



# Exploring the Impact of Smart Working on Burnout Among Young Italian Professionals:

## The Roles of Personality and Occupational Factors in a Mixed-Methods Study

Flavia Accorinti

Dissertation written under the supervision of Peter Rajsingh

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## **Abstract**

With the widespread transformation of the workplace brought about by smart working, and the growing emphasis on employee wellbeing, it is crucial to look more closely at the elements that may contribute to the likelihood of experiencing burnout symptoms.

Responding to demands from academics in the field, this thesis investigates the impact of smart working on the propensity to burnout among young Italian professionals. The role of personality traits, measured by the Big Five model, and the significance of unique elements related to remote work, have been considered.

Building upon the Job Demands-Resources framework, a mixed method approach was employed, incorporating a survey to collect perspectives of young employees, and interviews to analyze managerial viewpoints. Using both a quantitative and qualitative study, this work explored the potential organizational and personality factors that could contribute to the experience of burnout in remote job settings.

The results suggested that smart working is a significant variable in accounting for the variation in burnout propensity among young Italian workers. Work-related factors exert a greater impact on employees' emotional reactions to remote job environments than personal variables. Nevertheless, intriguing findings have been achieved regarding certain personality traits that may have a more pronounced effect.

Overall, the insights generated suggested a more holistic approach to smart working, and emphasized the role of the corporate cultures, managers, and leaders as enveloping drivers, able to generate a positive collective response. Important managerial implications were drawn, with the aim of contributing to the fundamental process of burnout prevention.

**Keywords:** burnout, personality, young employees, smart working, stress, well-being, individual factors, organizational factors, people, company

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**Author:** Flavia Accorinti

## **Abstrato**

Com a transformação do local de trabalho provocada pelo smart working e a crescente ênfase no bem-estar dos funcionários, é crucial examinar de perto os elementos que podem contribuir para a probabilidade de experienciar burnout.

Respondendo às necessidades de acadêmicos, esta tese investiga o impacto do smart working na propensão ao burnout entre jovens profissionais italianos. O papel dos traços de personalidade, medido pelo modelo dos Big Five, e o significado de elementos relacionados com o trabalho remoto, foram considerados.

Com base na estrutura Job Demands-Resources, foi utilizada uma abordagem de método mista: uma pesquisa para coletar perspectivas de jovens funcionários e entrevistas para analisar pontos de vista dos gestores. Utilizando um estudo quantitativo e qualitativo, este trabalho explorou os fatores organizacionais e de personalidade que poderiam contribuir para a experiência de burnout em ambientes de trabalho remotos.

Os resultados sugerem que o smart working é uma variável significativa na contabilização da variação da propensão ao burnout entre jovens trabalhadores italianos. Os fatores relacionados com o trabalho exercem maior impacto nas reações emocionais dos funcionários aos ambientes de trabalho remotos do que as variáveis pessoais. Descobertas intrigantes foram alcançadas em relação a certos traços de personalidade que podem ter um efeito mais pronunciado.

Os insights gerados sugeriram uma abordagem mais holística para o smart working e enfatizaram o papel das culturas corporativas como motores abrangentes, capazes de gerar uma resposta positiva. Foram extraídas importantes implicações na gestão, com o objetivo de contribuir para o processo de prevenção do burnout.

**Palavras-chave:** burnout, personalidade, jovens funcionários, trabalho inteligente, estresse, bem-estar, fatores individuais, fatores organizacionais, pessoas, empresa

**Título:** Explorando o impacto do trabalho inteligente no burnout entre jovens profissionais italianos: os papéis da personalidade e dos fatores ocupacionais em um estudo de métodos mistos

**Autor:** Flavia Accorinti

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# INTRODUCTION

## BACKGROUND AND CONTEXT

How individuals relate to their jobs, and the challenges that can develop when this connection fails, have increasingly come to be acknowledged as important aspects of people's lives. Nowadays the influence of work on the health and well-being of employees is receiving increasing focus because of the implications of notable technological advancements that are reshaping the work paradigm.

The term "burnout" started to gain use in the 1970s in the United States, particularly referring to individuals employed in the human services sector. After has been extensively studied, *job burnout* has been conceptualized "as a psychological syndrome in response to chronic interpersonal stressors on the job" (Maslach et al., pp. 397-422, 2001), impacting people in any line of work, independently from the sector and the role assumed.

Being one of the most significant issue and risk in the current professional world, job burnout is also considered responsible for expenses that today's society is facing. As a result of the extensive research that has been conducted, as well as of its definition in the International Classification of Diseases (World Health Organization, 2019), this syndrome is now widely recognized by many academics, and in many professional contexts.

Today, with the advent of massive smart working following the Covid-19 outbreak, a fundamental change has occurred in the modern business environment, bringing up implications for workers' wellbeing. Remote working is redefining how to handle work-related obligations: employees are increasingly experiencing alternative forms of interpersonal interactions, as well as a rise in desired flexibility.

Considering the nature, magnitude, and potential consequences of this shift, factors that play a role in shaping the employees' experiences shall be exhaustively investigated. The burnout field of research has been collecting a significant number of studies showing the existence of specific personalities who, in case of extreme stress, are more at risk of experiencing symptoms such as exhaustion, depersonalization and inefficacy.

The Big Five theory, developed by Robert R. McCrae and Paul T. Costa (2003), is a systematic classification of personality attributes. Among several personality conceptualizations, this model has been widely accepted and extensively examined, both in theory and via empirical research. Consistently, the Big Five framework has been the most recurrently used in burnout studies (Edú-Valsania et al., 2022).

In a new era marked by the rise of smart working and the increased focus on employee wellness in the workplace, it is of the utmost importance to further explore which factors can potentially increase the likelihood of experiencing burnout symptoms, including personality traits (Drayton, 2021). Hence, the purpose of this thesis is to contribute to the existing body of research on burnout, personality, and remote work.

## **OBJECTIVES OF THE STUDY**

### **Drivers of the research**

The present study expands upon the Job Demands-Resources framework (Demerouti et al., 2001). The primary goal is to investigate the impact of characteristics specific to smart working on the relationship between workers' well-being, measured by the Maslach Burnout Inventory - GS, and employees' personality traits, assessed through the Big Five model.

The investigation on how the previously explored relationships between burnout propensity and personality traits change in smart working contexts is a focal part of this work. Indeed, no extensive studies have been carried out so far to understand how correlations between intrinsic traits and chronic stress are altered in remote job positions.

Additionally, the existing research on the correlation between smart working and well-being lacks consensus regarding whether remote jobs yield more advantages or drawbacks for employees (Bolisani et al., 2020; Hall et al., 2023). Hence, this research examines the extent to which personal as well as organizational factors may influence this correlation, to solve this unanswered question and gain a deeper comprehension of the effects of remote work on workers' well-being.

### **Research Questions:**

*Does smart working mitigate the tendency to burnout in young Italian professionals?*

This project seeks to use mixed measurements to compare and understand how the relationships between burnout, personality traits, and other job demands and resources, hold for smart workers. The analysis aims to identify which factors can add to or alleviate the feeling of constant stress in remote job environments, compared to more traditional on-site contexts. Answering this Research Question seeks to offer focused insights into the phenomenon of burnout in today's workplace setups.

## **JUSTIFICATION AND SCOPE**

### **Addressing research gaps**

The COVID-19 epidemic has expedited the widespread acceptance of remote work, leading to a significant and quick reassessment of current work relationships. With the rise of a new setting of professional world, academics currently advocate the pursuit of initiatives in order to further comprehend the dynamics of this change.

Despite the extensive body of study, researchers have not reached a consensus on the overall beneficial or detrimental implications for those who embrace smart working (De Carlo et al., 2022). Some individual characteristics such as personality factors, already recognized as potential intensifiers of burnout syndrome, may play an important, as well as overlooked, role that is worth investigating.

This thesis responds to academics in the field, with the objective of building upon the existing literature and filling a gap into the current body of research. Indeed, current researchers and experts stated that “it would also be interesting to examine whether the current shift towards remote working and the general transition towards online professional communication has impacted the development of emotional burnout. Future research could examine the perceptions of job demands that are specific to remote working such as constant online presence and social isolation. The impact of these demands on the three components of emotional burnout can be evaluated, also examining whether certain personality traits could lead to larger effect.” (Bashkirova et al., 2023; pp.109–125); furthermore, “burnout symptoms develop and evolve differently depending on individual characteristics and the work environment, (...). Because of the increase in home working during the COVID-19 pandemic, it would also be interesting to

examine whether teleworking may cause a greater or lesser occurrence of this symptomatology” (Edú-Valsania, Laguía and Moriano, 2022; p.1780).

## Focus of the research

### *Why Italy*

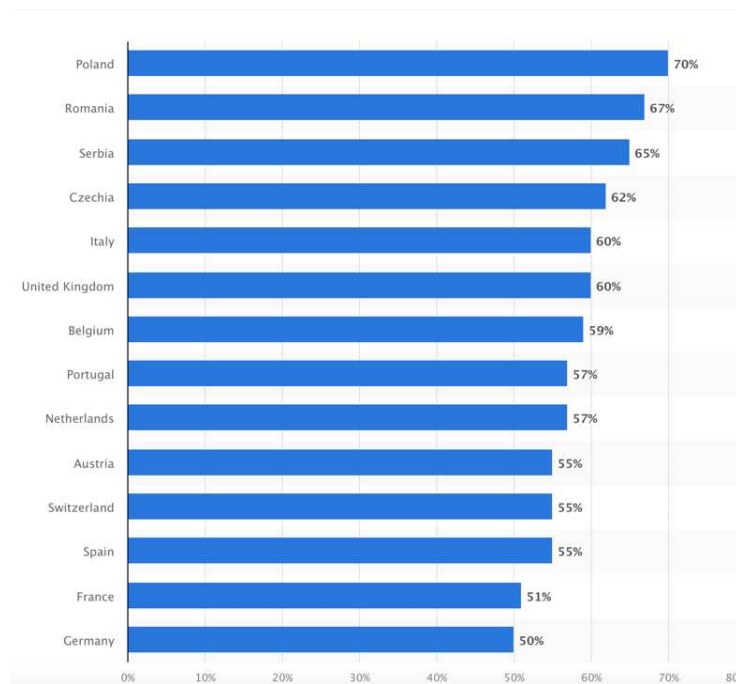


Figure 1, “Share of people who felt burnout in Europe, by country”, Statista, 2022

In accordance with Statista data from 2022, the present thesis focuses on the analysis of burnout among young Italian workers, with Italy ranking first in Western Europe and fifth in Europe in terms of the percentage of burnout cases (60% in Italy). In light of the increasing number of instances of professional burnout, the Italian context presents unique challenges and dynamics in the workplace.

### *Why young professionals*

This study is founded in the belief that focusing on young workers becomes critical considering the significant level of job burnout cases. First and foremost, young people represent the future of the labour market, the economy, and society in its whole. Their well-being and professional achievements are vital for maintaining a robust and engaged staff in both the immediate and long-term.

Furthermore, young workers are more likely to encounter burnout due to the multitude of distinct challenges they may encounter in the modern work setting. They need to handle the expectations and responsibilities in a highly competitive setting, where having countless opportunities can even become harmful. Additionally, new hires may experience significant pressures while embarking on their career.

Recent studies indicate that younger individuals are facing more challenges in managing both their personal and professional lives compared to their elder colleagues. A global survey conducted by Bain & Company revealed that, while only less than 40% of individuals aged 35 and older are experiencing high levels of stress and overwhelming feelings in their workplaces, an increasing percentage (i.e., 61%) of interviewed Millennial and Gen-Z professionals face job burnout risk daily (Bain, 2022).

In Italy, over 60% of young individuals experience mental suffering because of burnout and intense social demands (Ferraiuolo, 2023). In 2023, research conducted by the Welfare Observatory (created by the Italian National Youth Council) revealed that 20% of the questioned young professionals deem it essential to have increased flexibility in their working hours. Furthermore, workers proposed necessary strategies to enhance workplace wellbeing, such as promoting activities that address everyday stress management (19%), avoid psychophysical distress (14.1%), and provide support for motherhood (13.9%), for instance (Fortune Italia, 2023).

# LITERATURE REVIEW

## OVERVIEW OF BURNOUT

### Definition and dimensions

At the inception of the term, what was called “job burnout” was a slippery concept. From the 70s to the 90s - before realizing that burnout was not limited to specific job positions - human service occupations, including nurses, teachers, social workers, and healthcare professionals, were the focus of studies on burnout (Freudenberger, 1974).

Today the burnout syndrome can be intended as a “strictly personal reaction to continuous interpersonal pressures that gradually rises and can finally become chronic, resulting in a mental condition of cognitive, emotional, and attitudinal impairment, and leading to unfavorable conduct towards work, as well as people involved, such as colleagues and clients” (Edú-Valsania et al., 2022). This holds for all workers in all professional environments.

Deep research on the topic allowed the creation of a “multidimensional theory of burnout”, where three main dimensions obtained the highest consensus as the ones that can best explain the whole burnout experience (Maslach, 1982). As of today, this is still the universally acknowledged burnout definition (Wiens, 2023). Being a complex syndrome, the burnout response is characterized by the following key components: an overwhelming emotional exhaustion, the sensation of cynicism and depersonalization, and finally, reduced personal accomplishment coming from a feeling of being ineffective (Maslach et al., 1998).

### *Emotional exhaustion*

A noticeable symptom of burnout is the experience of an extreme and relentless fatigue (i.e., exhaustion, weariness, tiredness). Emotional exhaustion is characterized by a depletion in both emotional and physical dimensions, and a perception that one's reserves have been exhausted due to efforts made to cope with psychological and mental demands (Kim et al., 2009). This results into a significant lack of energy, to the extent that it is not possible to handle any more requests (Bashkirova et al., 2023).

Having said that, despite emotional exhaustion is a basic stress dimension and an essential burnout element, it is unable to capture the fundamental elements of people's relationships with others and their job (Maslach, Schaufeli and Leiter, 2001).

### *Cynicism or depersonalization*

Cynicism and depersonalization, the second dimension, describe the interpersonal component of the burnout syndrome. On one hand, a general distrust or skepticism towards the external environment and others is involved when referring to cynicism; on the other hand, depersonalization implies a sense of detachment from oneself or various aspects of one's job (Roloff et al., 2022).

Unpleasant attitudes, lack of trust in the organizational ideals, and frequent irritation, are the most common manifestation of this symptom, as well as a strong tendency to avoid any interaction with colleagues and other parties (Maslach and Leiter, 2016). In general, people take distances and become negative about their working environment (Schaufeli et al., 2002).

### *Reduced personal achievement and inefficacy*

The third dimension of burnout is manifested through a pessimistic assessment of one's professional abilities to efficiently carry out tasks (Bashkirova et al., 2023).

Diminished achievement encompasses the self-assessment aspect of burnout and pertains to sentiment of inadequacy, being highly demotivating (Aronsson et al., 2017; Anon, 2021). Decline in productivity, reduced coping capacities, and diminished morale are the main effects of this symptom. Overall, “reduced professional efficacy is characterized by low self-efficacy, lack of accomplishment, lack of productivity, and incompetence” (Leiter, Schaufeli and Maslach, pp.397–422, 2001).

## **Job Demand-Resources Model**

### *The Demands-Resources Theory and Framework definition*

Among many others, the most common framework explaining the emergence and the mechanism of burnout is the Job Demand-Resource model (Demerouti et al., 2001; 2021). According to this approach, the prolonged asymmetry and imbalance between the requirements (i.e., demands) and the assets (i.e., resources) obtained at work is the main reason of burnout development (Bakker and Demerouti, 2017).

Excessive workload, constrained time management, emotional and social effort, are typical job demands, which cause physiological and psychological burdens. Job resources - such as social

support, feedback, positive relationships - are responsible for the reduction of works' pressure and experienced stress (Obschonka et al., 2023). When resources are insufficient to meet requests, and when workers do not benefit from an adequate recovery, demands become overwhelming, and negative consequences arise. If this scenario persists in time, fatigue can develop into a chronic condition leading eventually to burnout (Coetzee, Maree and Smit, 2019). Therefore, job demands may result in employee burnout if they call for exaggerated physical and/or psychological exertions not backed up by sufficient available resources to the worker (Schaufeli and Bakker, 2004; Obschonka et al., 2023).

“In sum, the job demand-resource model proposes that the development of burnout follows two processes. In the first process, demanding aspects of work (i.e., extreme job demands) lead to constant overtaxing in the end, to exhaustion. In the second process, a lack of resources complicates the meeting of job demands, which further leads to withdrawal behavior. The long-term consequence of this withdrawal is a disengagement from work” (Demerouti et al., pp.499-512, 2001).

### *Organizational and Personal Factors: potential demands or resources*

All demands and resources able to trigger or prevent burnout fall into two main groups: organizational factors and individual variables (Edú-Valsania, Laguía and Moriano, 2022).

Organizational and social resources are considered external assets, whereas cognitive traits and behavior patterns are considered internal assets, according to Richter and Hacker (1998).

Job-related elements have a potential for both positive and negative outcomes. If well managed, they may serve as valuable resources. However, if not properly addressed, they can become onerous demands to deal with.

First of all, research literature (Adriaenssens, De Gucht and Maes, 2015; Stanley and Anand Jerard Sebastine, 2023) shows that, not only the nature of the work and its intrinsic dynamics, but also the planning of it, as well as the sustained relationships with co-workers and third parties, might potentially contribute to regulate burnout.

Work overload and time pressure play a crucial role in this scenario. When workload is too heavy to be healthy sustained, continuously exerting efforts for longer periods of time has physical and mental consequences (Maslach and Leiter, 2017). Poor working hours leading to a poor balance between personal and professional life has also been proven to significantly affect employees, potentially triggering burnout (Maslach and Leiter, 2017).

Moreover, when workers do not feel they have control on their surrounding working environment, they may more easily feel overwhelmed and lost. Indeed, it has been shown a positive correlation between burnout and lack of autonomy in the workplace (Orgambídez and Almeida, 2019).

Role ambiguity occurs when an employee is either confused about their responsibilities or does not have sufficient knowledge to carry them out (Acker, 2003). Lack of appropriate supervision, the absence of felt social support in the work environment, role confusion, are all organizational factors that, if present overtime, increase the likelihood of workers experiencing job burnout (Stanley et al., 2023).

Given specific organizational aspects, additional factors such as personality traits, sociodemographic characteristics, and personal coping methods, have been recognized as further mediating the rise of burnout feeling. As work environment perception depends on an individual's personality traits, these intrinsic characteristics have an important role in guiding and responding to job-related demands and resources (Galaiya et al., 2020; Edú-Valsania et al., 2022). The Big Five personality traits show significant links to burnout, according to several research so far, such as McCrae and Costa (1987), Kim et al. (2019), Pérez-Fuentes et al. (2019), among others. Furthermore, despite not being the focus of this study, research proved "Type A" behavior, high expectations, and an external locus of control to be additional contributors to burnout (Adriaenssens et al., 2015; Maslach and Leiter, 2017;). (See the Annex for details).

### *Workplace Support*

*Primary prevention* strategies are fundamental resources to minimize those factors that put people at risk of burnout. This may be achieved by providing employees with sufficient support and information, by educating and offering workers enough tools to cope with the psychological risk, and by creating a structure with enough flexibility to allow for the adjustments of responsibility and workload according to one's abilities and capacity. In contrast, *secondary prevention* aims to improve the individual's response to specific demands after the first signs of burnout symptoms has occurred (Schaufeli and Enzmann, 1998; Ahola et al., 2017).

Examining interventions from a different angle, they may be categorized as supported (i.e., promoted, organized, and funded) by the company, and supported by employees.

On one hand, organizations may plan several actions to alleviate some of the pressures that employees have on the job, while simultaneously providing them with more resources, empowering young workers to handle workplace stress on their own (Demerouti et al., 2021). On the other hand, physical activity, regular self-evaluation, efficient time management practices, and - when necessary - psychotherapy, are all examples of employee-initiated efforts that attempt to improve their mental and physical well-being (Tarissa Hidajat et al., 2023; Ochentel et al., 2018; Karbakhsh Ravari et al., 2020; Towey-Swift et al., 2022). Controlling burnout and increasing productivity may be achieved via the use of measures like Cognitive Behavioral Therapy (CBT) and stress-reducing practices such as mindfulness ((Luken and Sammons, 2016; Patel et al., 2019).

## **SMART WORKING AND ITS IMPLICATIONS**

### **Definition and characteristics**

Before the pandemic, there was a growing trend of company-established initiatives with the scope of growing the global pool of workers engaging in a variety of smart working practices, under individual countries' legislative frameworks (Albano et al., 2019). Subsequently, the COVID-19 epidemic has resulted in an exponential increase in this pattern, until today, when remote work has grown into being commonly accepted and adopted (Antolín et al., 2024). Smart working is distinct from teleworking. Indeed, the use of digital assets allowing to “work somewhere away from the physical office of the employer company” is referring to as the practice of “teleworking” (Malik et al. 2016).

Subsequently, teleworking advanced thanks to the latest technological and social development, turning into what is known today as "smart working". In this new concept, the term "smart" is specifically used to highlight the intelligent component and the potential of this approach to be beneficial in different aspects, for both organizations and individuals (Fragouli and Ilia, 2019). All in all, smart working refers to “telework that individuals perform in a smart and innovative manner” (Kim et al., 2017).

The concept is a contemporary management approach that emphasizes granting individuals the freedom and independence to select their workspaces, schedules, and tools, in return for increased responsibility for achieving desired outcomes. This definition aligns with the one provided by the Smart Working Observatory of the Politecnico di Milano in 2015. The innovative approach required by the smart working practice calls for a significant shift in culture, a complete rethink of the company's organizational structure (public or private), and a reevaluation of the characteristics of work, driven by the ideas of flexibility, virtualization, and human collaboration (FPA, 2024).

## **Remote working specific job demands and resources**

### *Job related factors*

Specific domains or elements of smart working have received primary attention in the studies so far, perceived as potential demands and resources particularly related to remote job contexts. To begin with, research highlighted that smart workers may more often end up working outside of normal working hours. The same electronic tools which allow employees to experience this innovative and potentially beneficial form of work can also make the disconnection harder for the workers, resulting in being "steaky" (Allen et al., 2019; Golden and Eddleston, 2020).

The experience of "technostress" (Atanasoff and Venable, 2017) can have not only negative effects on detachment difficulty, but also on work-family balance. On one side of the coin, work-life balance issues become more common if employees in smart working are expected to be ceaselessly available by their bosses and coworkers: the absence of clear distinctions between the personal and professional life may lead to role conflicts and confusion (Tennakoon, 2021). Furthermore, smart workers are also more subject to get additional inquiries from family members (Albano et al., 2019). On the other side of the coin, the potential to reconcile work and private life is considered one of the most emphasized benefits of smart working. Indeed, a positive aspect of technology is the increased flexibility it provides, both in terms of location and time. This mobility may allow workers more freedom to balance their job and family lives (Wigert and White, 2022; International Labour Organization, 2023). The perception of higher autonomy and control is also considered a crucial resource of smart working (De Carlo et al., 2022). Hence, the results regarding smart working's impact on work-family balance are inconclusive (Allen et al., 2019).

The danger of social isolation has been also extensively discussed. Research has shown that people who work from home may feel lonely and abandoned in their careers and social lives. It has also been suggested that online networks could not make up for the diminished opportunities for face-to-face communication, interactions with superiors, and coworkers.

Due to this alternative way of interacting, employees in a smart working setting may have difficulties in acquiring specific, targeted, important resources from their colleagues or supervisors, creating barriers to an efficient and effectiveness performance of assigned job tasks (Slavković et al., 2021). Another point touched by current studies refers to the reduced opportunities for growth and professional advancements, further enhancing feelings of inefficacy and of being left alone (Errichiello and Pianese, 2020).

Several distinct and partially unrelated factors can influence the effectiveness of smart working adoption. These elements include the nature of the organization and its features, such as the professional environment, and the perception of an innovative and attentive culture. Other factors consist of employee assessment methods, perceived social support, clarity of procedures and objectives, availability of information and technologies supporting smart working practices. Furthermore, determinants at a single individual level should be considered, such as mindsets, traits, and habits, which play a fundamental role in shaping the success of smart working implementation (Kang and Kwon 2016; Park, 2018; De Carlo et al., 2022).

### *Technostress and Zoom Fatigue*

Technostress refers to “a kind of stress that arises from the excessive, disproportionate, and dysfunctional use of technology, which has substantial effects on both an individual's social and professional life” (Atanasoff and Venable, 2017; Bondanini et al., 2020).

