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Key Drivers of Burnout Across High-Stress Industries: An Analysis of the Startup Sector in
Germany – Robert Macic (60400)

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Abstract: Burnout is a critical issue affecting individual well-being, organizational performance, and public health. This thesis aims to give an overview about the development of job-related burnout, the burnout key drivers and the current state in German startups. A quantitative study of 138 professionals (investment banking, consulting, and startups) using the Burnout Assessment Tool (BAT) is conducted to understand the burnout dynamics in these three industries. One finding is that there is no significant evidence that remote work shows a negative impact on burnout. Another one is that in German startups, burnout risk is influenced by high workload, stress frequency and conflicts between individual and organizational values, resulting from the often value-driven work environment. The findings emphasize the need for targeted investments and strategic initiatives based on data-driven tools to enhance employee well-being and develop effective burnout prevention systems in this high-stress industry.

Keywords: Job Burnout, Stressors, Consulting, Investment Banking, Startup, Germany

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CHAPTER ONE: INTRODUCTION

1) Background Information

Burnout has become an increasingly critical issue in the modern workplace, with alarming trends observed across the globe. The phenomenon has evolved from an individual health concern to a critical organizational challenge that affects productivity, employee retention, and overall business performance (e.g., McKinsey 2023b). In light of these alarming trends, the World Health Organization (WHO) officially recognized burnout in 2019 as an occupational phenomenon and defined it as a syndrome “resulting from chronic workplace stress that has not been successfully managed” (World Health Organization 2019). This first section will provide an introduction into the current state of burnout and its growing significance in the professional landscape, both globally and within Germany.

1.1 Global State of Burnout

Recent global studies revealed a concerning state of burnout’s prevalence. According to McKinsey’s comprehensive health study (McKinsey 2023b), which surveyed over 30,000 employees across 30 countries, 22% of employees globally experience burnout symptoms and 42% report a “severe loss of energy that results in mental and physical tiredness”, similar to the findings of Mental Health UK, stating that in the past year, 91% of adults in the UK “experienced high or extreme levels of pressure or stress at some point in the past year” and one in five workers (20%) had to take time off due to burnout resulting from pressure or stress (Mental Health UK 2024).

This already concerning global trend is substantiated and even amplified by more recent research. A study published in 2024 by the Boston Consulting Group (BCG) found that approximately half (49%) of the 11,000 surveyed desk-based and frontline workers from eight different countries (i.e., Australia, Canada, France, Germany, India, Japan, UK, and the U.S.) are experiencing burnout symptoms (Boston Consulting Group 2024a). This indicates that a significant portion of the global workforce is struggling with occupational stress and exhaustion.

This concerning global trend is further emphasized by additional research about the impact of the COVID-19 pandemic on burnout. A study conducted by the global job matching and hiring platform Indeed found that burnout rates have increased substantially since the COVID-19 pandemic, with 52% of the 1,500 surveyed U.S. professionals reporting to feel burned out, and 67% believing that their burnout has worsened throughout the pandemic (Threlkeld 2024). Of particular interest is the finding that 38% of remote workers reported an increase in burnout during the pandemic, compared to 28% of on-site workers, which aligns with the findings of numerous academic studies and researchers (e.g., Allgood, Jensen, and Stritch 2022; Jimenez-Gomez, Sawhney, and Albert 2021; Raišienė et al. 2023; Singh et al. 2022). This discrepancy is an important factor to consider and will be explored in greater depth in subsequent sections of this research.

1.2 German State of Burnout

In Germany, the situation mirrors and in some aspects even exceeds these global concerns. According to McKinsey's health study (2023b), approximately one in five employees (20%) in Germany reported experiencing burnout symptoms, and a third (37%) stated to be suffering from physical and mental exhaustion, with only half (51%) considering themselves truly healthy - lower than the global average of 57% who report feeling holistically healthy.

This finding becomes even more alarming when considered alongside data from Pronova BKK, a well-established and one of Germany's oldest health insurers. In November 2023, Pronova BKK conducted a workplace study with 1,204 participants, which revealed that 61% of employees rate their own risk of burnout as moderate or high (compared to 50% in 2018) (Pronova BKK 2023, 25).

While these study results already indicate a rising trend in burnout in the German context, it is equally important to analyze data on employees officially declared unable for work. Reported cases of absenteeism due to burnout in Germany provide a critical indicator of this issue. The

German health insurer AOK has compiled data on officially reported absenteeism cases from 2004 to 2022 in a bar chart, as it can be found in Appendix 1, Figure 1 (Radtke 2023a).

The Y-axis of the chart represents the number of officially reported absenteeism cases per 1,000 AOK members, while the X-axis illustrates the progression over time. The data reveals a consistent and significant increase in burnout-related absenteeism over the years. In 2004, only 0.6 cases per 1,000 AOK members were reported, while in 2022, the number rose to 6.8 cases per 1,000 members – an increase of approximately 10 times (1,033%) the 2004 figure.

When examining the duration of these absences, measured as “Arbeitsunfähigkeitstage” (sick leave days) per 1,000 AOK members, the increase is even more significant. In 2004, only 8.1 sick leave days per 1,000 members were reported due to burnout, while by 2022, this figure skyrocketed to 159.8 days – an increase of nearly 19 times (1,873%) the 2004 figure (Radtke 2023b). The bar chart can be found in Appendix 1, Figure 2.

With AOK insuring 27.2 million individuals in 2022, almost one-third of Germany’s population, these figures are highly indicative of the national trend (AOK-Bundesverband 2023). Projecting these figures onto the entire German workforce illustrates the alarming scale of the issue. According to the German Federal Statistical Office, there were 46 million people employed in Germany by the end of 2022 (Destatis 2023). This would translate to an estimated 312,800 absenteeism cases due to burnout and a substantial 7.35 million sick leave days:

$$(1) 46M \text{ employees} * \frac{6.8 \text{ absenteeism cases due to burnout}}{1,000 \text{ employees}} = 312,800 \text{ cases},$$

$$(2) 46M \text{ employees} * \frac{159.8 \text{ sick leave days due to burnout}}{1,000 \text{ employees}} = 7,350,800 \text{ sick leave days}.$$

2) Problem Statement

The rising prevalence of burnout, as evidenced by the significant increase in reported cases and sick leave days in Germany, translates into substantial economic costs for businesses and the nation as a whole. According to a study conducted by Gallup, one of the leading global market researchers and workplace advisors, “a substantial portion of the German workforce is burned

out or nearing it, [...] resulting in an estimated cost of more than 9 billion euros in lost productivity annually to German employers” (Nink 2016). Similar numbers were found by the European Agency for Safety and Health at Work (2009).

However, the issue of burnout goes far beyond just economic costs. It is a well-known and extensively studied problem, with research from numerous institutions, such as the American Psychological Association and reputable consultancy firms, which highlights its impact on people’s well-being, the health of workplace culture, and the long-term success of organizations (e.g., American Psychological Association 2023; Edú-Valsania, Laguía, and Moriano 2022; McKinsey 2023a).

In addition to these broader implications, another critical observation is that burnout is particularly acute among high-performing employees, who are often at the heart of organizational success. Research from the Harvard Business Review indicates that high performers are more susceptible to burnout due to the unique pressures they face (Plummer 2018). These pressures include heavier workloads, often from being staffed to the most challenging projects, increased expectations (for example, having to take on additional responsibilities to make up for underperforming team members), and limited opportunities for recovery, as they are frequently asked to assist with tasks on other projects, with these small contributions accumulating over time.

In industries such as consulting, investment banking, and startups, these dynamics are often magnified. Consulting professionals regularly work under stringent deadlines (e.g., von Humboldt et al. 2013), while investment bankers face the demanding expectations of long working hours and rigid performance metrics (e.g., Kelly 2024). Similarly, startup environments, characterized by their fast pace and resource constraints, often require employees to “work incredibly hard and move extraordinarily fast” (McKinsey 2020) to balance these challenges, which in turn intensifies levels of occupational stress.

This creates a significant paradox for the economy, as the sectors that drive innovation and economic growth – such as consulting (e.g., Armbrüster 2006), investment banking (e.g., Kehinde et al. 2023), and startups (e.g., Dizikes 2020) – may be unconsciously shaping an environment that is particularly conducive to burnout, thereby undermining their own sustainability and long-term success by overworking and depleting their most valuable talent.

3) Research Objective

The sustained upward trend of burnout cases highlights the growing importance of 1) gaining a deeper understanding of the underlying factors that drive burnout, as well as 2) the urgent need for proactive measures to mitigate its widespread impact on both employees and organizations.

- 1) The primary objective of this research is to conduct an in-depth investigation into the specific factors that drive burnout in three high-intensity professional sectors: consulting, investment banking, and startups. As previously described, these sectors are known for their high-pressure environments, which, while fostering innovation and contributing significantly to economic growth, may also create conditions that increase the likelihood of burnout among employees. Thus, this study aims to identify the industry-specific stressors that contribute to burnout, such as work culture, organizational expectations, and job demands among others. Additionally, the research will explore how individual demographic factors, such as gender or age, may influence susceptibility to burnout in these sectors.
- 2) The secondary objective of this research is to establish a foundation that organizations in consulting, investment banking, and startup environments can build upon for burnout prevention and mitigation. This objective seeks to translate the research findings into implications that organizations can use to implement preventive measures and create supportive workplace cultures that prioritize employee well-being without compromising organizational performance.

4) Significance of Research

This research is important for a range of stakeholders, including organizations, policymakers, and individuals working in high-stress professional environments. By identifying the industry-specific factors that contribute to burnout, this research aims to offer insights into how these industries can balance their performance-driven culture with sustainable practices that protect employee well-being and long-term organizational success. This understanding can help organizations to develop strategies to manage stress and prevent burnout, thereby not only improving the employee well-being but also enhancing productivity, retention, and overall business performance.

CHAPTER TWO: LITERATURE REVIEW

1) Introduction

This literature review examines the determinants and development of work-related burnout, focusing specifically on high-stress work environments while excluding other contexts such as student or athlete burnout. It begins with an overview of key burnout theories, highlighting foundational works (Freudenberger 1974; Maslach and Jackson 1981) and developmental theories that address the imbalance between resources and demands, including the Conservation of Resources theory (Hobfoll 1989) and the Job Demands-Resources model (Demerouti et al. 2001). The review also discusses various measurement instruments developed over the years to assess individual burnout level risks, facilitating targeted interventions when necessary.

