuguese | 400 | 100% | |
| **Academic qualifications** | 1st cycle | 0 | 0% | |
| | 2nd cycle | 6 | 1,50% | |
| | 3rd cycle | 9 | 2,30% | |
| | High School | 100 | 25% | |
| | Bachelor | 167 | 41,80% | |
| | Master | 117 | 29,30% | |
| | PhD | 1 | 0,30% | |
| **Professional situation** | Unemployed | 12 | 3% | |
| | Trainee | 8 | 2% | |
| | Student | 54 | 13,50% | |
| | Self-employed | 32 | 8% | |
| | Employee | 244 | 61% | |
| | Student-worker | 50 | 12,50% | |
| **Activity Sector** | Administration | 40 | 10% | |
| | Agriculture, livestock, fishing, or forestry | 9 | 2,30% | |
| | Banking and insurance | 13 | 3,30% | |
| | Commerce and distribution | 23 | 5,80% | |
| | Construction | 15 | 3,80% | |
| | Consulting | 17 | 4,30% | |
| | Sports (training and coaching, sports mediation, sports marketing, etc.) | 7 | 1,80% | |
| | Creative economy (music, film, visual arts, design, etc.) | 12 | 3% | |

| | | | |
|---|---|---|---|
| | Education | 29 | 7,20% |
| | Energy | 4 | 1,00% |
| | Manufacturing industries | 26 | 6,50% |
| | Marketing | 15 | 3,80% |
| | Information and Communication Technology | 10 | 2,50% |
| | Transportation and logistics | 10 | 2,5% |
| | Tourism | 14 | 3,500% |
| | Health | 41 | 10,30% |
| | Security | 5 | 1,30% |
| | Other | 56 | 13,60% |
| **Organization dimension** | Less than 10 workers | 75 | 18,80% |
| | 10 to 15 workers | 62 | 15,50% |
| | 51 to 250 workers | 66 | 16,50% |
| | More than 250 workers | 143 | 38,50% |
| **Managerial responsabilities** | None | 245 | 61,30% |
| | Supervision | 31 | 7,80% |
| | Intermediate Management | 40 | 10% |
| | Administration | 14 | 3,50% |
| | Director Position | 16 | 4% |

# 3. Results

In this chapter, we aimed to analyze the data sample we collected through the questionnaire. This analysis consists of studying the validity, reliability, and adequacy of the structural model. In order to accomplish this, we used *Microsoft Office Excel*, *IBM SPSS Statistics* (Statistical Package for the Social Science), version 29, and *SmartPLS*.

PLS (Partial Least Squares) is particularly effective for research aimed at developing predictive or exploratory models (Garson, 2016). Increasingly adopted in fields such as management, marketing, and social sciences, this technique not only measures relationships between latent variables but also facilitates the analysis of mediation and moderation. Therefore, *SmartPLS* was the software chosen for the primary analyses.

## 4.1 Confirmatory factorial analysis

After data collection, we proceeded to factor analysis. According to Marôco (2014), factor analysis is a statistical process aimed at identifying latent variables, previously referred to as constructs, that help understand the correlation among a set of items or manifest variables. There are two methods for conducting this analysis: exploratory factor analysis — used when there is no prior knowledge of the factor structure that can justify the correlations among the items; and confirmatory factor analysis—used when there has been a previous analysis of the factor structure that is merely being confirmed. Given that all the constructs had been previously validated, we conducted the confirmatory factor analysis. For each construct, we sought to analyze the reliability and validity of each construct.

Marôco (2014) states that reliability seeks to ensure the consistency and precision of the construct. When we consider an instrument reliable, it means that, in the sample concerned, it achieves solid and reproducible results. Cronbach's alpha (Cronbach, 1951) is often used to assess reliability and, consequently, internal consistency. George and Mallery (2016) consider acceptable values greater than 0.7. However, several studies have raised doubts about the validity of this metric, proposing other approaches for measurement (Marôco, 2014). One such approach is composite reliability, which can be calculated from the results of confirmatory factor analysis. According to the author, it is generally considered appropriate for a composite reliability value to be equal to or greater than 0.7.

Regarding validity, it is the characteristic that defines the appropriateness of an instrument or scale to measure what it proposes to measure in an accurate and operational

manner (Marôco, 2014). It is subdivided into three components: factorial validity, convergent validity, and discriminant validity. Factorial validity is verified when the items adequately reflect the latent factor they are intended to measure. It is common to measure factorial validity through standardized factor weights, assuming that factors with values equal to or greater than 0.5 exhibit factorial validity (Marôco, 2014). Convergent validity arises when the items of a scale are predominantly explained by the same factor. Fornell and Larcker (1981) suggest that convergent validity can be measured through the average variance extracted variance (AVE). For convergent validity to be considered adequate, the AVE value must be at least 0.5. Discriminant validity is used to verify that items supposedly measuring different factors are not correlated with other factors. When the square root of the AVE is greater than the correlations among the variables ($\phi ij$), discriminant validity is confirmed. Additionally, the HTMT criterion should also be analyzed, as Henseler et al. (2014) demonstrated through simulation studies that HTMT is better at detecting discriminant validity issues, making it a crucial tool for ensuring the accuracy of SEM results. It calculates the mean correlation between items from distinct constructs and compares it to the geometric mean of the average correlations between items assessing the same construct. The authors propose values below 0.85 to consider discriminant validity present. Table 4 presents the reference values.

*Table 4 - Reference values for reliability and validity*

| **Reliability** | **Indicator** | **Reference Value** | **Authors** |
|---|---|---|---|
| Internal consistency | Alpha de Cronbach | > 0,7 | George & Mallery (2016) |
| Reliability | Composed Reliability | ≥ 0,7 | Marôco (2014) |
| **Validity** | **Indicator** | **Reference Value** | **Authors** |
| Factorial validity | Standardized factor weights | > 0,5 | Marôco (2014) |
| Convergent validity | AVE | ≥ 0,5 | Fornell and Larcker (1981) |
| Discriminant validity | Fornell and Lacker Criterion | $\sqrt{}$ AVE$j > \phi ij$ | Fornell and Larcker (1981) |
| | Heterotrait-Monotrait Ratio | < 0,85 | Henseler et al. (2014) |

To assess reliability, factorial validity, convergent validity, and discriminant validity, we conducted a confirmatory factor analysis.

Regarding the factor loadings (Appendix III), we observed that some items exhibited unacceptable values. Following Marôco' (2014) criterion, which accepts values above 0.5, we proceeded to eliminate the items listed in Table 5.

*Table 5 - Eliminated items*

| Construct - latent variable | Item – observed variable | Factor loadings |
|---|---|---|
| **Openness to experience** | OE1 | 0,426 |
| | OE2 | 0,279 |
| | OE4 | 0,446 |
| | OE6 | 0,281 |
| | OE8 | 0,237 |
| | OE11 | 0,460 |
| **Readiness for four-day workweek** | R4WW10 | 0,448 |
| | R4WW12 | 0,180 |
| | R4WW13 | 0,235 |

After eliminating the specified items, we proceeded to evaluate the reliability and convergent validity values. Specifically, we analyzed the composite reliability values, which were deemed acceptable for all constructs as they were all above 0.7 (Marôco, 2014). For the construct *Openness to Experience*, the value was relatively lower compared to the others, which all exceeded 0.9. Regarding internal consistency, according to George and Mallery (2016), *Openness to Experience* shows an acceptable value, while *Readiness for a four-day workweek*, *Productivity*, *Work-life balance*, *Well-being*, *Engagement*, and *Health* exhibit excellent values, all above 0.9. We also examined convergent validity through the AVE, which, as previously mentioned, should be 0.5 or higher. As shown, all constructs meet this criterion except for *Openness to Experience*, which shows a marginal value (AVE=0,422). However, according to Fornell and Larcker (1981), the AVE can be a more conservative measure. Therefore, even if more than 50% of the variance is due to error, if the composite reliability value is acceptable, convergent validity can still be considered adequate. As previously mentioned, the CR value is acceptable, thus this criterion is met.

*Table 6 - CR, Cronbach's Alpha, AVE*

| | Cronbach's alpha | Composite reliability | Average variance extracted (AVE) |
|---|---|---|---|
| **E** | 0,931 | 0,942 | 0,645 |
| **H** | 0,921 | 0,935 | 0,642 |
| **P** | 0,967 | 0,971 | 0,770 |
| **WB** | 0,949 | 0,957 | 0,737 |
| **WLB** | 0,949 | 0,957 | 0,737 |
| **R4WW** | 0,949 | 0,956 | 0,689 |
| **OE** | 0,738 | 0,813 | 0,422 |

Regarding discriminant validity, we used the Fornell and Larcker criterion and obtained the values presented in Table 7. As shown, the correlations between each construct and all other constructs are lower than the square root of the average AVE for that construct.

*Table 7 - Discriminant Validity - Fornell and Larcker Criterion*

| | E | H | OE | P | R4WW | WB | WLB |
|---|---|---|---|---|---|---|---|
| **E** | 0,803 | | | | | | |
| **H** | 0,485 | 0,802 | | | | | |
| **OE** | 0,199 | 0,191 | 0,650 | | | | |
| **P** | 0,684 | 0,568 | 0,247 | 0,877 | | | |
| **R4WW** | 0,496 | 0,460 | 0,167 | 0,621 | 0,830 | | |
| **WB** | 0,733 | 0,463 | 0,229 | 0,691 | 0,555 | 0,858 | |
| **WLB** | 0,673 | 0,395 | 0,181 | 0,570 | 0,528 | 0,642 | 0,858 |

We also assessed discriminant validity using the HTMT criterion. As illustrated in the table, all values are below 0.85, confirming discriminant validity.

*Table 8 - Discriminant Validity - HTMT Criterion*

| | E | H | OE | P | R4WW | WB | WLB |
|---|---|---|---|---|---|---|---|
| **E** | | | | | | | |
| **H** | 0,518 | | | | | | |
| **OE** | 0,235 | 0,238 | | | | | |
| **P** | 0,716 | 0,597 | 0,274 | | | | |
| **R4WW** | 0,520 | 0,483 | 0,181 | 0,645 | | | |
| **WB** | 0,776 | 0,492 | 0,253 | 0,717 | 0,577 | | |
| **WLB** | 0,706 | 0,415 | 0,199 | 0,593 | 0,549 | 0,671 | |

## 4.3 Descriptive analysis and correlational analysis

Appendix IV provides a detailed summary of the descriptive statistics for the variables under study. This includes the mean, standard deviation, minimum, and maximum values for the questions related to productivity, health, well-being, work-life balance, engagement, openness to experience and readiness for a four-day workweek. Furthermore, Table 9 presents the correlation coefficients among these variables. The study variables were analyzed using Spearman's correlation coefficients.

As we can see, the variable gender has several significant correlations. One of them is a negative and significant correlation between gender and managerial responsibilities, indicating that women are less likely to hold managerial positions. Conversely, there are positive and significant correlations between gender and the expectations of engagement, well-being, work-life balance, health, and productivity. This suggests that perceptions of how the shift to a four-day workweek will impact these variables differ between genders, with females perceiving a more positive impact. .

The significant correlations between age and various variables indicate that age is associated with differences in several areas, both in terms of expectations and current situations. As age increases, there tends to be lower academic qualifications; however, there is also a greater likelihood of holding managerial positions and a greater openness to new experiences. In terms of expectations, older employees tend to be less optimistic about the benefits of a four-day workweek in terms of well-being, engagement, and productivity benefits. Additionally, older employees show less readiness to adopt a four-day workweek.

We can also observe that higher levels of academic qualifications are associated with a greater readiness to adopt a four-day workweek. However, it is also evident that individuals with higher managerial responsibilities tend to have lower expectations for work-life balance, engagement, well-being, health, and productivity, and are less likely to be ready to adopt a four-day workweek.