An example of technostress is zoom fatigue. The COVID-19 epidemic, and its consequently shift to smart working, called for a sharp rise in the amount of video conference sessions held. The feeling of being drained of energy after long video conferences became increasingly common to smart workers, being referred to as "Zoom Fatigue" (Parker, 2020). This phenomenon gained significance and interest during the first pandemic outbreak, when the term was extensively researched and clicked through Google in March 2020 (Nesher Shoshan and Wehrt, 2021). “Zoom fatigue, or videoconferencing fatigue, refers to the extent to which people

experience exhaustion that is directly linked to their participation in videoconferences” (Lubstorf et al., pp.151–166, 2023). (See Annex for further details on the topic.)

## **Studies on the impact of smart working on employee well-being**

### *The question is still open*

Working remotely may allow employees to better manage their professional and personal obligations, maintaining a healthier equilibrium. Moreover, the enhanced flexibility brought upon by smart working is considered to improve working conditions from a general point of view (Cohen, 2022; Kortsch et al., 2022). Nevertheless, according to different studies, implementing smart working might be challenging.

The question of whether smart working has more beneficial or detrimental implications for the individuals who embrace it, is still unresolved (Galanti et al. 2021; De Carlo et al., 2022; Hall et al., 2023).

On one hand, researchers have been able to show that remote workers declared to be happier as they perceive a higher sense of flexibility, and an enhanced sense of psychological control over their life. Indeed, as indicated by a recent McKinsey study, workers having the possibility to perform their job duties remotely, resulted to be more satisfied and engaged (Alexander et al., 2021). This was confirmed by later research featured in Forbes, supporting that smart worker, on average, reported an additional 20% of life and job satisfaction than their in-office counterparts (Robison, 2022).

Conversely, research pieces of evidence also show that anxiety rates are more likely to rise, accompanied by heightened feelings of stress, social isolation, and disconnection from the outside world (Gill, 2023). Some recognized potential adverse consequences of remote work consist in extended work hours, employees' incapacity to split business-related matters and individuals' personal lives, and hindered opportunities (Errichiello et al., 2020; Ghislieri et al., 2023).

## *What about Italy*

In Italy “agile working” or “smart working” is not a different type of employment relationship, but rather a special way of performing employment services introduced to increase competitiveness and facilitate work-life balance (Ministero delle Politiche Sociali, 2023).

Mixed results were found according to a 2020 INPS study (National Institute of Social Security). In fact, although roughly 44% of respondents acknowledged that the autonomy provided by agile work improves time management and, consequently, boosts work performance, 33% of workers reported that they find it challenging to balance their time between work and "private life" (Inps, 2021).

In 2021, Inail (National Institute for Insurance against Accidents at Work) conducted longitudinal research that provided new insights on the experience of agile work. The study highlighted a positive change in work-life balance. Most survey participants expressed willingness to continue working from home. Nevertheless, individuals also disclosed to feel high levels of stress and responsibility. There were indications of decreased levels of interaction among colleagues, and a reduction in the size of social networks. Additionally, they faced significant challenges when attempting to disengage from work (Inail, 2021).

According to another study conducted in Italy, most appreciated advantages revolve on the industrial and economic domain, including increased productivity and reduced expenses for both companies and employees. Overall, remote work has provided individuals with enhanced autonomy, however, it has also heightened the expectations and demands placed on their job performance (Fraccaroli et al., 2021).

## **BIG FIVE PERSONALITY TRAITS**

### **Introduction to the framework: what is personality**

“Personality refers to the enduring characteristics and behavior that comprise a person’s unique adjustment to life, including major traits, interests, drives, values, self-concept, abilities, and emotional patterns” (American Psychological Association, 2022).

Different sources of human behavior have been long researched; this was translated into personality studies. As emerged, personality is the root cause of many actions; therefore, being

aware of enduring individual facets would be useful in building reliable behavioral expectations (Roberts and Yoon, 2021).

To classify and investigate the many aspects of personality, theoretical frameworks and evaluation instruments was developed. All “*trait theories*” postulate that people are hardwired from birth to exhibit certain patterns of behavior that may be categorized as personality characteristics, where traits are “those characteristics exhibited in a large number of situations, relatively enduring over time” (Robbins and Judge, 2017).

<b>Big Five Trait</b>	<b>Description</b>
<i>Openness to Experiences</i>	Originality, curiosity (i.e., a wide range of interests), and being fascinated by the novelty define openness as a personality trait. The contrasting end is characterized by a tendency to comply with what is already known and established, a lack of creativity and originality, which is referred to as being more “conventional”.
<i>Conscientiousness</i>	Conscientiousness is a reliability metric of individuals. People at the high end of this category have distinguished persistence, dependability, and self-discipline, people presenting low conscientiousness in their personality tend to be not reliable, more distracted, and significantly less organized.
<i>Extraversion</i>	Extraversion consists in the capacity to build social relationships being confident and at comfort, but it is also linked with having a positive mindset when faced with adversity. Conversely, introverts have a propensity to be more absorbed in one's inner world rather than the external world; they are quiet, shy, and introspective.
<i>Agreeableness</i>	Agreeableness is a personality attribute associated with cooperativeness. Individuals with high levels of agreeableness are more likely to be not only friendly and warm, but also generous, trusting, and charitable. Negative aspects of this component are represented by hostility, insensitivity, and coldness.
<i>Emotional Stability</i>	The capacity to properly manage unpleasant feelings and handle stress is known as emotional stability. People being emotionally stable are more optimistic, self-confident, calmer, and happier. The propensity to feel negative emotions readily and more intensively, conversely, is shared by those who suffer from emotional instability, also known as “neuroticism”. Neurotic subjects have tendency to be tensed, anxious, melancholic, and insecure.

Table 1, “Description of Big Five Traits”, Author’s analysis

The Big Five theory is a “model which looks at personality in terms of five broad dimensions, also known as the Big Five personality traits” (Costa and McCrae, 1992, 2008). The five factors - that are the building blocks of the human personality - are openness to experiences, conscientiousness, extraversion, agreeableness, emotional stability. This model was born during the 1980s as part of the field of psychological trait theory, and it is, as of today, one of the most accepted and accredited models in describing personality, being regarded as the most accurate explanation for the experienced behavioral variations among individuals (Grohol, 2019).

A summary of the key features and qualities that characterize the five personality traits is produced by combining the information from several sources (Costa and McCrae, 1992, 2008), (de Raad and Mlačić, 2015), (Robbins and Judge, 2017), (Grohol, 2019), (Bashkirova et al., 2023), among others.

### **Studies linking personality traits to workplace outcomes**

The ability of managing and coping with work responsibilities and resources is impacted by an individual's personality, which in turn affects their perception of their professional settings (Edú-Valsania et al., 2022; Bashkirova et al., 2023). A significant portion of the recent study on burnout and personality has relied on Big Five model. Research have confirmed that traits of human personality play a crucial role and may, to an extent, predict the rise of burnout syndrome. According to the available literature so far, there exist important correlations between burnout components and the personality dimensions proposed by the Big Five framework (Angelini, 2023).

All of the following results are evidenced by studies conducted by McCrae and Costa (1987), Allen and Mellor (2002), Kim et al. (2007), Bianchi (2018; 2021), Pérez-Fuentes et al. (2019), Galaiya, Kinross and Arulampalam (2020), Kim, Jörg and Klassen (2019), Roloff et al. (2022), Bashkirova et al. (2023), Angelini (2023), Wang at al. (2024), among others. It is worth noting that, even though most results so far depicted the specific relationship directions considered and presented in this thesis, few other researchers observed unexpected, inversed correlations between burnout and personality variables.

### *Conscientiousness and agreeableness*

Research findings suggest that both conscientiousness and agreeableness have a positive correlation with professional effectiveness. Additionally, agreeableness appears to have a negative correlation with cynicism. High conscientious individuals would be guarded from emotional exhaustion and professional low self-actualization by their result-oriented work ethic, which would prevent them to be unproductive in the first place. Regarding agreeableness, the propensity to have warm relationships, and understanding people more easily, may shield individuals from immediate job exhaustion and depersonalization.

### *Extraversion and openness*

A negative correlation between extraversion and the experience of exhaustion has been proven. Positivity about professional efficacy and low depersonalization tendency are other two ways in which extraversion protects against burnout.

Openness qualities allow people to see potential in failure and new beginnings and shield them from emotional exhaustion and lack of confidence leading to work burnout. On the contrary, less open individuals may resort to readily available - yet fewer effective - measures, such as depersonalization, when confronted with workplace stressors.

### *Emotional stability and neuroticism*

Finally, exhaustion and cynicism seem to become higher, the higher individuals score in neuroticism, meaning that individuals at the low end of the emotional stability category are more prone to experience severe burnout. These neurotic traits would be a major detriment to productivity and happiness at work, increasing the likelihood of burnout. Extreme fatigue is more easily experienced by these individuals as they are more likely to suffer from anxiety and nervousness.

## **METHODOLOGY SECTION**

### **RESEARCH DESIGN**

#### **Mixed-method approach**

The current study used a mixed-method approach to address the research issue. In this project, methodological triangulation involves integrating and analyzing many sources of data gathering, including primary sources (such as expert interviews and survey) and secondary sources (such as summaries of literature review sources). Multiple methodological techniques are used in the examination of a singular phenomenon to mitigate the limitations associated with relying on a single approach. Additionally, these strategies are implemented to explore diverse perspectives and validate research results (Jack and Raturi, 2006).

The mixed-method approach has been increasingly employed in recent studies. It entails the combination, collection, and analysis of both quantitative and qualitative data to answer a single research question. This method has been chosen as it works under the assumption that, not only the validity of the stand-alone models is preserved, but also potential vulnerabilities in either type of data are reduced, and additional insights are obtained from the integrated analysis (Creswell, 2017; Poth, 2018).

Furthermore, the reason why a mixed method approach was chosen for this research is that it is particularly appropriated to comprehend the intricate characteristics of human behaviors (Harrison, Reilly and Creswell, 2020). “Mixed methods research can add value in management research because it offers the opportunity to yield insight regarding both process (qualitative) and outcomes (quantitative).” (Molina-Azorín and Cameron, 2015).

#### **Quantitative research design**

An initial survey was undertaken to carry out the first quantitative component of the investigation. Various dimensions were assessed in the survey. Initially, the participants were required to respond to questions designed to assess the respective degrees of the Big Five personality characteristics. Furthermore, the participants provided answers to assess their degree of burnout. Subsequently, a segment related to the work environment followed. Ultimately, a section dedicated to demographic data was completed by each participant.

Following the collection of responds, analysis was conducted using R Studio. In order to examine the associations between variables and determine the factors that are more likely to influence the inclination towards burnout, various statistical techniques such as visual representation of variables interactions, correlations, ANOVA test, and multiple linear regression models have been utilized.

### **Qualitative Research Design**

Once the results of the quantitative analysis were analyzed and interpreted, a qualitative analysis was conducted. The collection and investigation of qualitative data allowed for a deeper analysis of the topic, facilitating the organization and interpretation of quantitative results. Furthermore, through confirmation, "triangulation enhances the capacity of researchers to derive inferences from their investigations and may provide a more solid and broadly applicable set of results" (Jack and Raturi, 2006; pp. 345-357).

Twelve subject matter experts were questioned through semi-structured interviews. This second phase was finalized to get a more senior management viewpoint. The number of interview subjects was purposefully limited to 12, as research has shown that this is both the required and adequate sample size for interviews studies (Guest et al., 2006; Francis et al., 2010). Collected data were then analyzed via Qualitative Content Analysis that "is a method for systematically describing the meaning of qualitative data" (Schreier, 2014; pp. 170).

## **DATA COLLECTION**

### **Data Collection: quantitative part of the study**

#### *Quantitative data collection procedure*

Young Italian professionals were reached and asked to compile the survey. A brief introduction to each section guided the participants throughout the survey structure. Respondents was contacted through the direct and indirect author's network, mainly relying on - but not limited to - social networks' groups of universities and alumni. The selection of this recruiting tactic was based on the intention to use pre-existing connections and optimize the distribution of the survey to a specific target demographic consisting of young individuals in the first phases of

their professional journeys. Furthermore, participants were invited to engage in word-of-mouth communication to enhance the study's outreach.

### *Demographics of collected data*

Out of the 130 respondents, 59 were males (47%) while 65 were females (51%), and only the remaining 2% decided not to declare their gender. The respondents ages ranged from 18 to 33, with an average at 24,5, with maximum of 7 years of experience in the professional world (with an average of 2,7 years), a maximum of 48 months in length of employment in the current position (with an average of 16 months), and 6 employers companies changed (with an average of 1,7). Most of the participants (n=63, 49%) were in a stable relationship, only 5 were married (5%) and 3% preferred not to share this information, while the remaining identified themselves as single (43%). Most of the participants (n=61, 48%) in the study completed a master's degree, 28 (21%) earned a bachelor's degree, 8 (7%) proceeded with a PhD, while the remaining 20% had a High School Diploma.

Among the whole sample, a total of 66 employees (50,8%) were classified as smart workers, and 64 employees (49,2%) were defined as non-smart workers. The latter group includes those who indicated their complete lack of involvement in remote work ("Never smart working"), as well as those who engage in remote work less often than four times per month. The purpose of this aggregation was to enable a comparison between people who engage in smart working regularly, indicating a higher likelihood of developing behavioral and psychological reactions associated with this specific professional context, and those who do not.

### *Self-Report measures*

To measure the burnout scores of each participant, the Maslach Burnout Inventory – General Survey (MBI-GS) was used (Bakker, Demerouti and Schaufeli, 2002).

MBI (Maslach et al., 1986; 1997) has long been the most common and scientifically validated method to measure burnout. MBI- General Survey was developed after the realization that burnout could be experienced by workers in every sector, generating from MBI- Human Services Survey, which instead focused on the study of burnout tendency of health care professionals (Williamson et al., 2018; Edú-Valsania et al., 2022).

MBI – General Survey consists in 16 questions (see Annex), built to measure each burnout dimension - namely cynicism, emotional stability, and professional efficacy. In this section a five-point scale was used to score each item, with 1 representing “strongly disagree” and 5 representing “strongly agree”. Finally, the burnout score variable was created as a composite average of the dimensions’ scores obtained, with cynicism and emotional exhaustion contributing positively, and professional efficacy being a reversed-score item.

The Big Five Personality Traits were assessed based on a Ten Items Personality Inventory (Gosling, Rentfrow and Swann, 2003), which has proved to be particularly advantageous when the researchers opt for a brief instrument to measure personality traits. Indeed, this option proved to have discriminant validity and a convergence with results obtained through the more extensive and widely accepted Big-Five measurements tool (Gosling et al., 2003). Since the survey conducted was very personal, it required attention and introspection, a shorter measure was considered the most suitable in ensuring that participants completed the survey in a thoughtful manner.

Respondents answered 10 questions. The items consisted in a pair of personality traits, and participants had to rate (in a five-point scale) the extent to which they perceived these pairs were consistent with their own personality. Out of the ten items, five were reverse-scored items, and each personality traits score was computed as an average between the direct and reversed self-report score, denoted by “R” (see Annex).

The third section of the survey included the submission of questions pertaining to the professional environment. Initially, participants provided details on smart working, including their involvement in this form of work, how frequently they worked out of office, and their perception of its influence on overall well-being. Additionally, participants offered further responses using a 5-point scale (with 1 corresponding to "strongly disagree" and 5 corresponding to "strongly agree") regarding their personal perception of particular job-related factors that have been frequently examined in recent research as possible demands and resources specifically associated with remote work (Allen et al., 2019; Errichiello and Pianese, 2020; Slavković et al., 2021; Alexander et al., 2021; De Carlo et al., 2022). These factors include participants' perceptions of their job engagement, work-life balance, growth opportunities within the employer company, job detachment difficulty, support from colleagues and superiors, and the quality of co-worker interactions.

The survey concluded with a section dedicated to collecting basic demographic information from the participants. Their age, gender, marital status, highest level of education, monthly salary, duration of employment in the same current position, and total years of professional experience.

## **Data collection: qualitative part of the study**

### *Qualitative data collection procedure*

Regarding the qualitative component, the professionals who consented to participate in the study were all regarded as subject matter experts, either due to their extensive experience working in the human resources department, their specialization as professional psychologists, or their passion as coaches, experts, or writers on job burnout and/or smart working. LinkedIn was used to find and connect with experts, who were asked to participate in an interview after being presented with a short summary of the study's objectives. The interviews were conducted via Google Meet.

Semi-structured interviews were used, affording researchers the opportunity to engage in interactive exchanges while maintaining a high level of rigor in the exploration of topics and issues (see Annex for the interview script). Twelve participants took part in this study and the details of the participants are described in the table below.

### *Interviewed Expert profiles' lists*

<b>Participant</b>	<b>Position</b>	<b>Professional Profile</b>
Participant 1	Smart Working Specialist, Professional Organizer, Leadership Expert, Mentoring Strategist, Author	Organization consultant who supports individuals in regaining balance, time for themselves and improving quality of life, and companies in being more productive and efficient. Involved since 2018 in assisting companies in introducing Smart Working and achieving well-being.
Participant 2	Senior advisor in corporate & digital wellbeing, Author, University professor	Creation and harmonization of corporate wellbeing strategies to the dynamics of digital/AI transformation/smart working, to better manage the digital revolution and avoid increased stress, decreased productivity, sleep, and mental health problems.
Participant 3	HR Manager-Talent Acquisition, Professional Coach	HR Professional focused on Talent Acquisition and People Development. Providing coaching and support to people to unlock their potential and maximize their performance. Showing particular interest and attention to burnout topics.
Participant 4	Carbon Removal Manager, Burnout Coach	Certified mental health (burnout prevention) coach and development coach (specialized in parts, process, and presence work). Experience in climate tech, startup- and NGO consulting, ESG reporting and the impact investment space.
Participant 5	Psychologist, Trainer, Consultant	In support of small, medium and large companies, Italian and international, development of behavioral training courses (soft skills) synchronous and asynchronous, in presence and digital.
Participant 6	The Burnoutologist, Banishing Burnout In A Changing World Of Work, Coach, Speaker, Trainer, Advisor	Working with Leaders, HR Teams, and Boards, educating, informing, training, and coaching on a new world of work, one where people are first, more than just resources. Working to prioritize well-being of workers.
Participant 7	Scientific speaker, Researcher, Expert in metacognition and economics of attention/distraction, Well-being and communication consultant	Consultant, specializing in the economics of distraction and attention, surveillance capitalism, metacognition, and digital well-being. Interventions aimed to offer companies to reduce costs arising from burnout, multitasking, information overload.
Participant 8	HR Consultant, Career Coach and Advisor	After many years of experience as headhunter and HR manager, he now supports people in finding a new and authentic job satisfaction. For the corporate world: support companies in creating a culture of work that allows you to make the most of the different potential of all the Resources for their full professional realization.
Participant 9	CEO & Co-founder	Dynamic entrepreneur and visionary leader passionate about driving innovation and empowering individuals. Supports HR departments and CEOs to accelerate the evolution of their employees' professional skills, helping organizations increase their flexibility and competitiveness in the market.
Participant 10	HR manager	A HR Manager focused on well-being and smart working specializes in creating policies that promote employee health and work-life balance, integrating remote work strategies with comprehensive support systems to enhance productivity and employee satisfaction. Implement innovative wellness programs and ensure that the organization's culture adapts to the evolving demands.
Participant 11	University Professor	She focuses her research, and she teaches in a top European University on subjects regarding personality, zoom fatigues, managing people, self-awareness, and well-being in the workplaces.
Participant 12	Strategy & Open Innovation Advisor, CEO, TEDx speaker, Lecturer, Smart Working Expert	Working with business leaders, innovation managers and startup founders by steering and accelerating them in the right direction, appropriate for today's digitally focused environment where emerging technologies are shaping the market rules. Introduction of organizational models into new ways of working framework such as smart working.

Table 2, "Interview Experts profile list", Author's analysis

## QUANTITATIVE ANALYSIS

### Data cleaning

Following the data collecting phase, acquired information underwent a series of procedures including cleaning, standardization, the creation of dummy variables, and the addition of new variables derived from collected data. After the first phase of data preparation, the dataset was uploaded into R Studio for analysis. An examination was conducted to investigate the primary factors of interest and their associations with the dependent variable, namely the burnout inventory score.

The dataset presented no missing values, while outliers were detected by the use of the z-score. It was decided to keep all the observations besides those registering a "prefer not to say" answers in demographic questions. This decision was taken based on the fact that the observations in question were a rather small proportion of the whole sample, specifically 6 out of 130 IDs, and possibly these findings might not have offered sufficient evidence to establish statistically significant conclusions on the influence of this particular category, hence possibly introducing complexity to the model and resulting in a reduced statistical power.

In order to adjust skewed distribution into normal ones (see Annex), a logarithmic transformation was performed for the variable "monthly salary", while a squared transformations were applied to the variable "tenure" and "years of experience", as being the most appropriate and common transformations normally applied to these specific categories of variables. Overall, the data did not show any anomalies, therefore the planned investigation was performed.

### Data exploration

To begin with the data exploration, the summary statistics was produced. In order to have a deeper look at the dataset, descriptive statistics were explored in the case of both smart workers and non, obtaining a first impression of how burnout inventory score changed, on average. The data indicated that the burnout inventory and cynicism scores slightly increased in the case of smart workers, while professional efficacy slightly decreased. However, from this first simple impression, significant conclusion could not be drawn.