Furthermore, the impact of burnout on individual and organizational well-being requires a comprehensive understanding of its various causes. Burnout can be a threat to the productivity and health of employees and the need to understand its development derives from the negative impact it can have on both individuals and organizations (Edú-Valsania, Laguía, and Moriano 2022). Various research findings suggest that it is not caused by a single trigger, but rather by an interplay of individual, interpersonal, and organizational factors (e.g. Maslach, Schaufeli, and Leiter 2001).

To understand these factors, this chapter systematically reviews the literature on these key factors to examine the main stressors and consequences, including both the personal and organizational level. Important research gaps are identified based on results in the literature, and these will be addressed in the course of this work. Consequently, hypotheses were developed that are tested through a conducted survey in the consulting, investment banking, and startup industries.

2) Historical Development of Burnout Theories

Although burnout is an issue that is relevant to almost all professions today, the first groundbreaking findings in burnout research were made in the 1970s and 1980s in the human services sector, examining the emotional and behavioral characteristics of volunteers and workers in the patient context, as well as how they dealt with themselves (Freudenberger 1974; Maslach and Jackson 1981). In addition, resource-oriented theories such as the Conservation of Resources Theory (Hobfoll 1989) or the Job Demands-Resources Theory (Demerouti et al. 2001) were introduced to test the connection between the presence of resources and burnout. Another approach that was introduced in the early 2000s is the inclusion of the person environment fit theory and the associated six dimensions of working life (Leiter and Maslach 2003; Maslach, Schaufeli, and Leiter 2001).

2.1 Foundational Works

Freudenberger (1974) was the first to identify that intrinsically motivated professionals in social health care institutions are particularly more likely to suffer burnout due to unmet expectations, leading to physical symptoms like exhaustion and insomnia, as well as behavioral issues such as excessive emotionality and isolation from colleagues. He proposed several preventive measures, including adjusting work hours, fostering staff discussions about burnout, and modifying job roles. Crucially, he emphasized the importance of allowing individuals time away from work and ensuring they have a supportive network during recovery (Freudenberger 1974).

In addition to Freudenberger, Maslach and Jackson (1981) also conducted research in the field of human service institutions to discuss the topic of burnout based on empirical methods and thus make it more comprehensible in a scientific context. They characterized burnout as a psychological syndrome that expresses itself through emotional exhaustion, depersonalization, and reduced personal achievements on the job, whereby the various symptoms can occur at the same time and are specific but have a certain degree of relation to each other (Edú-Valsania, Laguía, and Moriano 2022; Maslach and Jackson 1981).

The dimension of emotional exhaustion is defined as emotional strain and lack of energy in relation to everyday working life, the associated tasks, and the increasing difficulty in dealing with them (Maslach and Jackson 1981). Depersonalization is seen as an incremental deterioration in dealing with people at work, which manifests itself in cynical and negative behavior on the part of the person concerned. The third and final aspect, negative self-evaluation or reduced personal accomplishment, is reflected in increasing self-doubt about the quality of one's own work performance, which can ultimately lead to poor work results (Edú-Valsania, Laguía, and Moriano 2022).

The Maslach Burnout Inventory (MBI), developed on the basis of the three dimensions and being one of the best-known and most-used constructs, is understood to be a multidimensional self-reporting tool that, based on the answers of the individual filling out the questionnaire, provides an indication of the severity of the three dimensions of the burnout syndrome (Maslach and Jackson 1981; Schaufeli 2017; Shirom 2003).

2.2 Resource-Oriented Theories

In contrast to the theories and associated dimensions presented so far, other theories such as the Conservation of Resource (COR) Theory from Hobfoll (1989) take a more resource-based approach to discussing the phenomena of stress and burnout. Furthermore, the Job Demands-Resources (JD-R) theory focuses on working conditions, which are divided into job demands

and job resources, and ultimately an imbalance of these two factors can lead to the development of burnout at work (Demerouti et al. 2001).

Conservation of Resources Model: The COR Theory, established by Hobfoll in 1989, proposes that people want to both protect their current resources and obtain new resources. As a resource-oriented model, the theoretical foundation is that “people strive to retain, protect, and build resources and that what is threatening to them is the potential or actual loss of these valued resources” (Hobfoll 1989, 513). It follows the approach that, due to evolution, people place a much higher weight on losing resources than on gaining them, which is also known as loss aversion (Tversky and Kahneman 1991). In a work-related environment, this means that losses such as a salary reduction are weighted more negatively than comparable gains such as additional vacation days or a higher salary are weighted positively (Halbesleben et al. 2014, 1335). As a result, stress arises when important resources could potentially be lost, are actually lost, or new resources cannot be secured despite considerable effort (Hobfoll et al. 2018, 104).

To make the resources that lead to changes in stress behavior due to their loss or gain more tangible, Hobfoll (1989) has divided them into four types. Firstly, object resources, which are defined by their nature or their value, leading to a certain status. Secondly, condition resources, such as interpersonal relationships, provide information about an individual’s resistance to stress. Thirdly, personal characteristic resources, which reveal an individual’s stress resistance through their personal traits. Finally, energy resources such as money or knowledge, which serve to improve the acquisition of other resources (Hobfoll 1989, 517).

Although this approach categorizes the different groups of resources in order to enable better comparability and scientific research, a clear problem has been apparent since the beginning: Depending on the person’s life situation and context, the different resources can sometimes be seen as positive and in other cases as negative, which is why it is recommended to use the COR framework in conjunction with other theories that deal in greater depth with the individual interactions of the resources (Halbesleben et al. 2014; Hobfoll 1989; Hobfoll et al. 2018).

Scientists have tried to counteract this problem by defining resources as value-creating means to achieve the respective goals of the person (Halbesleben et al. 2014) and by seeing the value of certain resources in a socio-cultural context in which the cultural orientation of a person is decisive for the value assessment of a resource (Morelli and Cunningham 2012). The COR theory can be broken down into its basic principles and the related conclusions. In addition to the prevailing principle that the loss of a resource is more severely weighted than the acquisition of a resource, the second principle states that people must invest in resources in order to prevent the loss of existing resources, acquire new resources or recover from the loss of resources (Hobfoll et al. 2018).

Vinokur and Schul (2002) investigated the relationship between recently laid-off workers' personal coping resources and their job search behavior, including search intensity and reemployment quality, based on the second principle. They discovered that the likelihood of reemployment rose with greater motivation on the side of those participating. Further studies, such as the one conducted by Ng and Feldman (2012), have shown that resource investment is an extremely complex process that is influenced by multiple factors (Halbesleben et al. 2014). In their analysis, they found that, on the one hand, exercising agency (i.e., putting forward innovative ideas) can lead to the loss of resources, especially in the presence of other job stressors. On the other hand, from a performance-driven perspective, it can also lead to productivity and the associated increase in performance (Ng and Feldman 2012). One of the articulated propositions posits that individuals or organizations possessing greater resources exhibit significantly enhanced resilience to resource loss and demonstrate superior capacity for acquiring new resources (Ng and Feldman 2012).

Conversely, this implies that individuals and organizations with fewer resources are more susceptible to resource loss and face greater challenges in acquiring new resources (Hobfoll 2001). This was investigated, among other aspects, by Mäkikangas, Bakker, Aunola, and Demerouti (2010) in the context of an empirical study with 335 employees, in which they wanted

to explore the relationship between job resources and flow at work. They found that the levels of job resources and workflow correlate positively. The second finding has to do with the ongoing depletion of resources. This is the start of a downward spiral when every new stressful event drains an organizations' or individual's resources, making the spiral wider and more powerful. Accordingly, the third conclusion is that resource gains can also exhibit a spiral dynamic, yet, these are generally weaker and slower than those linked to resource losses because of the first premise (Hobfoll et al. 2018).

Job Demands-Resources Model: The Conservation of Resources theory (COR) is the underlying theoretical framework of the JD-R model (Figure 3), explaining the “link between job demands-resources, personal resources, organizational commitment, work engagement, turnover intentions, and job performance” (Bon and Shire 2022, 236). The link as the basis of the JD-R model is emphasized when job demands are specifically identified as resources consumed and job resources are identified as resources gained or conserved.

The JD-R model's ideas about gain and loss spirals, positive and negative cycles of resource change as also previously discussed, directly reflect COR's fundamental ideas about resource acquisition and conservation (Demerouti et al. 2001). Consequently, the JD-R model can be regarded as an extension of COR theory, specifically adapted for the workplace context. Thus, for the application of these models to empirical findings related to burnout in occupational settings, the consideration of the JD-R model is particularly pertinent (Bakker and Demerouti 2018; Demerouti et al. 2001). To show how the demands outweigh the insufficient resources and how working conditions influence employees and vice versa, the individual components are defined more precisely so that findings can be better analyzed later (Demerouti et al. 2001).

Job demands refer to aspects of work that consume energy, for example, high workload, complicated tasks, and conflicts in the workplace. (Bakker and Demerouti 2018).

Job resources, on the other hand, are aspects of work that help employees to handle demands, and can include feedback, social support, and a variety of skills. Sufficient job resources buffer

the negative impact of work demands on well-being by allowing employees to satisfy their psychological needs, thus reducing the risk of burnout that originates from high job demands (Demerouti et al. 2001; Bakker and Demerouti 2018). Another aspect that acts similarly to job resources are personal resources, which are individual characteristics, such as optimism and self-efficacy that influence employees' resilience to work demands. A high level of personal resources consequently helps employees to better cope with demands and should therefore reduce the likelihood of burnout (Bakker and Demerouti 2018).

In addition to the influence of personal resources, an associated observation shows how individuals influence some factors themselves, leading to two cyclical processes that influence the well-being of employees, namely loss cycles and gain cycles. Loss cycles are unfavorable and result from high work demands that lead to stress, exhaustion, and cynicism which then trigger self-undermining behaviors that may further create obstacles and increase demands, which increase the strain and keep a downward cycle going. In contrast, gain cycles are beneficial and begin with sufficient work resources and personal resources that foster motivation and engagement at work. This empowers individuals to proactively participate in shaping their work by changing their work so that resources increase and demands decrease, creating a positive cycle that further increases engagement and well-being. These contrasting cycles illustrate how employees' actions can either intensify or reduce burnout, depending on the interplay of demands and resources and individual characteristics (Bakker and Demerouti 2018, 3-4).