Regarding openness to experience, we find statistically significant associations with work-life balance, engagement, well-being, health, and productivity. This suggests that individuals who are more open to new experiences tend to have more positive expectations regarding the benefits in these areas. Additionally, there is a positive and statistically significant correlation with readiness to adopt the four-day work week, indicating a greater willingness among individuals who are more open to experiences.

We also observe that the positive and significant correlations between work-life balance, productivity, health, engagement, and well-being indicate that these dimensions are interconnected. Individuals who believe that a reduced workweek will improve one of these areas tend to believe that there will be improvements in the other areas as well. The positive and significant correlations between readiness to adopt a four-day workweek and the variables of work-life balance, engagement, well-being, health, and productivity indicate that individuals who believe a reduced workweek will bring benefits in any of these areas are more likely to be ready to make the change.

By examining the mean scores, it is evident that, overall, participants have positive perceptions of work-life balance, well-being, engagement, and productivity. Although health has a slightly lower average compared to the other variables, it still falls within a positive range, as well as Openness to Experience. The standard deviations of the variables imply that the participants' perceptions are relatively consistent, with some variability present. The greatest consistency is observed in perceptions of work-life balance, while the greatest variability is seen in perceptions of health. We also observe significant variability in the activity sectors and age groups of the participants, indicating a wide diversity in the areas of work and age ranges represented in the sample. Overall, participants have fairly uniform perceptions across the different dimensions evaluated, with health being the area where opinions vary the most significantly.

*Table 9 – Descriptive and correlation analysis*

| | Mean | S.D. | 1. Gender | 2. Age | 3. Academic qualifications | 4. Organization Dimension | 5. Managerial responsibilities | 6. OE | 7. WLB | 8. E | 9. WB | 10. H | 11. P | 12. R4WW |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Gender [a] | ,75 | ,457 | -- | | | | | | | | | | | |
| 2. Age | 33,02 | 12,276 | -0,039 | -- | | | | | | | | | | |
| 3. Academic qualifications [b] | 4,96 | ,882 | 0,044 | -,269** | -- | | | | | | | | | |
| 4.Organization dimension [c] | 2,80 | 1,193 | -0,103 | -,117* | ,229** | -- | | | | | | | | |
| 5. Managerial responsibilities [d] | 1,62 | 1,110 | -,180** | ,378** | -0,084 | -,165** | -- | | | | | | | |
| 6.Openness to experience | 3,6079 | ,70411 | 0,072 | ,130** | 0,023 | 0,008 | 0,050 | -- | | | | | | |
| 7. Work life balance | 4,4778 | ,65705 | ,202** | -0,090 | 0,015 | 0,088 | -,158** | ,162** | -- | | | | | |
| 8. Engagement | 4,1186 | ,73697 | ,170** | -,101* | -0,049 | -0,005 | -,145** | ,211** | ,610** | -- | | | | |
| 9. Well Being | 4,1944 | ,77634 | ,118* | -,125* | -0,018 | 0,074 | -,152** | ,219** | ,623** | ,698** | -- | | | |
| 10. Health | 3,8253 | ,86303 | ,147** | -0,087 | -0,013 | 0,019 | -,189** | ,213** | ,420** | ,491** | ,463** | -- | | |
| 11. Productivity | 4,2523 | ,73290 | ,159** | -,116* | -0,011 | 0,072 | -,166** | ,274** | ,594** | ,645** | ,675** | ,576** | -- | |
| 12. Readiness for four-day WW | 4,3210 | ,73849 | ,215** | -,305** | ,106* | ,116* | -,293** | ,132** | ,521** | ,493** | ,557** | ,454** | ,562** | -- |

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0,01 level (2-tailed)

Notes: **a)Gender**: 0= Male, 1= Female, 2=Non-Binary, 3=Prefer not to say **b) Academic Qualifications**: 1= 1st cycle, 2= 2nd cycle, 3= 3rd cycle, 4=high school, 5= bachelor degree, 6= master degree, 7 = doctoral degree; **c) Organization dimension:** 1 = Less than 10 employees, 2 = 10 to 50 employees, 3 = 51 to 250 employees, 4 = More than 250 employees; **d) Managerial responsibilities**: 1 = No, 2 = Yes - Supervision, 3 = Yes - Middle management, 4 = Yes - Management position, 5 = Yes - Administrative position.

## 4.4 Structural model assessment

After assessing the measurement model, we proceed to the structural model using *SmartPLS*. The aim is to realize the significance and relevance of the structural model's relationships — path coefficients — as well as its explanatory and predictive power. Before delving into the analysis, Hair et al. (2019) referred that certain aspects need confirmation: 1) collinearity; 2) coefficient of determination ($R^2$); 3) effect size ($f^2$); 4) $Q^2$ value.

### 1) Collinearity

Multicollinearity arises when two or more independent variables reveal strong correlation, implying shared information and complexity in isolating their effects on the dependent variable (Hair et al., 2019). To evaluate multicollinearity, we employ the Variance Inflation Factor (VIF), calculated for each predictor variable. VIF values exceeding 5 typically suggest potential multicollinearity (Hair et al., 2017). In Table 10, we can see that none of the values surpass the limit.

*Table 10 - VIF*

| Variables | VIF |
|---|---|
| E | 2.966 |
| H | 1.578 |
| P | 2.640 |
| WB | 2.996 |
| WLB | 2.138 |
| OE | 1.140 |
| OE x E | 3.649 |
| OE x H | 1.357 |
| OE x P | 3.214 |
| OE x WB | 4.302 |
| OE x WLB | 2.875 |

### 2) Coefficient of Determination ($R^2$)

The coefficient of determination assesses the variance explained by the dependent variable, serving as a measure of the model's explanatory power (Shmueli & Koppius, 2011). Higher $R^2$ values indicate greater explanatory power. According to Henseler et al. (2009) and Hair et al. (2011), an $R^2$ of 0.75 is deemed substantial, 0.50 satisfactory, and 0.25 weak. In this case, we obtained an $R^2$ value of 0.546 — considered satisfactory.

### 3) Effect Size ($f^2$)

The $f^2$, measuring effect size, signifies the variation in $R^2$ and allows researchers to quantify how the removal of a specific predictor construct affects the model's explanatory power (Hair et. al., 2019). For reference, $f^2$ values of 0.02, 0.15, and 0.35 denote small, medium, and large effects of an exogenous latent variable, respectively (Muller & Cohen, 1989). As observed in table 11, all variables exhibit notably low values. The effect sizes indicate that the variables engagement, health, well-being and openness to experience, along with most interactions, have minimal impact on the dependent variable, as their $f^2$ values are all very small. Productivity and work-life balance, with $f^2$ values of 0.083 and 0.041 respectively, fall short of the medium threshold of 0.15, but still indicating small effects.

*Table 11 - Effect Size*

| Variables | Effect size |
|---|---|
| E | 0.001 |
| H | 0.012 |
| P | 0.083 |
| WB | 0.007 |
| WLB | 0.041 |
| OE | 0.001 |
| OE x E | 0.000 |
| OE x H | 0.003 |
| OE x P | 0.001 |
| OE x WB | 0.008 |
| OE x WLB | 0.000 |

### 4) $Q^2$ value

$Q^2$ value serves to gauge the model's predictive power (Hair et. al., 2019). A positive value suggests superior predictions compared to those based solely on the mean. The $Q^2$ value of this model is 0.462, indicating predictive validity.

The results indicate that the model is statistically sound and does not suffer from significant multicollinearity. The variables included in the model explain a reasonable portion of the readiness for a four-day workweek ($R^2 = 0.546$), and the model has good predictive capability ($Q^2 = 0.462$). Nevertheless, the small effect sizes suggest that individual variables have a limited impact on readiness. According to Lakens (2013), effect sizes are essential for

communicating the practical significance of results. However, he highlights that despite the small effect sizes of individual variables, the $R^2$ value of 0.546 can be explained by the cumulative contribution of all predictors and interactions in the model.

## 4.5 Hypothesis test

Table 12 illustrates the results of the model used to test the previously formulated hypotheses. It is important to note that hypotheses will be rejected based on the t-test, where a t-value ≥ 1.96 indicates significance at a p-value ≤ 0.05 level (Garson, 2016). The coefficient ranges from -1 to 1, with stronger relationships between variables observed when the coefficient approaches extreme values (Hair et al., 2019).

*Table 12 - Hypothesis results*

| Hypothesis | Path | Coefficients | t-value | p-value | Result |
|---|---|---|---|---|---|
| **H1** | **P → R4WW** | 0.315 | 4.244 | 0.000 | **Supported** |
| **H2** | **H → R4WW** | 0.092 | 2.045 | 0.041 | **Supported** |
| **H3** | **WB → R4WW** | 0.094 | 1.291 | 0.197 | **Not supported** |
| **H4** | **WLB → R4WW** | 0.199 | 2.546 | 0.011 | **Supported** |
| **H5** | **E → R4WW** | -0.036 | 0.554 | 0.580 | **Not supported** |
| **H6 a)** | **OE x P → R4WW** | 0.030 | 0.378 | 0.705 | **Not supported** |
| **H6 b)** | **OE x H → R4WW** | -0.045 | 1.175 | 0.240 | **Not supported** |
| **H6 c)** | **OE x WB → R4WW** | -0.115 | 1.571 | 0.116 | **Not supported** |
| **H6 d)** | **OE x WLB → R4WW** | 0.021 | 0.246 | 0.806 | **Not supported** |
| **H6 e)** | **OE x E → R4WW** | -0.009 | 0.134 | 0.893 | **Not supported** |

**Hypothesis 1 (H1): Readiness for the four-day workweek is positively associated with expectations that productivity will be maintained or increased.**

The positive coefficient of 0.315 indicates a moderate positive and statistically significant association between readiness for the four-day workweek and expectations of

productivity maintenance or enhancement. With a t-value of 4.244 and a p-value of 0.000, this relationship is statistically significant.

**Hypothesis 2 (H2): Readiness for the four-day workweek model is positively associated with expectations of health benefits.**

The coefficient of 0.092 suggests a positive, although modest, association between readiness for the four-day workweek and expectations of health benefits. With a t-value of 2.045 and a p-value of 0.041, this relationship is statistically significant.

**Hypothesis 3 (H3): Readiness for the four-day workweek model is positively associated with expectations of well-being benefits.**

The coefficient of 0.094 indicates a positive association between readiness for the four-day workweek and expectations of well-being benefits. However, with a t-value of 1.291 and a p-value of 0.197, this relationship is not statistically significant.

**Hypothesis 4 (H4): Readiness for the four-day workweek model is positively associated with expectations of work-life balance benefits.**

The coefficient of 0.199 indicates a positive association between readiness for the four-day workweek and expectations of improvements in work-life balance. With a t-value of 2.546 and a p-value of 0.011, this relationship is statistically significant.

**Hypothesis 5 (H5): Readiness for the four-day workweek model is positively associated with expectations of work engagement benefits.**

The negative coefficient of -0.036 suggests a negative association between readiness for the four-day workweek and expectations of work engagement benefits. With a t-value of 0.554 and a p-value of 0.580, this relationship is not statistically significant. The results indicate that readiness for the four-day workweek is not associated with an expectation of increased work engagement.

**Hypothesis 6 (H6): Openness to experience moderates the relationship between independent variables and the dependent variable (readiness for to the four-day workweek).**

None of the sub-hypotheses regarding the moderation of openness to experience (OE) were confirmed. The coefficients are low, and the p-values are all well above the significance level of 0.05, indicating that Openness to Experience does not moderate the relationship between independent variables (productivity, health, well-being, work-life balance, engagement) and the dependent variable (readiness for the four-day workweek).