Summary Statistics with NO Smart

Statistic	N	Mean	St. Dev.	Min	Median	Max
id	64	54.391	32.755	2	52.5	119
extraversion	64	2.695	0.819	1.000	2.500	4.500
agreeableness	64	3.273	0.740	1.500	3.500	4.500
conscientiousness	64	3.555	0.708	2.000	3.500	4.500
emotional_stability	64	3.000	0.766	0.500	3.000	4.500
open_to_experiences	64	3.336	0.782	1.000	3.500	4.500
prof_efficacy	64	3.845	0.647	1.000	3.900	5.000
cynicism	64	2.081	0.965	1.000	2.000	5.000
emotional_exhaustion	64	3.297	0.817	1.000	3.200	5.000
burnout_inv	64	2.175	0.565	1.000	2.100	3.500
SW_positive	64	0.172	0.380	0	0	1
SW_negative	64	0.000	0.000	0	0	1
SW_neutral	64	0.078	0.270	0	0	1
Never_SW	64	0.688	0.467	0	1	1
colleague_interaction	64	4.359	0.824	1	5	5
engagement	64	4.031	0.835	1	4	5
worklife_bal	64	3.297	1.122	1	3	5
detachment_diff	64	2.672	1.169	1	2.5	5
support_perception	64	3.281	1.105	1	3	5
GrowthOpportunity	64	3.438	1.233	1	4	5
sal_reduction	64	0.453	0.502	0	0	1
Age	64	24.484	3.101	18	24	32
Male	64	0.500	0.504	0	0.5	1
Female	64	0.469	0.503	0	0	1
PreferNotSay_Gen	64	0.031	0.175	0	0	1
Stable_relationship	64	0.547	0.502	0	1	1
Married	64	0.047	0.213	0	0	1
PreferNotSay_Rel	64	0.031	0.175	0	0	1
Single	64	0.375	0.488	0	0	1
Master	64	0.484	0.504	0	0	1
Bachelor	64	0.219	0.417	0	0	1
High_school	64	0.250	0.436	0	0	1
PreferNotSay_Educ	64	0.016	0.125	0	0	1
PHD	64	0.031	0.175	0	0	1
years_experience	64	2.859	1.918	1	2	7
tenure_month	64	15.422	11.963	1	12	36
salary_per_month	64	1,796.094	791.638	400	1,600	3,700
n_employers	64	1.641	1.264	0	2	4
no_SW	64	1.000	0.000	1	1	1

Figure 3, "Summary Statistics with NO Smart", Author's analysis

Summary Statistics with Smart

Statistic	N	Mean	St. Dev.	Min	Median	Max
id	66	76.273	39.208	1	81.5	130
extraversion	66	2.402	0.761	0.500	2.500	4.500
agreeableness	66	3.424	0.860	1.000	3.500	4.500
conscientiousness	66	3.659	0.675	2.000	3.500	4.500
emotional_stability	66	3.114	0.867	1.000	3.000	4.500
open_to_experiences	66	3.402	0.652	2.000	3.500	4.500
prof_efficacy	66	3.767	0.613	2.300	3.800	5.000
cynicism	66	2.209	0.997	1.000	2.000	5.000
emotional_exhaustion	66	3.261	0.895	1.000	3.000	5.000
burnout_inv	66	2.233	0.659	0.800	2.150	3.900
SW_positive	66	0.439	0.500	0	0	1
SW_negative	66	0.015	0.123	0	0	1
SW_neutral	66	0.212	0.412	0	0	1
Never_SW	66	0.000	0.000	0	0	0
colleague_interaction	66	4.076	0.982	1	4	5
engagement	66	3.864	0.975	1	4	5
worklife_bal	66	3.303	1.067	1	3	5
detachment_diff	66	2.818	1.122	1	3	5
support_perception	66	3.136	1.108	1	3	5
GrowthOpportunity	66	3.561	1.125	1	4	5
sal_reduction	66	0.455	0.502	0	0	1
Age	66	24.561	3.129	19	24.5	33
Male	66	0.439	0.500	0	0	1
Female	66	0.545	0.502	0	1	1
PreferNotSay_Gen	66	0.015	0.123	0	0	1
Stable_relationship	66	0.439	0.500	0	0	1
Married	66	0.045	0.210	0	0	1
PreferNotSay_Rel	66	0.030	0.173	0	0	1
Single	66	0.485	0.504	0	0	1
Master	66	0.470	0.503	0	0	1
Bachelor	66	0.197	0.401	0	0	1
High_school	66	0.212	0.412	0	0	1
PreferNotSay_Educ	66	0.015	0.123	0	0	1
PHD	66	0.106	0.310	0	0	1
years_experience	66	2.470	1.470	1	2	7
tenure_month	66	15.530	11.021	2	12	48
salary_per_month	66	1,607.727	627.009	500	1,550	3,500
n_employers	66	1.758	1.665	0	2	6
no_SW	66	0.000	0.000	0	0	0

Figure 2, "Summary Statistics for YES Smart", Author's analysis

Correlation Table

Variable	burnout_inv	emotional_exhaustion	cynicism	prof_efficacy	no_SW	extraversion	agreeableness	conscientiousness	emotional_stability	open_to_experiences	colleague_interaction	engagement	detachment_diff	worklife_bal	GrowthOpportunity	firm_management	support_perception
burnout_inv		0.727***	0.894***	-0.566***	-0.074	-0.001	-0.187	-0.227*	0.366***	-0.166	-0.487***	-0.560***	0.325***	-0.437***	-0.551***	-0.461***	-0.436***
emotional_exhaustion	0.727***		0.911***	-0.808	-0.001	0.047	-0.030	0.056	-0.372***	-0.117	-0.337***	-0.189*	0.440***	-0.440***	-0.324***	-0.293***	-0.227*
cynicism	0.894***	0.911***		-0.414***	-0.110	-0.023	-0.214*	-0.215*	-0.285**	-0.113	-0.438***	-0.519***	0.219*	-0.331***	-0.493***	-0.400***	-0.485***
prof_efficacy	-0.566***	-0.808	-0.414***		0.049	0.037	0.114	0.389***	0.125	0.159	0.298***	0.589***	-0.038	0.246**	0.433***	0.337***	0.220*
no_SW	-0.074	-0.001	-0.110	0.049		0.187*	-0.083	-0.081	-0.067	-0.008	0.144	0.356	-0.054	-0.028	-0.055	-0.040	0.092
extraversion	-0.001	0.047	-0.023	0.037	0.187*		0.183*	-0.043	0.009	0.363***	0.338***	0.039	-0.023	0.154	0.036	-0.024	0.117
agreeableness	-0.187	-0.030	-0.214*	0.114	-0.083	0.183*		-0.036	0.251**	0.172	0.132	0.305	-0.096	0.024	0.124	0.140	0.125
conscientiousness	-0.227*	0.056	-0.215*	0.389***	-0.081	-0.043	-0.036		0.024	-0.003	0.132	0.336***	0.032	0.225*	0.253**	0.232**	0.256**
emotional_stability	0.366***	-0.372***	-0.285**	0.125	-0.067	0.009	0.251**	0.024		0.062	0.213*	0.299*	-0.181*	0.268**	0.359***	0.238**	0.220*
open_to_experiences	-0.166	-0.117	-0.113	0.159	-0.008	0.363***	0.172	-0.003	0.062		0.227**	0.134*	0.092	0.202*	0.172	0.106	0.082
colleague_interaction	-0.487***	-0.337***	-0.438***	0.298***	0.144	0.338***	0.132	0.132	0.213*	0.227**		0.560***	0.003	0.412***	0.379***	0.360***	0.413***
engagement	-0.560***	-0.189*	-0.519***	0.589***	0.106	0.039	0.165	0.389***	-0.199*	0.164*	0.560***		0.006	0.353***	0.453***	0.411***	0.448***
detachment_diff	0.325***	0.440***	0.219*	-0.038	-0.054	-0.023	-0.096	0.032	-0.181*	0.092	0.003	0.006		-0.330***	-0.098	-0.114	-0.220*
worklife_bal	-0.437***	-0.440***	-0.331***	0.246**	-0.028	0.154	0.034	0.225*	0.268**	0.202*	0.412***	0.353***	-0.330***		0.304***	0.496***	0.334***
GrowthOpportunity	-0.551***	-0.324***	-0.493***	0.433***	-0.055	0.036	0.124	0.253**	-0.359***	0.172	0.378***	0.453***	-0.098	0.384***		0.023**	0.413***
firm_management	-0.461***	-0.293***	-0.400***	0.337***	-0.040	-0.024	0.140	0.231**	0.238**	0.106	0.360***	0.421***	-0.114	0.408***	0.023**		0.585***
support_perception	-0.436***	-0.227*	-0.485***	0.219*	0.092	-0.117	0.125	0.256**	-0.220*	0.082	0.473***	0.448***	-0.220*	0.334***	0.413***	0.585***	

Figure 4, "Correlation Matrix", Author's analysis

The correlation matrix between possible explanatory and dependent variables was also examined as part of preliminary investigations. The data presented in the Figure indicates a statistically significant negative correlation between burnout inventory and emotional stability ( $r = -0.37, p < 0.01$ ), as well as a lower significant correlation with conscientiousness ( $r = -0.23, p < 0.1$ ), among the Big Five traits. Additionally, there are significant negative correlations between burnout inventory and various job-related variables, including colleague interaction ( $r = -0.49, p < 0.01$ ), engagement ( $r = -0.56, p < 0.01$ ), work-life balance ( $r = -0.46, p < 0.01$ ), growth opportunity ( $r = -0.55, p < 0.01$ ), and support perception ( $r = -0.44, p < 0.01$ ). Finally, there exists a positive and statistically significant correlation between burnout and detachment difficulties ( $r = 0.33, p < 0.01$ ).

After analysing the correlation matrix (please refer to the Annex for further details), variables that might have had the strongest influence on burnout experience were selected and further explored through graphs such as scatter plots, box plots, and bar plots, to get a visual impression on potential variable relations (see Annex).

One of the main advantages of Data Visualization is its capacity to promptly elucidate even the most complex data sets. By using graphs, and other visual representations, substantial amounts of data were converted into visual formats that can be promptly comprehended (Unwin, 2020).

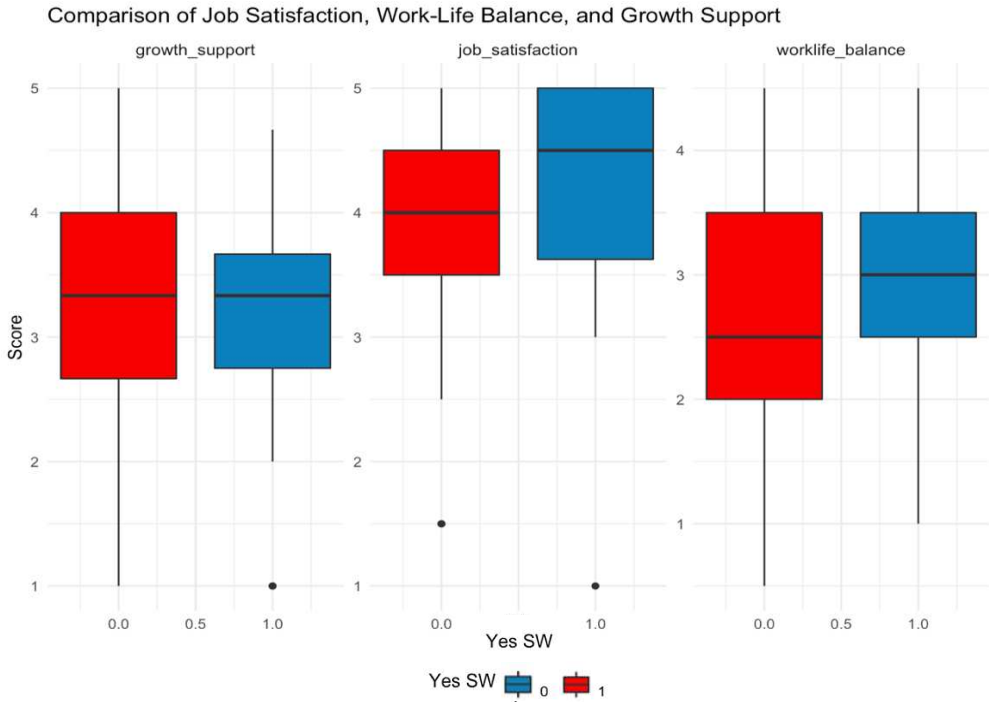


Figure 5, “Experienced wellbeing aspects by smart workers and non”, Author’s analysis

- The scores for “**growth and support**” (*support perception + growth opportunity*) do not show a marked difference between the two groups. Both groups have a similar median score, but the non-smart working group (blue) shows a slightly lower interquartile range, i.e. more consistency in the perceptions.
- Individuals engaged in smart working show a lower median “**job satisfaction**” (*engagement + colleague interaction*) score compared to non-smart working individuals. The interquartile range is also relatively smaller, suggesting less variance in perception among smart working individuals.
- Smart working individuals exhibit a lower median score for “**work-life balance**” (*work-life balance + (R)detachment difficulty*) compared to their non-smart working counterparts. The spread of scores is relatively broad, suggesting higher variability in how work-life balance is experienced by smart workers.

## Data analysis

The significance of demographic factors has been assessed using various ANOVA tests to see whether there were statistically significant variations across different groups of respondents based on demographic characteristics. Those which resulted significant were inserted into the performed regression models.

The predicted correlations were formally tested via multiple regression analysis. Burnout inventory score was the main outcome variables, being a composite variable originating from the average of cynicism, emotional exhaustion, and reverse professional efficacy.

The analysis was conducted across multiple stages, whereby the variable "yes\_SW" (a binary variable indicating the presence or absence of smart working among workers) served as the primary explanatory factor. Each phase included the addition of a distinct set of control variables. Initially, the regression model included the five personality-related variables. Afterwards, a set of moderator variables was introduced, showing the interaction between the variable "yes\_SW" and each personality attribute. This was done to investigate how smart working influences the relationship between burnout and personality aspects.

Secondly, the study examined job-related factors as a distinct set of control variables inside a novel model. Under the same methodology used for personality characteristics, moderators were then included in the regression analysis. Step 3 involved combining the models into a single regression model. This model took into account the control effects of personality variables, job-related variables, and moderators. The purpose was to gain a more

comprehensive understanding of which variables could significantly predict the tendency to burnout, and how smart working influences the relationships between statistically significant explanatory variables and the tendency to experience burnout (see Annex for further details).

Once the final model was built, a new version of the regression was created, only considering the significant variables for the purpose of simplicity in presenting and discussing the results, and to satisfy the principle of parsimony. This last step was performed formally through the inclusion of “stepAIC” from the MASS package in R.

The automated process involved repeatedly incorporating and eliminating predictor variables inside a regression model to identify a final optimal collection of predictor variables. Ultimately, the models underwent testing in order to verify their adherence to the assumptions of multiple linear regression. In order to achieve this objective, many procedures were executed (see Annex).