Besides those individual determinants, there are also aspects on higher levels such as the organization, leadership, and team which are interrelated. A supportive work environment and strong leadership can help mitigate individual work stress, while poor teamwork or ineffective management can contribute to it. Due to their interrelation, improvements at one level can also have a positive impact on burnout at other levels, emphasizing not only the sum, but the importance of each individual aspect (Bakker and Demerouti 2018, 5-7; Figure 3).

In summary, the JD-R Model shows the connections between demands and resources, but also individual and other workplace factors, showing that there are multiple levels which highlight the complexity of possible drivers and barriers to burnout.

2.3 Complementary Theories and Models

In addition to the fundamental works in burnout research presented so far, there are other significant models and theories that are partly based on the basic models and attempt to tackle recognized weaknesses and thus increase validity.

The testing of the dual processes' hypothesis can be understood as a nuance and practical test of the JD-R model. In 2003, Bakker, Demerouti, and Schaufeli simultaneously tested the extent to which job demands affect the mental health of employees and how job resources affect employee involvement. It was shown that the energy-driven process, which includes demands such as work pressure or changes in tasks, has an impact on mental health. Regarding job resources, such as time management and feedback culture, the motivational process has been demonstrated to correlate with employee engagement. This reveals that when examining burnout, both the motivational processes and the energy-driven processes must be taken into account in order to effectively tackle them (Bakker, Demerouti and Schaufeli 2003).

Another theoretical approach that focuses on the fit between a person and their environment is the person-environment fit theory, which states that considering a person together with their environment can better explain their behavior than an isolated consideration. It also states that a result is best when a person's personal attributes are compatible with their environment. The third and final principle states that a poor fit between the person and their environment leads to poorer results, regardless of the direction in which the differences lie (Van Vianen 2018).

There are further theories that have explored this in more detail in the context of organizational structures (Schneider 1987) or in connection with the stress levels and mental health of individuals (Edwards and Cooper 1990). The six dimensions of working life were presented, influenced by the idea of the personal environment fit: workload, control, reward, community,

fairness, and values (Leiter and Maslach 2003; Maslach, Schaufeli, and Leiter 2001). The main tenets of the theory are that a mismatch between an individual and the six dimensions can lead to an increased likelihood of burnout and, on the other hand, that the better the fit between the person and the dimensions, the better the work outcome (Maslach and Leiter 2016a).

Several other well-established theories address the phenomenon of burnout syndrome. For the purposes of this study, the most prominent examples have been selected to facilitate a qualitative synthesis of the subject matter in preparation for the subsequent sections

3) Measurement of Burnout

To assess an individual's level of work-related burnout and draw conclusions about their condition, empirical methodologies based on key burnout theories have been developed. Some assessment tools are tailored for specific occupational groups, such as athletes, educators, and healthcare professionals, while others offer a general framework applicable across various professions (e.g., Edú-Valsania, Laguía, and Moriano 2022, 17). This section outlines these models, highlighting their similarities and differences in methodology.

3.1 Maslach Burnout Inventory

One of the oldest, but also most widely used tools for assessing job burnout is the MBI tool which was introduced in the course of research by Maslach and Jackson (1981). The MBI is a self-reporting tool in which participants express their feelings about certain statements, which are divided into the three dimensions of emotional exhaustion, depersonalization, and personal accomplishment. It is important to note that the initial assessment tool was developed specifically for use in the human services sector, the MBI-human services survey (MBI – HSS), which includes jobs like nurses, therapists, police, and social workers and was therefore initially only used in this sector (Maslach and Jackson 1981). This was followed by a version specifically designed for teachers, the MBI-educators survey (MBI - ES) (Maslach, Jackson, and Leiter 1997). However, both tools differ only minimally in wording and are therefore structured in the

same way. They both consist of a total of 22 statements that relate to the job context and can be divided into the three dimensions previously described (Maslach and Jackson 1981; Maslach, Jackson, and Leiter 1997).

Numerous researchers have tested the tools for validity and have come to different conclusions in some cases. Some have come to the conclusion that the three-factor structure is both valid and reliable (Hallberg and Sverke 2004; Iwanicki and Schwab 1981). Others, however, have found that a two-factor structure, compromising exhaustion and depersonalization into one dimension is better or that certain items such as “I am very energetic” or “Working directly with people stresses me out too much” should be deleted to prevent distorted results due to their factor loadings (Gorter et al. 1999, 212; Holland, Michael, and Kim 1994). Nevertheless, the overall research situation implies that the MBI is a useful instrument that is rightfully seen as being crucial, but that it may also be modified.

The third and general version of the MBI, the MBI-general survey (MBI-GS) was developed to cover the increasing interest in burnout in other occupational fields and thus to be used in a general context (Maslach, Leiter, and Jackson 2012; Schaufeli et al. 1996). In contrast to the previous tools, there are only 16 items in the general survey with a six-response per statement scale (never - daily), which are divided into the three dimensions, although a rewording into emotional exhaustion, cynicism, and reduced professional fulfillment has taken place. The first dimension refers to the perceived physical and mental fatigue, the second asks about the degree of depersonalization, for example, an indifferent attitude towards the job and employees, and the third measures satisfaction with job-related successes (Schaufeli et al. 1996). Participants who received high scores on the first two dimensions but low scores on the last dimension exhibit a certain level of burnout. Conversely, participants with low scores in the first two dimensions, but with a high score in the personal accomplishments dimension, show positive effects in relation to their work (Maslach and Leiter 2008). The three-factor structure has been proven by various researchers in this field in both different professional and cultural contexts (Bakker, Demerouti,

and Schaufeli 2002; Bria et al. 2014; Loera, Converso, and Viotti 2014). Critics of the tool argue that the negative framing of statements in the exhaustion and cynicism dimensions, contrasted with the positive framing in the reduced personal accomplishment dimension, may lead to unwanted clustering (Demerouti et al. 2001; Doty and Glick 1998).

3.2 Oldenburg Burnout Inventory

Another self-assessment tool, the Oldenburg Burnout Inventory (OLBI) was established in the course of JD-R theory and revealed the possibility of a two-factor structure in burnout measurement that was not geared to a specific industry (Demerouti et al. 2001). On one hand, the new tool aims to address the problematic phrasing of the MBI by correcting the imbalance between negatively and positively framed statements, thereby mitigating the risk of response bias. On the other hand, the items are only divided into two dimensions, namely exhaustion and disengagement from work. Each dimension contains eight statements for which the participants have the option of a four-point response scale (strongly disagree – strongly agree) (Demerouti et al. 2001; Demerouti et al. 2003). Using two data samples of U.S. based workers and the English version of the Oldenburg Burnout Inventory, Halbesleben and Demerouti (2005) were able to confirm both the reliability and validity of the tool, thus supporting the OLBI as a viable alternative to the standard MBI.

3.3 Copenhagen Burnout Inventory

Similar to the development of the Oldenburg Burnout Inventory (Demerouti et al. 2001), Kristensen et al. (2005) wanted to create an alternative to the MBI framework to address its limitations in assessing burnout, motivation, and job satisfaction in the human services sector. They criticized the MBI's questionnaire formulation and conceptualization of burnout, arguing for the independent assessment of all three burnout dimensions. Concerns were also raised about the MBI's negative phrasing and its perceived American bias, which adversely affected participant responses (Kristensen et al. 2005, 193-195). Additionally, the MBI's restricted accessibility due to its private distribution limits its broader application (Kristensen et al. 2005).

In response, they developed the Copenhagen Burnout Inventory, which focuses on exhaustion and fatigue as central burnout dimensions and includes three subscales: personal burnout, work-related burnout, and client-related burnout. Each subscale assesses different aspects of exhaustion, allowing for comprehensive evaluation. Both subscale and total scores can be analyzed to determine overall burnout levels (Kristensen et al. 2005). The instrument has shown positive psychometric properties across various cultural contexts, supporting its validity and reliability (Kristensen et al. 2005; Milfont et al. 2008; Molinero Ruiz et al. 2013).

3.4 Shirom Melamed Burnout Measure

The Shirom-Melamed Burnout Measurement tool is based on the theoretical concept of the COR model (Hobfoll 1989) and refers specifically to the energetic resources that are examined in more detail in the form of physical, emotional, and cognitive exhaustion (Shirom 2003, 250; Shirom and Melamed 2006). Three reasons are given for the focus on the three dimensions mentioned. Firstly, the energy levels are very individual and are considered to be highly correlated. Secondly, there is no overlap with other concepts such as anxiety or cynicism. Furthermore, it is distinguished from coping mechanisms or stress assessments that are preceded by burnout. The tool consists of a total of 14 items, which are divided into two subscales, namely physical and cognitive exhaustion, and require participants to locate their emotional state on a seven-point response scale (never/almost never - always/almost always) (Shirom and Melamed 2006). In addition to the successful validation in the work-related area (Schilling et al. 2019), other scientists also determined a high level of reliability and validation in school-age adolescents (Gerber et al. 2018), which stands for a good general validity of the assessment tool.

3.5 Burnout Assessment Tool

Based on the dissatisfaction with the standards that have been applied so far, which view the burnout definition as a three-factor construct and measure it using the MBI, the novel Burnout Assessment Tool (BAT) was developed (Maslach and Jackson 1981; Schaufeli, Desart, and De Witte 2020). With the help of an intensive exchange with psychologists, doctors, practicing

burnout researchers, as well as a well-founded data analysis, four new burnout dimensions were defined in the BAT: “(1) exhaustion (i.e., a severe loss of energy that results in feelings of both physical and mental exhaustion); (2) mental distance (i.e., a strong reluctance or aversion to work, indifference, and cynicism); (3) cognitive impairment (i.e., memory problems, attention and concentration deficits, and poor cognitive performance); and (4) emotional impairment (i.e., intense emotional reactions such as anger or sadness, and feeling overwhelmed by one’s emotions)” (Schaufeli and De Witte 2023, 4).