In conclusion, the study's findings indicate that readiness for adopting a four-day workweek is positively influenced by expectations of productivity (H1), health benefits (H2), and work-life balance (H4), but not significantly affected by expectations of well-being (H3) and engagement (H5). Additionally, openness to experience (H6) did not demonstrate a significant moderating effect on any of the relationships investigated.

# 5. Conclusion

In this chapter, we will discuss the conclusions regarding the studied problem, exploring its theoretical and practical implications for management. Additionally, we will highlight the main limitations of the study and present suggestions for future research.

## 5.1 Discussion

Although the four-day workweek is a rising topic gaining increased attention, existing research primarily focuses on potential outcomes for organizations, employees, and society. However, there is a crucial gap in the research: what happens before implementation. Organizational leaders often implement changes with specific objectives in mind (Van de Ven & Poole, 1995). However, conflicts between leaders and members are common during the process. Therefore, it is crucial to exchange information among all parties involved before implementing any change to align goals (Van de Ven & Poole, 1995). Consequently, it has become evident that evaluating individual readiness before implementing any organizational change, including the four-day workweek, is necessary. Readiness helps understand how prepared individuals are to adopting a change plan, potentially avoiding divergences that could affect the success of the implementation.

As evident from the outcomes, some of the tested hypotheses were confirmed while others were rejected.

Concerning hypothesis 1 (H1), which examines the impact expectations of maintaining or boosting productivity have on readiness for the four-day workweek, we can see that individuals' expectations align with what has been reported by the results of experiments on the four-day workweek. Individuals feel prepared to embrace this work model, convinced they will sustain or even elevate their productivity levels. This aligns with what Veal (2022) stated that workers can achieve comparable output in fewer weekly hours as they do in a standard workweek, owing to their heightened awareness of the need to fulfill tasks within a compressed timeframe, thereby fostering greater focus and concentration.

Regarding hypothesis 2 (H2), which explores the relationship between expectations of health benefits and readiness for the model under study, it has been concluded that individuals who consider themselves ready to adopt the four-day workweek anticipate improvements in their health. This conclusion is supported by the fact that several studies have already found a correlation between the number of working hours and varying levels of health (De Spiegelaere & Piasna, 2017), suggesting that reducing working hours leads to healthier lifestyles in individuals (Ahn, 2015).

The association between expected well-being benefits and readiness for the four-day working week (H3) was found to be not statistically significant, although the correlation coefficient was positive. This is inconsistent with the literature presented, which suggested that the four-day working week could lead to an improvement in individuals' well-being (Chakraborty & Biswas, 2019; Streimikiene & Grundey, 2009). The results indicate that there is an association between the two variables, however, this is not strong enough when in competition with other factors. Spearman's correlation previously indicated a positive and statistically significant relationship between well-being and readiness to the four-day workweek model. However, when considering this variable alongside others in a broader model, this correlation did not remain strong. It suggests a tendency that future research could explore further.

The expected benefits in work-life balance were found to be positively related to readiness for this reduced work model (H4), aligning with expectations based on existing literature. Tipping et al. (2012) highlighted that in some studies, workers had already considered more flexible work policies as favorable for achieving a healthy balance in their professional and personal lives.

Hypothesis 5, which linked expectations of engagement benefits with readiness for the four-day working week, was rejected. Individuals who are open to the idea of a shorter working week do not necessarily expect to have higher levels of engagement in their work as a result.. Research by Rich, LePine, and Crawford (2010) concluded that engagement depends a lot on the level of interest individuals have in the tasks they have to fulfil. This may explain why the readiness for a four-day workweek does not result in an increase in expectations of engagement levels, since these may be more related to the content of the tasks and not so much to the structure of the working week. Moreover, the bivariate analysis indicated a positive association between work engagement and readiness for the four-day workweek model when these two variables were considered in isolation. However, when other variables were included in the multivariate analysis, the impact of work engagement diminished. This suggests that other factors, such as productivity, health, and work-life balance, have a stronger influence on readiness for the four-day workweek model. Further qualitative research could explore why employees who feel ready for a four-day workweek do not necessarily expect increased engagement.

Openness to experience does not appear to influence how other variables impact readiness for the four-day workweek. This implies that readiness for the four-day model remains consistent regardless of individuals' levels of openness to experience. This finding contrasts with research by McCrae and Costa (2004) and Rossberger (2014) who suggested

that openness to experience often conducts relationships involving innovation and change. One possible explanation is that the specific context of transitioning to a four-day workweek might not interact with openness in the same way as other organizational changes. Additionally, the uniformity of the benefits associated with the four-day workweek, such as improved work-life balance and health, may resonate similarly across individuals, regardless of their openness to new experiences. Future studies might benefit from exploring different aspects of openness to experience or considering it alongside other potential moderators, such as organizational culture or individual resilience, to gain a deeper understanding of the factors influencing readiness for the four-day workweek.

This research revealed that certain indicators play a more significant role in individuals' readiness for a four-day workweek. Specifically, the expectation of maintaining or increasing productivity, gaining health benefits, and achieving a better work-life balance are key factors. Among these, productivity benefits are the most influential in fostering readiness for this work model. Additionally, we found that engagement is not a relevant factor for those who are receptive to adopting the four-day workweek, as well as well-being. Furthermore, contrary to expectations, we concluded that openness to experience does not impact the strength of these relationships.

The correlation between age and readiness for a four-day workweek was negative and significant, indicating that older workers tend to be less ready to adopt a reduced workweek. This finding was reinforced by subsequent analysis, which also revealed a negative and significant relationship between these variables. Existing literature support these findings, suggesting that older workers, adapted to certain routines, had greater difficulty adjusting to new work procedures (Niessen, Swarowsky, & Leiz, 2010). Additionally, there was evidence that organizational changes increased older workers' sense of job insecurity due to the uncertainty associated with these changes (Wanberg, Kammeyer-Mueller, & Shi, 2016). These combined factors may explain why readiness for a four-day workweek was lower among older workers.

Gender was found to have a statistically significant impact on readiness for a four-day workweek. The analysis indicated a significant relationship, suggesting that gender differences influence how participants perceive and prepare for the transition to a reduced workweek. This finding supports the results from the bivariate analysis, indicating that female participants showed greater readiness for a four-day workweek. This result is consistent with existing literature, which often suggest that women value flexible work practices and are more likely to adopt new policies that can improve their quality of life (Shao, 2022).

Additionally, we concluded from the correlation table that individuals with higher academic qualifications show a greater inclination towards a four-day workweek. However, the structural equation modeling analysis indicated that academic qualifications do not have a statistically significant impact on readiness for a four-day workweek. This implies that although there may be an observed positive trend, the more robust analysis does not support academic qualifications as a significant predictor of readiness to adopt a four-day workweek. This finding is consistent with the study by Bal and De Lange (2015), which concluded that levels of education do not impact how flexible management practices are perceived.

Previously, bivariate analysis indicated that those with higher managerial responsibilities tend to be less ready to adopt a reduced workweek. This conclusion was reinforced by structural equation modeling analysis, which also revealed a negative and significant relationship between these variables. This finding is consistent with the study conducted by Boys (2022), which concluded that employers' opinions on reducing the workweek to four days are ambiguous, with many expressing skepticism about its effectiveness. This hesitation among employers is consistent with findings that those in managerial positions are less likely to be ready to adopt a reduced workweek.

## 5.2 Contributions to theory and management

The results of this study have important theoretical and practical implications that can help broaden the current understanding of the four-day workweek. The primary contribution of this study lies in the fact that we focused on the process preceding the implementation of the change from a traditional workweek to a four-day workweek. This is a crucial point, as the literature, as previously mentioned, mainly focuses on the outcomes that a four-day workweek can produce. However, it is crucial to take into account the level of acceptance by individuals to avoid conflicts during the implementation of organizational change (Jahal et al., 2023).

This study, therefore, offers a clearer understanding of individuals' expectations regarding the implementation of the four-day workweek. By directly investigating and measuring individuals' readiness for this change, leaders can gain a more accurate perception of workers' expectations and concerns about this new work model. This can be useful for organizations to develop strategies to implement the change in a way that meets employee expectations.

Additionally, the confirmation that readiness for the four-day workweek is associated with expectations of maintaining or increasing productivity can be significant for leaders.

This suggests that employees believe that, despite working fewer hours, they will be able to maintain or even improve their work performance. This positive perception can help reassure managers who are concerned about potential productivity declines when implementing a shorter workweek. According to Veal (2022), this concern is one of the biggest obstacles for employers.

The findings regarding the positive association between readiness for the four-day workweek and expectations of health benefits and work-life balance highlight the perceived importance by employees of having additional time to care for themselves and their families (Tipping et al., 2012). This is crucial at a time when work-life balance has become an increasing priority for many workers (Spreitzer, Cameron, & Garrett, 2017). This information can be important for promoting an organizational culture that values and encourages a healthy and balanced work environment.

Although readiness for the four-day workweek is associated with positive expectations in several areas, the study reveals a lack of significant association with expectations of increased work engagement and well-being. This suggests that employees may not believe that the change will lead to greater commitment to work or significantly improve their well-being. This perception can be useful for considering good planning on how to communicate and implement changes in the work schedule.

These conclusions can be fundamental for an effective implementation and a smooth transition to a new work system.

## 5.3 Limitations and future research

This study employed a widely recognized quantitative approach, even though subject to limitations. The selection of a convenience sample and the use of self-administered questionnaires may have introduced biases into the results, with relevant questions not fully explored. The non-attendance of a researcher during data collection may have limited the investigation of important points and more detailed responses, compared to qualitative approaches. Additionally, collecting data at a single point in time might have restricted the depth of insights. To enhance the conclusions and enrich the model, future research could benefit from a qualitative methodology.

It is also important to note that we selected areas (productivity, health, engagement, well-being, and work-life balance) deemed relevant based on the literature. However, other areas may be equally important to individuals' expectations regarding the four-day workweek.

Therefore, future research should explore additional areas, such as environmental benefits, job creation, or social effects (Schor, 2014).

An additional limitation is the possibility that the data may not be generalizable, as the sample may not adequately represent Portuguese individuals. Despite efforts to obtain a considerable sample size, future studies should use a larger number of observations to ensure a more significant representation of the population and, consequently, greater robustness of the results.

Another limitation of the current study is the diversity of respondents in the questionnaire, which included individuals from different backgrounds, including students, whose work experience may vary significantly. It was not possible to discern whether all participants had relevant professional experience, which may have influenced the depth and accuracy of their responses. In future research, it would be beneficial to differentiate and consider participants' work experience for a more precise analysis of the results.

Lastly, the approach to openness to experience may be considered a limitation. Given the results obtained, there may have been a misunderstanding of the topic by participants. The questions related to this theme were not as clearly articulated as those in other areas, which were more directly linked to understanding the four-day workweek. In future research, it may be important to clarify this point.

## 6. References


Afonso, P., Fonseca, M., & Pires, J. F. (2017). Impact of working hours on sleep and mental health. *Occupational Medicine*, *67*(5), 377–382. https://doi.org/10.1093/occmed/kqx054

Ahn, T. (2015). Reduction of Working Time: Does It Lead to a Healthy Lifestyle? *Health Economics*, *25*(8), 969–983. https://doi.org/10.1002/hec.3198

Allen, T. D., Herst, D. E. L., Bruck, C. S., & Sutton, M. J. (2000). Consequences associated with work-to-family conflict: A review and agenda for future research. *Journal of Occupational Health Psychology*, *5*(2), 278–308. https://doi.org/10.1037/1076-8998.5.2.278

Armenakis, A. A., Bernerth, J. B., Pitts, J. P., & Walker, H. J. (2007). Organizational Change Recipients' Beliefs Scale. *Journal of Applied Behavioral Science*, *43*(4), 481–505. https://doi.org/10.1177/0021886307303654

Armenakis, A. A., Harris, S. G., & Mossholder, K. W. (1993). Creating readiness for organizational change. *Human Relations*, *46*(6), 681–703. https://doi.org/10.1177/001872679304600601

Attridge, M. (2009). Measuring and managing employee work engagement: A review of the research and business literature. *Journal of Workplace Behavioral Health, 24*(4), 383–398. https://doi.org/10.1080/15555240903188398.