## RESULTS QUANTITATIVE ANALYSIS

The analysis of variance (ANOVA) is a statistical technique used in this study to examine the disparities among means of demographics groups.

```
> summary(anova_demographics_burnout_complete)
              Df Sum Sq Mean Sq F value Pr(>F)
factor(gender)      1  1.26  1.2637   3.311 0.0718 .
factor(freq_SW)     5  1.35  0.2710   0.710 0.6173
factor(marital_status) 2  0.63  0.3130   0.820 0.4433
factor(highest_educ) 3  0.21  0.0713   0.187 0.9051
n_employers         1  0.19  0.1938   0.508 0.4778
tenure_month        1  0.62  0.6180   1.619 0.2062
years_experience     1  0.41  0.4085   1.070 0.3034
factor(gender):Never_SW 2  1.95  0.9751   2.555 0.0828 .
factor(marital_status):Never_SW 2  0.52  0.2586   0.678 0.5102
factor(highest_educ):Never_SW 2  0.13  0.0629   0.165 0.8482
n_employers:Never_SW 1  0.05  0.0480   0.126 0.7235
tenure_month:Never_SW 1  0.47  0.4695   1.230 0.2701
years_experience:Never_SW 1  0.15  0.1476   0.387 0.5354
Residuals          100 38.17  0.3817
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

Figure 6, “ANOVA analysis for demographic variables”, Author’s analysis

The study revealed that there was a modest statistically significant association between burnout and gender. The p-values for "gender" and "gender:Never\_SW" were 0.0718 and 0.0828 respectively. Although these p-values were not statistically significant at the commonly accepted level of significance, they resulted importantly lower than the p-values of all other demographic variables taken into account. Considering the ANOVA findings, we decided to use gender as a control variable in the regression analysis for burnout.

Regression Analysis - Determinants of Burnout Level				burnout_inv		
Dependent variable:				(1)	(2)	(3)
	burnout_inv					
	(1)	(2)	(3)			
yes_SW	0.091 (0.110)	0.180* (0.102)	0.118 (0.876)	0.091 (0.110)	0.035 (0.079)	0.978** (0.464)
factor(gender)male		0.176* (0.105)	0.176 (0.108)		0.130 (0.079)	0.178** (0.079)
extraversion		0.082 (0.068)	0.092 (0.091)		-0.194*** (0.055)	-0.343*** (0.087)
conscientiousness		-0.160** (0.075)	-0.190* (0.103)		-0.121** (0.055)	0.117 (0.095)
agreeableness		-0.065 (0.065)	-0.179* (0.096)		-0.035 (0.044)	-0.059 (0.058)
open_to_experiences		-0.135* (0.075)	-0.051 (0.098)		0.146*** (0.037)	0.143*** (0.048)
emotional_stability		-0.262*** (0.062)	-0.240** (0.093)		0.004 (0.044)	0.040 (0.058)
yes_SW:extraversion			-0.049 (0.140)	GrowthOpportunity	-0.159*** (0.039)	-0.144*** (0.050)
yes_SW:conscientiousness			0.084 (0.146)	yes_SW:engagement		0.240** (0.113)
yes_SW:agreeableness			0.248* (0.134)	yes_SW:colleague_interaction		-0.344*** (0.116)
yes_SW:open_to_experiences			-0.223 (0.156)	yes_SW:worklife_bal		0.007 (0.088)
yes_SW:emotional_stability			-0.065 (0.127)	yes_SW:detachment_diff		-0.016 (0.074)
Constant	2.138*** (0.078)	3.856*** (0.447)	3.959*** (0.686)	yes_SW:support_perception		-0.072 (0.087)
Observations	124	124	124	yes_SW:GrowthOpportunity		-0.048 (0.076)
R2	0.006	0.247	0.283	Constant	2.138*** (0.078)	3.636*** (0.247)
Adjusted R2	-0.003	0.201	0.206	Observations	124	124
Residual Std. Error	0.613	0.547	0.546	R2	0.006	0.552
F Statistic	0.681	5.424***	3.658***	Adjusted R2	-0.003	0.521
				Residual Std. Error	0.613	0.424
				F Statistic	0.681	17.716***
						11.934***

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Figure 7, "Personality Traits and Organizational Factors as determinants of Burnout level", Author's analysis

As previously mentioned, the first steps of the analysis consisted in studying the effects of different groups of control factors on burnout propensity separately. While from Figures arose that the personality control variables could explain 20% of the variance of burnout inventory, while we could observe that factors related to the professional environment accounted for the 55% of observed variability.

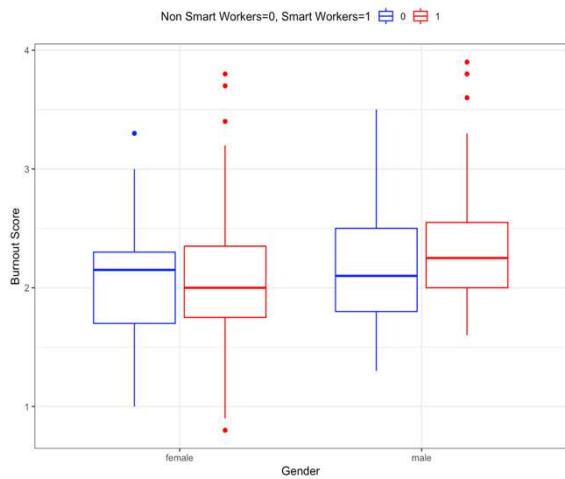
This latter value is significantly higher than the Adjusted R<sup>2</sup> from the previous figure, indicating that work related factors could explain more variability in the propensity to burnout with respect to personality variables alone. Please refer to the annex for further details on the models.

Regression Analysis - Determinants of Burnout Level	
Dependent variable:	
burnout_inv	
yes_SW	0.704* (0.379)
factor(gender)male	0.205*** (0.074)
extraversion	0.090* (0.049)
emotional_stability	-0.092* (0.048)
engagement	-0.317*** (0.083)
colleague_interaction	0.069 (0.085)
detachment_diff	0.148*** (0.032)
GrowthOpportunity	-0.152*** (0.036)
yes_SW:engagement	0.206** (0.102)
yes_SW:colleague_interaction	-0.342*** (0.101)
Constant	3.176*** (0.331)
Observations	124
R2	0.618
Adjusted R2	0.584
Residual Std. Error	0.395
F Statistic	18.259***
Note:	*p<0.1; **p<0.05; ***p<0.01

Figure 8, "Regression Analysis - Significant Determinants of Burnout level", Author's analysis

A final model was generated by doing further analysis, systematically including and removing variables by forward selection and backward elimination of control and mediator elements. Ultimately, stepAIC was used as a statistical technique to choose the final model, guaranteeing a harmonious equilibrium between the accuracy and parsimony of the constructed regression.

All the variables included in this model (Figure 8) accounted for almost 62% of the variability observed in burnout inventory score. The main explanatory variable “yes\_SW” remained significant, thus we could fairly conclude that smart working is associated with a higher propensity to experience burnout for young professionals ( $b=704$ ,  $p<0.1$ ).



“Gender\_male” continued to be constantly positively correlated to burnout ( $b=0.205$ ,  $p<0.01$ ), supporting our previous findings that males are more prone to burnout with respect to females. This can be observed in the boxplot: male presented high burnout level, especially if in smart working.

*Figure 9, "Burnout level for males and females in smart working and non", Author's analysis*

Regarding personality traits, only two seemed to significantly impact the perception of being extremely stressed, namely emotional stability ( $b=-0.092$ ,  $p<0.1$ ) being a mitigator, and extraversion ( $b=0.090$ ,  $p<0.1$ ) which instead appeared to be positively associated to burnout. As previously mentioned, individuals’ perception of their professional environment resulted those variables being able to explain most of the burnout variability. Engagement in one’s duties and work environment ( $b=-0.317$ ,  $p<0.01$ ), and the perception of having opportunity to learn and grow professionally ( $b=-0.152$ ,  $p<0.01$ ) showed negative relationships with our dependent variable, suggesting that the presence of these factors could significantly reduce the risk of burnout. On the other hand, detachment difficulty to job responsibilities is something that could feed workers’ stress ( $b=0.148$ ,  $p<0.01$ ).

The interaction term “yes\_SW:engagement” exhibited a statistically significant positive coefficient ( $b=0.206$ ,  $p<0.05$ ). This implies that, while engagement remains a significant variable, for those experiencing smart working, the positive mitigating effect that engagement has on burnout is weakened with respect to non-smart working class. Finally, the interaction term between “yes\_SW” and “colleagues\_interaction” is statistically significant and negatively correlated to burnout experienced level ( $b=-0.342$ ,  $p<0.01$ ). The findings suggested that, for individuals in smart working, having increased interactions with colleagues was a crucial factor,

and it could have stronger beneficial effects in burnout prevention than for individuals who do not engage with remote job environments.

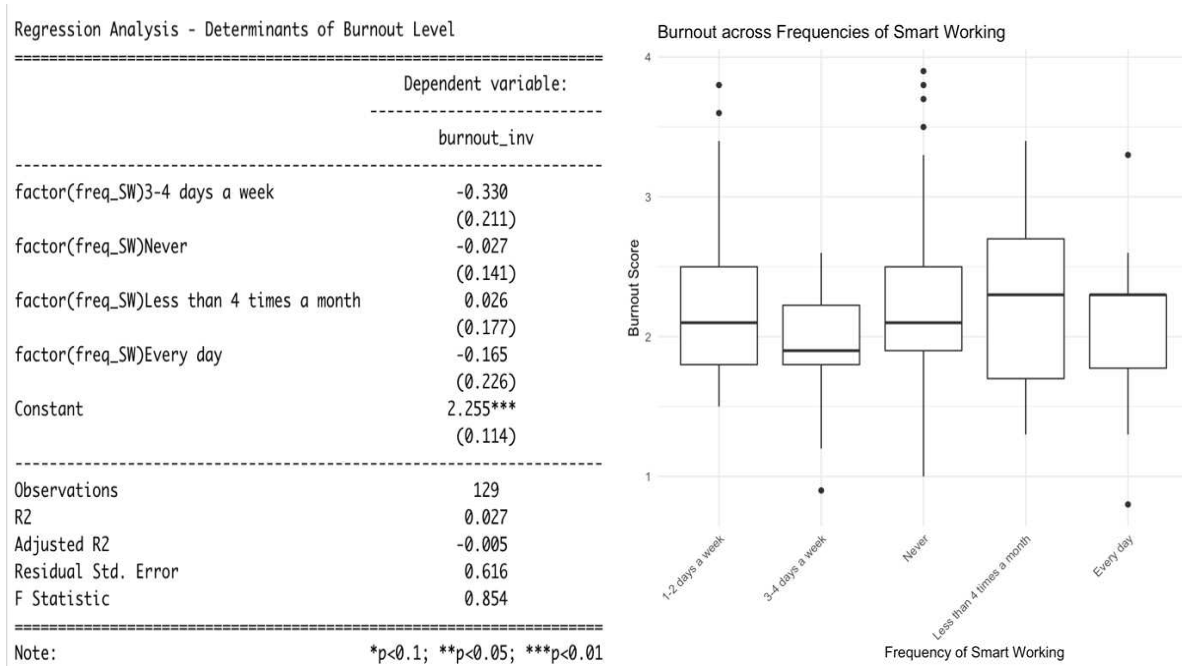


Figure 10, “Regression - Frequency of Smart Working as Determinant of Burnout, Author's analysis”  
 Figure 11, “Box-plot – Burnout scores based on Frequency of Smart Working, Author's analysis”

An additional step was performed in order to test potential different results between a full remote and a hybrid solution. Based on the analysis conducted on the young employees’ responses, regression in Figure 10 suggested that the frequency of smart working was not a significant variable, thus being unable to influence the burnout inventory score.

Despite an apparent lower burnout level for those who work remotely 3-4 days per week, the absence of a clear pattern can be also observed in the box plot on the right in Figure 11.

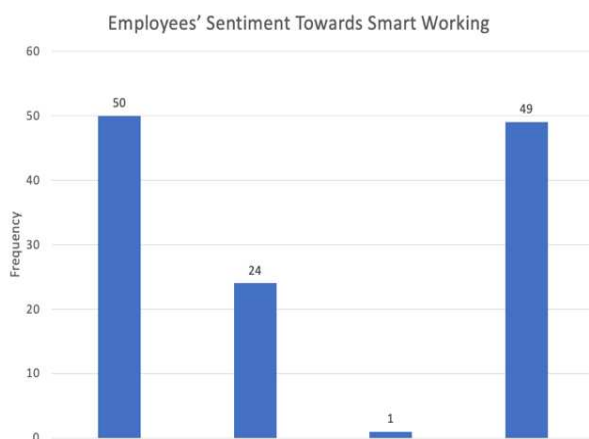


Figure 13, “Employees Perception towards Smart Working”, Author's analysis

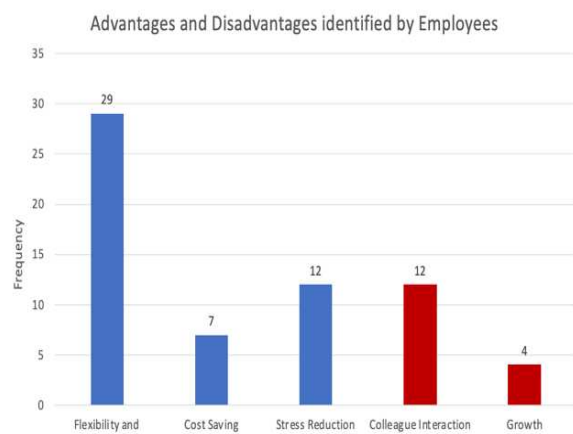


Figure 12, “Benefits and Risks of Smart Working according to the Employees”, Author's analysis

Results (Figure 13) indicates that the majority of those who have an opinion have a favorable perception of smart working. Indeed, while only one respondent classified smart working as a negative experience, 50 said the opposite, and 24 perceived it as a neutral contribution to their wellbeing.

The bar chart on the right (Figure 12) presents the results of an open-ended question analysis where participants had to share thoughts on how smart working could impact their daily life (“How do you feel about the impact of smart working on life?”). Responses were analyzed and coded and the results showed that the vast majority considered flexibility and autonomy as the main advantage of smart working, followed by cost and stress reduction. Besides, limited colleague interaction and social isolation has been recognized as the main risk of a remote job, followed by constrained growth, and learning opportunities.

## **QUALITATIVE CONTENT ANALYSIS**

Qualitative content analysis (QCA) was conducted in order to investigate data collected from the expert surveys. “QCA is systematic in nature—in the sense that the selection of content to be analyzed, the deriving of units of analysis, and the application of coding procedures are carried out according to explicit rules which are consistently applied in the process of analysis” (Prasad, 2019).

Following the interviews with 12 experts, the study was conducted in three distinct stages. The transcripts of all the interviews were analyzed and coded through Maxqda, a program that offers reliable methods for analyzing qualitative information and extracting meaningful insights. Initially, a deductive technique was used, followed by the adoption of a more inductive strategy to establish subcodes and maintain an adaptable perspective on the material. Ultimately, aggregated dimensions were established to systematically examine and discuss results.

### **Initial deductive category assessment**

Deductive category assessment was the specific QCA technique initially employed in this study. “The category system is established before coding the text; it is deduced from theory,

from other studies, from previous research” (Mayring, 2014; pp. 97). The employed category structure corresponded to the categories analyzed in the quantitative research. These codes are based on existing theory, as discussed in the Literature Review section. Moreover, the choice of using the same categories has been driven by the objective of validating prior results and gathering further insights.

Once an initial coding system was determined, all the transcribed interview records were imported into Maxqda. Line-by-line analysis of the interviews text sections was conducted, with citations being linked to each respective established class.

Variable	Value	Coding Rules
<b>Personality Traits Impact on Burnout</b>		
Extroversion	Positive Impact	Statements where high extroversion (being sociable, outgoing, energetic) is seen as beneficial in smart working settings, reducing burnout risk. While low extroversion is seen as worsening burnout propensity.
	Negative Impact	The contrary of positive impact.
	Low Impact	Statements that suggest extroversion has little to no significant positive or negative impact on the burnout risk in smart working settings.
Openness	Positive Impact	Responses where high openness to experience (creativity and open-mindedness) allows for an easier adaptation to smart working is correlated with a reduced burnout risk. Or reduced open-mindedness that can increase burnout risk.
	Negative Impact	The contrary of positive impact.
	Low Impact	Responses that indicate low openness to experience has little to no significant positive or negative impact on burnout risk in smart working environments.
Agreeableness	Positive Impact	Insights where high agreeableness (cooperativity and trustworthiness) is associated with a lower risk of burnout in smart working environments, in comparison to traditional settings. Instances where low cooperativity is related to high burnout.
	Negative Impact	The contrary of positive impact.
	Low Impact	Perspectives where agreeableness has little to no significant positive or negative impact on burnout risk within smart working settings.
Conscientiousness	Positive Impact	Observations that link high conscientiousness (organized, responsible, hard-working) with a decreased risk of burnout in smart working settings, compared to traditional work environments, while low "sense of responsibility" is associated with high burnout inventory.
	Negative Impact	The contrary of positive impact.
	Low Impact	Discussions that suggest conscientiousness (reflecting a diligent workstyle) has little to no significant positive or negative impact on the burnout risk in smart working environments.
Emotional Stability	High Impact - Positive	Statements that associate high emotional stability (being calm, resilient, and secure) with a substantial decrease in burnout risk, and high neuroticism with high risk of burnout, within smart working settings, as opposed to traditional environments.
	High Impact - Negative	The contrary of positive impact.
	Low Impact	Code for discussions indicating that emotional stability and neuroticism have little to no significant positive or negative impact on burnout in smart working contexts.

Table 3, "Coding Agenda for Personality Traits impact on Burnout", Author's analysis

Variable	Value	Coding Rules
<b>Work-Related Factors Impact on Burnout</b>		
Engagement	High Impact on Burnout	Statements suggesting that a deep emotional and psychological commitment to work in smart working contexts correlates with burnout risk compared to traditional settings.
	Low Impact on Burnout	The contrary of high impact.
Detachment Difficulty	High Impact on Burnout	Instances demonstrating that challenges in detaching from work from significantly impact burnout risk.
	Low Impact on Burnout	The contrary of high impact.
Work-Life Balance	High Impact on Burnout	References to a harmonious work-life balance contributing to a lower burnout risk in smart working compared to traditional work settings. Instances where a poor work-life balance is associated with an increase in burnout risk within smart working environments.
	Low Impact on Burnout	The contrary of high impact.
Support	High Impact on Burnout	Statements highlighting that robust organizational support in smart working contexts effectively lowers the burnout risk. Comments connecting insufficient organizational support with a higher incidence of burnout in smart working environments.
	Low Impact on Burnout	The contrary of high impact.
Management	High Impact on Burnout	Mentions of management practices that are effective in reducing burnout risk in smart working environments. Discussions where poor management practices are linked to higher burnout risk in smart working settings.
	Low Impact on Burnout	The contrary of high impact.
Growth Opportunity	High Impact on Burnout	Instances linking the presence of professional growth opportunities in smart working to a reduced burnout risk. References that a lack of growth opportunities may lead to job stagnation and increased frustration, raising the risk of burnout.
	Low Impact on Burnout	The contrary of high impact.
Colleague Interaction	High Impact on Burnout	Examples where strong, positive interactions with colleagues in smart working settings are tied to a lower burnout risk. Instances where limited or negative interactions with colleagues in smart working environments are correlated with a higher burnout risk.
	Low Impact on Burnout	The contrary of high impact.

*Table 4, "Coding Agenda for Work-related factors impact on Burnout", Author's analysis*

## Interviews Coding in Maxqda – addition of subcodes inductively

After the first deductive coding step, all the segmented categories were examined again. The process of coding was dynamic, flexible, and continues adjustments were made. Using a more inductive approach, some codes were merged, while several other were split into subcodes. This phase was crucial for maintaining a receptive mindset throughout our investigation, being able to capture all the important elements that could have been previously overlooked but revealed to be significant during the expert interviews.

Variable	Value	Coding Rules
<b>Additional Crucial Factors</b>	Personal factors and Self-awareness	Code segments discuss individual personality traits, self-awareness levels, and their impact on adaptation to smart working environments.
	Social factors	Include discussions about interpersonal relationships, team dynamics, and the social support structure within the smart working framework.
	Physiological factors	Code data relating to physical health, ergonomic considerations, and other biological or physiological impacts of smart working.
	Organizational factors	Code mentions of organizational structure, culture, and the institutional policies that affect the implementation and outcomes of smart working.
<b>Effective Strategies</b>	Support and Training	Include mentions of programs or initiatives aimed at providing employees with the necessary skills and support for effective smart working.
	Internal policies	Code discussions about specific policies within the organization that govern or influence smart working practices.
	Communication and Feedback	Code any references to the mechanisms of communication and feedback that enhance or hinder smart working.
	Leadership and organization	Include segments discussing the role of leadership and organizational strategies in managing and facilitating smart working.
<b>Advantages/benefits of SW</b>	Flexibility and Work-life balance	Code for mentions of increased flexibility in work hours or location and its impact on balancing personal and professional life.
	Time and cost saving	Include references to reductions in commuting time, lower office maintenance costs, or other financial and temporal efficiencies gained from smart working.
	Stress reduction	Code for discussions highlighting reduced stress due to flexible working conditions or other smart working benefits.
	Employees satisfaction	Include any mentions of improvements in employee morale, job satisfaction, or general well-being attributed to smart working practices.
<b>Disadvantages/risks of SW</b>	Social isolation	Code segments that discuss feelings of loneliness, isolation, or disconnectedness resulting from remote or smart working arrangements.
	Learning and development	Include discussions on the perceived barriers to professional growth, learning opportunities, or career development in smart working settings.
	Blurred boundaries	Code for mentions of difficulties in separating work and personal life, leading to work encroaching on personal time or space.
	Negative organization	Include references to any negative impacts on organizational dynamics, such as reduced team cohesion or organizational disconnect due to smart working.
<b>Smart Working &amp; Employee Well-being</b>	Positive Influence	Smart working should be referred as associated with improvements in well-being and decreases in burnout risk.
	Negative Influence	Smart working should be referred as linked to negative outcomes for well-being and potential increased burnout risk.
<b>Employee Sentiment Toward Smart Working</b>	Positive General Sentiment	Statements that reflect positive reactions or attitudes toward smart working, including any mentions of improved well-being, work satisfaction, or other beneficial aspects.
	Negative Consequences of desire	Statements that reflect negative reactions or attitudes toward smart working, including any mentions of isolation, work-life imbalance, or other challenging aspects.

Table 5, "Additional Subcodes created based on the Interviews Results", Author's analysis

## Creation of aggregated dimensions

As the conclusive step, the final list of codes was grouped together based on similarities, building main macro categories (i.e., broader themes) in order to be able to answer the research question in a more structured way. The method of thematic analysis by Gioia, Corley, and Hamilton had a significant impact on the coding process utilized in this study.

The term "First Order Codes" refers to concepts that were found to be significant to the topic's experts and were consistently mentioned throughout the interviews. Second Order Codes refer to the Theoretical Categories that were derived via the analysis of various codes. Aggregate Theoretical Dimensions refer to specific topics that are categorized under wider aggregate theoretical dimensions, achieved through a higher level of abstraction (Gioia et al., 2012).



Figure 14, "Codes Cloud - indicating codes frequencies", Author's analysis

Word	Word length	Freque...	%	Rank	Documents	Documents %
work	4	690	5,56	1	12	100,00
smart	5	316	2,54	2	12	100,00
not	3	251	2,02	3	12	100,00
burnout	7	202	1,63	4	12	100,00
people	6	174	1,40	5	12	100,00
employee	8	155	1,25	6	12	100,00
there	5	151	1,22	7	11	91,67
company	7	143	1,15	8	12	100,00
young	5	124	1,00	9	12	100,00
very	4	105	0,85	10	11	91,67
important	9	98	0,79	11	11	91,67
then	4	97	0,78	12	11	91,67
stress	6	89	0,72	13	12	100,00

Table 6, "Frequency Table of the most recurrent words during Expert Interviews", Author's analysis

## RESULTS QUALITATIVE ANALYSIS

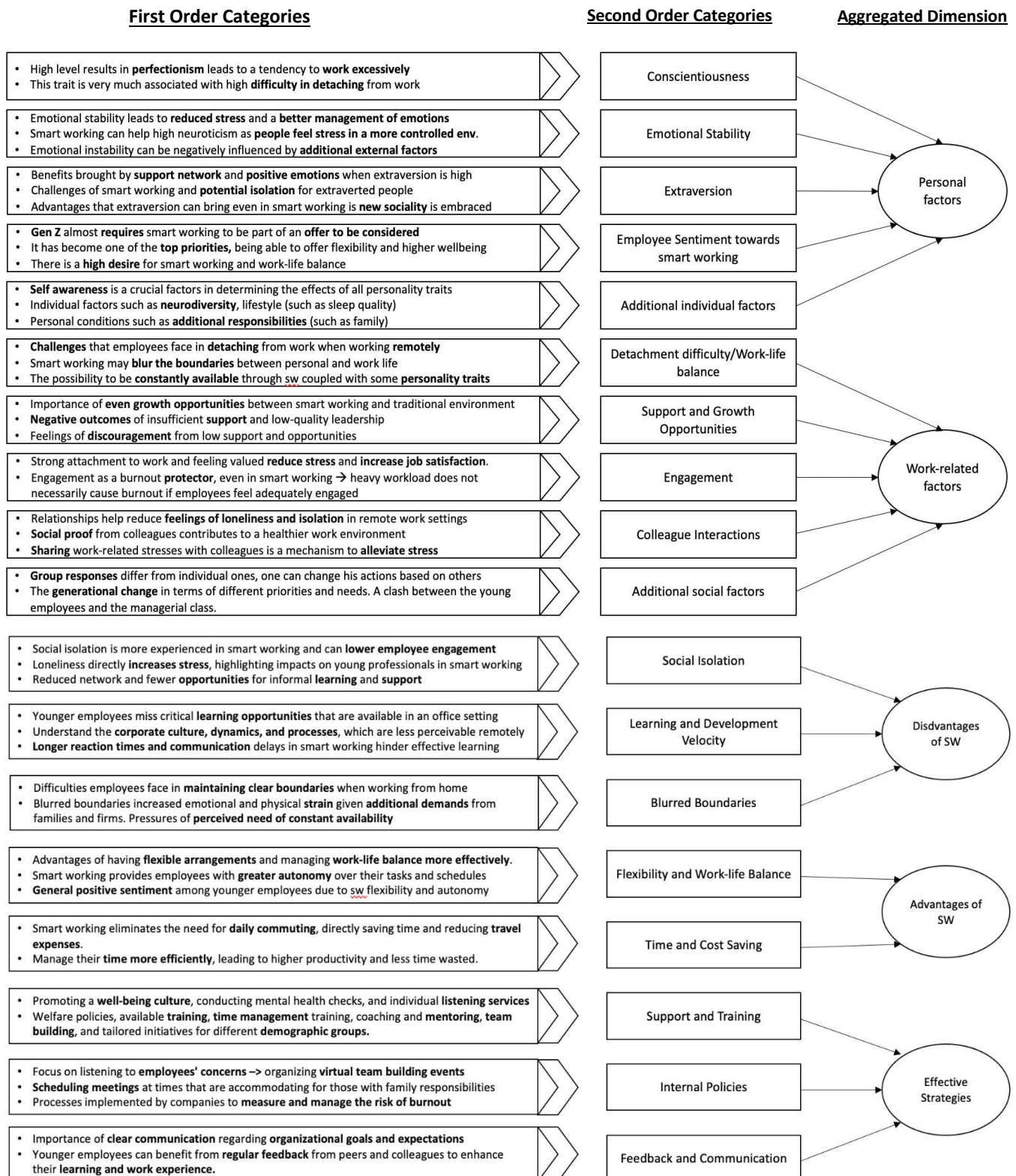


Figure 15, "First and Second Order Codes, and Aggregated Dimensions", Author's analysis

Second-order themes	Representative First-order data
Conscientiousness	<p>“Conscientiousness would increase massively the stress level. What conscientious people are likely to be doing in smart working is that they never switch off, due to perfectionism.”</p> <p>“Relationship can be reversed in smart working where people tend to work more and conscientiousness may facilitate burnout”</p>
Emotional Stability	<p>“A high degree of emotional stability helps a person to control stress levels.”</p> <p>“Having some smart working helps to relax, and this might have a stronger effect on neurotic people.”</p>
Extraversion	<p>“Extroverts have a lower tendency for burnout due to their strong support network”.</p> <p>“Should their job prevent them from being able to maintain social interactions their likelihood of experiencing burnout episodes can increase.”</p> <p>“For extraverted people, if smart working is a way to encourage people to work with more people, then it is great”</p>
Employees Sentiment	<p>“Generation Z, workers who demand minimum smart working up to the full remote.”</p> <p>“There is a desire for flexibility, that is the desire to be able to better organize for themselves.”</p> <p>“Priorities and needs have changed. I believe that the vast majority does not accept a new opportunity if it doesn’t include smart working.”</p>
Additional Individual Factors	<p>“But I would also add to the Big 5 self-awareness as an important characteristic able to mediate the potential risk of smart working.”</p> <p>“Another factor that we need to take into account would be neurodiversity, as this can have an impact on stress level and perception of working environment.”</p> <p>“Personal effects have also a role because then there are those who have to manage a family.”</p>
Detachment Difficulty	<p>“The difficulty to the detachment increases with the smart working, indeed smart working leads you to work more with the digital tools, so this leads you to remain attached.”</p> <p>“Company built the remote relationships on the assumptions that employees are always available.”</p> <p>“The key to burnout related to the smart working is the difficulty of detachment, this is main because detachment brings paranoia.”</p>
Support, Organization, Management	<p>“Support is fundamental to ensure protection against burnout in smart-working contexts.”</p> <p>“Support perceived by employees and provided by the company, managers, leaders, is of utmost importance in preserving and growing employees wellbeing.”</p> <p>“New leadership is a fundamental lever to ensure the wellbeing of young professionals and help people to be able to work in smart working: everything passes through the leadership channels.”</p>
Engagement	<p>“Workers who perceive a greater involvement with the work certainly have a lower level of burnout as they perceive the value and importance of their contribution.”</p> <p>“Smart working influences positively the relationship with the company and the experienced engagement.”</p> <p>“Because if employees have a very heavy workload but they also have serenity, involvement, expertise you overcome all.”</p>

Colleague Interactions	<p>“The first feedback is from peers, is given by colleagues so in this case it is very important to have a social proof.”</p> <p>“Colleagues plays it a very important role in burnout and the moment you have a positive colleague’s relationship since we are social being this protects us from the perception of stress.”</p> <p>“In fact, the sharing of experiences, moments of stress and work, usually helps the employee to experience a lower level of burnout.”</p>
Additional Social Factors	<p>“Young people compared to my generation have just different young priorities in job search.”</p> <p>“If you consider a group of people with very different personalities, and if the company is able to create an enriching environment when they are in the office, then in my opinion the answer differs. There is a group response vs. single response, another crucial factor to consider in the analysis.”</p>
Social Isolation	<p>“Loneliness and isolation is a fundamental element in creating stress and burnout, being in itself the greatest potential disadvantage of smart working.”</p> <p>“If you never go to the office, you miss the opportunity of the open position, of interacting with colleagues, and be quicker in learning.”</p> <p>“The risk for young professional to perceive more stress due to that element of isolation plays a very important role, maybe because it becomes difficult to interact with other people.”</p>
Learning and Development Velocity	<p>“With smart working we give up working in an environment where younger employees can also learn with a glimpse of the eyes, where they can escalate some skills the knowledge more quickly and efficiently.”</p> <p>“For young professional who need to learn a lot the non-immediate communication typical of smart working can be particularly harmful.”</p> <p>“So, the understanding of the corporate environment would be distorted if there is the first approach online.”</p>
Time and Cost Savings	<p>“Another important advantage, smart working eliminates the costs (in terms of money but above all in terms of time) of commuting.”</p> <p>“Possibility not to be in conditions of stress that are affected by traffic, having to move from home for a job, to go to work especially in metropolitan cities like Milan but also Rome.”</p>
Support and Training	<p>“It is important to promote a culture of well-being by organizing awareness-raising events on mental health and the comparison of experiences, and also by establishing an individual listening desk.”</p> <p>“Great results can be also achieved through mentoring.”</p> <p>“Companies have then made the decision to support their own people through courses of training oriented to time management.”</p>
Internal Policies	<p>“There should be also a rule in the organization to create small temporal breaks in the performance of their work activities.”</p> <p>“For example, processes that companies implement to make people feel that are important, but also listen to them, listen to the need, as burnout does not happen very quickly.”</p> <p>“Some tools today can be very effective in capturing the emotions, and in my opinion could be very useful also in human resources and wellbeing processes.”</p>
Feedback and Communication	<p>“Adopting clear communication regarding daily, weekly, monthly goals and to make them feel considered and close to the company.”</p> <p>“Another thing that in my opinion very important is the feedback culture: the ability to create a language and a protected space of sharing and mutual openness and authentic relationship with your boss with your colleagues.”</p>

Table 7, "Representative Supporting Data for each Second Order Theme", Author's analysis