From these four dimensions, a new 23-item questionnaire was created that uses a five-point scale (never – always) to ask about the emotional state of the participants related to work. Both the subscale scores and the total score can be used to draw initial conclusions about a person’s risk of burnout (Schaufeli, Desart, and De Witte 2020). In addition to the initial, longer version, a further 12-item version has been developed to gain meaningful insights based on even fewer questions. Although both the longer and shorter versions have passed the reliability and validity checks, it is pointed out that further research is needed to be able to make even better and more accurate statements regarding score interpretation (Hadžibajramović, Schaufeli, and De Witte 2022; Schaufeli, Desart, and De Witte 2020). Despite being a relatively novel concept, the BAT shows its resilience through exhibiting a degree of independence from potentially misleading variables including gender, age, and cultural background.

Furthermore, it reveals correlations with the Job Demands-Resources (JD-R) model, indicating its alignment with established research findings in the field (Schaufeli and De Witte 2023).

In summary, the BAT represents a valuable instrument for assessing the level of burnout symptoms in both individual and organizational contexts, owing to its user-friendly design and public accessibility in multiple languages (Schaufeli and De Witte 2023).

4) Key Stressors of Burnout

The studies to date on the topic of burnout stressors focus on a two-dimensional approach that links work-related factors on the one hand and personality-related factors on the other with burnout. There are differing views within the scientific community regarding the appropriate weighting of each factor in the analysis (Edú-Valsania, Laguía, and Moriano 2022).

4.1 Organizational Stressors

Maslach, Schaufeli, and Leiter (2001) analysed previous studies on job-related burnout and found that people's levels of burnout are influenced by six important areas of their work lives. In this context, ongoing problems between the person and one or more areas simultaneously lead to a higher level of burnout (Maslach et al. 2001).

One of the relevant areas is workload, which in both forms, such as too many tasks or tasks that are too difficult in relation to the person's available resources, lead to a significant increase in the level of exhaustion. The extent to which people are able to recover from the demands of their work is also taken into account. If there is a persistent lack of recovery, this can have a negative impact on the quality of work (Leiter and Maslach 2003).

Another approach that focuses more on working hours shows that overtime, shift work, or long working hours can be significant stressors that promote burnout. These factors can also lead to additional problems, such as sleep disturbances or job dissatisfaction, especially when work-life balance is disrupted (Edú-Valsania, Laguía, and Moriano 2022; Maslach and Leiter 2016a).

The second area, control, provides information about how much autonomy a person has over the resources required for the job or task in question. It is also about the degree of freedom that people have in prioritizing and executing tasks. In addition, researchers have found that unclear expectations of the role in the form of mismatched tasks can lead to higher levels of burnout (Acker 2003). A lack of autonomy, or a limited degree of control, raises burnout scores (Maslach

et al. 2001). On the other hand, there are studies that show that empowering measures at work can lead to lower levels of burnout (Orgambídez and Almeida 2019).

The third section examines the degree to which the workplace reward system functions both financially, through monetary rewards, and socially, through acknowledgment from coworkers or managers. Lack of these elements may result in negative feelings of inefficacy and, as a result, a higher risk of burnout (Maslach et al. 2001). Since interpersonal relationships also play an important role at work, a conflict in the community area leads to a loss of relationships with other colleagues. Individuals usually show an interest in positive interactions with others, as these interactions are fundamental to optimal functioning. On the other hand, unresolved and protracted problems in teams can lead to frustration and, in the worst case, to resignations (Maslach et al. 2001, Maslach and Leiter 2016a). Even if the lack of social support in the team from colleagues or superiors is a significant stressor for burnout, mutual support can be a decisive factor in combating it (Boland et al. 2019).

Another important area that has a strong connection to the community is fairness in the workplace. If employees notice constant injustice in the form of unequal pay or incomprehensible promotions, for example, this has a negative impact on both their personal level of exhaustion and their attitude towards their colleagues and superiors (Maslach et al. 2001, Maslach and Leiter 2016a).

The last area deals with the mismatch between individual values and those of the company in which a person works. This may occur, for instance, when individuals are required to perform actions to complete a task that conflicts with their personal ethical principles. The process of controlling personal emotions in a professional setting to conform to the company's wishes is a detrimental expression of this dimension (Edú-Valsania, Laguía, and Moriano 2022). For example, a study of Malaysian workers in the human resource department showed that acting out fake emotions can lead to a higher level of burnout (Mustafa et al. 2016). However, if personal values match those of the company, this leads to positive effects such as greater

commitment and the fulfilment of personal goals in terms of the meaningfulness of work (Leiter and Maslach 2003).

In conclusion, it can be stated that on the one hand the mismatch between the actual characteristics of the domains and a person can have negative effects on the burnout level, but on the other hand a high match between them can lead to positive effects in the work context (Leiter and Maslach 2003; Maslach et al. 2001).

4.2 Individual Stressors

In addition to the presence of purely occupational stressors, there are some personality-related stressors that can influence the degree of burnout in people in the work context (Edú-Valsania, Laguía, and Moriano 2022). In the following, some of them are examined in more detail to provide a well-rounded overview. For example, Bellmann and Hübler (2022) were able to find out that the Big Five personality traits can have different effects on the mental health of employees by examining a German data set. The five dimensions of the Big Five are agreeableness, conscientiousness, extraversion, openness to experience, and neuroticism (McCrae and John 1992). Consistent sources have shown that people with high levels of extraversion, conscientiousness, agreeableness and openness to experience have better mental health (i.e., they are less at risk of burnout than their colleagues with the opposite personality traits). People with a high degree of neurotic traits such as emotional instability have significantly higher burnout levels than more emotionally stable people (Angelini 2023, Bellmann and Hübler 2022).

Besides the five personality dimensions, there are other personal stressors that have a demonstrable impact on people's burnout levels. On the one hand, it has been shown that people who believe that things and events that happen around them and affect them only depending on the actions and decisions of others are more likely to be affected by burnout (Edú-Valsania, Laguía, and Moriano 2022). In line with the essential findings of Freudenberger (1974), it has also been shown that employees who have very high expectations and goals on the one hand,

and who are also too involved in their work on the other, are more exhausted and have a negative attitude towards work and can therefore exhibit a higher degree of burnout (Edú-Valsania, Laguía, and Moriano 2022, Maslach and Leiter 2016a). It has also been shown that people who tend to use passive, emotion-oriented coping mechanisms increase the risk of burnout. People who tend to choose an active, problem-oriented approach to solving problems and critical situations have lower scores (Edú-Valsania, Laguía, and Moriano 2022).

4.3 Remote Work

One category that has experienced strong growth in implementation across all industries due to the Covid-19 pandemic is remote work. It is interesting to note that there are many studies that have shown remote work to have a negative impact on burnout levels (e.g., Jimenez-Gomez, Sawhney, and Albert 2021; Raišienė et al. 2023), as working from home was, for example, associated with higher stress and internet-based communication problems led to challenges in performing activities (e.g., Hayes et al. 2021). Research has also demonstrated that the influence of digital platforms within the work context adversely affects individual well-being and can cause technostress, especially when remote work is not a voluntary choice (Singh et al. 2022). Vacchiano, Fernandez and Schmutz (2024) have gained further interesting insights based on 132 studies on the influence of remote work on quality of life and mental well-being, which clearly show the complexity of this topic. The study revealed that both the remote work environment, specifically, the setting and availability of natural light, and the duration of remote work significantly impact individual well-being. Furthermore, the interplay between remote work and mental health is also influenced by personal characteristics, including personality traits and the individual's current life stage (Vacchiano, Fernandez and Schmutz 2024).

Further studies, on the other hand, have shown that hybrid work, for example, a mix of remote and face-to-face work due to the autonomy gain, can certainly have a reducing effect on an individual's burnout level (Höcker et al. 2024; Vacchiano, Fernandez and Schmutz 2024). Additionally, there are studies that illustrate both positive and negative effects of remote work.

For instance, while remote work is associated with increased job satisfaction, it simultaneously presents challenges in terms of disengagement from work-related activities after hours (Felstead and Henseke 2017). Based on survey responses from government employees during the pandemic, Allgood, Jensen, and Stritch (2022) found that individuals with a strong sense of social belonging experience reduced work-family conflicts, which correlates with lower levels of burnout. Furthermore, their research indicates that remote work can obscure the boundaries between professional and personal life, potentially leading to increased tension and stress.

The mixed results suggest that the association between teleworking and burnout levels is a highly complex issue, with conclusions frequently emerging from context-specific research that emphasizes individual differences in personality traits, variations across different work sectors, and the extent of teleworking implemented.

Although there are some common burnout stressors that apply to all industries, research and literature indicate that the impact and severity of these factors frequently vary by industry. This supports the need for additional industry-specific research to obtain fresh, innovative perspectives that can aid in understanding burnout syndrome and its key triggers, and then create new remedies based on these discoveries.

5) Consequences of Burnout

As the number of absenteeism due to burnout continues to rise, it is critical to understand that there are far-reaching consequences that come along with it. Burnout not only affects individual health by undermining employee well-being, but also disrupts organizational performance, and creates broader societal challenges. Accordingly, this section will explore the impact of burnout on individuals, organizations, and society as a whole, in order to highlight the interconnected nature of the problem.

5.1 Individual Consequences

Many studies have been published over the years, with research dating back decades, all highlighting the serious impact burnout has on individuals. Especially for the physical consequences, there is a high amount of research and substantial evidence that burnout can have a significant impact on an individual's physical health (e.g., Burke and Deszca 1986; Cordes and Dougherty 1993; Maslach and Jackson 1981; Maslach and Pines 1977). According to Kahill (1988), these physical health problems include fatigue, sleep difficulties, headaches, gastrointestinal disturbances, and colds, among others. In a more recent and comprehensive meta-study, Salvagioni et al. (2017) analyzed 36 prospective studies (out of 993 initially identified articles) and identified hypercholesterolemia, type 2 diabetes, coronary heart disease, hospitalization due to cardiovascular disorder, musculoskeletal pain, changes in pain experiences, prolonged fatigue, headaches, gastrointestinal issues, respiratory problems, severe injuries, and mortality below the age of 45 years as the main physical consequences. Researchers have also identified additional negative impacts on physical health, such as the fact that burnout patients can experience hypercortisolism, which can be detected in their hair (Penz et al. 2018). Furthermore, individuals can be affected by psychological symptoms, such as emotional depletion, insomnia, excessive anxiety, or the feeling of helplessness (e.g., Armstrong 1979; Forney, Wallace-Schutzman, and Wiggers 1982; Jackson and Maslach 1982; Salvagioni et al. 2017). Also, depression, is a common outcome of burnout, with studies showing that 23% of individuals experiencing burnout but no depressive symptoms at baseline developed depressive symptoms at follow-up (Ahola and Hakanen 2007), which is in line with findings of Armon et al. (2014).