Băesu, C., & Bejinaru, R. (2014). Leadership approaches regarding the organizational change. *The USV Annals of Economics And Public Administration*, *13*(22),146-152.

Bakker, A. B., & Leiter, M. P. (Eds.). (2010). *Work engagement: A handbook of essential theory and research*. Psychology Press. https://doi.org/10.4324/9780203853047

Bakker, A. B., Demerouti, E., De Boer, E. M., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, *62*(2), 341–356. https://doi.org/10.1016/s0001-8791(02)00030-1

Bal, P. M., & De Lange, A. H. (2015). From flexibility human resource management to employee engagement and perceived job performance across the lifespan: A multi-sample study. *Journal of Occupational and Organizational Psychology, 88*(1), 126-154. https://doi.org/10.1111/joop.12082

Baptiste, N. (2008). Tightening the link between employee wellbeing at work and performance. *Management Decision*, *46*(2), 284–309. https://doi.org/10.1108/00251740810854168

Barrera-Herrera, A., Baeza-Rivera, M. J., Salazar-Fernández, C., & Manríquez-Robles, D. (2023). Analysis of the mental and Physical Health symptomatology scale in a sample of emerging and migrant adults in Chile. *International Journal of Environmental Research and Public Health (Online)*, *20*(6), 4684. https://doi.org/10.3390/ijerph20064684

Bauer, G. F., Huber, C. A., Jenny, G. J., Müller, F., & Hämmig, O. (2009). Socioeconomic status, working conditions and self-rated health in Switzerland: explaining the gradient in men and women. *International Journal of Public Health*, *54*(1), 23–30. https://doi.org/10.1007/s00038-008-7077-2

Bernolak, I. (1997), Effective measurement and successful elements of company productivity: the basis of competitiveness and world prosperity, *International Journal of Production Economics*, *52*(1-2), 203-13.

Bird, R. C. (2010). The four-day work week: Old lessons, new questions symposium. *Connecticut Law Review*, *42*(4), 1059–1080.

Bornstein, M. H., Jager, J., & Putnick, D. L. (2013). Sampling in developmental science: Situations, shortcomings, solutions, and standards. *Developmental Review*, *33*(4), 357–370.

Boys, J. (2022). *The four-day week: Employer perspectives on moving to a shorter working week*. London: Chartered Institute of Personnel and Development.

Bradburn, N. M., Sudman, S., & Wansink, B. (2004). *Asking questions: The definitive guide to questionnaire design—for market research, political polls, and social and health questionnaires*. Jossey-Bass.

Campbell, J. P., & Wiernik, B. M. (2015). The modeling and assessment of work performance. *Annual Review of Organizational Psychology and Organizational Behavior*, *2*(1), 47–74. https://doi.org/10.1146/annurev-orgpsych-032414-111427

Campbell, T. T. (2023). The four-day work week: a chronological, systematic review of the academic literature. *Management Review Quarterly*. https://doi.org/10.1007/s11301-023-00347-3

Carlson, D. S., Grzywacz, J. G., & Zivnuska, S. (2009). Is work—family balance more than conflict and enrichment? *Human Relations*, *62*(10), 1459–1486. https://doi.org/10.1177/0018726709336500

Chadi, A., & Hetschko, C. (2018). The magic of the new: How job changes affect job satisfaction. *Journal of Economics & Management Strategy*, *27*(1), 23–39. https://doi.org/10.1111/jems.12217

Chakraborty, D., & Biswas, W. (2019). Evaluating the impact of human resource planning programs in addressing the strategic goal of the firm. *Journal of Advances in Management Research*, *16*(5), 659–682. https://doi.org/10.1108/jamr-01-2019-0007

Chakraborty, D., Bhatnagar, S. B., Biswas, W., & Dash, G. (2022). The Subtle Art of Effecting a Four-day Workweek to Drive Performance. *Management and Labour Studies*, *47*(3), 275–297. https://doi.org/10.1177/0258042X221082893

Chappell, B. (2019). 4-Day Workweek Boosted Workers' Productivity By 40%, Microsoft Japan Says. Retrieved from https://www.npr.org/2019/11/04/776163853/microsoft-japan-says-4-day-workweek-boosted-workers-productivity-by-40

Chernyak-Hai, L., & Tziner, A. (2016). The "I believe" and the "I invest" of Work-Family Balance: The indirect influences of personal values and work engagement via perceived organizational climate and workplace burnout. *Revista De Psicología Del Trabajo Y De Las Organizaciones*, *32*(1), 1–10. https://doi.org/10.1016/j.rpto.2015.11.004

Chung, H. (2022). A Social Policy Case for a Four-Day Week. *Journal of Social Policy*, *51*(3), 551–566. https://doi.org/10.1017/s0047279422000186

Cinamon, R. G., & Rich, Y. (2002). Profiles of attribution of importance to life roles and their implications for the work–family conflict. *Journal of Counseling Psychology, 49*(2), 212–220. https://doi.org/10.1037/0022-0167.49.2.212

Collewet, M., & Sauermann, J. (2017). Working hours and productivity. *Labour Economics*, *47*, 96–106. https://doi. org/10.1016/j.labeco.2017.03.006

Costa, P. T., & McCrae, R. R. (1992a). The Five-Factor model of personality and its relevance to personality disorders. *Journal of Personality Disorders*, *6*(4), 343–359. https://doi.org/10.1521/pedi.1992.6.4.343

Costa, P. T., & McCrae, R. R. (1992b). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual.* Odessa, FL: Psychological Assessment Resources.

Costa, P. T., Jr., & McCrae, R. R. (1989). *NEO Five-Factor Inventory (NEO-FFI)*. Psychological Assessment Resources.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, *16*(3), 297-334. https://doi.org/10.1007/BF02310555

Cross, G. (1989). *A quest for time*. University of California Press.

Cuello, H. (2023). *Assessing the validity of four-day week pilots*. Seville: European Commission.

Dagher, G. K., Chapa, O., & Junaid, N. (2015). The historical evolution of employee engagement and self-efficacy constructs. *Journal of Management History*, *21*(2), 232–256. https://doi.org/10.1108/jmh-05-2014-0116

De Azevedo Andrade, É. G. S., Queiroga, F., & Valentini, F. (2020). Short version of Self-Assessment Scale of Job Performance. *Anales de Psicología, 36*(3), 543–552. https://doi.org/10.6018/analesps.402661

De Spiegelaere, S., & Piasna, A. (2017). *The why and how of working time reduction*. European Trade Union Institute. Retrieved from https://www.etui.org/publications/guides/the-why-and-how-of-working-time-reduction

Delaney, H., & Casey, C. (2022). The promise of a four-day week? A critical appraisal of a management-led initiative. *Employee Relations*, *44*(1), 176-190. https://doi.org/10.1108/er-02-2021-0056

Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2009). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research, 97*(2), 143–156. https://doi.org/10.1007/s11205-009-9493-y

Dong, R., Wu, H., Ni, S., & Lu, T. (2021). The nonlinear consequences of working hours for job satisfaction: The moderating role of job autonomy. *Current Psychology*, *42*(14), 11849–11870. https://doi.org/10.1007/s12144-021-02463-3

Dow, S., McMullen, T., Royal, M., & Stark, M. (2010). The impact of rewards programs on employee engagement. *World at Work*, 1–17.

Dutta, T., & Dhir, S. (2021). Employee Loyalty: Measurement and Validation. *Global Business Review*, 097215092199080. https://doi.org/10.1177/0972150921990809

Farndale, E., & Murrer, I. (2015). Job resources and employee engagement: a cross-national study. *Journal of Managerial Psychology*, *30*(5), 610–626. https://doi.org/10.1108/jmp-09-2013-0318

Ferreira, B. (2023). Há um ano com a semana de 4 dias, 360imprimir viu faltas ao trabalho cair para metade. *Observador*. Retrieved from https://observador.pt/2023/11/23/ha-um-ano-com-a-semana-de-4-dias-de-trabalho-360imprimir-viu-faltas-ao-trabalhar-cair-para-metade/

Fløvik, L., Knardahl, S., & Christensen, J. O. (2019). Organizational change and employee mental health: A prospective multilevel study of the associations between organizational changes and clinically relevant mental distress. *Scandinavian Journal of Work, Environment & Health*, *45*(2), 134–145. https://doi.org/10.5271/sjweh.3777

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50. https://doi.org/10.1177/002224378101800104

Fowler, F. J. (2008). *Survey research methods* (5th ed.). SAGE Publications.

Frone, M. R., Russell, M., & Cooper, M. L. (1997). Relation of work-family conflict to health outcomes: A fouryear longitudinal study of employed parents. *Journal of Occupational and Organizational Psychology, 70*, 325– 335.

Garson, G. D. (2016). *Partial least squares regression and structural equation models*. Statistical Associates Publishers.

George, D., & Mallery, P. (2016). *IBM SPSS Statistics 23 step by step*. Routledge. https://doi.org/10.4324/9781315545899

Gifford, J., & Young, J. (2021). *Employee engagement: Definitions, measures and outcomes* (Discussion report). Chartered Institute of Personnel and Development. https://www.cipd.org/globalassets/media/knowledge/knowledge-hub/evidence-reviews/employee-engagement-discussion-report_tcm18-89598.pdf

Gil, A. C. (2008). *Métodos e técnicas de pesquisa social* (6a ed.). Atlas.

Gomes, P. & Fontinha, R. (2024). Four-Day Week Portuguese Pilot – Final Report. 4 Day Week Global.

Gräfe, H., & Kauffeld, S. (2024). ORC-Q. *Diagnostica, 70*(2), 77–87. https://doi.org/10.1026/0012-1924/a000324

Greenhaus, J. H., & Beutell, N. J. (1985). Sources of Conflict between Work and Family Roles. *Academy of Management Review*, *10*(1), 76. https://doi.org/10.2307/258214

Greenhaus, J. H., Collins, K., & Shaw, J. D. (2003). The relation between work–family balance and quality of life. *Journal of Vocational Behavior*, *63*(3), 510–531. https://doi.org/10.1016/s0001-8791(02)00042-8

Haar, J. (2013). Testing a new measure of work–life balance: a study of parent and non-parent employees from New Zealand. *International Journal of Human Resource Management*, *24*(17), 3305–3324. https://doi.org/10.1080/09585192.2013.775175

Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). SAGE Publications.