## Relevant Personality Factors

Conscientiousness is a personality trait that has found to be consistently related to the propensity to burnout. While a good level of this trait is recognized to be necessary to be motivated, disciplined, and engaged with one's job, very high level of conscientiousness leads to perfectionism, that - especially in smart working context - can enhance detachment difficulty from work responsibilities and hinder the right work life balance.

Imposition of clear boundaries has crucial importance for these individuals. This of course can be mediated by a good self-awareness, management of the company, and some internal policies that give feedback, recognize efforts, and force people not to work or not to set meetings beyond specific time of the day.

Emotional stability was considered to be an important trait in regulating the response to acute stress levels, being a valuable resource against burnout. People with high level of neuroticism can be helped by smart working, as being in more familiar environment can alleviate the perceived stress. Conversely, other views sustained that having low emotional stability can drive burnout even more quickly if the employees are in smart working and perceive to be abandoned. The effect of neuroticism can be also mediated by the support received by the company.

Furthermore, being highly extroverted has been considered as an important resource against burnout in traditional working contexts. However, extroverted people may feel more isolated and bored working from home (provided that there is not the right idea of smart working as working from "everywhere"). On the other hand, if a new sociality is embraced, then extroverted people can even benefit from smart working modality. Thus, we concluded that the impact of extroversion on burnout propensity in smart working context vs. traditional contexts is not uniform, but it may depend on external factors.

Agreeableness and openness to experience have not been found as highly influential factors, with a uniform direction of the impact, thus they were decided to be not further considered.

Apart from the canonical personality traits identified by the Big Five framework, what emerged to be important was self-awareness. Indeed, self-consciousness would help individuals to manage their emotional responses, and accepting their "true self". Having high self-awareness

is an important protector against burnout, but it needs time to develop, and young employees may lack it due to their age.

Additional factors which have been identified as recurrent themes are more related to strictly personal conditions such as neurodiversity, inner fragilities, lifestyle, and familiar responsibilities. All these can be specific sources of stress, potentially contributing to the emergence of burnout.

A consistent conclusion regarded the fact that, while personality traits could explain why and how individuals respond differently to the same stressors, the more crucial factors and explaining elements of burnout are related to the working environment. While personality factors are considered response “mediator”, they are not sufficient to prevent or guide workers in experiencing burnout, their effects are subject to the organization, leadership, and culture within the company.

Finally, the initial sentiment of young employees towards smart working has been considered. It resulted that Gen Z have a strong desire for smart working. Policies supporting flexibility are increasingly seen as a company benefit, and have become a top priority for new hires, being considered as a synonym of work-life balance and personal well-being.

### **Relevant work-related factors**

The perceived work-life balance, and detachment difficulty from job responsibilities, have identified as crucial factors in explaining burnout, especially when working remotely.

The primary motivation for smart working adoption was to achieve a better work-life balance, interpreted as one of the most powerful resources against burnout and stress. However, if the working situation is not well handled, the challenge of maintaining balance may be exacerbated by the difficulties of detachment, particularly in the circumstances of remote employment. This vicious mechanism can ultimately result in burnout over time.

The difficulty of detachment is primarily driven by technostress, porous boundaries between work and personal life, and specific personality traits such as conscientiousness. As a result, individuals engaging in smart working tend to work extended hours. The business and its leadership have the duty to provide education and assistance to workers in attaining a

harmonious work-life balance, avoiding excessive workloads, discouraging continual availability, and banning meetings at unconventional times.

Colleagues' interaction was also found to have a fundamental role in preventing burnout, even more importantly in remote job environments. In smart working, where social isolation and the sense of loneliness are common consequences, the lack of peer interactions can enhance the sentiment of being abandoned. According to our experts "smart working does not isolate, but it should be intended as a new sociality". If this fails to happen, then this element can become a demand instead of a precious resource. This phenomenon increases when it comes to young employees and new hires, who need time in presence to get to know colleagues and be able to maintain relationships online.

The level of perceived support and growth prospects were also accounted as vital for the well-being of young professionals, particularly in circumstances when they may experience a lack of contact due to the physical distance. Burnout may result from emotions of alienation and disconnection brought on by the perception of a lack of interest by superiors. This way, the prospects of growth are also hindered. The business should put a strong emphasis on building trust and ensure young employees feel appreciated, supported, engaged.

Job engagement has a crucial role in mitigating burnout among employees. Higher engagement and emotional connection to the job was found to be correlated with lower levels of stress. According to our findings, engagement is also crucial in smart working, mitigating some disadvantages that may arise from it. The business culture is essential for fostering employee involvement and acknowledging their potential. "A heavy workload does not inevitably lead to burnout if employees feel engaged, calm, and satisfied".

Additional social factors have been identified as recurrent themes in shaping responses to stressors. For example, the generational change that the world of work is facing nowadays seemed to play an important role. There is a new importance given to wellbeing by young employees, which however is very distant from management and leadership class perspective, who always had different, more material, needs. This generational change in priorities could translate in a continuous misunderstanding. Furthermore, importance is given also to a group response vs. individual response. Indeed, people may react differently based on colleagues. Sharing and social exchange, together with a more comprehensive understanding of needs and

priorities by the leadership class, are valuable resources protecting young employees from burnout risk.

### **Disadvantages and risks of smart working**

The feeling of isolation was seen as the primary disadvantage of remote work, which might possibly result in exhaustion. This is especially important for young workers, since they would need to familiarize themselves with colleagues, the organization, and the overall work environment. Over time, burnout may occur in young workers who lack sufficient support and guidance in adopting efficient work practices, leading to feelings of disorientation and discouragement.

Another significant drawback that has been highlighted is the limited chance for rapid and efficient learning and growth. Inexperienced workers, who lack proper training in efficient remote work practices and are completely isolated from the office environment, are more likely to miss out on learning opportunities. The lack of quick communication inherent with smart working may cause stress for unskilled workers and hinder their ability to form genuine relationships. This, in turn, might result in dissatisfaction, eventually contributing to burnout. Furthermore, contrary to its initial objective, smart working may also blur lines between personal and professional life. If proper agreements and policies are lacking, imbalance might be intensified by the apparent need to always be available to both family members and superiors.

### **Advantages and benefits of smart working**

The advantages of smart working - in its true essence of being "smart" vs. teleworking - include flexible working schedules, less commuting time and expenses, heightened autonomy and control, and improved retention of young workers. Out of all the benefits that have been identified, two have emerged as the primary and most influential ones.

When well-managed and structured, smart working provides individuals with flexibility, autonomy, and a harmonious work-life balance. In addition, remote work also obviates the need for commuting, resulting in time and cost savings. The benefits that come with smart working can lead to a greater sense of well-being, reduce feelings of frustration, and burnout.

Since COVID-19 pandemics there is an increasingly favorable attitude towards smart working by recent graduates and Gen Z, who see in it a real opportunity, in terms of greater control and autonomy. Indeed, “it is absurd to think not to propose it (where feasible) because it would mean giving up attracting talent and keeping up with the target market”.

### **Effective strategies**

There have been identified specific strategies and policies that the companies can implement in order to reduce the risk of burnout in smart working context vs traditional professional environments. Everything stems from a quality leadership and good organization.

The most important action identified that helps young employees was to provide them with support and training, intended as the promotion of a culture of well-being, access to mental health check and individual listening desks. Mentoring and coaching can both decrease the perceived stress and anxiety deriving from a new professional environment, making feel the young employees more important and included. Training can also regard time management and team building, providing employees with tools to protect against potential burnout in smart working.

As a second element, we found effective communication and a culture of feedback. In smart working systems feedback gain an enhanced importance, so that young employees have a direction, they feel supported, and they feel they have opportunities to learn from their own mistakes. A clear communication explaining expected goals and the available tools to attain those goals is also a crucial resource to improve wellbeing and avoid burnout. Once again, the responsibility for everything seemed to lie on the shoulders of companies and leadership.

Lastly, internal policies, both written and non, play a very important role in making young professional feel protected. Virtual team building attentions are highly overlooked but may have significant positive impacts. Policies should be set in order to define and communicate the respect of clear boundaries between personal and professional sphere. All these strategies should have a single aim: employees, and their mental health, should feel valued and important, especially in smart working.

## **Smart working and burnout**

Smart working can have both beneficial and detrimental effects on the wellbeing of young employees. The answer was not uniform, as various factors were taken into account to influence and regulate this connection. Nevertheless, a persistent idea has been recognized.

Smart working is highly regarded for its potential to offer numerous advantages to young employees, such as increased flexibility, autonomy, and a greater sense of control over their daily lives. However, one of the main causes of burnout related to smart working is that it often reduces to be “teleworking”, so simply working from home, at strict predefined schedules, with no flexibility or social interaction. Additionally, negative impacts of smart working on employee’s wellbeing are consistently referred as aftermaths of the pandemic situation: during Covid, people tended to be always available, and they were constrained to work from home; this contributed to create a toxic culture of smart working, which still survives today.

A complete remote work arrangement for young employees and new hires was not regarded as the optimal option. Excessive engagement in remote work, especially among young workers, might lead to increased feelings of isolation, lack of enough stimulation and opportunities for successful growth. Hence, maintaining a well-balanced approach to smart working during first stages of career was considered essential in order to avoid any detrimental emotions that may ultimately result in burnout.

By incorporating smart working into the corporate culture and offering training to both young employees and managers, the probability of experiencing burnout would be significantly diminished.

## **An umbrella theme: organizational culture, management, leadership**

Corporate culture, management and leadership was consistently considered to be the most influential element, in determining the actual impact of smart working on propensity to burnout. Indeed, as shown in the figure below, the theme of corporate culture and organization appeared significantly more frequently than any other code, indicating its above-average influential power among the work-related factors (being themselves considered more explanatory).

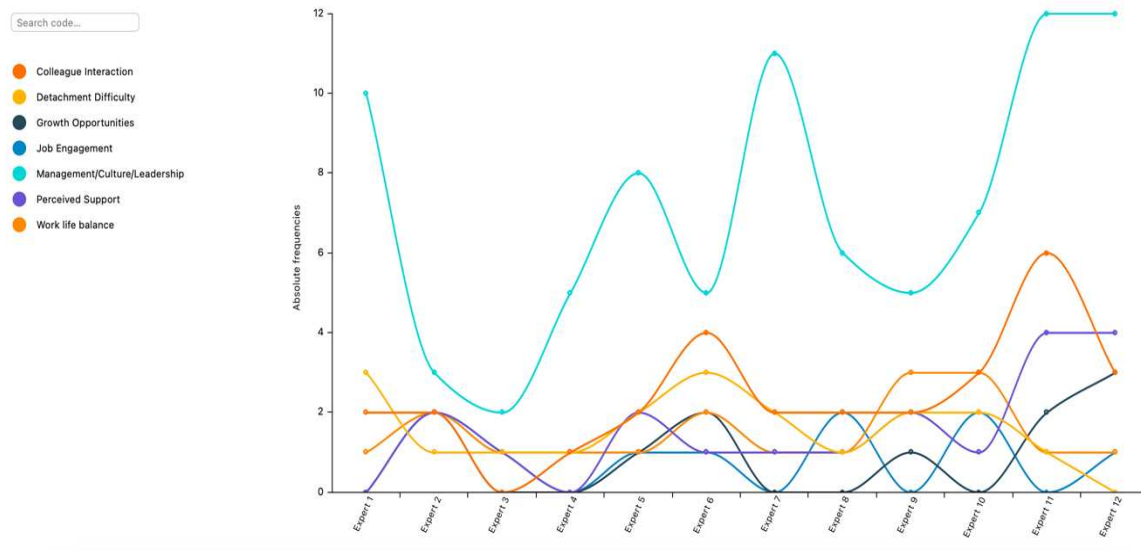


Figure 16, "Code Trends", Author's analysis

“Despite all the variables we can consider, toxic corporate cultures are still the first triggers of burnout”. “The main problem leading to burnout in young employees is the non-commitment of companies to focus energies and resources on their wellbeing, but instead they focus on a sort of greenwashing of wellbeing.”

Management, leadership, and organizational practices influence and mediate all the potential influences of the other variables. Therefore, according to the unanimity of our experts’ opinions, the key to burnout prevention relied in effective management, quality leadership, and a clear organization, committed to improve wellbeing and mental health of employees.

“Leadership should be the main focus of the work to be done to make smart working efficient and prevent any form of burnout.” Among other important topics, one consistently emerged in our study. Companies should embrace new assessment methods that does not necessarily depend on working hours, but rather on goal-oriented work.

## OVERALL RESULTS

Comparing the results that we got from the quantitative and qualitative investigation, we observed some common points but also some divergences on the potential direction of impact of key factors, intended as resources or demands for employees in smart working.

First of all, smart working is consistently considered to be an influential variable in studying employee's wellbeing and propensity to burnout. While in our quantitative results it was positively correlated with the burnout score, from the interviews it resulted to be more of a "double-edge sword", being capable of impacting the level of stress in opposite direction simultaneously, while representing a particularly riskier element for new hires if not well managed. Other factors were considered, to be able to give a more comprehensive response.

Findings regarding the correlation between the frequency of smart working and burnout propensity were inconsistent. Based on our survey responses, there was no notable connection between the number of days spent at the company and employee wellbeing. However, our qualitative results indicate that working remotely for extended periods, particularly at the beginning of one's career, can have a detrimental impact on employee experience and increase the likelihood of burnout. Similarly, regarding gender, while during interviews it was never mentioned to be a relevant factor, survey results provided us with a consistent significance of the variable, showing males to be more prone to experience burnout than female. Instead, as far as advantages and disadvantages of smart working are concerned, our analyses reported consistent findings for all the elements except for work-life balance; indeed, from a managerial point of view, the desire to achieve integration, may result in blurred boundaries if not appropriately supported by the right policies and culture.

Slightly divergent results appeared regarding the personality factors. Indeed, from our questionnaire results, we could conclude that only two traits could significantly explain the variability in burnout score, namely extroversion and emotional stability, being the former intended as a demand, and the latter as a resource. Nevertheless, none of them was considered to have a different impact between the class of smart workers and non. Qualitative findings confirmed that both traits, extraversion and emotional stability, do influence the experience of stress. However, both were recognized as important factors that protect against burnout, in traditional working environments. While this result was confirmed for emotional stability in

smart working contexts, the specific impact of extraversion in remote settings was not clearly determined. Moreover, a significant degree of conscientiousness was identified as a key factor in explaining the likelihood of experiencing burnout, particularly in relation to the challenge of detaching in smart working.

It is worth noting that, although differences in the results were identified, both analyses indicated that personal factors do not primarily explain or cause burnout among young employees in relation to smart working, suggesting that other factors should be taken into consideration. This was a crucial point of convergence.

Finally, regarding the work-related factors initially explored, results seemed to be more harmonious. Colleagues' interactions, support, growth opportunities, and detachment difficulty consistently resulted to play a very significant role, with the latter one being considered crucial by our qualitative results in explaining burnout in remote jobs. Similarly, the role of support and growth in smart working as been particularly emphasized by our interviews' conclusion. While engagement has been uniformly recognized as a significant variable, certain degree of uncertainty is reported regarding the direction of its impact in smart working contexts. Qualitative analysis also highlighted the importance of other variables that were considered worth investigating, and the effect of which is presented.

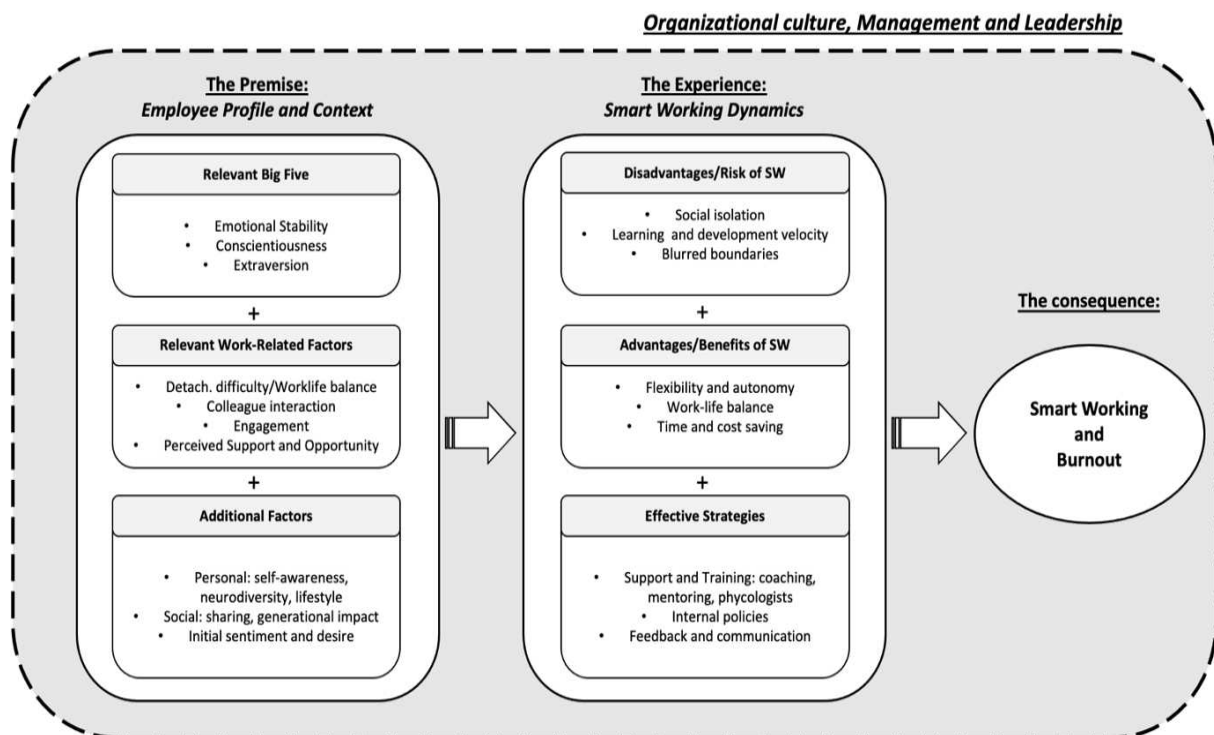


Figure 17, “Final model explain burnout in smart working”, Author’s analysis

The figure presented above has been drawn on the different aggregate dimensions analyzes (Figure 15) and considering the interaction between quantitative and qualitative results. We identified three main components being able to explain the propensity to burnout of young employees in smart working context. The first component “employee profile and context” was built to comprise *a-priori* conditions, intrinsic and extrinsic variables related to the employee and professional environment, existing before the working experience.

This premise includes relevant personality traits identified among the Big Five framework, namely emotional stability, conscientiousness, and extraversion scores, as well as significant organizational factors that workers daily face, specifically detachment difficulties, colleague interactions, engagement, perceived support and opportunities for growth. Lastly, some additional factors that consistently emerged from our qualitative analysis were considered worth mentioning: first, self-awareness was accounted to be very significant, together with other personal conditions; second, social factors such as generational change, in terms of shifts in priorities and approach to work. General sentiment towards smart working was also thought to play a significant role in shaping employees experience of smart working.

The middle component of this framework aimed to show how this journey pass from potential predispositions of young professionals to the real-world mechanisms. The concrete experience of smart working, referred to as “smart working dynamics”, has been found to build on these personal, social and organizational foundations and, accordingly, the young professional could perceive different advantages or disadvantages.

While workers might benefit from greater autonomy, improved work-life balance, and savings from commuting or living in very expensive cities, they face extensive risks. We concluded that the major factor that can increase propensity to burnout when working remotely is the feeling of social isolation, steaming from the lack of colleague interactions, and resulting in a sense of inadequateness and abandonment. Together with this, blurred boundaries and feeling of constraint opportunities to learn and grow may negatively influence young professional wellbeing. Some effective strategies planned and offered by the companies to the employees were also considered to have a critical impact on the perceived working dynamics, and the overall experience of work.

The final outcome of the model is the wellbeing of young employees while engaging in smart working practices, intended as burnout score and propensity. The positive sentiment towards autonomy increasingly led young employees to demand smart working. However, this desired flexibility was not always supported by positive results in terms of wellbeing. Indeed, according to our survey results, despite the great enthusiasm in smart working, respondents reported high degree of burnout scores if working remotely. This was also supported by our experts point of views who, despite acknowledging the potential advantages of this work modality, were highly aware of the risks.

Surrounding and influencing all variables and related interactions is the fundamental role of companies, managers, and leaders. How smart working is organized, how managers approach young employees, how leaders convey visions, resulted to be the enveloping driver, as well as the only variable capable of shaping the potential impacts of all the other factors. It is an umbrella dimension that dictate the rules of the game. The success of individuals entering the workforce was found to be contingent upon the guidance and expertise provided by their superiors; in the same way, the drawbacks of agile working were conditioned on corporate culture, leadership, and management.

“The quality of our life can be definitely improved by smart working, but I don’t think that it is sufficient as an insurance to keep young professionals out of burnout. It really depends on the management, on the organization of the company that provides the opportunity. The real differentiator in my opinion is how the company can manage the smart working.”

According to our findings, the primary role of organizations could help explain the existent gap between the positive perception of smart working, and the actual consequences of it.

This model illustrates the substantial influence that company culture, management, and leadership have on the results of several interconnected factors. Finally, the perceived efficacy of management and firm leadership were acknowledged to be the most significant factors affecting human reactions to smart working.

## DISCUSSION

### TRIANGULATION OF RESULTS

This thesis acknowledged the ongoing academic debate (Galanti et al. 2021) regarding the advantages and disadvantages of smart working, considering various factors that may impact the effectiveness of its adoption. With this objective, based on the Job Resources-Demands model (Demerouti et al., 2001; 2021), we intended to understand and explain which personal and work-related factors could best explain the mechanism of burnout in smart working, acting as significant resources or demands for the perception of stress.

First, the results of this study highlighted the importance of work-related factors in shaping employees experience and wellbeing (Adriaenssens, De Gucht and Maes, 2015; Stanley and Anand Jerard Sebastine, 2023), over personality factors (Drayton, 2021). Technostress and detachment difficulty have been confirmed as important job-related demands arising from smart working. These findings are supported by studies conducted by Atanasoff and Venable (2017), Allen et al. (2019), and Golden and Eddleston (2020).

However, our results on the impact of smart working on work-life balance were inconclusive, consistently with current literature (Allen, 2019; Galanti, 2021; Alexander, 2021; Ghislieri, 2023). Moreover, the presence of role ambiguity was found to be closely linked to the level of supervision received. This connection was reflected in the variable labeled as "perceived support and opportunity." The significance of the latter has been favorably acknowledged by our study, highlighting prior knowledge (Acker, 2003; Laschinger, 2015; Stanley et al., 2023). Another aspect addressed in previous research (Errichiello and Pianese, 2020), which aligned with our analysis, pertained to the limited prospects for career development, accounted as a significant disadvantage that could potentially contribute to higher burnout scores, particularly for young employees (Bakker, Demerouti, & Sanz-Vergel, 2022).

Further investigations on the effects of detachment difficulty, perceived support, and growth opportunities in smart working are encouraged. Besides, this study more definitively acknowledged the significance of colleague interactions and engagement in influencing answers in remote workplace environments compared to traditional office settings. In fact, consistent findings confirmed engagement to be an important protector of job burnout, as

previously suggested by Obschonka et al. (2023). Nonetheless, our results provided weaker evidence that involvement can play a positive role when employees go in smart working, as suggested by past findings (Alexander et al., 2021).

Furthermore, our conclusions matched the existing research (Inail, 2021; Gill, 2023), indicating that individuals who work from home on a regular basis experience feelings of loneliness and isolation. If this emotion persists, it may significantly contribute to the probability of workers encountering occupational burnout (Stanley et al., 2023). Despite this, our conclusions slightly differed from the existing literature which asserts that online networks are completely incapable of making up for the limited chances of personal interaction (Errichiello and Pianese, 2020). Indeed, our findings convey a certain degree of trust in smart working in compensating for social relationships, as a responsibility of the company to create suitable communication channels and promote a "new sociality".

Regarding the main identified advantages, flexibility and the desire for autonomy have been recognized as significant factors that motivate employees to seek smart working (Wigert, 2022; International Labour Organization, 2023), regarded as the most important potential benefits of remote jobs (Cohen, 2022; Kortsch et al., 2022). Time and cost savings has been also strongly confirmed as an important perk of remote jobs (Fraccaroli et al., 2021). Expanding upon the impact of work-related factors, it has been recognized that primary prevention strategies are essential in reducing organizational risk factors that contribute to burnout. This aligns with the existing literature on the subject (Ahola et al., 2017).

As far as internal assets are concerned, this study agreed on the fact that the ability of managing work responsibilities is impacted - to a certain degree - by an individual's personality, which in turn affects perceptions of their professional setting (Edu-Valsania et al., 2022; Bashkirova et al., 2023). Overall, in line with previous findings, it was concluded that "these personality factors have a potent influence on our behavior in smart working, but they don't determine it entirely" (Drayton, 2021).

Although there is some significance in openness to experiences in preventing burnout in both traditional and smart working environments, the findings slightly deviate from previous research, which suggests a stronger association between this trait and burnout prevention. Furthermore, our study did not confirm the significance of agreeableness as a protective factor