Even more concerning, research has shown that burnout can be associated with an increased risk of suicidal ideation (Bryan et al. 2017).

5.2 Organizational Consequences

However, the impact of burnout extends beyond individual health as it also affects organizations, leading to a range of serious and interconnected consequences. The previously described health issues caused by burnout inevitably spill over into the workplace. This can lead to lower performance, disengagement, and a decrease in overall effectiveness and it is widely acknowledged that burnout can negatively affect turnover rates, absenteeism, and employee morale (e.g., Adriaenssens, De Gucht, and Maes 2015; Ahola, Toppinen-Tanner, and Seppänen 2017; Han, Bonn, and Cho 2016; Jackson, Schwab, and Schuler 1986; Maslach and Jackson 1981, Parker and Kulik 1995; Rössler 2012; Salvagioni et al. 2017). According to these findings, employees who suffer from burnout are not only absent more frequently but also, when present, dedicate less time and effort to their work, often focusing only on the bare minimum required and showing minimal or no motivation for the subject matter. Especially, emotional exhaustion was found to have a significant impact on job dissatisfaction (Figueiredo-Ferraz 2012; Lizano and Mor Barak 2015). Another interesting finding was highlighted by Borritz et al. (2006), who observed that a one standard deviation increase on the work-related burnout scale was associated with a 21% increase in sick days per year.

5.3 Societal Consequences

The effects of burnout on individuals and organizations, in the end, extend to society as a whole. As burnout leads to increased absenteeism and lower productivity, the broader societal costs become evident. For example, burnout in the U.S. is estimated to cost around \$4.6 billion annually due to physician turnover and reduced clinical hours (Han et al. 2019). The rising prevalence of burnout not only strains public health systems but also contributes to economic losses and diminished social well-being. A study of Swedish administrative data found that burnout leads to permanent earnings losses for workers, reduced family income, and decreased children's educational achievements, ultimately reducing national labor income by 2.3%

(Nekoei, Sigurdsson, and Wehr 2024), which demonstrates how the cascading effects extend far beyond individual experiences and that long-term societal risks are particularly concerning.

6) Research Gaps

6.1 Constantly Evolving Workplace Settings

Some changes have undoubtedly occurred in recent years since the launching of the COR model in 1989 and the JD-R model in 2006. Key elements that are likely to be responsible for the creation of new job demands and job resources include topics such as remote work, increased digitization, and other advances, particularly as a result of the Covid-19 pandemic.

6.2 Lack of Comparative Analyses across High-Stress Industries

Although there is a wide range of research on burnout, there is a significant gap in the comparative analysis of different high-pressure industries. Existing studies often focus on individual sectors and neglect the potential for varying burnout drivers and their relative weight in different demanding environments.

7) Hypotheses

Based on the literature review and the research gaps identified, two hypotheses can be formulated, which will be analyzed and tested in the further course.

7.1 Hypothesis One

Remote work is negatively related to burnout.

The proportion of remote work and flexibility correlates negatively with burnout as the ability to work remotely can act as a job resource that provides more flexibility and autonomy, thereby reducing stress and lowering burnout risk, as suggested by the JD-R model.

7.2 Hypothesis Two

a) The risk of burnout is highest in investment banking, followed by consulting, with startups having the lowest risk among the three.

b) The industry-specific burnout drivers differ between investment banking, consulting, and startups.

The high-stress, demanding nature of investment banking creates an environment of intense workloads, long hours, and constant performance expectations, which significantly increases the likelihood of employee burnout. Consulting involves more creative and less repetitive work, yet still includes high-stress client interactions, frequent travel, and project-based work that can lead to mental exhaustion. In contrast, startups often offer more flexible work environments, a sense of purpose, and a more collaborative culture that can mitigate burnout.

CHAPTER THREE: RESEARCH DESIGN AND METHODOLOGY

1) Introduction

This chapter describes the research design and methodology used to investigate the various factors that contribute to burnout in the three high-pressure professional environments. The study takes a quantitative approach and utilizes survey data analysis to identify statistically significant relationships and quantify the relative influence of different factors on burnout levels using the 12-item version of the BAT (Hadžibajramović, Schaufeli, and De Witte 2022). This methodology is chosen to achieve the main objective of the study: to investigate the specific factors that drive burnout in consulting, investment banking, and startups.

2) Data Collection and Survey Structure

The data was collected using a structured questionnaire that was distributed to the target audience through channels such as LinkedIn or alumni groups to maximize the number of independent responses from professionals with relevant experience. For data protection reasons, the survey was conducted anonymously, and a control question was included to ensure that only serious responses are considered and to maintain high data quality. In order to obtain meaningful data, the survey was conducted until at least 30 relevant responses were received in each industry. As a result, the central limit theorem applies with a sufficiently large sample so that the sample

distribution approximates a normal distribution, making the analysis statistically relevant (Mascha and Vetter 2018).

The survey included a number of measurable factors to collect data for assessing their impact on burnout levels and was structured and divided into the following factors.

2.1 Demographic Information

The survey starts with questions regarding demographic information. These information provide a contextual understanding of the respondents' backgrounds, allowing different groups to be categorized for analysis. For this information, age, gender, level of education, country of residence, annual salary, and employment status were queried. This not only allows for demographic categorization but was also the first filtering criterion to ensure the geographical focus of the research.

2.2 Work Experience and Job Characteristics

In the next step, more job-related characteristics were polled in order to determine the variables of work, effort, and flexibility. The industry in which the person works was asked for grouping purposes. Then, in order to measure the level of experience and responsibility, the number of years in the industry, the seniority level, and the number of people managed was asked. In order to assess the workload, the number of hours worked per week as well as work at weekends and the perceived stress level were surveyed. To make the effect of remote work measurable, both the number of remote days per week and the freedom of choice were investigated.

2.3 Stressors

In the next part, a multiple-choice question is used to focus on prominent stressors in order to analyze how they are perceived by the individuals and whether and to what extent they have an influence on the burnout score. The options for selection are 1) high workload, 2) competition within the firm, 3) lack of positive feedback and recognition, 4) lack of autonomy over work / micromanagement, 5) conflict with team members or leadership, 6) conflict between individual and organizational values, 7) lack of trust, openness, and respect in the workplace. In addition,

an open text field provides the opportunity to identify further stressors (Edú-Valsania, Laguía, and Moriano 2022; Leiter and Maslach 2003; Maslach and Leiter 2016a; Maslach, Schaufeli, and Leiter 2001).

2.4 Prevention Measures

In order to find out whether and which measures are already being taken by employers, there was an extensive multiple-choice question that consisted of the answer 1) “Nothing” and included prominent coping measures such as 2) workload adaptation (e.g., flexible working models, remote work), 3) medical and mental health support (e.g., persons of trust, psychologists, physical health initiatives), 4) training and workshops (e.g., stress/time management workshops, mindfulness/meditation training), and 5) improvement in workplace environment (e.g., communication/transparency initiatives, recognition/reward systems, career development opportunities). The aim is to investigate how widespread which of the measures are for the benefit of employees and whether or what influence these measures have on the burnout risk of the respondents (EURES 2023; Maslach, Schaufeli, and Leiter 2001).

2.5 Burnout Assessment Tool

In the last part of the survey, the short version of the BAT was integrated in order to use an up-to-date and valid assessment tool that can accurately quantify the burnout risk of the respondents (Hadžibajramović, Schaufeli, and De Witte 2022). To further confirm the reliability of the BAT score and its four subdimensions, Cronbach's alpha was examined. Both the four subdimensions and the overall score demonstrate alpha values exceeding 0.7, which indicates the reliability of the test and thus validates its use (see Appendix 1, Figures 4-8; Taber 2018). The individual statements based on the tool were listed chronologically, divided into the four sub-areas and queried using the options of the five-point scale (never-always) (Schaufeli, De Witte, Desart 2019). In the evaluation, all answers are assigned a numerical value of 1-5, allowing a score to be calculated for each individual, which is used as an indicator of burnout risk for further analyses, representing an essential component of the following regression analysis as a

dependent variable, which is explained in the following chapter. Furthermore, the different industries and demographic groups can also be examined and compared, which will be particularly meaningful in the later part of the research.

3) Data Analysis

3.1 Descriptive Statistics

In the first part of the data analysis, a special focus is placed on descriptive statistics by evaluating the survey results using an Excel analysis and statistical software Jamovi. The consolidated results are listed in tabular form in the Appendix and are also written down for direct comparison to highlight prominent features. In addition to absolute figures for comparison, distributions and differences are presented as percentages and, where appropriate, a mean value is shown. The section is divided thematically into demographics, work experience and job characteristics, stressors, prevention measures, and the BAT scores.

3.2 Inferential Statistics

To assess the validity of the previously described hypotheses, inferential statistical methods are applied. The analysis includes both linear regression models and one-way ANOVA tests to examine the relationships between burnout risk and various influencing factors.

Before the linear regressions can be conducted, the survey data is prepared and structured to ensure that each variable is represented in a way that allows for meaningful and accurate interpretations of its relationship to burnout. For example, the stressors and prevention measures are transformed into dummy variables. This means that each stressor or measure is translated into a binary variable, where a value of 1 indicates that the respondent has selected or experienced that specific factor, and a value of 0 indicates that they have not. For instance, if a respondent identified high workload as a significant stressor, it is coded as 1, whereas if they did not, it is coded as 0.

Other variables, such as the BAT score, are treated as continuous variables, allowing them to be analyzed on a numerical scale to capture incremental differences, for example, to reflect varying levels of burnout risk.