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: indeed a silver bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139–152. https://doi.org/10.2753/mtp1069-6679190202

Hair, J.F., Risher, J.J., Sarstedt, M. &, Ringle, C.M. (2019). When to use and how to report the results of PLS-SEM., *European Business Review, 31* (1), 2-24

Haraldsson, G. D., & Kellam, J. (2021). *Going public: Iceland's journey to a shorter working week*. Association for Democracy and Sustainability

Hedges, J. N. (1971). A look at the 4-day workweek. *Monthly Labor Review*, *94*(10), 33–37

Heim, I., & Sardar-Drenda, N. (2020). Assessment of employees' attitudes toward ongoing organizational transformations. *Journal of Organizational Change Management*, *34*(2), 327–349. https://doi.org/10.1108/jocm-04-2019-0119

Henseler, J., Ringle, C. M., & Sarstedt, M. (2014). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science, 43*(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in international marketing*, *20*, 277–319. https://doi.org/10.1108/s1474-7979(2009)0000020014

Holt, D. T., Armenakis, A. A., Feild, H. S., & Harris, S. G. (2007). Readiness for organizational change. *The Journal of Applied Behavioral Science*, *43*(2), 232–255. https://doi.org/10.1177/0021886306295295

Hsu, Y., Bai, C. H., Yang, C., Huang, Y., Lin, T., & Lin, C. (2019). Long Hours' Effects on Work-Life Balance and Satisfaction. *BioMed Research International*, *2019*, 1–8. https://doi.org/10.1155/2019/5046934

Hunnicutt, B. K. (1984). The end of shorter hours. *Labor History*, *25*(3), 373–404. https://doi.org/10.1080/00236568408584762

Hunnicutt, B. K. (1988). *Work without end*. Temple University Press

International Labour Organization [ILO]. (n.d.). *Workplace Wellbeing*. Retrieved from www.ilo.org/safework/areasofwork/workplacehealth-promotion-and-well-being/WCMS_118396/lang-- en/index.htm

Jacob, E. (2020), Can shorter working hours help avoid burnout and boost productivity?, *Financial Times*. Retrieved from https://www.ft.com/content/7bb06122-57d0-11ea-abe5-8e03987b7b20

Jager, J., Putnick, D. L., & Bornstein, M. H. (2017). More than just convenient: the scientific merits of homogeneous convenience samples. *Monographs of the Society for Research in Child Development*, *82*(2), 13–30. https://doi.org/10.1111/mono.12296

Jahal, T., Bardoel, E. A., & Hopkins, J. (2023). Could the 4-day week work? A scoping review. *Asia Pacific Journal of Human Resources*, *62*(1). https://doi.org/10.1111/1744-7941.12395

Jensen, J. H., Flachs, E. M., Skakon, J., Rod, N. H., & Bonde, J. P. (2019). Longitudinal associations between organizational change, work-unit social capital, and employee exit from the work unit among public healthcare workers: a mediation analysis. *Scandinavian Journal of Work, Environment & Health*, *45*(1), 53–62. https://doi.org/10.5271/sjweh.3766

Kossek, E. E., & Michel, J. S. (2011). Flexible work schedules. In S. Zedeck (Ed.), *Handbook of industrial and organizational psychology: Building and developing the organization* (pp. 535-572). American Psychological Association.

Kossek, E. E., Kalliath, T., & Kalliath, P. (2012). Achieving employee wellbeing in a changing work environment. *International Journal of Manpower*, *33*(7), 738–753. https://doi.org/10.1108/01437721211268294

Kuron, L. K. J., Lyons, S. T., Schweitzer, L., & Ng, E. S. (2015). Millennials' work values: differences across the school to work transition. *Personnel Review, 44*(6), 991–1009. https://doi.org/10.1108/pr-01-2014-0024

Lakens, D. (2013). Calculating and reporting effect sizes to facilitate cumulative science: a practical primer for t-tests and ANOVAs. *Frontiers in Psychology, 4*, 863. https://doi.org/10.3389/fpsyg.2013.00863

Lee, D., & Lim, H. (2014). Nonlinearity in Nexus between Working Hours and Productivity. *Social Science Research Network*. https://doi.org/10.2139/ssrn.2580642

Lehndorff, S. (2014). It's a long way from norms to normality: The 35-hour week in France. *Industrial and Labor Relations Review, 67*(3), 838-863

Leščevica, M., & Gusta, Z. (2022). Well-Being at work: a literature review on the complex framework. In *12th International Scientific Conference "Business and Management 2022"* https://doi.org/10.3846/bm.2022.843

Li, X., Kan, D., Liu, L., Shi, M., Wang, Y., Yang, X., Wang, J., Wang, L., & Wu, H. (2015). The Mediating Role of Psychological Capital on the Association between Occupational Stress and Job Burnout among Bank Employees in China. *International Journal of Environmental Research and Public Health*, *12*(3), 2984–3001. https://doi.org/10.3390/ijerph120302984

Lima, M. P., & Simões, A. (1997, 2006). *NEO-PI-R*. Lisboa: CEGO.

Lingard, H., & Francis, V. (2009). *Managing Work-Life Balance in Construction*. London: Routledge

Macey, W. H., & Schneider, B. (2008). The Meaning of Employee Engagement. *Industrial and Organizational Psychology*, *1*(1), 3–30. https://doi.org/10.1111/j.1754-9434.2007.0002.x

Machi, L. A., & McEvoy, B. T. (2016). *The Literature Review: Six Steps to Success*. Corwin https://doi.org/10.4135/9781071939031

Magalhães, E., Salgueira, A. P., Gonzalez, A., Costa, J. P., Costa, M. J., Costa, P., & De Lima, M. P. (2014). NEO-FFI: Psychometric properties of a short personality inventory in Portuguese context. *Psicologia*, *27*(4), 642–657. https://doi.org/10.1590/1678-7153.201427405

Malhotra, N. K., Nunan, D., Birks, D. F., & Wills, P. (2017). *Marketing research: An applied approach* (5th ed.). Pearson.

Malone, T., & Lusk, J. L. (2019). Releasing the Trap: A Method to Reduce Inattention Bias in Survey Data with Application to U.S. Beer Taxes. *Economic Inquiry, 57*(1), 584-599.

Man, N. C., & Ling, T. W. (2014). Relationships between working hours and productivity: The case of food services and information communication industries in Hong Kong. *Advances in Economics and Business*, *2*(7), 281–292. https://doi.org/10.13189/aeb.2014.020704

Marôco, J. (2014). *Análise de Equações Estruturais: Fundamentos Teóricos, Software e Aplicações*

Martens, M. F. J., Nijhuis, F., Van Boxtel, M. P., & Knottnerus, J. A. (1999). Flexible work schedules and mental and physical health. A study of a working population with non-traditional working hours. *Journal of Organizational Behavior*, *20*(1), 35–46. https://doi.org/10.1002/(sici)1099-1379(199901)20:1

McCrae, R. R. (2004). Openness to experience. In C. D. Spielberger (Ed.), *Encyclopedia of applied psychology* (pp. 707-709). Elsevier. https://doi.org/10.1016/B0-12-657410-3/00068-4

McCrae, R. R., & Costa, P. T. (1997). Personality trait structure as a human universal. *American Psychologist, 52*(5), 509–516. https://doi.org/10.1037/0003-066x.52.5.509

McCrae, R. R., & Costa, P. T., Jr. (2004). *NEO Five-Factor Inventory-3 (NEO-FFI-3)*. Psychological Assessment Resources.

Moores, J. E. (1990). A meta-analysis of the effects of compressed work weeks. *Applied Human Resource Management Research, 1*(1), 8–14.

Muller, K., & Cohen, J. (1989). *Statistical Power Analysis for the Behavioral Sciences. Technometrics, 31*(4), 499. https://doi.org/10.2307/1270020

Ng, T. W. H., & Feldman, D. C. (2012). Evaluating Six Common Stereotypes About Older Workers with Meta-Analytical Data. *Personnel Psychology*, *65*(4), 821–858. https://doi.org/10.1111/peps.12003

Niessen, C., Swarowsky, C., & Leiz, M. (2010). Age and adaptation to changes in the workplace. *Journal of Managerial Psychology*, *25*(4), 356–383. https://doi.org/10.1108/02683941011035287

Okazaki, E., Nishi, D., Susukida, R., Inoue, A., Shimazu, A., & Tsutsumi, A. (2019). Association between working hours, work engagement, and work productivity in employees: A cross-sectional study of the Japanese Study of Health, Occupation, and Psychosocial Factors Relates Equity. *Journal of Occupational Health*, *61*(2), 182–188. https://doi.org/10.1002/1348-9585.12023

Oreg, S. (2006). Personality, context, and resistance to organizational change. *European Journal of Work and Organizational Psychology*, *15*(1), 73–101. https://doi.org/10.1080/13594320500451247

Oreg, S., Bartunek, J. M., Lee, G., & Do, B. (2018). An Affect-Based Model of Recipients' Responses to Organizational Change Events. *Academy of Management Review, 43*(1), 65–86. https://doi.org/10.5465/amr.2014.0335

Organization for Economic Cooperation and Development. (2015). Fit Mind, Fit Job: From Evidence To Practice In Mental Health And Work: Mental Health And Work. *Organization For Economic Co-Operation & Development.*

Pan, W. C., & Sun, L. (2017). A Self-Regulation model of Zhong yong thinking and employee adaptive performance. *Management and Organization Review*, *14*(1), 135–159. https://doi.org/10.1017/mor.2017.33

Pang, A.S.K. (2020), *Shorter: How Working Less Will Revolutionise the Way Your Company Gets Things Done*, Penguin.

Pasamar, S. (2020). Why a strong work-life balance system is needed? *Cuadernos De Gestión*, *20*(3), 99–107. https://doi.org/10.5295/cdg.180903sp

Pedroso-Lima, M., Magalhães, E., Salgueira, A. P., Gonzalez, A., Costa, J. P., Costa, M. J., & Costa, P. (2014). A versão portuguesa do NEO-FFI: Caracterização em função da idade, género e escolaridade. *Psicologia*, *28*(2), 1–10. https://doi.org/10.17575/rpsicol.v28i2.534

Pencavel, J. (2014). The Productivity of Working Hours. *The Economic Journal*, *125*(589), 2052–2076. https://doi.org/10.1111/ecoj.12166

Piasna, A. (2015). "Thou shalt work hard": Fragmented working hours and work intensification across the EU. *Forum Socjologiczne*, 77–89. https://wuwr.pl/fsoc/article/download/5824/5502

Presbitero, A. (2017). How do changes in human resource management practices influence employee engagement? A longitudinal study in a hotel chain in the Philippines. *Journal of Human Resources in Hospitality and Tourism, 16*(1), 56–70. https://doi.org/10.1080/15332845.2016.1202061

Rafferty, A. E., & Minbashian, A. (2018). Cognitive beliefs and positive emotions about change: Relationships with employee change readiness and change-supportive behaviors. *Human Relations*, *72*(10), 1623–1650. https://doi.org/10.1177/0018726718809154

Rego, A., & Cunha, M. P. E. (2009). Do the opportunities for learning and personal development lead to happiness? It depends on work-family conciliation. *Journal of Occupational Health Psychology*, *14*(3), 334–348. https://doi.org/10.1037/a0014248

Repovš, E., Drnovšek, M., & Kaše, R. (2019). Change ready, resistant, or both? Exploring the concepts of individual change readiness and resistance to organizational change. *Economic and Business Review*, *21*(2). https://doi.org/10.15458/85451.82

Rich, B. L., LePine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal, 53*(3), 617-635. https://doi.org/10.5465/amj.2010.51468988

Rossberger, R. J. (2014). National Personality Profiles and Innovation: The Role of Cultural Practices. *Creativity and Innovation Management*, *23*(3), 331–348. https://doi.org/10.1111/caim.12075

Roth, T. (2007). Insomnia: Definition, Prevalence, Etiology, and Consequences. *Journal of Clinical Sleep Medicine*, *3*(5 suppl). https://doi.org/10.5664/jcsm.26929

Sauermann, J. (2023). Performance measures and worker productivity. *IZA World of Labor*. https://doi.org/10.15185/izawol.260.v2

Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J., Duarte, M. E., Guichard, J., … Van Vianen, A. (2009). Life designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behavior*, *75*(3), 239–250. https://doi.org/10.1016/j.jvb.2009.04.004

Schalk, R., Campbell, J. W., & Freese, C. (1998). Change and employee behaviour. *Leadership & Organization Development Journal*, *19*(3), 157–163. https://doi.org/10.1108/01437739810210202

Shao, Q. (2022). Does less working time improve life satisfaction? Evidence from European Social Survey. *Health Economics Review*, *12*(1). https://doi.org/10.1186/s13561-022-00396-6

Schaufeli, W. (2016). Heavy work investment, personality and organizational climate. *Journal of Managerial Psychology*, *31*(6), 1057- 1073. https://doi.org/10.1108/JMP-07-2015-0259

Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10–24). Psychology Press.