against burnout. Emotional stability has been verified as a crucial characteristic for safeguarding the well-being of employees, particularly in the context of smart working. However, our study findings contradict the existing literature regarding conscientiousness: high levels of conscientiousness resulted to have a detrimental effect on burnout scores, particularly in the context of smart working. Regarding extroversion, although we could reasonably acknowledge its importance, we were not able to conclude on the direction of its influence.

Nevertheless, it is worth noting that all the above-mentioned results are evidence obtained by prior studies which did not consider the potential impact of smart working (McCrae and Costa, 1987; Bianchi, 2018; 2021; Pérez-Fuentes et al.,2019; Roloff et al.,2022; Bashkirova et al.,2023; Angelini, 2023; Wang at al.,2024; among others). Thus, additional studies on the intersections between personality and burnout in smart working are recommended.

## **CONTRIBUTION TO EXISTENT LITERATURE**

This thesis has been originated in response to demands from academics in the field, with the objective of building upon the existing literature and filling a gap into the current body of research, examining how smart working could impact the propensity of burnout, ad considering both personality traits and other demands and resources specific to remote jobs.

Our results were promising. First, smart working was confirmed to be a significant variable in explaining the variability of potential burnout among young Italian employees. Second, although the impact of smart working on young individuals remained inconclusive in terms of its overall positive or negative effect, as supported by previous research (De Carlo et al., 2022; Hall et al., 2023), other noteworthy factors have been discovered.

Based on the triangulation of results, it was difficult to draw definitive conclusions about individual traits, as no previous studies has been conducted on personality and burnout in smart working contexts. Still, certain valuable observations were achieved, which merit further attention in future investigations. For instance, the combination of conscientiousness and extraversion, along with specific contextual triggers related to smart working, yielded unexpected and intriguing results. Another interesting conclusion indicated that work-related factors have a more significant influence on employees' emotional response to smart working environments, compared to personal factors.

Third, the insights generated through this project suggested a more holistic approach to smart working that emphasized the role of the employer companies, managers, and leaders to generate a positive collective response. Based on our analysis, it can be inferred that both, the influence of personal and organizational variables, and the overall employee experience, is contingent upon effective organizational culture.

In our opinion, this enveloping aspect can add to the existing literature and fill a present gap. Because so far it was not possible to definitively determine the *per se* impact of smart working on employee well-being and susceptibility to burnout, this study conclusion aims to draw attention to the responsibility of companies in designing and providing smart working opportunities for young employees. Further analysis and examination are encouraged to investigate the influence of organizational practices, management styles, and leadership behaviors on the significant impact of smart working on burnout of young employees.

## **MANAGERIAL AND ORGANIZATIONAL IMPLICATION**

The findings of this study have implications for future research and provide insights into managerial and leadership practices that can be implemented in organizations to improve employees' well-being and protect them from experiencing burnout at the early stages of their careers, particularly in smart working environments. Managers and leaders have a role of utmost importance in shaping an organizational culture that prioritize open communication, trust, respect, and genuine flexibility. These are all key aspects in promoting effective smart working practices which can truly benefit employees.

First and foremost, authentic leadership is needed. A valuable leader shall act as mentor, offering valuable feedbacks, being willing to teach young employees, and showing sincere concern about their professional and personal growth. Leaders should also be educated to demonstrate acceptance of different generational needs and priorities. Managers should abandon old performance assessment metrics and embrace new ones, based on accomplishments of assigned tasks (i.e., management by objectives). Overall, managers and leaders should strive to forge an organizational culture capable of making employees feel comfortable, listened to, and important, despite physical distance, ceaselessly taking into consideration personal differences and needs of individuals.

Furthermore, companies need to establish explicit agreements with employees regarding smart working. Comprehensive guidelines and policies could prevent managers from exerting disproportionate control, and employees from entering a state of paranoia given insufficient direction. Agreements that regulate the level of flexibility in organizing workdays, scheduling meetings, establishing rules of conduct during videoconferences, and setting a time limit after which work is not allowed, have all been found to be positive factors that can improve employees' wellbeing. Organizations shall effectively address the risk of social isolation and lack of colleagues interactions by promoting online team-building activities. Additionally, leaders and managers shall provide the necessary human touch to foster and capitalize on the new sociality resulting from smart working.

Finally, it is fundamental for firms to invest in employee well-being and burnout prevention. Companies should refrain from engaging in the harmful cycle of "greenwashing of well-being", in which they make several promises but ultimately fail to adopt any meaningful steps, or only execute superficial ones. On the contrary, employees should have constant access to programs, trainings, resources to enhance their serenity at work. This matter should be prioritized when drafting the company's budget and should not be considered a secondary factor dependent on past expenses.

## **LIMITATION AND FUTURE RESEARCH**

As for any other empirical study, this project presents limitations that should be addressed and that build foundations for potential future research on the topic. The first drawback consisted of the self-reported measures used to collect data through the survey. Indeed, these kinds of metrics are recognized to be potentially associated with biases and thus can negatively impact the validity and robustness of findings (Podsakoff et al., 2003).

Second, the survey small sample size, as well as the low heterogeneity of respondents resulting from selection out of the author's personal network, could limit the statistical strengths of results. Furthermore, as the sample of respondents was constrained both in terms of nationality and in terms of age range, this study could be replicated considering respondents coming from different countries and/or demographics, thus being able to expand the scope and enable a more comprehensive validation of the proposed framework. Third, this research does not present a

longitudinal dimension, which could be interesting to investigate how variables and relations vary overtime. A longitudinal study could be a valuable follow up research to give a more holistic view of existing mechanisms, enhancing understanding through the analysis of temporal dynamics, adaptation strategies, and long-term effect in terms of well-being.

Further research is encouraged to understand the potential impact of personality traits on burnout in smart working contexts, to delve more into the effects of organizational practices, management, and leadership styles, and to build on explicated inconclusive findings. This study is limited to provide initial empirical evaluations. To validate the relevance of the proposed theory in different contexts it would be beneficial to conduct supplementary explorations of the identified concepts and their relationships.

Burnout in new work settings is a fundamental topic of today, which will increasingly shape the work of tomorrow. It merits additional attention to fill existing gaps in the literature body and add to the current knowledge of smart working impacts on young employees' wellbeing and propensity to burnout at the first stages of career.

## Annex

### Literature review

#### Additional personal factors

Locus of control (LOC) is the subjective assessment of the causes of events, facts, and outcomes. Internal locus of control people think outcomes and events are mainly results of their actions, whereas individuals with external locus of control prevalence believe that events, outcomes, and outcomes are primarily influenced by external forces, less or not at all controllable (Rotter, 1966). Experiencing burnout is more likely when one has an external locus of control (Maslach and Leiter, 2017).

Type A behavior, associated with aggressiveness, impulsivity, impatience, and competitiveness, has been proved to be positively related to the experience of emotional exhaustion and depersonalization (Hallberg et al., 2007).

Moreover, having higher expectations causes people to exert more effort than what is eventually needed, and sometimes the expectations are set so high that become unrealistic; thus dissatisfaction, emotional exhaustion and depersonalization may arise (Adriaenssens et al., 2015; Maslach et al., 2017).

#### Control model of demand management

Individuals at work tend to use performance-protection approaches in response to stressful circumstances, as outlined in control model of demand management (Robert J. Hockey, 1997). The mental expenses incurred by people are higher the more effort they put into pursuing the defensive strategy. Hockey's theory allows for the identification of multiple forms of indirect deterioration. For instance, focus reduction, redefining job demands, risky decision-making, and extremely subjective exhaustion, are only a few consequences that may arise as accommodation of initial strategies to a current condition of accumulated weariness.

Energy depletion and rise of burnout might be the consequence of such a compensatory control approach. The Job Demands Resources Model is based on the fundamental premise that different types of work expose people to different stressors (Baker & Demerouti, 2007). Job demands refer to elements that are linked to specific social psychological costs as they relentlessly necessitate emotional and cognitive investment.

“Job demands are not necessarily negative”; in fact, they can even motivate workers. Thanks to the employment of different types of resources at need, burnout can be prevented or even reverted (Mazzetti et al. 2021).

## Burnout consequences

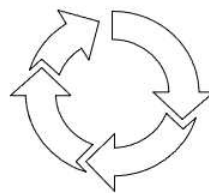
Burnout syndrome leads to a range of negative outcomes for both the individuals victim of it and the businesses employing burnout employees. Although impacts are mostly psychological at first, they eventually manifest in negative consequences for workers' physical and biological health and conduct.

### Psychological Consequences

Burnout leads to psychological changes that affect both cognitive and emotional functioning. Issues with attention and memory, decision-making, decreased ability to handle stress, anxiety and sadness, overall unhappiness, low self-confidence, sleeping disorder, irritability, and alcohol and tobacco increased use.

### Health Consequences

Individuals experiencing elevated levels of burnout are at an increased risk of developing various physical health issues, including muscular pain, gastrointestinal and cardiovascular disorders, headaches, heightened susceptibility to infections, as well as insomnia and chronic fatigue



### Behavioral Consequences

Besides causing physical and psychological health issues, burnout is specifically linked to behavioral consequences mostly involving general job unhappiness, lower organizational commitment, increased absenteeism rate, turnover intention, and decreased performance.

### Organizational Consequences

Severe repercussions at the individual level, manifest as reduced motivation and performance. These effects can also impact the work unit and the organization, leading to a decline in the quality of services. This syndrome typically results in economic losses.

(“Psychological, Behavioral, Health and Organizational consequences of burnout”,  
Author’s analysis, 2024)

## Zoom fatigue: main triggers

Stanford Professor Jeremy Bailenson conducted research on the psychological effects of an excessive use of Zoom and related platforms, highlighting the most likely causes of Zoom fatigue (Bailenson, 2021).

First, high levels and extremely intense eye contact. The size of faces that can be seen on screens and the significant amount of eye contact during video conversations are both abnormal compared to in-person meetings. During Zoom calls, everyone is always staring at each other. Feeling constantly observed by colleagues can be uncomfortable and tiring.

Second, not only workers may feel pressed as being observed by others, but everyone can even ceaselessly stare at himself/herself while in an online meeting. This is extremely unnatural, as if people would look at a constant mirror, thus ceaselessly monitoring behaviors, expressions, appearance.

Furthermore, physical movement in space during online conference is reduced with respect to an on-site meeting where people tend to feel freer in standing up, walking around the room, while showing full attention to the speaker.

Finally, zoom conferences lead to higher cognitive workload. According to Bailenson, while during daily interactions everyone exchange nonverbal signals on a subconscious level, nonverbal communication does not occur as spontaneously in online meetings. Indeed, it takes more effort to convey and interpret facial and non-verbal cues during video conversations, as each gesture may take on a different meaning related to what is happening in the close surroundings that are outside of the camera field of view (such as a child intruding in the room, for instance).

### **Data collection: quantitative part of the study**

MBI-GS measures cynicism via five items (i.e., “Since I started the job”, “I have been losing interest in my job”, “I have become less enthusiastic about my work”, “I don’t really care if my work is done well or poorly”, “I doubt the value of my work”, “I have become more cynical about whether my work is worth anything”), emotional stability through other five items (i.e., “I feel emotionally exhausted by my job”, “I feel exhausted at the end of the day”, “I feel fatigued when I get up in the morning and have to face another day of work”, “Working all day is really stressful for me”, “I feel burned out from my job”), while professional efficacy is assessed through six items (i.e., “In my opinion, I am very good at my job”, “I feel fulfilled when I accomplish something in my work”, “I have accomplished many worthwhile things in my work”, “I feel confident that I am effective in getting things done”, “I am able to effectively solve problems that arise in my work”, “I feel that I am making an effective contribution to the activity of my organization” ) (Bravo et al. 2021).

Many different evaluation tools may be used to quantify the Big Five. The NEO Personality Inventory, Revised (NEO-PI-R), a tool comprising 240 questions developed by Costa and McCrae (1992), is the most thorough tool available. However, as it often takes too long for many research objects, numerous shorter instruments stemming from the original one has been validated and routinely relied on (44-item Inventory (Benet- Martinez & John, 1998), 60-item Inventory (Costa & McCrae, 1992), 100-items Inventory (Goldberg, 1992), and others).

Among all the instruments available, in this study it was decided to rely on the 10-item instrument.

For instance, extraversion score was the result of the rate associated to “Extraverted, enthusiastic”, and R: “Reserved, quiet”; conscientiousness resulted from “Dependable, self-disciplined”, and R: “Disorganized, careless”; openness to experience “Open to new experiences, complex”, and R: “Conventional, uncreative”; agreeableness from “Sympathetic, warm”, and R: “Critical, quarrelsome”; and finally emotional stability is the addition of “Calm, emotionally stable”, and R: “Anxious, easily upset”.

## Survey script

### Survey Introduction

Dear Participant,

Thank you for participating in this survey!

Your insights will be a valuable contribution to this study about the nature of corporate work.

Please answer the questions with careful consideration and honesty.

Your responses will be used exclusively for research purposes and will remain anonymous.

### Section 1

Assess the degree to which the combination of features applies to you, even if one quality is more dominant than the other.

The rates stand for:

1 "strongly disagree"; 2 "disagree"; 3 "hard to say"; 4 "agree"; 5 "strongly agree".

#### 1. Critical, quarrelsome.

Strongly Disagree

1 2 3 4 5

Strongly Agree

#### 2. Dependable, self-disciplined.

Strongly Disagree

1 2 3 4 5

Strongly Agree

#### 3. Anxious, easily upset.

Strongly Disagree

1 2 3 4 5

Strongly Agree

**4. Open to new experiences, complex.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**5. Reserved, quiet.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**6. Sympathetic, warm.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**7. Disorganized, careless.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**8. Calm, emotionally stable.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**9. Extraverted, enthusiastic.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**10. Conventional, uncreative.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

## **Section 2**

Burnout is the experience of prolonged stress at work.

Please indicate a numerical value to each statement to show agreement or disagreement.

The rates stand for:

1 "strongly disagree"; 2 "disagree"; 3 "hard to say"; 4 "agree"; 5 "strongly agree".

**11. I sometimes feel emotionally exhausted by my job.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**12. I sometimes feel that I am making an effective contribution to the activity of my organization.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**13. I sometimes feel exhausted at the end of the day.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**14. I sometimes feel tired when I get up in the morning and have to face another day of work.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**15. Working all day is really stressful for me.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**16. I feel burned out from my job.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**17. Since I started the job, I have been losing interest in my job.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**18. I have become less enthusiastic about my work.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**19. I don't really care if my work is done well or poorly.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**20. I doubt the value of my work.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**21. I have become more cynical about whether my work is worth anything.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**22. In my opinion, I am very good at my job.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**23. I feel fulfilled when I accomplish something in my work.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**24. I have accomplished many worthwhile things in my work.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**25. I feel confident that I am effective in getting things done.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**26. I am able to effectively solve problems that arise in my work.**

Strongly Disagree

1 2 3 4 5

Strongly Agree

### **Section 3**

Our approach to working has changed, particularly since the advent of smart working.

Smart working is designed to enable individuals to perform their professional duties remotely, leveraging technological tools.

This segment's scope is to understand if you engage with smart working in the first place, and so the possible ramifications it may have on your overall well-being.

**27. How frequently do you engage in smart working?**

Everyday

3-4 days per week

1-2 days per week

Less than 4 times per month

Never

**28. How do you feel about the impact of smart working on life?**

---

---

**29. Overall, how would you rate your smart working experience?**

Positive

Neutral

Negative

I don't engage in smart working practices

Please respond to the following statements:

The rates stand for: 1 "strongly disagree"; 2 "disagree"; 3 "hard to say"; 4 "agree"; 5 "strongly agree"

**30. "I enjoy interactions with my co-workers"**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**31. "I feel engaged by the tasks associated with my daily work"**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**32. "I feel I have a good work-life balance"**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**33. "I feel I have a hard time disconnecting from my job"**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**34. "I feel constant support from my supervisors and colleagues"**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**35. "I believe my company is well-managed and that communication flows smoothly"**

Strongly Disagree

1 2 3 4 5

Strongly Agree

**36. "I believe my job position offers growth opportunities"**

Strongly Disagree

1 2 3 4 5

Strongly Agree

## **Demographic Information**

**1. Age:** \_\_\_\_

**2. Gender:**

Altro:

Male

Female

Prefer not to say

**3. Marital status:**

Altro:

Single

Stable relationship

Civil union

Married

Prefer not to say

**4. Highest Educational Level:**

High School

Bachelor's degree

Master's degree

PhD Doctorate

Prefer not to say

**5. Months of professional experience so far:** \_\_\_\_

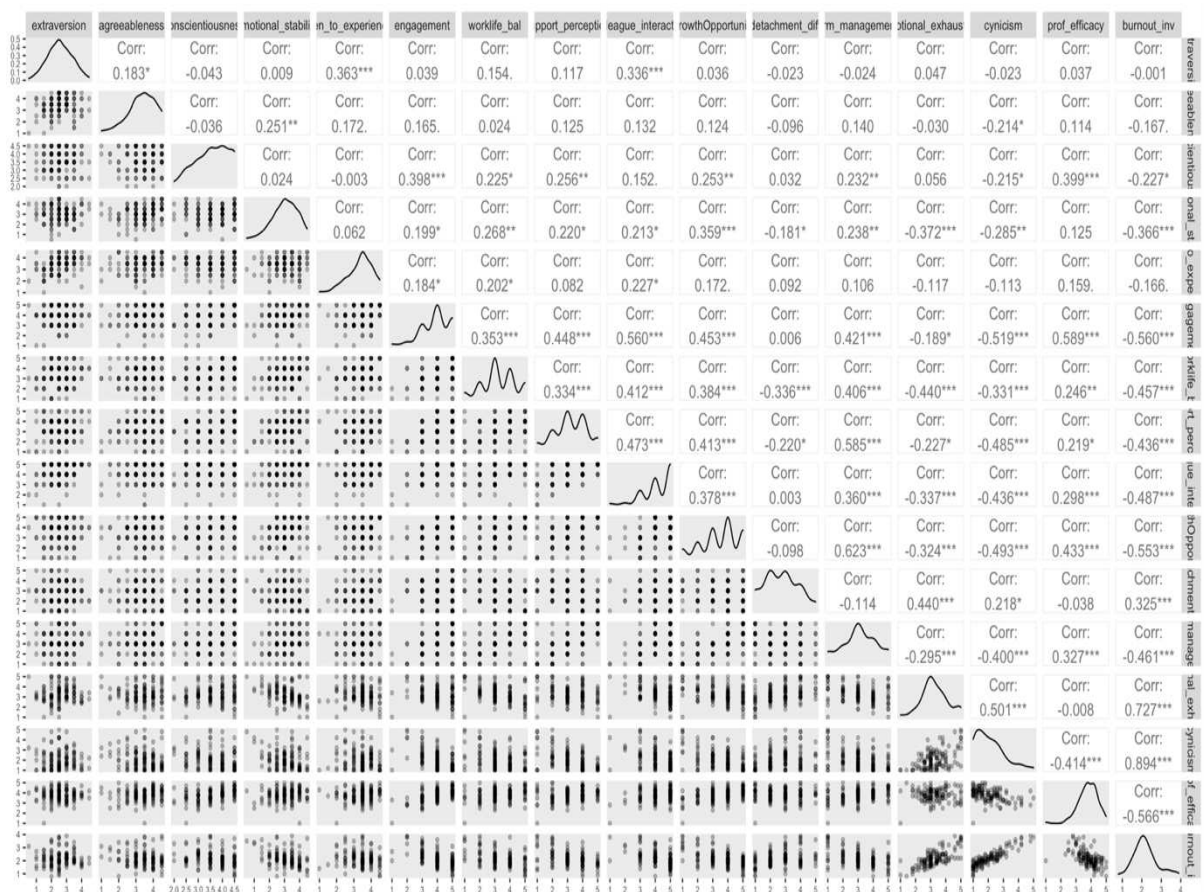
**6. Months of professional experience in your current employer company:** \_\_\_\_

**7. Monthly salary:** \_\_\_\_

**8. Number of professional positions changed so far:** \_\_\_\_

## Data glimpse

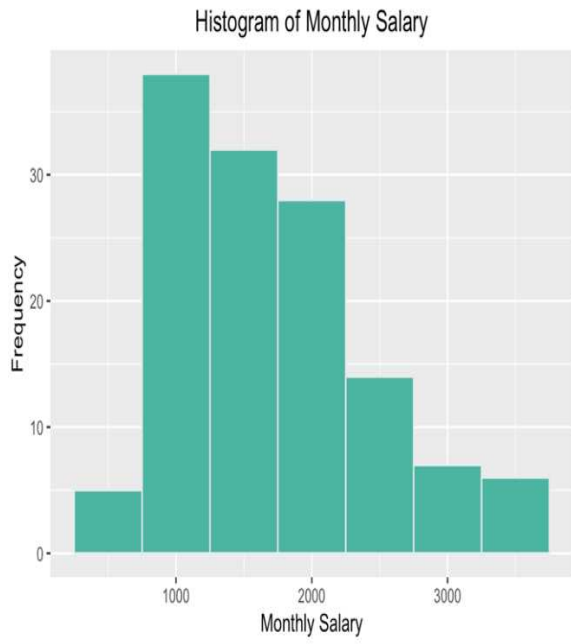
In order to start our data exploration, we run a `ggpairs` with our main variable of interest, from here we get important insights regarding the distributions or our variables as well as their relations and correlation, essential for the following analysis.



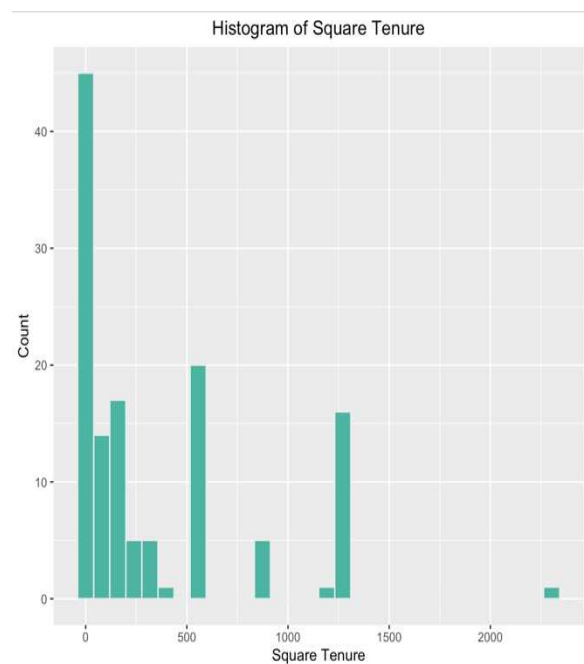
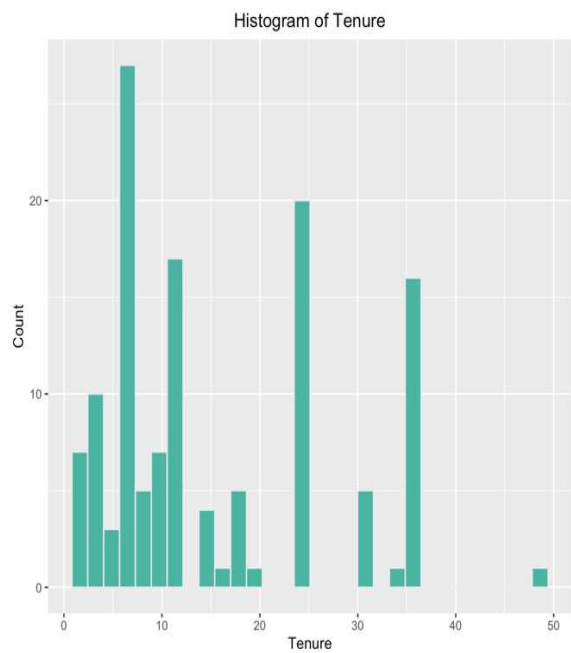
(Figure 1 Annex, “ggpairs table, a glimpse of the data”, Author’s analysis)

## Data cleaning

In order to adjust skewed distribution in more normal ones, a logarithmic transformation was performed for the variable “monthly salary”, while a squared transformations were applied to the variable “tenure” and “years of experience”, as being the most appropriate and common transformations normally applied to these specific categories of variables.



(Figure 2 Annex, “Histogram and distribution of monthly salary”, Author’s analysis)  
 (Figure 3 Annex, “Histogram and distribution of transformed monthly salary in log form”, Author’s analysis)



(Figure 4 Annex, “Histogram and distribution of tenure in months”, Author’s analysis)  
 (Figure 5 Annex, “Histogram of transformed tenure in months in squared form”, Author’s analysis)

## Data exploration

### Correlation

Correlation Table

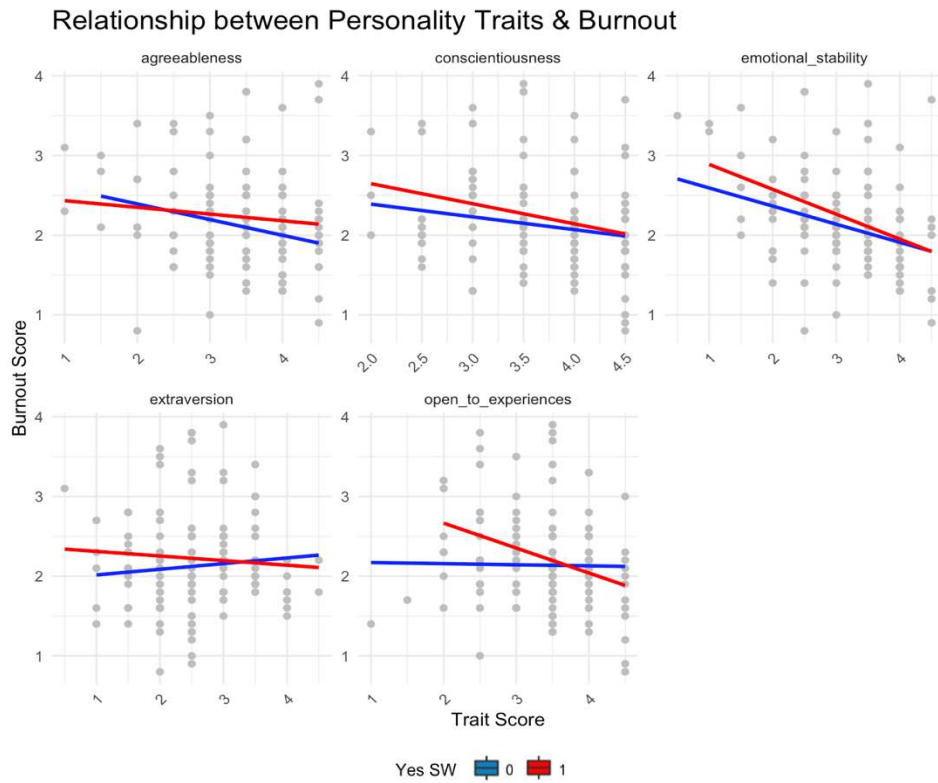
Variable	burnout_inv	emotional_exhaustion	cynicism	prof_efficacy	no_SW	extraversion	agreeableness	conscientiousness	emotional_stability	open_to_experiences	colleague_interaction	engagement	detachment_diff	worklife_bal	GrowthOpportunity	firm_management	support_perception
burnout_inv		0.727***	0.694***	-0.566***	-0.074	-0.001	-0.167	-0.227*	0.366***	-0.166	-0.487***	-0.560***	0.325***	-0.467***	-0.353***	-0.461***	-0.436***
emotional_exhaustion	0.727***		0.561***	-0.808	-0.001	0.047	-0.030	0.056	-0.372***	-0.117	-0.331***	-0.189*	0.440***	-0.440***	-0.324***	-0.293***	-0.227*
cynicism	0.694***	0.561***		-0.414***	-0.110	-0.023	-0.224*	-0.215*	-0.285**	-0.113	-0.436***	-0.539***	0.219*	-0.311***	-0.493***	-0.400***	-0.485***
prof_efficacy	-0.566***	-0.808	-0.414***		0.049	0.037	0.114	0.399***	0.125	0.159	0.298***	0.580***	-0.038	0.246**	0.431***	0.327**	0.219*
no_SW	-0.074	-0.001	-0.110	0.049		0.183*	-0.083	-0.061	-0.067	-0.008	0.144	0.106	-0.054	-0.018	-0.055	-0.040	0.002
extraversion	-0.001	0.047	-0.023	0.037	0.183*		0.183*	-0.043	0.009	0.363***	0.336***	0.039	-0.023	0.154	0.036	-0.024	0.117
agreeableness	-0.167	-0.030	-0.224*	0.114	-0.083	0.183*		-0.036	-0.251**	0.172	0.132	0.185	-0.096	0.024	0.124	0.140	0.125
conscientiousness	-0.227*	0.056	-0.215*	0.399***	-0.061	-0.043	-0.036		-0.024	-0.003	0.132	0.396***	0.032	0.225*	0.255**	0.322**	0.236**
emotional_stability	0.366***	-0.372***	-0.285**	0.125	-0.067	0.009	0.251**	0.024		0.062	0.213*	0.199*	-0.181*	0.260**	0.359***	0.228**	0.220*
open_to_experiences	-0.166	-0.117	-0.113	0.159	-0.008	0.363***	0.172	-0.003	0.062		0.227**	0.184*	0.092	0.202*	0.172	0.106	0.002
colleague_interaction	-0.487***	-0.331***	-0.436***	0.298***	0.144	0.336***	0.132	0.132	0.213*	0.227**		0.560***	0.003	0.412***	0.378***	0.360***	0.473***
engagement	-0.560***	-0.189*	-0.519***	0.580***	0.106	0.039	0.165	0.399***	0.199*	0.184*	0.560***		0.006	0.353***	0.453***	0.421***	0.448***
detachment_diff	0.325***	0.440***	0.219*	-0.038	-0.054	-0.023	-0.096	0.032	-0.181*	0.092	0.003	0.006		-0.336***	-0.008	-0.114	-0.220*
worklife_bal	-0.467***	-0.440***	-0.311***	0.246**	-0.018	0.154	0.024	0.225*	0.268**	0.202*	0.412***	0.353***	-0.336***		0.364***	0.406***	0.334***
GrowthOpportunity	-0.353***	-0.324***	-0.493***	0.431***	-0.055	0.036	0.124	0.253**	0.359***	0.172	0.378***	0.453***	-0.008	0.364***		0.623***	0.413***
firm_management	-0.461***	-0.293***	-0.400***	0.327***	-0.040	-0.024	0.140	0.211**	0.238**	0.106	0.360***	0.421***	-0.114	0.406***	0.623***		0.585***
support_perception	-0.436***	-0.227*	-0.485***	0.219*	0.092	0.117	0.125	0.250**	-0.220*	0.082	0.473***	0.448***	-0.220*	0.334***	0.413***	0.585***	

(Figure 6 Annex, “Correlation matrix - dependent and potential explanatory variables”, Author’s analysis)

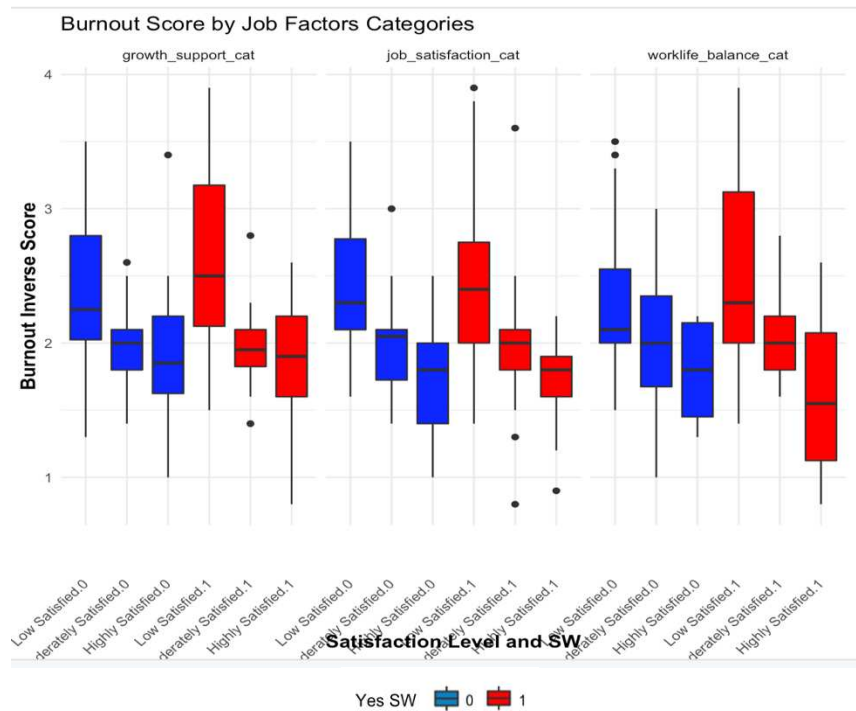
The dependent variable emotional exhaustion exhibits a similar pattern of correlations, with a diminished significance of the negative association with support perception ( $r=-0.23$ ,  $p<0.1$ ). Regarding cynicism we noticed new negative significant relationships with agreeableness ( $r=-0.21$ ,  $p<0.1$ ), and conscientiousness ( $r=-0.29$ ,  $p<0.1$ ), while the degree of significance of the positive connection with detachment difficulties exhibited a reduction ( $r=0.22$ ,  $p<0.1$ ). Conscientiousness is the only personality characteristic that exhibits a statistically significant positive association ( $r=0.399$ ,  $p<0.01$ ) in connection to professional effectiveness. The found correlations between professional efficacy and burnout inventory, which is a reverse score variable, remain significant but exhibit opposite signs. However, the correlation between professional efficacy and detachment difficulties has lost its statistical significance.

General graphs showing potential correlation between variables

*Personality and work-related factors*

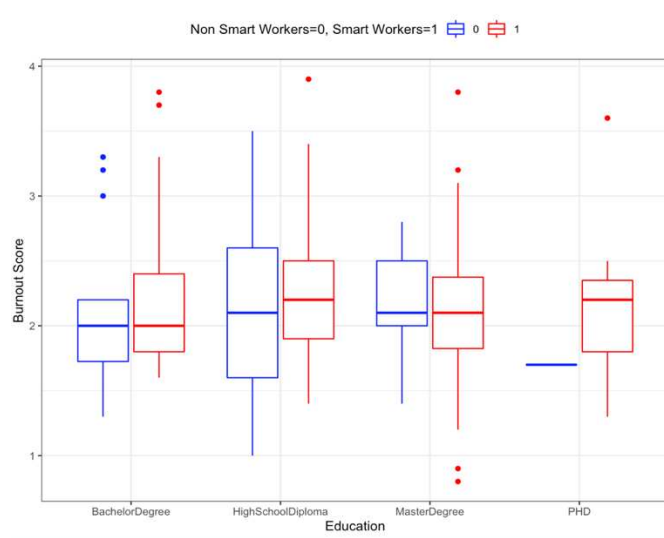


(Figure 7 Annex, “Scatterplots relationship between personality traits and burnout score”, Author’s analysis)

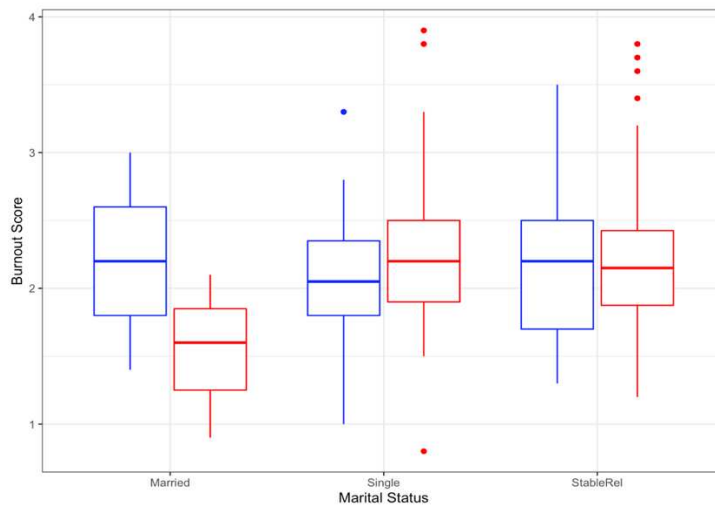


(Figure 8 Annex, “Boxplot distribution of satisfaction level in different job-related spheres - across smart working status”, Author’s analysis)

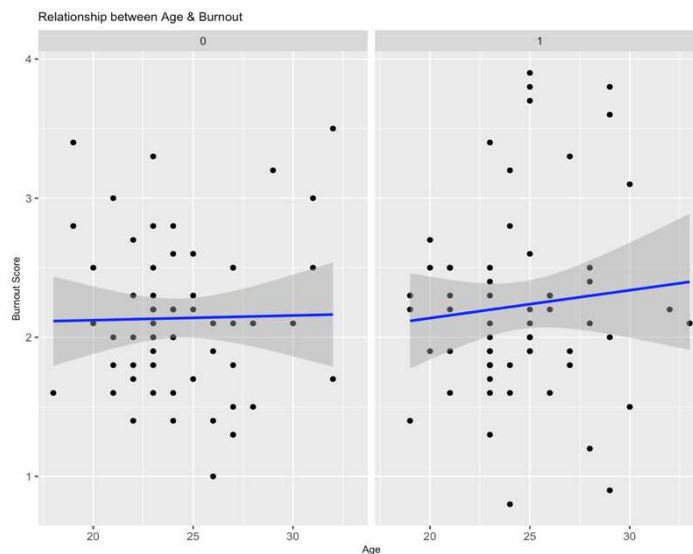
## Demographic variables



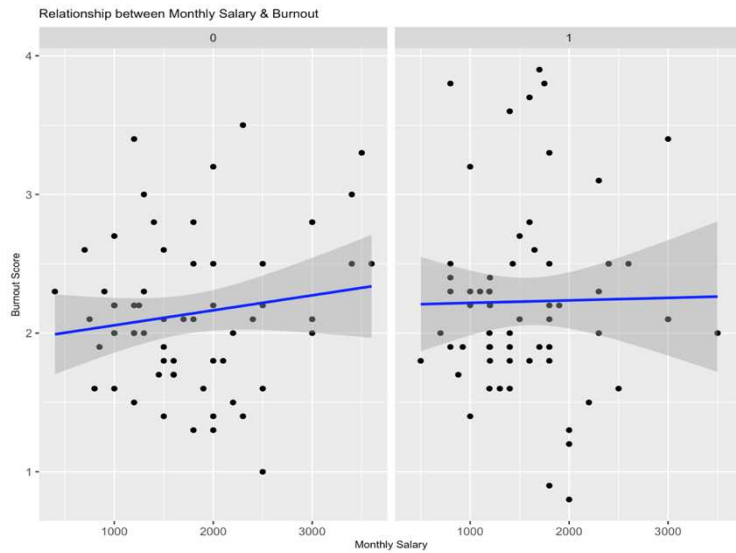
(Figure 9 Annex, “Boxplot burnout score across education and smart working status”, Author’s analysis)



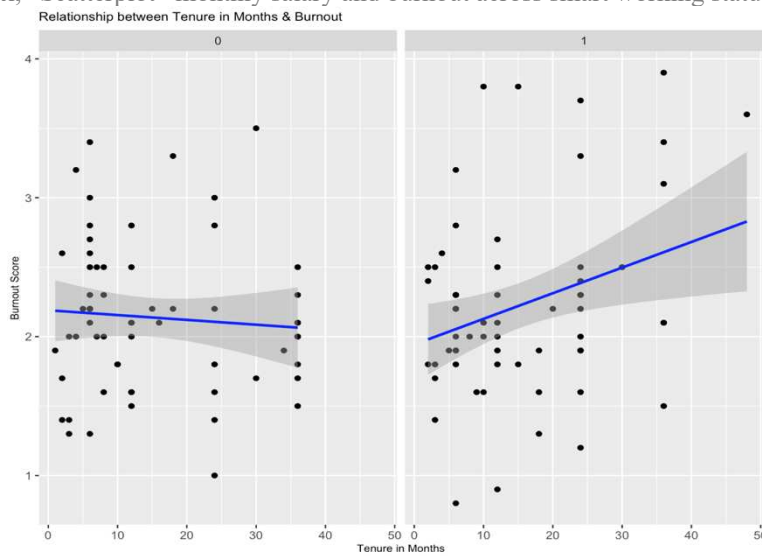
(Figure 10 Annex, “Boxplot burnout score across marital and smart working status”, Author’s analysis)



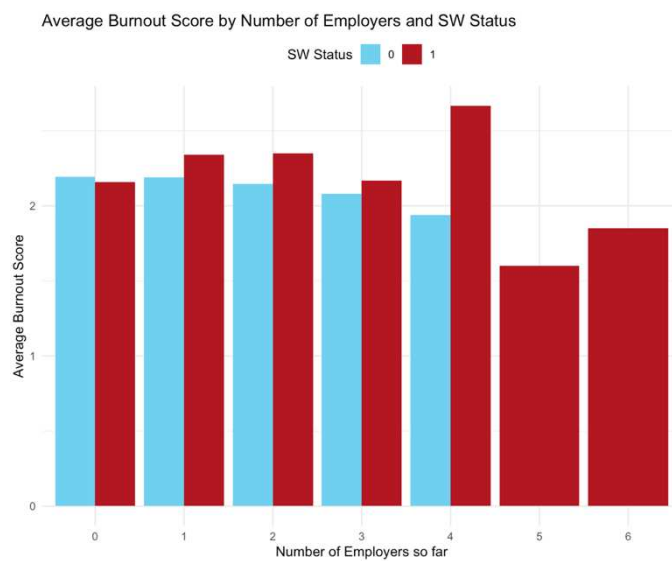
(Figure 11 Annex, “Scatterplot –age and burnout across smart working status”, Author’s analysis)



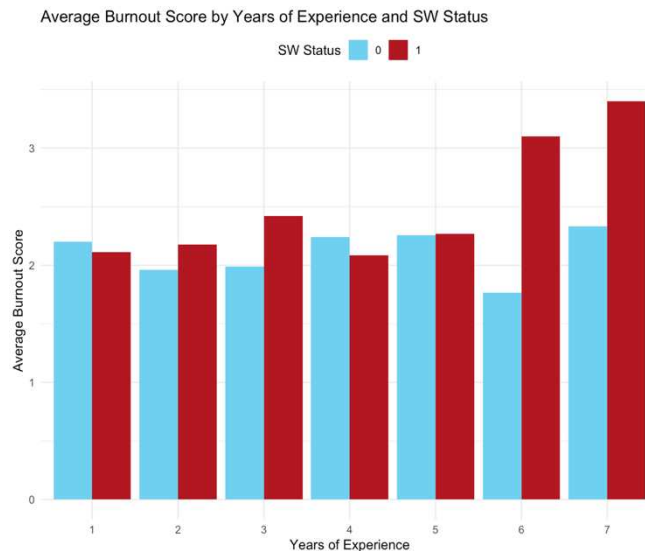
(Figure 12 Annex, “Scatterplot –monthly salary and burnout across smart working status”, Author’s analysis)



(Figure 13 Annex, “Scatterplot –tenure in months and burnout across smart working status”, Author’s analysis)



(Figure 14 Annex, “Bar plot – average burnout score by n. of employers and SW status”, Author’s analysis)



(Figure 15 Annex, “Bar plot – average burnout score by years of experience and SW status”, Author’s analysis)

### Check the dataset