For **Hypothesis 1**, a linear regression is conducted to investigate the relationship between remote work and burnout risk. In this model, burnout risk (measured by BAT score) serves as the dependent variable, while remote work and autonomy to work remotely are the independent variables:

$$(1) Y_{BAT_Score} = \beta_0 + \beta_1(\text{remote work days}) + \varepsilon$$

$$(2) Y_{BAT_Score} = \beta_0 + \beta_1(\text{remote work autonomy}) + \varepsilon$$

This analysis assesses whether increased remote work and autonomy are associated with lower burnout risk, supporting or rejecting the hypothesis that remote work is negatively related to burnout.

In these equations, Y_{BAT_Score} represents the dependent variable (i.e., the burnout risk derived from the BAT score), β_0 denotes the intercept (i.e., the baseline burnout risk when all independent variables are zero), and $\beta_1, \beta_2, \dots, \beta_k$ represent the regression coefficients associated with the independent variable. Each β_i quantifies the magnitude and direction (positive or negative) of the relationship between the corresponding independent variable and the burnout risk score, while holding all other variables in the model constant. A positive β_1 indicates that as the value of the independent variable increases, the burnout risk score tends to increase, thus suggesting a risk-enhancing effect. On the other hand, a negative β_1 suggests that as the independent variable increases, the burnout risk score decreases, thus indicating a mitigating effect. The absolute value of β_1 reflects the strength of this association (i.e., larger values imply a stronger relationship, while smaller values suggest a weaker influence).

For **Hypothesis 2a**, a one-way ANOVA is used to compare burnout risk across the three industries: investment banking, consulting, and startups. The BAT score and its four dimensions

(exhaustion, mental distance, emotional impairment, and cognitive impairment) are analyzed to determine whether there are statistically significant differences in burnout levels among industries. This test helps to establish whether investment banking exhibits the highest burnout risk, followed by consulting, with startups showing the lowest risk, as hypothesized.

For **Hypothesis 2b**, separate linear regressions are conducted for investment banking, consulting, and startups to examine whether the drivers of burnout vary across industries. In these models, burnout risk (BAT score) remains the dependent variable, while various stressors (e.g., high workload, competition within firm) and prevention measures (e.g., workload adaptation, training and workshops) serve as independent variables:

$$\begin{aligned}
 (3) Y_{BAT_Score} = & \beta_0 + \beta_1(\text{high workload}) + \beta_2(\text{competition within firm}) + \\
 & \beta_3(\text{lack of positive feedback and recognition}) + \\
 & \beta_4(\text{lack of autonomy over work/micromanagement}) + \\
 & \beta_5(\text{conflict with team members or leadership}) + \\
 & \beta_6(\text{conflict between individual and organizational values}) + \\
 & \beta_7(\text{lack of trust, openness, and respect in the workplace}) + \varepsilon
 \end{aligned}$$

$$(4) Y_{BAT_Score} = \beta_0 + \beta_1(\text{nothing}) + \beta_2(\text{workload adaptation}) + \beta_3(\text{medical and mental health support}) + \beta_4(\text{training and workshops}) + \beta_5(\text{improvement in workplace environment}) + \varepsilon$$

This analysis identifies which factors contribute most significantly to burnout risk within each industry and whether protective measures differ in effectiveness across sectors.

Furthermore, normality (Shapiro-Wilk, Kolmogorov-Smirnov, and Anderson-Darling) and heteroskedasticity tests (Breusch-Pagan, Goldfeld-Quandt, and Harrison-McCabe) are conducted to verify that the necessary assumptions for accurate statistical inference are met in order to ensure robustness and validity of the findings.

CHAPTER FOUR: GENERAL ANALYSIS AND RESULTS

1) Introduction

This chapter aims to show the analysis of the research and findings to gain a detailed insight into the key stressors of burnout in high-stress industries. First, the generality of the relevant results of the survey is presented, providing an overview and reference values for detailed analyses. The three industries are then examined in depth and compared with the benchmarks to identify similarities and differences. The procedure focuses on analyses through an assessment by descriptive statistics and linear regression, and the evaluation of the BAT scores.

2) General Analysis of Results

2.1) Demographic Information

A total of 166 people completed and submitted the survey. Due to the industry focus, nationality, and the attention question, 28 answers were identified as irrelevant and consequently sorted out to make the results of the analysis as precise and significant as possible. Consequently, a total of 138 Germans (n=138) remained for the analysis, of which 75 work in consulting, 33 in investment banking, and 30 in the startup sector which make the results statistically representative for each individual industry, as the central limit theorem applies.

There were 33 women and 105 men among the respondents, creating a gender imbalance. In general, respondents tended to be younger, with 89.8% below 35 years of age. Among the respondents, 50% have a bachelor's degree and 41.3% have a master's degree, illustrating a high standard of academic education. There are also different groups of employment statuses, with the majority being full-time employees with 68.1%. An interesting finding, which was to be expected in the sectors, is that the respondents have a high income compared to the annual German gross salary of €51,876 (Imöhl and Regniet 2024). Of the 94 full-time employees, at least 87% are above the national average, with some substantially above, confirming that these high-stress industries also pay significantly higher salaries (see Appendix 2, Tables 6-12)

2.2) Work Experience and Job Characteristics

Most of the respondents show a moderate level of experience in the industry with 88.4% between 0-5 years. In line with this experience structure, 81.2% of respondents state that they work at entry-level or mid-level, and 18.8% are senior-level or executive-level. To apply the responsibilities to the BAT score, the number of people who are managed or supervised also provides a useful indication with 65.2% that do not manage others, 22.5% respondents having 1-5 people under their supervision, and 12.3% manage six or more others (see Appendix 2, Tables 13 – 15).

When analyzing the working hours, it is evident that many work considerably more than the 40-hour week that is usual in Germany (Bundesministerium der Justiz 2024). Of the full-time employees, only 24 people answered that they work less than 50h which shows that only around 26% of respondents work the usual working hours. The further distribution shows that a majority works more than the standard, and as many as 11.6% stated that they even work over 80 hours per week (i.e., $\geq 100\%$ of the usual working hours). Given that such working hours are almost impossible if people only work during weekdays, it is no surprise that 61% also at least sometimes work on weekends (see Appendix 2, Tables 16-17).

Another factor that may have an impact on stress levels and the risk of burnout is the proportion of remote work, with 24.2% of Germans who work remotely regularly, which is almost twice as high as before the Covid-19 pandemic (Destatis 2024). For this purpose, not only the number of remote days, but also the autonomy of this form of work was surveyed. On average, respondents work remotely 2.05 days per week. There are two extreme cases here with 21% who go to the office every day and do not work remotely at all, but there are also 13% who stated that they work remotely every day. Compared with the German average of 24.2% that sometimes work from home, the survey shows that the share is significantly higher in the observed industries with 79% of respondents who sometimes work from home. Besides the number of days worked remotely, the freedom of choice shows some differences as well. For example, 12.3% of respondents do not have the autonomy to decide whether they work remotely. A further group of 42% are free to decide which, but not how many days they work remotely and the largest proportion, 45.7%, are free to decide which and how many days they work remotely (see Appendix 2, Tables 18-19).

Lastly, this part investigated how frequently people perceive work-related stress. Only two people (i.e., 1.4%) stated that they are never stressed and 6.5% said that they are rarely stressed. The two most common answers were “Sometimes” with 48.6% and “Often” with 39.9%. 3.6% of respondents even answered that they are always stressed. If you assign a value to the answers in ascending order, where “Never” is given a value of one and “Always” a value of five, the average would be relatively high at 3.38, which is already an indicator that the respondents generally have a certain level of stress at work (see Appendix 2, Tables 20 & 25).

2.3) Stressors

A multiple-choice question revealed that by far the most frequently perceived stressor of respondents with 76.1% is their workload. The second most common factor was lack of autonomy over work / micromanagement, which 34.1% of respondents found stressful. This was followed by lack of positive feedback and recognition with 29% and conflict between individual

and organizational values with 28.3%. Less stressful were factors such as conflict with team members or leadership with 18.8% or lack of trust, openness, and respect in the workplace with 18.1%, and the least stressful was competition within the firm with only 17.4%. Further stressors that were named included constant pressure due to deadlines and targets, missing guidance for or confidence about own work, the complexity of tasks, the need to be permanently available, but also the responsibility for other employees. Generally speaking, there is a wide range of stressors that are purely related to the amount or content of work, but some also take into account and weight interpersonal aspects (see Appendix 2, Tables 21 & 26).

2.4) Prevention Measures

In addition to the negative factors and stress, there are of course also countermeasures that should be taken by the employer in particular to reduce stress levels and the risk of burnout. There was also a multiple-choice question on this topic with the four most prominent countermeasures. The most frequently existing factor with 41.3% is 4) training and workshops, immediately followed by 2) workload adaptation and 5) improvement in workplace environment with 39.9% each. 3) Medical and mental health support was mentioned the least with 22.5%. On average, respondents selected 1.43 support initiatives from their employer, but it should also be noted that 24.6% of respondents stated that 1) they do not receive any support from their employer (see Appendix 2, Tables 22 & 27).

2.5) BAT Score

Finally, the individual burnout score, according to the BAT, was determined for everyone in the survey, which plays an important role for the regression analysis in particular. An average value of 2.31 was determined, which translates into an overall low average risk of burnout. It should be noted here that not all of the four sub-areas were equally influential for the result and, for example, exhaustion with an average of 2.72 is significantly higher than emotional impairment with only 1.79. In addition to the averages, however, it is also relevant to look at the individual burnout scores. Accordingly, 69.6% of respondents have a score below 2.53 and are therefore at

low risk of burnout but there are also 13% that have a high risk of burnout with a score of over 2.96 (see Appendix 2, Tables 23-24).

2.6) Inferential Statistics

The use of linear regressions and Anova analysis serves to determine on a comparing level to what extent the formulated hypotheses can actually be validated or not.

In the demographic analysis it is noteworthy that the results of the linear regression analysis revealed a statistically significant relationship with respect to gender. Specifically, with a p -value of 0.047 at a significance level of 5%, it can be concluded that men exhibit a BAT score that is 0.223 points lower than that of women. This suggests that there are likely differences in the burnout levels between men and women (see Appendix 2, Table 31). However, when looking at the individual industries and performing the regression based on gender, no significant results can be found (see Appendix 2, Tables 32-34). Furthermore, no significant correlations were identified between the BAT score and other variables, such as income or educational qualifications.