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The Measurement of Burnout and Engagement: A Confirmatory Factor analytic Approach. *Journal of Happiness Studies*, *3*(1), 71–92. https://doi.org/10.1023/a:1015630930326

Schor, J. (2014). Work sharing. In G. D'Alisa, F. Demaria, & G. Kallis (Eds.), *Degrowth: A Vocabulary for a New Era*. Routledge.

Shaffer, M., Sebastian Reiche, B., Dimitrova, M., Lazarova, M., Chen, S., Westman, M., & Wurtz, O. (2016). Workand family-role adjustment of different types of global professionals: Scale development and validation. *Journal of International Business Studies*, *47*(2), 113–139. https://doi.org/10.1057/jibs.2015.26

Shagvaliyeva, S., & Yazdanifard, R. (2014). Impact of Flexible Working Hours on Work-Life Balance. *American Journal of Industrial and Business Management*. *4,* 20-23 https://doi.org/10.4236/ajibm.2014.41004

Shields, M. (2021). Long working hours and health. *The Lancet Regional Health - Western Pacific*, *11*, 100199. https://doi.org/10.1016/j.lanwpc.2021.100199

Shmueli, N., & Koppius, N. (2011). *Predictive Analytics in Information Systems Research. Management Information Systems Quarterly, 35*(3), 553. https://doi.org/10.2307/23042796

Sirgy, M. J., & Lee, D. (2018). Work-Life Balance: an Integrative Review. *Applied Research in Quality of Life*, *13*(1), 229–254. https://doi.org/10.1007/s11482-017-9509-8

Smith, S. J. (1986). The Growing Diversity of Work Schedules. *Monthly Labour Review 109*(11), 7–13.

Sonnentag S. (2001) Work, recovery activities, and individual well-being: a diary study. *Journal of Occupational Health Psychology*, *6*(3), 196–210.

Spencer, D. A. (2022). A Four-Day Working Week: its Role in a Politics of Work. *The Political Quarterly*, *93*(3), 401-407. https://doi.org/https://doi.org/10.1111/1467-923X.13173

Spreitzer, G. M., Cameron, L., & Garrett, L. (2017). Alternative work arrangements: Two images of the new world of work. *Annual Review of Organizational Psychology and Organizational Behavior, 4*(1), 473-499. https://doi.org/10.1146/annurev-orgpsych-032516-113332

Štreimikienė, D., & Grundey, D. (2008). Life satisfaction and happiness – the factors in work performance. *Economics & Sociology*, *2*(1), 9–26. https://doi.org/10.14254/2071-789x.2009/2-1/2

Tangen, S. (2005). Demystifying productivity and performance. *International Journal of Productivity and Performance Management*, *54*(1), 34–46. https://doi.org/10.1108/17410400510571437

Taşdelen-Karçkay, A., & Bakalım, O. (2017). The mediating effect of work–life balance on the relationship between work–family conflict and life satisfaction. Australian Journal of Career Development, *26*(1), 3–13. https://doi.org/10.1177/1038416216682954

Tipping, S., Chanfreau, J., Perry, J., & Tait, C. (2012). *The Fourth Work-Life Balance Employee Survey*. Department for Business, Innovation and Skills (BIS).

Unilever. (2022, November 1). Unilever Australia & New Zealand expands four-day work week trial following encouraging results. Retrieved from https://www.unilever.com.au/news/press-releases/2022/unilever-australia-new-zealand-expands-fourday-work-week-trial-following-encouraging-results/

Vallo, N., & Mashau, P. (2020). The Impact of Working Hours On Employee Productivity Case Study of Sabertek Ltd, South Africa. *Academy of Entrepreneurship Journal*, *26*(4).

Van de Ven, A. H., & Poole, M. S. (1995). Explaining development and change in organizations. *Academy of Management Review, 20*(3), 510-540. https://doi.org/10.5465/amr.1995.9508080329

Veal, A. (2022). The 4-day work-week: the new leisure society? *Leisure Studies*, *42*(2), 172–187. https://doi.org/10.1080/02614367.2022.2094997

Wanberg, C. R., Kammeyer-Mueller, J. D., & Shi, K. (2016). Career adaptability: The impact of work changes on older workers. *Journal of Organizational Behavior, 37*(7), 977-996. https://doi.org/10.1002/job.2070

Warr, P. B. (2007). *Work, happiness, and unhappiness*. Mahwah, NJ: Erlbaum

Weiner, B. J. (2009). A theory of organizational readiness for change. *Implementation Science*, *4*(1). https://doi.org/10.1186/1748-5908-4-67

World Health Organization (2022), *World mental health report: transforming mental health for all.* Retrieved from https://iris.who.int/bitstream/handle/10665/356119/9789240049338-eng.pdf?sequence=1

World Health Organization, (n.d.). *Promoting Well-Being*. Retrieved from https://www.who.int/activities/promoting-well-being

World Health Organization. (n.d.). *Constitution*. Retrieved from https://www.who.int/about/accountability/governance/constitution

Wright, T. A., & Huang, C.-C. (2012). The many benefits of employee well-being in organizational research. *Journal of Organizational Behavior*, *33*(8), 1188–1192. doi:10. 1002/job.1828

# 7. Appendices

## Appendix I- Questionnaire

**A Prontidão dos Trabalhadores para a Semana de Quatro dias de Trabalho**

O presente questionário serve uma investigação no âmbito de uma dissertação do Mestrado em Gestão da Faculdade de Economia da Universidade do Porto.

Esta investigação procura perceber a recetividade dos trabalhadores à semana de quatro dias de trabalho.

**A semana de quatro dias de trabalho é um modelo alternativo em que os indivíduos trabalham 4 dias por semana (ao invés dos cinco dias tradicionais), mantendo as 8 horas de trabalho diárias. Este modelo resulta, então, num dia extra de folga por semana, sem redução salarial.**

Os dados obtidos servirão apenas fins académicos.

**A participação neste questionário é anónima, confidencial e voluntária.** Não há respostas certas ou erradas, pelo que lhe pedimos a máxima seriedade e honestidade ao longo do preenchimento deste questionário.

Caso necessite de esclarecer alguma dúvida, poderá colocar as suas questões através do e-mail up202102588@up.pt (Carolina Faim).

**A resposta a este questionário tem um tempo estimado de cerca de 10 minutos.**

Agradecemos antecipadamente a sua colaboração.

**Secção 1**

Consentimento Informado

1. Declaro que tomei conhecimento dos objetivos da presente investigação e aceito participar. *
    - Sim

**Secção 2**

ATENÇÃO!

Se estiver a responder a este inquérito pelo telemóvel deve arrastar o ecrã para a direita e para a esquerda, em frente a cada frase, para poder ver as opções de resposta disponíveis.

2. *O que pensa sobre cada uma das seguintes afirmações?

| Afirmação | Discordo totalmente | Discordo | Neutro | Concordo | Concordo totalmente |
|---|---|---|---|---|---|
| Não gosto de perder tempo a sonhar acordado(a). | | | | | |
| Quando encontro uma maneira correta de fazer qualquer coisa não mudo mais. | | | | | |
| Fico admirado(a) com os modelos que encontro na arte e na natureza. | | | | | |
| Acredito que deixar os alunos ouvir pessoas, com ideias discutíveis, só os pode confundir e desorientar. | | | | | |
| A poesia pouco ou nada me diz. | | | | | |
| Frequentemente experimento comidas novas e desconhecidas. | | | | | |
| Poucas vezes me dou conta da influência que diferentes ambientes produzem nas pessoas. Acredito que devemos ter em conta a autoridade religiosa quando se trata de tomar decisões respeitantes à moral. | | | | | |
| Gosto pouco de me pronunciar sobre a natureza do universo e da condição humana. | | | | | |
| Tenho muita curiosidade intelectual. | | | | | |
| Muitas vezes dá -me prazer brincar com teorias e ideias abstractas. | | | | | |

**Secção 3**

3. *Imagine que a sua organização decide aplicar o modelo da semana de quatro dias de trabalho. Qual é, na sua opinião, a probabilidade de **MELHORAR** cada um dos seguintes aspetos:

| Afirmação | Muito improvável | Improvável | Neutro | Provável | Muito provável |
|---|---|---|---|---|---|
| Conseguir satisfazer as minhas próprias necessidades e as necessidades daqueles que são importantes na minha vida. | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Conseguir gerir os meus papéis relativos à vida familiar de forma equilibrada. | | | | | |
| Conseguir ter tempo suficiente para mim mesmo(a) preservando o equilíbrio entre a vida profissional e a vida familiar. | | | | | |
| Sentir-me leal aos meus papéis tanto na minha vida profissional como na minha vida familiar. | | | | | |
| Gerir a minha vida profissional e familiar de forma controlada. | | | | | |
| Ser bem sucedido(a) na criação de um equilíbrio entre os diversos papéis da minha vida - funcionário(a), esposo(a), mãe, pai, filho(a),… | | | | | |
| Conseguir lidar com as situações que ocorrem devido ao conflito entre os meus papéis da minha vida profissional e da minha vida familiar. | | | | | |
| Estar igualmente satisfeito(a) com os meus papéis na minha vida familiar e profissional. | | | | | |

4. *Imagine que a sua organização decide aplicar o modelo da semana de quatro dias de trabalho. Qual é, na sua opinião, a probabilidade de **MELHORAR** cada um dos seguintes aspetos:

| Afirmação | Muito improvável | Improvável | Neutro | Provável | Muito provável |
|---|---|---|---|---|---|
| Sentir-me com energia. | | | | | |
| Sentir-me forte e vigoroso. | | | | | |
| O meu trabalho inspirar-me. | | | | | |
| Ser entusiasta com o meu trabalho. | | | | | |
| Quando me levantar de manhã, ter vontade de trabalhar. | | | | | |
| Sentir-me feliz quando estiver a trabalhar intensamente. | | | | | |
| Queremos testar a sua atenção. Por favor marque a opção "neutro". | | | | | |
| Estar orgulhoso(a) do trabalho que faço. | | | | | |
| Estar imerso(a) no meu trabalho. | | | | | |
| Deixar-me levar quando estiver a trabalhar. | | | | | |

5. *Imagine que a sua organização decide aplicar o modelo da semana de quatro dias de trabalho. Qual é, na sua opinião, a probabilidade de **MELHORAR** cada um dos seguintes aspetos:

| Afirmação | Muito improvável | Improvável | Neutro | Provável | Muito provável |
|---|---|---|---|---|---|
| Levar uma vida com propósito e significado. | | | | | |
| As minhas relações sociais serem de apoio e recompensadoras. | | | | | |
| Estar comprometido(a) e interessado(a) nas minhas atividades diárias. | | | | | |
| Contribuir para a felicidade e bem-estar dos outros. | | | | | |
| Ser competente e capaz nas atividades que são importantes para mim. | | | | | |
| Ser uma boa pessoa e viver uma vida boa. | | | | | |
| Ser otimista relativamente ao meu futuro. | | | | | |
| As pessoas respeitarem-me. | | | | | |

**Secção 4**

6. *Imagine que a sua organização decide aplicar o modelo da semana de quatro dias de trabalho. Qual é, na sua opinião a probabilidade de **REDUZIR** a frequência de cada um dos seguintes sintomas:

| Afirmação | Muito improvável | Improvável | Neutro | Provável | Muito provável |
|---|---|---|---|---|---|
| Ansiedade | | | | | |
| Depressão | | | | | |
| Stress | | | | | |
| Problemas de sono | | | | | |
| Problemas alimentares | | | | | |
| Problemas de estômago | | | | | |
| Problemas sexuais | | | | | |
| Dores de cabeça | | | | | |