```
> #Check Equity
>
> # Gender
> male_count <- sum(tb.survey$Male == 1, na.rm = TRUE)
> total_countGen <- sum(!is.na(tb.survey$Male))
> female_count <- (total_countGen-male_count)
> male_percentage <- (male_count / total_countGen) * 100
> print(paste("Male count:", male_count))
[1] "Male count: 59"
> print(paste("Female count:", female_count))
[1] "Female count: 65"
> print(paste("Total count:", total_countGen))
[1] "Total count: 124"
> print(paste("Male percentage:", male_percentage))
[1] "Male percentage: 47.5806451612903"
```

(Figure 16 Annex, “Count and percentages on gender data”, Author’s analysis)

```
> print(paste("Total count:", total_countEdu))
[1] "Total count: 124"
> print(paste("Master percentage:", master_percentage))
[1] "Master percentage: 49.1935483870968"
> print(paste("Bachelor percentage:", bachelor_percentage))
[1] "Bachelor percentage: 21.7741935483871"
> print(paste("Diploma percentage:", diploma_percentage))
[1] "Diploma percentage: 22.5806451612903"
> print(paste("PHD percentage:", PHD_percentage))
[1] "PHD percentage: 6.45161290322581"
> print(paste("Master count:", master_count))
[1] "Master count: 61"
> print(paste("Bachelor count:", bachelor_count))
[1] "Bachelor count: 27"
> print(paste("Diploma count:", diploma_count))
[1] "Diploma count: 28"
> print(paste("PHD count:", PHD_count))
[1] "PHD count: 8"
```

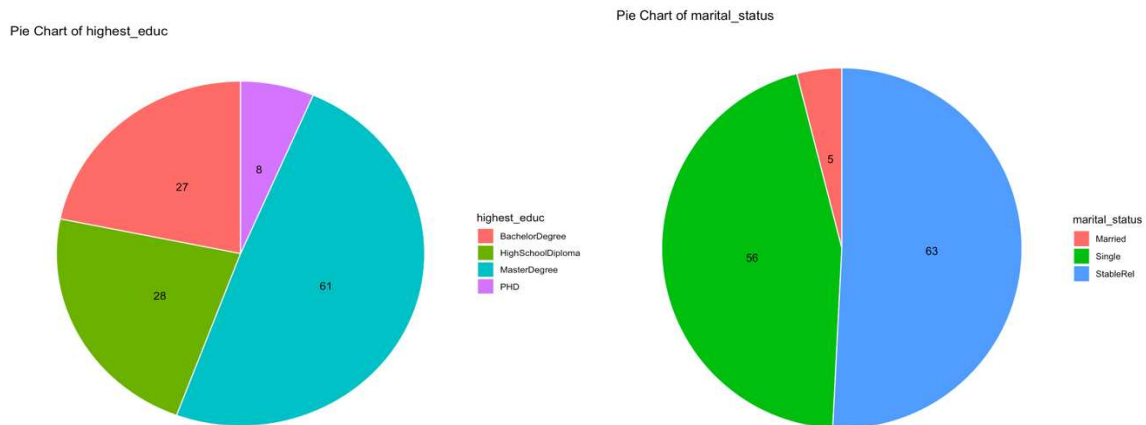
(Figure 17 Annex, “Count and percentages on education data”, Author’s analysis)

```

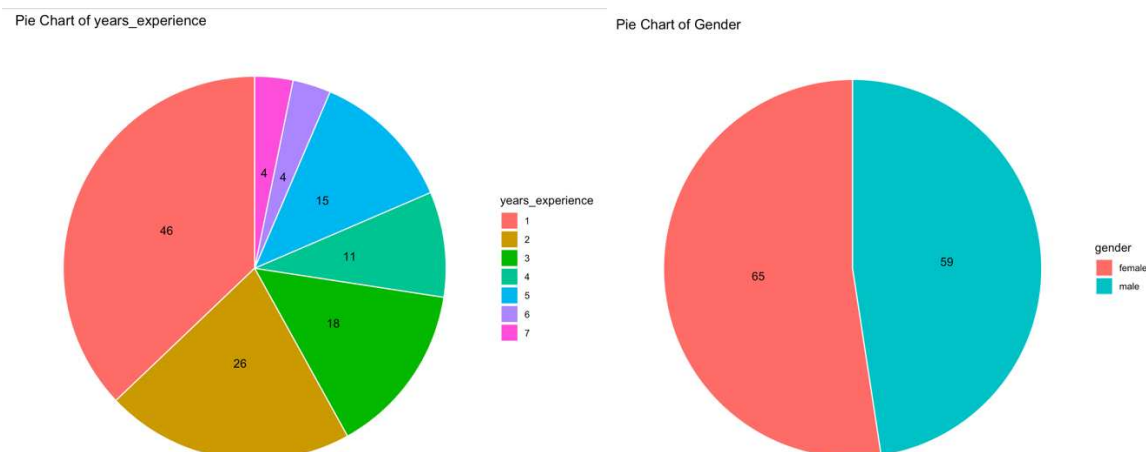
> # Marital Status
> single_count <- sum(tb.survey$marital_status == "Single", na.rm = TRUE)
> stable_rel_count <- sum(tb.survey$marital_status == "StableRel", na.rm = TRUE)
> married_count <- sum(tb.survey$marital_status == "Married", na.rm = TRUE)
> total_countMar <- sum(!is.na(tb.survey$marital_status))
> single_percentage <- (single_count / total_countMar) * 100
> stable_rel_percentage <- (stable_rel_count / total_countMar) * 100
> married_percentage <- (married_count / total_countMar) * 100
> print(paste("Total count:", total_countMar))
[1] "Total count: 124"
> print(paste("Single percentage:", single_percentage))
[1] "Single percentage: 45.1612903225806"
> print(paste("Married percentage:", married_percentage))
[1] "Married percentage: 4.03225806451613"
> print(paste("Stable Relationship percentage:", stable_rel_percentage))
[1] "Stable Relationship percentage: 50.8064516129032"
> print(paste("Single count:", single_count))
[1] "Single count: 56"
> print(paste("Married count:", married_count))
[1] "Married count: 5"
> print(paste("Stable Relationship count:", stable_rel_count))
[1] "Stable Relationship count: 63"

```

(Figure 18 Annex, “Count and percentages on marital status data”, Author’s analysis)

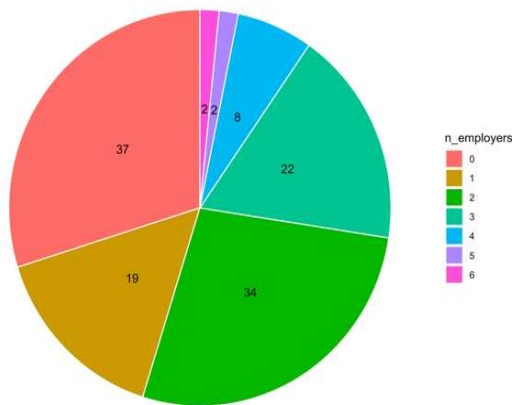


(Figure 19 Annex, “Pie chart of education”, Author’s analysis)  
(Figure 20 Annex, “Pie chart of marital status”, Author’s analysis)

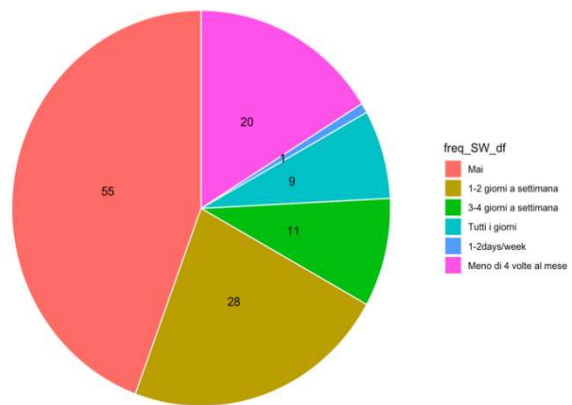


(Figure 21 Annex, “Pie chart of years of experience”, Author’s analysis)  
(Figure 22 Annex, “Pie chart of gender”, Author’s analysis)

Pie Chart of n\_employers



Pie Chart of Frequency of Smart Working



(Figure 23 Annex, “Pie chart of number of employers so far”, Author’s analysis)  
 (Figure 24 Annex, “Pie chart of frequency of smart working”, Author’s analysis)

## Data analysis

### Regressions

Since the last Model (3) of Figure 25 did not allow for a significant increase in the variance explained ( $R^2 = 20,6\%$ ) despite including a significant number of interaction terms as control variables, the results of the more parsimonious Model (2) are further discussed in the following paragraph. Emotional stability resulted to be the most significant variable ( $b = -0.262$ ,  $p < 0.01$ ) and it presented a negative relationship with level of burnout experienced. Conscientiousness and openness to experiences followed in terms of significance, respectively ( $b = -0.160$ ,  $p < 0.05$ ) and ( $b = -0.135$ ,  $p < 0.1$ ), being negatively associated with the propensity to burnout. Moreover, “factor(gender)male” is significant ( $b = 0.176$ ,  $p < 0.1$ ), indicating that males tend to experience more severe burnout with respect to the omitted gender category (i.e., female). In this model considering only the five big personality traits, the variable “yes\_SW” is also significant ( $b = -0.180$ ,  $p < 0.1$ ), showing a positive relationship with burnout levels, suggesting that people that work remotely have more propensity to perceive intense stress.

Regression Analysis - Determinants of Burnout Level			
Dependent variable:			
	burnout_inv		
	(1)	(2)	(3)
yes_SW	0.091 (0.110)	0.180* (0.102)	0.118 (0.876)
factor(gender)male		0.176* (0.105)	0.176 (0.108)
extraversion		0.082 (0.068)	0.092 (0.091)
conscientiousness		-0.160** (0.075)	-0.190* (0.103)
agreeableness		-0.065 (0.065)	-0.179* (0.096)
open_to_experiences		-0.135* (0.075)	-0.051 (0.098)
emotional_stability		-0.262*** (0.062)	-0.240** (0.093)
yes_SW:extraversion			-0.049 (0.140)
yes_SW:conscientiousness			0.084 (0.146)
yes_SW:agreeableness			0.248* (0.134)
yes_SW:open_to_experiences			-0.223 (0.156)
yes_SW:emotional_stability			-0.065 (0.127)
Constant	2.138*** (0.078)	3.856*** (0.447)	3.959*** (0.686)
Observations	124	124	124
R2	0.006	0.247	0.283
Adjusted R2	-0.003	0.201	0.206
Residual Std. Error	0.613	0.547	0.546
F Statistic	0.681	5.424***	3.658***
Note:	*p<0.1; **p<0.05; ***p<0.01		

(Figure 25 Annex, “Regression– Personality Traits as determinants of Burnout Level”, Author’s analysis)

In Figure 26 below, Model (3) will be further considered and discusses as, with the introduction of the interaction terms it was possible to capture more complex relationships and to increase the R-squared of the regression model. Furthermore, single independent variables not only kept their significance with the inclusion of the interaction terms, but they even showed a stronger association with burnout. “Factor(gender)male” is consistently significant ( $b=0.178$ ,  $p<0.05$ ), indicating that males tended to experience stronger tendency to burnout with respect to female. Both engagement and perceived growth opportunities showed a negative relationship with burnout level, respectively ( $b=-0.343$ ,  $p<0.01$ ) and ( $b=-0.144$ ,  $p<0.01$ ), suggesting that both could mitigate the feeling of prolonged stress at work. On the other hand, the perception of difficulty in detachment from one’s professional duties influenced positively the experience of burnout ( $b=0.143$ ,  $p<0.01$ ).

Regression Analysis - Determinants of Burnout Level

---

Dependent variable:

---

	burnout_inv		
	(1)	(2)	(3)
yes_SW	0.091 (0.110)	0.035 (0.079)	0.978** (0.464)
factor(gender)male		0.130 (0.079)	0.178** (0.079)
engagement		-0.194*** (0.055)	-0.343*** (0.087)
colleague_interaction		-0.121** (0.055)	0.117 (0.095)
worklife_bal		-0.035 (0.044)	-0.059 (0.058)
detachment_diff		0.146*** (0.037)	0.143*** (0.048)
support_perception		0.004 (0.044)	0.040 (0.058)
GrowthOpportunity		-0.159*** (0.039)	-0.144*** (0.050)
yes_SW:engagement			0.240** (0.113)
yes_SW:colleague_interaction			-0.344*** (0.116)
yes_SW:worklife_bal			0.007 (0.088)
yes_SW:detachment_diff			-0.016 (0.074)
yes_SW:support_perception			-0.072 (0.087)
yes_SW:GrowthOpportunity			-0.048 (0.076)
Constant	2.138*** (0.078)	3.636*** (0.247)	3.098*** (0.328)
Observations	124	124	124
R2	0.006	0.552	0.605
Adjusted R2	-0.003	0.521	0.554
Residual Std. Error	0.613	0.424	0.409
F Statistic	0.681	17.716***	11.934***

---

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

(Figure 26 Annex, “Regression – work-related factors as determinants of Burnout Level”, Author’s analysis)

The variable “yes\_SW” became significant only when accounting for interaction terms (b=0.978, p<0.05), suggesting that the potential influence of smart working practices on the propensity to burnout is mediated by other work-related aspects, such as engagement and colleague interaction. The interaction term “yes\_SW:colleague\_interaction” showed a negative correlation with burnout (b=-0.344, p<0.01); particularly, for individuals in smart working increased interaction with colleagues could have stronger beneficial effects on perception of stress than for individuals who do not engage with smart working. Finally, the interaction term “yes\_SW:engagement” presented a positive significant correlation with burnout levels (b=0.240, p<0.05). This suggested that smart working inverted the relationship between engagement and prolonged stress, meaning that engagement could more strongly mediate burnout for those employees who are not in smart working with respect to those who experience working remotely.

Regression Analysis - Determinants of Burnout Level

	Dependent variable:			
	burnout_inv			
	(1)	(2)	(3)	(4)
yes_SW	0.091 (0.110)	0.035 (0.079)	0.082 (0.080)	0.916* (0.469)
factor(gender)male		0.130 (0.079)	0.173** (0.082)	0.212** (0.082)
engagement		-0.194*** (0.055)	-0.168*** (0.059)	-0.318*** (0.090)
colleague_interaction		-0.121** (0.055)	-0.154*** (0.058)	0.077 (0.098)
worklife_bal		-0.035 (0.044)	-0.031 (0.045)	-0.045 (0.059)
detachment_diff		0.146*** (0.037)	0.140*** (0.038)	0.142*** (0.052)
support_perception		0.004 (0.044)	0.007 (0.044)	0.048 (0.059)
GrowthOpportunity		-0.159*** (0.039)	-0.137*** (0.040)	-0.138*** (0.051)
extraversion			0.127** (0.055)	0.104* (0.055)
conscientiousness			0.021 (0.064)	0.003 (0.063)
agreeableness			-0.021 (0.051)	0.011 (0.052)
open_to_experiences			-0.062 (0.060)	-0.056 (0.062)
emotional_stability			-0.090* (0.051)	-0.094* (0.051)
yes_SW:engagement				0.236** (0.116)
yes_SW:colleague_interaction				-0.325*** (0.116)
yes_SW:worklife_bal				-0.005 (0.088)
yes_SW:detachment_diff				-0.020 (0.078)
yes_SW:support_perception				-0.086 (0.089)
yes_SW:GrowthOpportunity				-0.011 (0.077)
Constant	2.138*** (0.078)	3.636*** (0.247)	3.702*** (0.361)	3.210*** (0.416)
Observations	124	124	124	124
R2	0.006	0.552	0.587	0.632
Adjusted R2	-0.003	0.521	0.538	0.565
Residual Std. Error	0.613	0.424	0.416	0.404
F Statistic	0.681	17.716***	12.030***	9.394***

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

(Figure 27 Annex, "Complete regression analysis – all models analyzed", Author's analysis)

## Model optimization - Apply stepAIC