In the second category, "Work Experience & Job Characteristics," which encompasses variables such as seniority within the industry, working hours, management level, frequency of remote workdays, and perceived stress levels, significant findings emerge regarding the participants' reported stress levels. According to the model, individuals with a higher stress level ($p < 0.001$) have a 0.39 higher BAT score (see Appendix 2, Table 35). This is also confirmed when looking at the individual industries, where a significant positive correlation between the stress level and the burnout score can also be demonstrated (see Appendix 2, Tables 36-38). It is interesting to note that neither the degree of autonomy with regard to remote days nor remote workdays have a significant influence on the individual's level of burnout. As a result, hypothesis 1 cannot be validated (see Appendix 2, Tables 39 and 40).

When analysing the stressors, it can be seen that there are drivers that can be found across all industries. For example, the high workload factor can be found in all three sectors, although it

should be emphasized that it only has a significant influence on the BAT score in investment banking ($p = 0.027$) and startups ($p = 0.042$). In consulting, no significance can be demonstrated in the data set due to the excessively high p-value ($p = 0.147$) (see Appendix 2, Tables 41-43).

In the category of preventive measures, a relevant influence of the measures on the score could not be observed for any of the three industries using the usual significance levels (see Appendix 2, Tables 44-46).

In conclusion, it can be stated that an individual's gender and stress level, along with specific stressors such as excessive workload significantly impact the BAT scores across the three industries. Furthermore, there is no evidence that burnout levels are higher in investment banking, for example, than in consulting or startups. Only when looking at the sub-dimensions there is evidence that the dimensions of exhaustion and mental distance are significantly higher in investment banking than in the other two industries. It can therefore be stated that hypothesis 2a can only be partially validated (see Appendix 2, Tables 47-49).

CHAPTER FIVE: INDUSTRY-SPECIFIC ANALYSES AND RESULTS

1) Analysis of the Startup Sector in Germany

The subsequent chapter provides a comprehensive analysis of the German startup sector, utilizing both collected primary data and relevant literature on work-related burnout. This analysis identifies key drivers contributing to burnout, enhancing our understanding of the challenges faced by entrepreneurs and employees in this dynamic industry.

The chapter begins with a definitional distinction from other company types and presents past and projected development trends to contextualize the sector. It systematically compares existing literature on burnout and employee well-being, particularly within Germany, with the collected data to evaluate the alignment between established findings and new insights.

A foundational analysis sets the stage for a discussion summarizing the burnout situation in the German startup landscape. Additionally, it explores prevention strategies and coping mechanisms that have been implemented in the industry and those that may gain relevance in the future.

3.1 General Information and Industry Development

According to the German Startup Monitor, startups are characterized by certain attributes that clearly distinguish them from other company types (Hirschfeld et al. 2024). On the one hand, to qualify as a startup, a company must not be older than ten years. On the other hand, however, two additional criteria play a superordinate role: a clearly recognizable innovation in the business model or the technology used and the pursuit or presence of revenue or employee growth as a corporate principle (Hirschfeld et al. 2024; Sternberg et al. 2024).

The German startup scene is a key indicator of the sector's economic significance, encompassing diverse industries. The leading sectors include information and communication (30%), healthcare (11%), and consumer goods (8%) (Hirschfeld et al. 2024). Future growth industries are expected to focus on healthcare, education, and energy, particularly through the integration of artificial intelligence into their products and services. Notably, nearly half of surveyed startups

identify as part of the sustainable economy, reflecting their social and ecological orientation (Hirschfeld et al. 2024).

According to the “National Entrepreneurship Context Index”, which is based on expert opinions, Germany ranks in the middle in terms of the favourable conditions for setting up a new company. This can be partly explained by the fact that German culture does not encourage risk-taking, and that basic education does not necessarily promote later entrepreneurial activity (Sternberg et al. 2024). To address these issues, the federal government has initiated measures since 2022 aimed at enhancing the startup ecosystem through funding programs, improved investment opportunities, and founder-friendly legislation. Of the 130 measures adopted, 80% have been implemented (Bundesregierung 2024). The importance of the German state for the whole industry also becomes clear when looking at the main sources of financing for German startups, which are mainly led by state subsidies (48,8%) followed by business angel (32,0%) and venture capital (18,9%) investments (Hirschfeld et al. 2024). However, an examination of these figures reveals significant gaps, particularly in non-state capital resources such as venture capital and strategic investments. These gaps indicate that the potential for growth and innovation within the German startup sector is not being fully realized, which can lead to challenges, especially in the later stages of growth when access to crucial capital and expertise becomes increasingly important (Hirschfeld et al. 2024). It is therefore still very important for the German government to continue the existing measures that aim to improve these conditions and thus promote a more robust investment landscape (Bundesregierung 2024).

However, an international comparison shows that Germany is not one of the top destinations worldwide in terms of its start-up landscape. Based on a study by Statista and StartupBlink (2024), which uses an overall score that includes quantitative aspects (e.g. number of start-ups or co-working spaces), qualitative aspects (e.g. number of unicorns, etc.) as well as business aspects (e.g. economic indicator at national level), Germany is only in seventh place worldwide with a score of 25.83 and is therefore ranked behind the United Kingdom in Europe, which is in

second place behind the USA with a score of 55.99, and Sweden, which is in sixth place with a score of 27.02. The 2023-2024 Global Entrepreneurship Monitor data also reveals Germany's average standing in an international comparison, which is evident given that the country ranks in the bottom third in terms of international start-up activity, despite having the second-highest national figure with nearly eight percent since the data was gathered in 1999 (Sternberg et al. 2024). Despite the average performance in international comparison, the number of unicorns, startups with a company valuation of at least one billion US dollars, shows that things are moving in the right direction. The number of unicorns almost tripled from 11 in 2020 to 32 in 2024, with 18 unicorns in Berlin and 10 in Munich, the country's startup strongholds (Hirschberg et al. 2024).

The problems in the start-up sector are partly due to the difficult overall economic situation in Germany, which is characterized by a relatively weak economic situation, constantly changing interest rates and a resulting decline in investment activity (PricewaterhouseCoopers 2023). Despite the macroeconomic challenges, which are reflected in a notable decline of ten percentage points since 2020 in the number of collaborations with established companies, now standing at 61.9%, it is significant that just over half (51.3%) of founders identify “resilience” as a critical skill, while 46.9% emphasize the importance of “vision”. These skills are essential for navigating adverse conditions and fostering innovative solutions as long-term responses to challenges (Hirschberg et al. 2024; PricewaterhouseCoopers 2023). All in all, however, there is a positive mood in the industry, which can be a good indicator for successful years to come, since, for example, 83.8% of founders would choose Germany as a location again to found a company, among other things due to the proximity to universities as well as the national network of founders and the associated knowledge exchange among them (Hirschberg et al. 2024). Although in 2021, just under one percent (415.000 employees) of the 45 million people employed in Germany could be assigned to the start-up sector, an increase of up to 3.7 million employees in the sector is possible if the positive attitude remains and the political and economic conditions

continue to improve (Schaible, Ditsche, and Kleipañ 2021). The innovative pioneering position of start-ups is also noticeable in the adaptation of relatively new working models such as remote work. For example, a study by the German Startup Association (Hirschfeld, Gilde, and Walk 2021) found that companies want to continue to rely on flexible working models due to their already digitalized work processes. Another area of attention is on the mental health of workers in startups, which is still in its early stages because of a shortage of human resources capacity but nevertheless offers enormous potential to improve the existing situation (Hirschfeld, Gilde, and Walk 2021).

3.2 Analysis of Results

The previous presentation of the situation and the development potential of the German startup sector shows its importance for Germany's general economic development. It is interesting to examine the extent to which the results of the survey and the developments in the start-up industry in terms of the risk of burnout coincide with general developments in the labor market. Employees in Germany are increasingly stressed, which has increased the risk of burnout by 11 percentage points to 37% in 2024, compared to 26% before the pandemic (Poggensee 2024).

Demographic Information: The sample size consists of 30 participants, representing approximately 22% of the relevant population (138 respondents). Among the 30 participants, 8 are women and 22 are men. The demographic distribution reveals that 53% of the participants belong to the 18-24 age group, while 40% fall within the 25-34 age range. Only 7% of the participants are in the 35-44 age group. This age distribution shows a dominance of younger people in the sample, which, however, differs from the general distribution in the startup landscape, where the largest groups are aged 25 to 34 and 35 to 44, accounting for approximately 83% of the total (Accenture and Startup Verband 2023). The imbalance between men and women roughly corresponds to the distribution in the start-up landscape in Germany (Hirschberg et al. 2024). Based on the study results of Accenture and Startup Verband (2023), it was found that the number of employees with a university degree in startups is significantly higher compared to

the rest of the economy, which is also in line with the study results obtained in this work in the form of 97% of respondents having at least a bachelor's degree.

The regression analysis carried out based on the demographic factor gender shows important differences between the overall sample and the startup sample. In the general sample, which comprises 138 respondents, there is a significant correlation between gender and the burnout score. The BAT score is 0.223 lower for men than for women, all other things being equal. However, if only the startup sample is considered, which consists of a total of 30 respondents, 8 women and 22 men, no significant connection ($p = 0.127$) between gender and BAT score can be proven. Here it must be questioned whether the differences are really based on industry-specific aspects or can be explained by the relatively small sample size and unequal distribution of men and women in the startup sample (see Appendix 2, Table 31 and 34).

Work Experience and Job Characteristics: Due to the relatively young age structure in the startup sector, two-thirds of respondents have been in the industry for 0-2 years and nearly one-third for 3-5 years. It should be noted that despite the low number of years of industry belonging, almost two thirds have at least mid-level status, which means that they have first touchpoints with management tasks such as project responsibility or leading teams of 1-5 people. The relatively rapid progression to initial leadership roles can be linked to the flat hierarchies in start-ups and the personal growth that is sought. However, these influences are significantly reduced as the number of employees in a startup increases and a more hierarchical structure is established (Accenture and Startup Verband 2023). The flexibility of the sector becomes clear when looking at remote working days and weekend work. Only 30% never work at weekends, which conversely means that 70% work at least sometimes or even regularly at weekends. On average, the number of remote working days is 2.63 days per week, which is in line with the global survey data on the future of remote work after the pandemic (Boston Consulting Group 2020). It should be emphasized that only one of the thirty participants has no decision-making power over the choice of the number of remote days. The others at least have the option of choosing the days

but not the number. However, flexibility is sometimes accompanied by a higher number of working hours, as can be seen from the 50% of respondents who work at least 50 hours or more per week, which is clearly above statutory German framework (Bundesministerium der Justiz 2024).