**Secção 5**

7. *Imagine que a sua organização decide aplicar o modelo da semana de quatro dias de trabalho. Qual é, na sua opinião, a probabilidade de **MANTER** ou **MELHORAR** cada um dos seguintes aspetos:

| Afirmação | Muito improvável | Improvável | Neutro | Provável | Muito provável |
|---|---|---|---|---|---|
| Realizar correctamente as tarefas difíceis. | | | | | |
| Tentar atualizar os meus conhecimentos técnicos para realizar o meu trabalho. | | | | | |
| Realizar o meu trabalho de acordo com aquilo que a organização espera de mim. | | | | | |
| Planear a execução do meu trabalho através da definição de ações, prazos e prioridades. | | | | | |
| Planear as ações de acordo com as minhas tarefas e com as rotinas da organização. | | | | | |
| Ter iniciativa para melhorar os meus resultados no trabalho. | | | | | |
| Procurar por novas soluções para problemas que surgem do meu trabalho. | | | | | |
| Esforçar-me para realizar as tarefas que me são atribuídas. | | | | | |
| Executar as minhas tarefas antecipando os seus resultados. | | | | | |
| Aproveitar as oportunidades que podem melhorar os meus resultados no trabalho. | | | | | |

**Secção 6**

8. *Imagine que a sua organização decide aplicar o modelo da semana de quatro dias de trabalho. **Indique o nível de concordância que acredita que teria com cada uma das seguintes frases:**

| Afirmação | Muito improvável | Improvável | Neutro | Provável | Muito provável |
|---|---|---|---|---|---|
| A implementação da semana de trabalho de quatro dias de trabalho é importante para a organização. | | | | | |
| Há boas razões para a organização implementar a semana de quatro dias de trabalho. | | | | | |
| A organização beneficiará da implementação da semana de quatro dias de trabalho. | | | | | |
| A semana de quatro dias de trabalho vai dar-me mais oportunidades para o meu desenvolvimento profissional. | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| Vou crescer a nível pessoal devido à implementação da semana de quatro dias de trabalho. | | | | | |
| Vou ganhar vantagens com a implementação da semana de quatro dias de trabalho. | | | | | |
| A semana de quatro dias de trabalho deixa-me entusiasmado(a). | | | | | |
| Em geral, sinto-me feliz com a implementação da semana de quatro dias de trabalho. | | | | | |
| Sinto-me motivado(a) com a implementação da semana de quatro dias de trabalho. | | | | | |
| Sinto-me stressado(a) com a implementação da semana de quatro dias de trabalho. | | | | | |
| Queremos testar a sua atenção. Por favor marque a opção "concordo totalmente". | | | | | |
| Em geral, tenho um mau pressentimento em relação à implementação da semana de quatro dias de trabalho. | | | | | |
| Informo-me ativamente acerca da implementação da semana de quatro dias de trabalho. | | | | | |
| Troco ativamente informações com os meus colegas sobre a implementação da semana de quatro dias de trabalho. | | | | | |

**Secção 7 – Dados Sociodemográficos**

9. *Sexo
    - Masculino
    - Feminino
    - Prefiro não dizer
    - Outro _____
10. *Idade
    Introduza a sua resposta _____

11. *Nacionalidade
    Introduza a sua resposta _____

12. *Nível de escolaridade
    - 1º Ciclo
    - 2º Ciclo
    - 3º Ciclo
    - Ensino Secundário

- Licenciatura / Bacharelato
- Mestrado / Pós-Graduação
- Doutoramento

13. *Situação profissional
    - Estudante
    - Trabalhador-Estudante
    - Trabalhador por conta de outrém
    - Trabalhador independente
    - Estagiário
    - Desempregado

14. Setor de atividade
    - Administração
    - Agricultura, pecuária, pesca ou sivicultura
    - Banca e seguros
    - Comércio e distribuição
    - Construção Civil
    - Consultoria
    - Desporto (formação e treino, mediação desportiva, marketing desportivo,...)
    - Economia criativa (música, cinema, artes visuais, design,...)
    - Educação
    - Energia
    - Indústrias transformadoras
    - Marketing
    - Tecnologia de Informação e Comunicação
    - Transporte e logística
    - Turismo
    - Saúde
    - Segurança
    - Outro _____

15. Dimensão da organização onde trabalha
    - Menos de 10 trabalhadores
    - 10 a 50 trabalhadores
    - 51 a 250 trabalhadores
    - Mais de 250 trabalhadores

16. Tem responsabilidade de chefia?
    - Não
    - Sim – Supervisão
    - Sim - Chefia intermedia
    - Sim - Cargo de direção
    - Sim - Cargo de administração

## Appendix II – Scales adaptation

| **Work-life balance scale - original** | | **Work-life balance scale - adapted** |
|---|---|---|
| Taşdelen-Karçkay, A., & Bakalım, O. (2017). The mediating effect of work–life balance on the relationship between work–family conflict and life satisfaction. *Australian Journal of Career Development, 26*(1), 3–13. https://doi.org/10.1177/1038416216682954 | | Imaginando que trabalha numa organização onde se aplica o regime da semana de trabalho de quatro dias, qual é a a probabilidade de melhorar cada um dos seguintes aspetos: |
| I can satisfy my own needs and the needs of the important people in my life. | | Conseguir satisfazer as minhas próprias necessidades e as necessidades daqueles que são importantes na minha vida |
| I can manage my roles related to family life in a balanced manner. | | Conseguir gerir os meus papéis relativos à vida familiar de forma equilibrada. |
| I can make enough time for myself by preserving the balance between my professional life and family life. | | Conseguir ter tempo suficiente para mim mesmo preservando o equilíbrio entre a vida profissional e a vida familiar |
| I feel loyalty to my roles both in my professional life and my family. | | Sentir-me leal aos meus papéis tanto na minha vida profissional como na minha vida familiar. |
| I manage my professional and family life in a controlled manner. | | Gerir a minha vida profissional e familiar de forma controlada. |
| I am successful at creating a balance between my multiple life roles (employee/ spouse/ mother, father,…) | | Ser bem sucedido/a na criação de um equilíbrio entre os diversos papéis da minha vida - funcionário, esposo/a, mãe, pai, filho,… |
| I can deal with the situations that occur due to the conflict between my roles that are specific to my professional and family life. | | Conseguir lidar com as situações que ocorrem devido ao conflito entre os meus papéis da minha vida profissional e da minha vida familiar. |
| I am equally content with my roles in my family and professional life. | | Estar igualmente satisfeito com os meus papéis na minha vida familiar e profissional. |
| **Productivity scale - original** | | **Productivity scale - adapted** |
| De Azevedo Andrade, É. G. S., Queiroga, F., & Valentini, F. (2020). Short version of Self-Assessment Scale of Job Performance. *Anales de Psicología, 36*(3), 543–552. https://doi.org/10.6018/analesps.402661 | | Imaginando que trabalha numa organização onde se aplica o regime da semana de trabalho de quatro dias, qual é a a probabilidade de manter ou melhorar cada um dos seguintes aspetos: |
| I perform hard tasks properly. | | Realizar correctamente as tarefas difíceis. |
| I try to update my technical knowledge to do my job. | | Tentar atualizar os meus conhecimentos técnicos para realizar o meu trabalho. |
| I do my job according to what the organization expects from me. | | Fazer o meu trabalho de acordo com aquilo que a organização espera de mim. |

| | | |
|---|---|---|
| I plan the execution of my job by defining actions, deadlines and priorities. | | Planear a execução do meu trabalho através da definição de ações, prazos e prioridades. |
| I plan actions according to my tasks and organizational routines. | | Planear as ações de acordo com as minhas tarefas e com as rotinas da organização. |
| I take initiatives to improve my results at work. | | Ter iniciativa para melhorar os meus resultados no trabalho. |
| I seek new solutions for problems that may come up in my job. | | Procurar por novas soluções para problemas que surgem do meu trabalho |
| I work hard to do the tasks designated to me. | | Esforçar-me para realizar as tarefas que me são atribuídas. |
| I execute my tasks foreseeing their results. | | Executar as minhas tarefas prevendo os seus resultados. |
| I seize opportunities that can improve my results at work. | | Aproveitar as oportunidades que podem melhorar os meus resultados no trabalho. |
| **Engagement scale - original** | | **Engagement scale - adapted** |
| Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement, 66*(4), 701-716. https://doi.org/10.1177/0013164405282471 | | Imaginando que trabalha numa organização onde se aplica o regime da semana de trabalho de quatro dias, qual é a a probabilidade de melhorar cada um dos seguintes aspetos: |
| At my work, I feel bursting with energy (v) | | Sentir-me com energia. |
| At my job, I feel strong and vigorous (v) | | Sentir-me forte e vigoroso. |
| I am enthusiastic about my job (d) | | Ser entusiasta com o meu trabalho. |
| My job inspires me (d) | | O meu trabalho inspira-me. |
| When I get up in the morning, I feel like going to work (v) | | Quando me levantar de manhã, ter vontade de trabalhar. |
| I feel happy when I am working intensely (a) | | Sentir-me feliz quando estou a trabalhar intensamente. |
| I am proud on the work that I do (d) | | Estar orgulhoso do trabalho que faço. |
| I am immersed in my work (a) | | Estar imerso no meu trabalho. |
| I get carried away when I am working (a) | | Deixar-me levar quando estiver a trabalhar. |
| **Well-being scale - original** | | **Well-being scale - adapted** |
| Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2009). New well-being measures: Short scales to assess flourishing and positive and negative feelings. *Social Indicators Research, 97*(2), 143–156. https://doi.org/10.1007/s11205-009-9493-y | | Imaginando que trabalha numa organização onde se aplica o regime da semana de trabalho de quatro dias, qual é a a probabilidade de melhorar cada um dos seguintes aspetos: |
| I lead a purposeful and meaningful life | | Levar uma vida com propósito e significado. |

| | | |
|---|---|---|
| My social relationships are supportive and rewarding | | As minhas relações sociais são de apoio e recompensadoras. |
| I am engaged and interested in my daily activities | | Estar empenhado e interessado nas minhas atividades diárias. |
| I actively contribute to the happiness and well-being of others | | Contribuir para a felicidade e bem-estar dos outros. |
| I am competent and capable in the activities that are important to me | | Ser competente e capaz nas atividades que são importantes para mim. |
| I am a good person and live a good life | | Ser uma boa pessoa e viver uma vida boa. |
| I am optimistic about my future | | Ser otimista relativamente ao meu futuro. |
| People respect me | | As pessoas respeitam-me. |
| **Health scale - original** | | **Health scale - adapted** |
| Barrera-Herrera, A., Baeza-Rivera, M. J., Salazar-Fernández, C., & Manríquez-Robles, D. (2023). Analysis of the mental and Physical Health symptomatology scale in a sample of emerging and migrant adults in Chile. *International Journal of Environmental Research and Public Health, 20*(6), 4684. https://doi.org/10.3390/ijerph20064684 | | Imaginando que trabalha numa organização onde se aplica o regime da semana de trabalho de quatro dias, qual é a expectativa que tem sobre a frequência de cada um dos seguintes sintomas? |
| Anxiety | | Ansiedade |
| Depression | | Depressão |
| Stress | | Stress |
| Sleeping problems | | Problemas de sono |
| Eating problems | | Problemas alimentares |
| Stomach problems | | Problemas de estômago |
| Sexual problems | | Problemas sexuais |
| Headaches | | Headaches |
| **Readiness to change - original** | | **Readiness to change scale - adapted** |
| Gräfe, H., & Kauffeld, S. (2024). ORC-Q. *Diagnostica*, *70*(2), 77–87. https://doi.org/10.1026/0012-1924/a000324 | | O que pensa sobre cada uma das seguintes afirmações? |
| This change is important for our organization. | | A implementação da semana de trabalho de quatro dias é importante para a organização onde trabalho. |
| There are good reasons for our organization to implement this change. | | Existem boas razões para a organização onde trabalho implementar a semana de trabalho de quatro dias. |