```

Call:
lm(formula = burnout_inv ~ yes_SW + factor(gender) + engagement +
  colleague_interaction + detachment_diff + GrowthOpportunity +
  extraversion + emotional_stability + yes_SW:engagement +
  yes_SW:colleague_interaction, data = tb.survey, na.action = na.exclude)

Residuals:
    Min       1Q   Median       3Q      Max
-0.89607 -0.25677 -0.01411  0.28232  0.88955

Coefficients:
                Estimate Std. Error t value Pr(>|t|)
(Intercept)      3.17639    0.33086   9.600 2.56e-16 ***
yes_SW           0.70437    0.37862   1.860 0.065431 .
factor(gender)male
 0.20528    0.07414   2.769 0.006578 **
engagement      -0.31727    0.08270  -3.837 0.000206 ***
colleague_interaction
 0.06866    0.08523   0.806 0.422177
detachment_diff  0.14782    0.03228   4.579 1.21e-05 ***
GrowthOpportunity
-0.15229    0.03622  -4.204 5.27e-05 ***
extraversion     0.09038    0.04891   1.848 0.067226 .
emotional_stability
-0.09202    0.04761  -1.933 0.055737 .
yes_SW:engagement
 0.20619    0.10185   2.025 0.045275 *
yes_SW:colleague_interaction
-0.34222    0.10089  -3.392 0.000957 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.3949 on 113 degrees of freedom
Multiple R-squared:  0.6177,    Adjusted R-squared:  0.5839
F-statistic: 18.26 on 10 and 113 DF,  p-value: < 2.2e-16

> vif(model_optimized4.fin)
there are higher-order terms (interactions) in this model
consider setting type = 'predictor'; see ?vif

```

	yes_SW	factor(gender)	engagement
yes_SW	28.481693	1.089819	4.449335
colleague_interaction	4.869208	detachment_diff	GrowthOpportunity
extraversion	1.229430	emotional_stability	yes_SW:engagement
yes_SW:colleague_interaction	37.611683	1.229241	34.293683

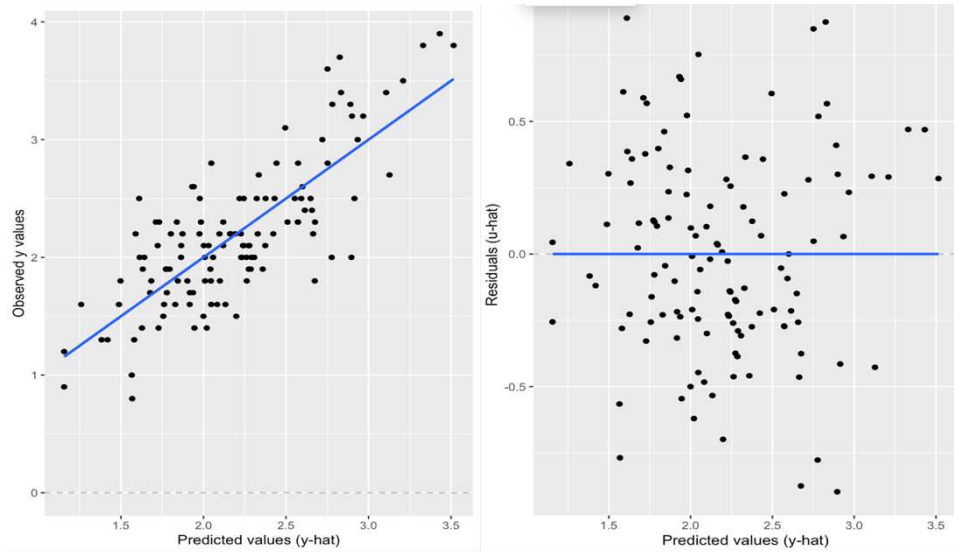
(Figure 28 Annex, “Result of stepAIC – optimized model”, Author’s analysis)

## Checking Assumptions

In this section, the steps as well as the results of the analysis to check the assumptions of regression are presented. Everything relates to optimized model (Figure 30 Annex).

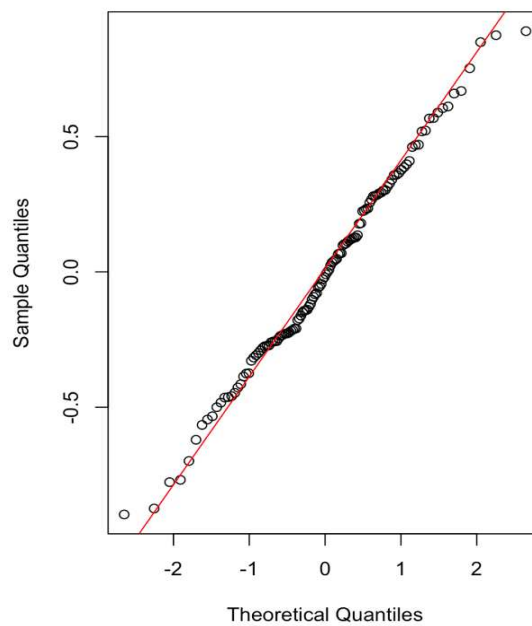
Initially, scatter plots were constructed to visually represent the relationship between the observed values and the anticipated values, as well as the predicted values and the residuals, to assess the presence of linearity.

Furthermore, the normality of the residual distribution was examined using a q-q plot, in which the data points were shown as being approximately aligned with the reference line. Homoskedasticity is attained when the variance of residuals remains constant in relation to the explanatory factors. This condition was assessed by a formal examination of the Breusch-Pagan test and the subsequent examination of the resultant p-value. The independence of residuals was assessed using the Durbin-Watson test to exclude the potential presence of autocorrelation among the residuals of the models. Finally, after examining the correlation matrix to identify possible multicollinearity among the explanatory variables of the models, the Variance Inflation Factor (VIF) was calculated to evaluate and exclude the existence of this problem formally and statistically.



(Figure 29 Annex, “Scatterplot – predicted values against observed values”, Author’s analysis)  
 (Figure 30 Annex, “Scatterplot – predicted values against residuals”, Author’s analysis)

### Normal Q-Q Plot



(Figure 31 Annex, “Normality check through q-q plot”, Author’s analysis)

```
> bptest(model_optimized4.fin)
```

studentized Breusch-Pagan test

data: model\_optimized4.fin

BP = 16.188, df = 10, p-value = 0.09438

(Figure 32 Annex, “Homoskedasticity check through Breusch-Pagan test”, Author’s analysis)

```
> dwtest(model_optimized4.fin)
```

Durbin-Watson test

data: model\_optimized4.fin

DW = 1.8726, p-value = 0.2257

alternative hypothesis: true autocorrelation is greater than 0

(Figure 33 Annex, “Independency of residuals check though Durbin-Watson test”, Author’s analysis)

```
> vif(model_optimized4.fin)
```

there are higher-order terms (interactions) in this model  
consider setting type = 'predictor'; see ?vif

yes_SW	factor(gender)	engagement
28.481693	1.089819	4.449335
colleague_interaction	detachment_diff	GrowthOpportunity
4.869208	1.062953	1.455209
extraversion	emotional_stability	yes_SW:engagement
1.229430	1.229241	34.293683
yes_SW:colleague_interaction		
37.611683		

(Figure 34 Annex, “Multicollinearity check though Variance Inflation Factor”, Author’s analysis)

## Expert Interviews Guide

1. From your professional perspective, how does smart working affect employee wellbeing, particularly in terms of burnout?
2. Regarding the Big Five personality traits, how do you think they are associated with burnout?
  - How does smart working influence these relationships?
  - Are there particular personalities for whom it’s more difficult to adapt to smart working?
    - In your experience, how do specific personality traits like *extraversion* and *emotional stability* impact the potential for burnout?
      - How does the smart working context modify this influence?
    - How might other personality traits such as *conscientiousness*, *agreeableness*, and *openness to experience*, play a role in an individual's experience of burnout?
      - How does it change in the context of smart working?
3. How do you think work-related settings impact employees’ burnout in traditional versus smart working environments?
  - From your experience, how do factors like *engagement* and *colleague interaction* influence burnout?
    - How does it change in the context of smart working?

- In your view, are there aspects related to *work-life balance*, *detachment difficulty*, or *firm management* that impact burnout differently in smart working settings compared to traditional ones?
  - How do perceived *growth opportunities and support* from the organization impact an employee's experience of burnout?
    - Does smart working modify this impact?
  - What is the overall sentiment among employees towards smart working?
    - Based on your experience, do individuals with higher levels of burnout tend to seek more flexible work arrangements? If yes, do you think smart working is an effective solution for them?
4. What are the main obstacles and advantages experienced by employees in smart working environments, according to your experience?
  5. Is there any other crucial factor to understanding the relationship between burnout and smart working, that hasn't been discussed yet?
  6. Could you discuss the policies and/or strategies that have proven effective in reducing the risk of burnout in smart working with respect to environments traditional environments?

## Interviews transcript

Interviews scripts are available upon requests, but they have not been included here due to the Annex's length requirements. However, you can kindly find attached the first expert' interview script.

### Expert 1

So if I need to analyze how smart working can affect the well-being of employees in particular in terms of burnout I first need to refer to the fact that we are living an epistemological passage, fundamental, if we think about the first lockdown forward smart working theme is quite recent. If we want to deep within the phenomenology of the research, smart working has so many advantages and it brings so many opportunities. On the other hand, there are risks mitigating and basically the smart working is not for everyone.

Think about the public employee (all respect) that for thirty years has been bought the tag and he had built a mindset related to the culture of control and imagine that that employee find himself in a more or less varied formula of smart working that goes from 3+2 or the full remote, this would undermine a mindset built over the years. So yes, smart working is more for younger people than for senior ones, but still, risks exist and should be managed, mainly related to make senior change this mindset and make them able to lead and manage remote activities for younger employees.

One of the most important risks to be mitigated is about the leaders and the whole question of leadership. This is a crucial topic within the Corporations that somehow built a system of control power.

So smart working cannot be for everyone.

Then there is the generation Z, workers who demand minimum smart working up to full remote and this has great advantages such as mobility, flexibility, autonomy, cost reduction, and anything else. However, on the other hand, we say the risks to mitigate can be that with smart working we give up working in an environment where younger employees can also learn with a glimpse of the eyes, where they can escalate some skills the knowledge more quickly and efficiently.

But today topics such as loneliness and isolation should be considered as a potential emotional response to smart working. Here a conclusion can be drawn: that if the younger employee is not predisposed and somehow does not have a strong identity or at least marked on what are your peculiarities, what are your needs, your values, especially your skills, smart working within a reality where there is no culture of smart working, can lead straight severe dysfunctions that if prolonged in time can result in burnout.

To work properly for me means mastering three big spheres, that surprisingly for many do not include time management, but the skills we need to refine are: the management of attention, energy management, and corporate culture redefinition, that means companies nowadays must first give a culture focused on the paradigms of communication.

So, in short, I conclude by saying that smart working is not for all. It has amazing advantages, which however should be well balanced in order for them to not create important obstacles. The smart working is the new way of conceiving work tied by the perfect place now.

Smart working is not for everyone we are referring to the personality of the individual, so it concerns the personality traits defined by the big five framework: extroversion, openness to the experiences, agreeableness, conscientiousness and emotional stability.

These traits I doubt to find 10 out of 10 people who have them all. The topic is very personal, how specific personality respond to stress in smart working and non are mechanisms that happens at a very individual level, and for me it is really important to do and study how specific personality traits can lead and partially influence the response to specific external stimuli. For this, I think that it is something surreal that today industries have invested a lot in technological development and little in human resources, ie understanding human behavior.

In my opinion, having higher score in all the big five traits (extroversion, openness to the experiences, agreeableness, conscientiousness, and emotional stability) are the antibodies for living within a job that is currently changing and will continue to change. We do not talk about it much yet but the impacts that has generative artificial intelligence against work will be devastating, as an example of the change that every generation (especially the younger ones) need to keep up with.

These skills are not taken for granted. The big deal would be if for example younger employees who has low conscientiousness, who are not aware of their identity structure in the world of smart working. Self-awareness indeed is another important factor that should be taken into consideration in this study.

Psycho emotional dynamics are obviously fundamental to the awareness to be able to work in to the smart working world but especially to work with other people. In this world there is no more body language that is if you and I are in the office you, the language so the verbal communication affects only 7% for mostly studies say that it is very prossemic no much body language but if you and I are remotely then in fact it is called digital body Language that is a competence that we must know.

So yes in conclusion I would say that personality traits are important to define the emotional response to smart working acting all as mediator if a high level is registered, but I would also add to the Big 5 self-awareness as an important characteristic able to mediate the potential risk of smart working of facilitating burnout.

Who is more or less brought to the burnout is the one who has fragility, those who did not make an inner work that did not do any so called “inner archeology”.

Today the World Health Organization has recognized burnout to be one of the strongest socio-cultural plagues.

If the person feels fragile, especially he/she suffers more a toxic work culture, this fragility is exasperated especially by a toxic culture of work. When I talk about toxic culture of work means that does not understand the rules of the game, namely the rules of flexibility, autonomy, not full control of workers. Therefore, it is not that working in presence means productivity, that means that if it is true that you and I can work in smart working, then the key performance indicators are not more given by how many hours we are in the office, but we need to do the transition from presence to outcome, that is to the achievement of goals.

If I told you: “you have to achieve this goal” if you work in the office or work in Sri Lanka or work in the Maldives you have to bring me the goal, however within companies we struggle to have and establish this new culture today, and this is the main cause of burnout in smart working for young employees, more than any personal attitude or characteristic. Indeed, personality traits are only mediators, but the real triggers would be a toxic corporate culture, and an inner fragility of the employee.

Regarding factors related to the work itself, so external objective factors dictated by the corporate culture, and analyzing how this can impact the rise of burnout in smart working, I would like to say that today the main drivers for Generation Z will be policy of flexibility, of autonomy, and above all of work life balance. So, we are in an epistemological change because today generation Z rejects full-time contracts, it means that the generation Zeta puts on weighs very clearly and very strongly on the concept of time. Indeed, the last Census report says the generation question themselves on overtime, questioning whether one extra hour of time is worth to be spent at work. So, while there was before a culture of toxic work, then all the work-related factors which have not been eradicated yet, have a strong impact on this new work culture, affecting a lot. The work life balance and detachment difficulty to work have both a very strong impact, if poorly managed, on burnout. It means that the less perceived work life balance, and the more difficulty to detach to work has a strong negative impact on stress in smart working, increasing likelihood to enter in a burnout status.

So, wrapping up the phenomenon of the work culture of the leadership, on the one hand there are fundamental drivers that today generation Z looks for, on the other hand the companies struggle to homologate to these values. Here you play the game of talent attraction and retention.

The difficulty to the detachment increases with the smart working, indeed smart working leads you to work more with the digital tools, so this leads you to remain attached. However also this

is very related to physiological traits, such as conscientiousness and organizational culture and practices.

Good personality traits can help you to face and combat this difficulty of detachment and can help you to overcome difficulties that may be tight to the smart working, however they would not be enough if the organizational setting and the management attitude is toxic. So, if you have a boss asking to you to work at 11pm, because he may like to exercise control or because he may be in burnout himself, then in a relationship manager – junior, the junior have few choices, either trying to speak up, leave, or just saying nothing and keep working as nothing ever happen and accept this toxic culture of control.

So, the concept here is very much related to the understanding of the new working culture from the managerial point of view. If on the one hand there is a boss that has the need of control, and uses basic digital tools to communicate in a toxic way we would react to work even more negatively if in smart working, while on the other hand if my manager is no longer a controlling boss but becomes a leader that has understood the new rules of the game, such as the concept delegation, confidence in juniors, and whatever else, then everything becomes more manageable and burnout is it more avoidable.

Furthermore, informational overload is also another factor that should be considered when asserting that we live in this situation today where we have more difficulty to disconnect, indeed if you cannot disconnect you are not reload, if you are not reload you cannot work.

Another fundamental element is feedback, and I mean to build feedback from smart working because if younger employees don't have feedback first of all those big five those go a little altered, and personal response to professional practices as well. The first feedback is obviously not from the leaders but is from peers, is given by colleagues so in this case it is very important to have a social proof.

There are some techniques to make sure that digital tools are used positively during meeting, that act as a glue during the work meeting.

Furthermore, I feel to say that another important strategy for companies to implement to reduce the propensity to burnout in smart working is intendent to solve the situation in which the woman still has no inclusion: I still see many leaders put the meetings of 18:00 pm but if you are a woman who has family, or who has returned from motherhood, then leadership this kind of inattentive leadership could be very sneaky causing what is called “snowball effect”, small behaviors then become something very big.

Another snowball effect could be when on a Saturday night a boss sent a message to someone who does not want to answer because he knows how to disconnect but then his colleague who needs to be seen or to be heard sent a reply to messages of your boss. In this case the social context leads you to be detached from your values even if your value is to recharge to take time to for cultivating hobbies cultivate relationships.

Despite your abilities to detach, you might have a system that is against this because of people who has negative big five. So being able to bear smart working risks in the right and healthy way is no longer a problem of the well-equipped employee, it becomes an opportunity to change the structural support system.

Here how to say there can be many strategies and to date there is a paradox: on the one hand companies have increased investment in “helping” but one the other hand there was also an increase in the key importance given to wellbeing from the employees.

First I’ll tell you what is missing: a corporate culture at 360 degrees, what is causing problems is that companies before launching a program of this kind and of a great importance, look at the residual of budget and time, but is extremely wrong as wellbeing is treated as something marginal while it should become a priority for companies.

One the other hand, the policies that today are working quite well are very simple policies based on listening, based on set up mental health checks. Everything can range from simple consoles entrusted to psychology or internal psychologist.

If we want to see an investment cake so far employees were always more interested in health insurance, or any other kind of material and concrete benefits, with respect to mental health, so the piece of cake that has been dedicated to mental health is still very little, due to past generations needs and due to the lack of ability of the today’s companies to accommodate the new needs in an agile and quick manner.

However, this last generation of your workers has erased the dogma that supported that going to the psychologist meaning that people going are sick, but today it’s accepted that if you go to the psychologist, it’s because you want to feel better, therefore a big investment in preserving and supporting mental health and general wellbeing of employees is still missing.

Another investment that is missing is in the leadership, in fact today there is a great risk of wellbeing. Unfortunately, there are too many companies that communicate holistic strategy to improve and preserve the mental wellbeing and health of employees, but that instead do not do anything real to actually change things. Now has been three years that we Italian companies are investing somehow, but according to scientific studies and investment studies, mental health

and wellbeing will be the most important factor of the next 5 years because burnout has so many costs, not only personal but also social costs, and we know that health care in Italy has worsened in the last 10 years, indeed we need to have a structure that can help us as not everyone can afford a psychologist from the economic point of view. Therefore, in conclusion, a very important investment is needed from the government itself.

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