| | | |
|---|---|---|
| Our organization will benefit from this change. | | A organização onde trabalho beneficiará da semana de trabalho de quatro dias. |
| This change will give me more opportunities for my professional development. | | A semana de trabalho de quatro dias vai dar-me mais oportunidades para me desenvolver profissionalmente. |
| I will grow personally due to this change. | | Vou crescer a nível pessoal devido à implementação da semana de quatro dias de trabalho. |
| I will gain advantages by this change | | Vou ganhar vantagens com a implementação da semana de quatro dias de trabalho. |
| This change makes me feel enthusiastic | | A semana de quatro dias de trabalho deixa-me entusiasmado(a). |
| Overall, I am happy about this change. | | Em geral, sinto-me feliz com a implementação da semana de quatro dias de trabalho. |
| I feel motivated by this change. | | Sinto-me motivado(a) com a implementação da semana de quatro dias de trabalho. |
| I feel stressed by this change. ® | | Sinto-me stressado(a) com a implementação da semana de quatro dias de trabalho. ® |
| Overall, I have a bad feeling about this change. ® | | Em geral, tenho um mau pressentimento em relação à implementação semana de quatro dias de trabalho. ® |
| I feel at the mercy of this change. ® | | Sinto-me à mercê da semana de quatro dias de trabalho. ® |
| I actively inform myself about this change. | | Informo-me ativamente acerca da implementação da semana de quatro dias de trabalho. |
| I actively exchange information about this change with my colleagues. | | Troco ativamente informações com os meus colegas sobre a implementação da semana de quatro dias de trabalho. |
| If I do not like something about this change, I say so. | | Se algo não me agrada na semana de quatro dias de trabalho, eu digo-o. |
| **Openness to experience** | | **Openness to experience – original – portuguese version** |
| Costa, P. T., & McCrae, R. R. (1992). *Revised NEO Personality Inventory (NEO-PI-R) and NEO Five-Factor Inventory (NEO-FFI) professional manual*. Odessa, FL: Psychological Assessment Resources. | | Lima, M. P., & Simões, A. (1997, 2006). *NEO-PI-R*. Lisboa: CEGO. |
| | | O que pensa sobre cada uma das seguintes afirmações? |
| I seldom daydream.® | | Não gosto de perder tempo a sonhar acordado(a). |
| Once I find the right way to do something, I stick to it. ® | | Quando encontro uma maneira correcta de fazer qualquer coisa não mudo mais. ® |
| I am intrigued by the patterns I find in art and nature. | | Fico admirado(a) com os modelos que encontro na arte e na natureza. |
| I believe letting students hear controversial speakers can only confuse and mislead them.® | | Acredito que deixar os alunos ouvir pessoas, com ideias discutíveis, só os pode confundir e desorientar. ® |

| | | |
|---|---|---|
| Poetry has little or no effect on me. | | A poesia pouco ou nada me diz. ® |
| I often try new and foreign foods. | | Frequentemente experimento comidas novas e desconhecidas. |
| I am seldom aware of the influence of different environments on people's behavior. ® | | Poucas vezes me dou conta da influência que diferentes ambientes produzem nas pessoas. ® |
| I believe we should look to our religious authorities for decisions on moral issues. ® | | Acredito que devemos ter em conta a autoridade religiosa quando se trata de tomar decisões respeitantes à moral. ® |
| Sometimes when I am reading poetry or looking at a work of art, I feel a chill or wave of excitement. | | Às vezes ao ler poesia e ao olhar para uma obra de arte sinto um arrepio ou uma onda de emoção. |
| I have little interest in speculating on the nature of the universe or the human condition.® | | Gosto pouco de me pronunciar sobre a natureza do universo e da condição humana. ® |
| I have a lot of intellectual curiosity. | | Tenho muita curiosidade intelectual. |
| I often enjoy playing with theories or abstract ideas. | | Muitas vezes dá-me prazer brincar com teorias e ideias abstractas. |

Notes: ® - Item reversed

## Appendix III – Outer Loadings

| | Outer loadings |
|---|---|
| E1 <- E | 0,754 |
| E2 <- E | 0,804 |
| E3 <- E | 0,846 |
| E4 <- E | 0,896 |
| E5 <- E | 0,849 |
| E6 <- E | 0,829 |
| E7 <- E | 0,826 |
| E8 <- E | 0,718 |
| E9 <- E | 0,686 |
| H1 <- H | 0,822 |
| H2 <- H | 0,814 |
| H3 <- H | 0,806 |
| H4 <- H | 0,844 |
| H5 <- H | 0,806 |
| H6 <- H | 0,785 |
| H7 <- H | 0,702 |
| H8 <- H | 0,824 |
| OE1 <- OE | 0,426 |
| OE2 <- OE | 0,279 |
| OE3 <- OE | 0,637 |
| OE4 <- OE | 0,446 |
| OE5 <- OE | 0,616 |
| OE6 <- OE | 0,281 |
| OE7 <- OE | 0,585 |
| OE8 <- OE | 0,237 |
| OE9 <- OE | 0,626 |
| OE10 <- OE | 0,541 |
| OE11 <- OE | 0,460 |
| OE12 <- OE | 0,630 |
| P1 <- P | 0,804 |
| P2 <- P | 0,844 |
| P3 <- P | 0,878 |
| P4 <- P | 0,905 |
| P5 <- P | 0,911 |
| P6 <- P | 0,892 |
| P7 <- P | 0,886 |
| P8 <- P | 0,871 |
| P9 <- P | 0,872 |
| P10 <- P | 0,906 |
| R4WW1 <- R4WW | 0,768 |
| R4WW2 <- R4WW | 0,818 |
| R4WW3 <- R4WW | 0,827 |
| R4WW4 <- R4WW | 0,809 |

| | |
|---|---|
| R4WW5 <- R4WW | 0,836 |
| R4WW6 <- R4WW | 0,858 |
| R4WW7 <- R4WW | 0,860 |
| R4WW8 <- R4WW | 0,908 |
| R4WW9 <- R4WW | 0,904 |
| R4WW10 <- R4WW | 0,448 |
| R4WW11 <- R4WW | 0,665 |
| R4WW12 <- R4WW | 0,180 |
| R4WW13 <- R4WW | 0,235 |
| WB1 <- WB | 0,851 |
| WB2 <- WB | 0,860 |
| WB3 <- WB | 0,869 |
| WB4 <- WB | 0,881 |
| WB5 <- WB | 0,887 |
| WB6 <- WB | 0,889 |
| WB7 <- WB | 0,897 |
| WB8 <- WB | 0,720 |
| WLB1 <- WLB | 0,829 |
| WLB2 <- WLB | 0,857 |
| WLB3 <- WLB | 0,870 |
| WLB4 <- WLB | 0,865 |
| WLB5 <- WLB | 0,878 |
| WLB6 <- WLB | 0,917 |
| WLB7 <- WLB | 0,828 |
| WLB8 <- WLB | 0,818 |

# Appendix IV – Descriptive Statistics

| | Min | Max | Mean | SD |
|---|---|---|---|---|
| Openness to experience | 1 | 5 | 3,6079 | ,70411 |
| OE3 | 1 | 5 | 3,88 | ,834 |
| OE5 | 1 | 5 | 3,59 | 1,116 |
| OE7 | 1 | 5 | 3,65 | 1,134 |
| OE9 | 1 | 5 | 3,38 | 1,214 |
| OE10 | 1 | 5 | 3,54 | 1,059 |
| OE12 | 1 | 5 | 3,62 | 1,031 |
| Work-life balance | 1 | 5 | 4,4778 | ,65705 |
| WLB1 | 1 | 5 | 4,47 | ,807 |
| WLB2 | 1 | 5 | 4,51 | ,769 |
| WLB3 | 1 | 5 | 4,59 | ,695 |
| WLB4 | 1 | 5 | 4,49 | ,772 |
| WLB5 | 1 | 5 | 4,50 | ,732 |
| WLB6 | 1 | 5 | 4,50 | ,715 |
| WLB7 | 1 | 5 | 4,33 | ,821 |
| WLB8 | 1 | 5 | 4,42 | ,825 |
| Engagement | 1 | 5 | 4,1186 | ,73697 |
| E1 | 1 | 5 | 4,49 | ,756 |
| E2 | 1 | 5 | 4,32 | ,825 |
| E3 | 1 | 5 | 4,04 | ,948 |
| E4 | 1 | 5 | 4,19 | ,873 |
| E5 | 1 | 5 | 4,07 | ,999 |
| E6 | 1 | 5 | 4,02 | ,968 |
| E7 | 1 | 5 | 4,14 | ,883 |
| E8 | 1 | 5 | 3,93 | ,999 |
| E9 | 1 | 5 | 3,86 | 1,015 |
| Well-Being | 1 | 5 | 4,1944 | ,77634 |
| WB1 | 1 | 5 | 4,06 | ,897 |
| WB2 | 1 | 5 | 4,24 | ,857 |
| WB3 | 1 | 5 | 4,34 | ,846 |
| WB4 | 1 | 5 | 4,27 | ,883 |
| WB5 | 1 | 5 | 4,36 | ,865 |

| | | | | |
|---|---|---|---|---|
| WB6 | 1 | 5 | 4,28 | ,919 |
| WB7 | 1 | 5 | 4,26 | ,935 |
| WB8 | 1 | 5 | 3,75 | 1,061 |
| Health | 1 | 5 | 3,8253 | ,86303 |
| H1 | 1 | 5 | 4,10 | ,975 |
| H2 | 1 | 5 | 3,97 | 1,066 |
| H3 | 1 | 5 | 4,20 | 1,007 |
| H4 | 1 | 5 | 4,13 | 1,016 |
| H6 | 1 | 5 | 3,54 | 1,171 |
| H7 | 1 | 5 | 3,43 | 1,144 |
| H8 | 1 | 5 | 3,36 | 1,138 |
| H9 | 1 | 5 | 3,87 | 1,086 |
| Productivity | 1 | 5 | 4,2523 | ,73290 |
| P1 | 1 | 5 | 4,07 | ,817 |
| P2 | 1 | 5 | 4,20 | ,858 |
| P3 | 1 | 5 | 4,25 | ,851 |
| P4 | 1 | 5 | 4,31 | ,844 |
| P5 | 1 | 5 | 4,32 | ,809 |
| P6 | 1 | 5 | 4,28 | ,830 |
| P7 | 1 | 5 | 4,23 | ,849 |
| P8 | 1 | 5 | 4,34 | ,824 |
| P9 | 1 | 5 | 4,18 | ,870 |
| P10 | 1 | 5 | 4,34 | ,806 |
| Readiness for four day working week | 1 | 5 | 4,3210 | 0,73849 |
| R4WW1 | 1 | 5 | 3,96 | 1,048 |
| R4WW2 | 1 | 5 | 4,27 | ,888 |
| R4WW3 | 1 | 5 | 4,10 | ,994 |
| R4WW4 | 1 | 5 | 4,28 | ,890 |
| R4WW5 | 1 | 5 | 4,41 | ,845 |
| R4WW6 | 1 | 5 | 4,46 | ,800 |
| R4WW7 | 1 | 5 | 4,50 | ,841 |
| R4WW8 | 1 | 5 | 4,52 | ,782 |
| R4WW9 | 1 | 5 | 4,49 | ,823 |
| R4WW11 | 1 | 5 | 4,24 | 1,077 |