Of the contents surveyed in the category of work experience and job characteristics, a significant correlation ($p = 0.006$) to the burnout level of a respondent could only be proven for the frequency of stress. People with a higher stress level tend to have a higher BAT score; to be more precise, if the stress frequency increases by one, the BAT score increases by 0.343 (see Appendix 2, Table 38). Neither the number of remote days, the weekly working hours nor the autonomy to decide freely on remote days has any influence on the dependent variable.

Stressors: In order to understand which factors particularly stress employees and to be able to understand whether certain factors occur more regularly than others, the participants were asked to choose from a list of predefined factors. In addition, they were given the opportunity to name further individual factors to gain even more detailed information about stress factors at work. Around 70% of respondents cited a heavy workload as a stress factor, making it by far the most frequently mentioned factor compared to the others. In a joint second place were “Lack of positive feedback and recognition”, “Lack of autonomy over work/micromanagement”, and “Conflict between individual and organization values”, which were mentioned by 30% of the participants. Six of the 30 respondents also cited “Lack of trust, openness, and respect in the workplace” as a stress factor. Only 13.3% see “Competition within the firm” and “Conflict with team members or leadership” as stress factors at work. (see Appendix 2, Table 26). It is important to note that multiple answers were possible, and no ranking of the factors was requested from the respondents. In addition, further stress factors were mentioned in the open field, such as the constant pressure to be the best or to have high expectations of oneself, insecurity about the success of the company or the responsibility towards employees, as well as not completing tasks due to a lack of focus. All of the factors mentioned lead to a moderate stress level of 3.40 among

the respondents, which means that employees in startups “sometimes” feel work-related stress (see Appendix 2, Table 25).

In order to understand even more precisely which factors have a significant influence on the burnout score of the individuals, a linear regression was carried out based on the presented stress factors. At a significance level of 10 percent, both the factors “High Workload” (p -value= 0.042) and “Conflict between individual and organizational values” (p -value= 0.081) have a significant influence on the BAT score. The factor “Conflict between individual and organizational values” increases the factor by 0.42 points, “High Workload” by 0.51 points. The strong influence of workload on a person's level of burnout becomes even clearer when a significance level of five percent is selected, and statistical significance still remains. No demonstrable influence on the BAT score could be determined for the other stress factors when choosing the statistically common significance levels. This analysis shows that the frequency with which a factor is mentioned does not necessarily indicate statistical significance, since other factors e.g. Micromanagement or lack of positive feedback and recognition, were often mentioned in addition to the workload, but have no measurable influence on the BAT score (see Appendix 2, Table 43).

Prevention Measures: In order to gain a holistic insight into the processes affecting employee well-being in start-ups, potential preventive measures on the part of employers were also investigated. Just over half of the respondents stated that they had received adjustments to their workload from their employer in the form of flexible working models as a supportive measure in the event of increased stress levels. One-third of respondents have received support in the form of an improvement in the workplace environment, which means, for example, that reward systems have been introduced or employees have been offered better career options. Only 13.3% of the participants have accessed medical and mental health support, which includes services provided by psychologists, health initiatives, and training programs focused on stress and time management, as well as meditation exercises. A worrying figure is the 30% who have received

no support at all from their employer and have therefore been left alone with their problems from a professional perspective. However, these figures are in line with findings from other studies, which show that start-ups are still in the early stages when it comes to employee support in the form of various and differentiated offers, as there is often still a lack of human resources to implement measures (Hirschfeld, Gilde, and Walk 2021). This may also be because many employers do not understand well enough the causes that lead to burnout, and thus the established measures do not result in the desired improvement of the situation (Croft, Parks, and Whillans 2024).

It can be stated that neither the various measures nor the practice of any measure had a demonstrably significant influence on the BAT score of the participants surveyed (see Appendix 2, Table 46). This could suggest that the measures presented are not really helpful and therefore do not have the desired effect, i.e. improving the burnout situation of those affected. However, it must be said that there are other measures that were not included in the analysis due to the limited scope of this study, meaning that no generalized assessment of the effect of measures can be made.

3.3 Discussion and Implications

Based on the previous analysis of the survey, the most significant results are examined in more detail and compared with the existing burnout literature in order to identify similarities and differences. This leads to the formulation of certain conclusions, which on the one hand help to answer the previously formulated hypotheses and on the other hand can provide a basis for the further direction of research and practice.

It must be noted that the demographic factors have no real significant influence on the BAT score, which suggests that neither education level nor age or gender can provide meaningful information about a person's burnout risk situation. When considering the gender factor, however, it is noticeable that with a p -value of 0.127, it is relatively close to be significant if a significance level of 10% is chosen. If this factor were significant, a 0.36-point lower BAT score

could be observed for men compared to women. This could suggest that measures targeting the different age groups or genders in startups would not necessarily be effective, as these factors have no demonstrable effect on the burnout risk of employees (see Appendix 2, Table 34).

Interestingly, the BAT score was only significantly impacted by stress frequency in the work experience and work characteristics group leading to a higher burnout score of 0.343 per increase of stress level underlining the importance of effective and personalized stress management in corporations (see Appendix 2, Table 38). However, it should be noted that the relatively small size of the sample may have led to a distortion of the results. Specifically, when considering the number of remote days or the autonomy of employees to decide about their work model, it is shown that they have not a negative significant influence, even though the industry is continuing to move towards remote work after the pandemic (Hirschfeld, Gilde, and Walk 2021). For example, Sirgy and Lee (2018) were able to show that remote work expands options due to the flexible working model, but it can also lead to problems because it can be difficult to separate work from non-work. There are numerous studies that attempt to analyze the influence of remote work on our well-being, but there are both findings that could prove a negative effect on stress or burnout levels (e.g. Jimenez-Gomez, Sawhney, and Albert 2021; Raišienė et al. 2023; Singh et al. 2022) as well as studies that found a stress- and burnout-reducing effect of remote work (e.g. Höcker et al. 2024; Vacchiano, Fernandez, and Schmutz 2024). The results of the survey and the existing literature show the complexity of the topic of remote work in the context of burnout risk and suggest that individual approaches, tailored to the culture and people in a startup, could be particularly successful, since, as described above, many components determine the extent to which a positive effect can be achieved.

The influence of organizational stressors such as workload and conflict between individual values and those of the organization was found to be significant, with both increasing the burnout score (see Appendix 2, Table 43). In line with the findings of Maslach and Leiter (2016a), workload issues can cause those affected to become more exhausted and less able to recover, as

well as more dissatisfied with their jobs, thus increasing their level of burnout (Edú-Valsania, Laguía, and Moriano 2022). The significant effect of the stressor “Conflict between individual and organizational values” on the burnout score shows how important it is from both the employee’s and the employer’s perspective to find a good match in which the values suit each other, as this can lead to better engagement on the part of the employee and thus reduce the risk of burnout (Leiter and Maslach 2003). In addition to organizational stressors, there are individual stressors such as a person's personality. Based on the degrees of expression of the five dimensions according to McCrae and John (1992), agreeableness, conscientiousness, extraversion, openness to experience and neuroticism, a person may have an increased risk of burnout. Thus, people with higher levels of extraversion, agreeableness, openness to experience and conscientiousness and low levels of neurotic traits are mentally healthier than colleagues with contrary traits (Angelini 2023, Bellmann and Hübler 2022). If we compare these findings with the personality traits found in entrepreneurs, a higher level of extraversion, conscientiousness and emotional stability (Zhao and Seibert 2006), it can be assumed that they have a lower risk of burnout than others. The previous findings coupled with the observed lack of substantial positive effects from preventive measures implemented by companies, underscore the inadequacy of generic interventions in promoting sustained mental health among employees. This finding suggests that a one-size-fits-all approach is insufficient; rather, it is crucial to develop innovative strategies that consider a multitude of factors, including employee personality characteristics, the organizational environment, and cultural diversity within the workplace.

Combining all survey results in the sample led to an average BAT score of 2.24, which according to Schaufeli and De Witte (2023) is neither in the orange (from 2.54) nor in the red zone (from 2.96), meaning that there is no distinct burnout risk in the sample (see Appendix 2, Table 24). However, when looking at the individual results in detail, it is noticeable that 30% of respondents have values in the orange or red range, which suggests an increased risk of burnout. This shows

how important it is to look at each individual case in order to take effective action. The analysis of the four sub-dimensions of burnout - exhaustion, mental distance, cognitive impairment, and emotional impairment - reveals that only in the domain of cognitive impairment the average score reaches 2.62, indicating a relatively high level of concern (see Appendix 2, Table 23). This elevated score suggests potential issues with concentration and an abundance of distracting factors within the work environment, as noted by Schaufeli and De Witte (2023). To counteract this, approaches could be pursued that allow employees to integrate “focus times” at work, such as meeting-free time slots or small individual booths that could minimize the potential for distraction.

In conclusion, it can be summarized that the individual stressors such as workload and value conflicts, as well as the stress frequency have the most significant influence on the BAT score and must play a central role in the creation of meaningful measures. Furthermore, the first hypothesis that remote work is negatively related to burnout could not be confirmed for the German startup sector in the particular sample nor for the overall sample (see Appendix 2, Table 40). The insights gained and the increasing relevance of the burnout topic in the startup industry (Hirschfeld, Gilde, and Walk 2021) lead to the fact that companies need to invest human capacity as well as money, science must conduct further research in order to address the complexity of the topic in order to jointly establish helpful health measures to ensure or improve the well-being of employees over the long term.

CHAPTER SIX: CONCLUSION

1) Limitations

While this study aims to provide valuable insights into the factors contributing to burnout within the previously outlined high-stress professional sectors, it is essential to acknowledge limitations that could impact the generalizability, depth, and overall validity of the findings.

Sample Characteristics and Representativeness: Despite the study achieving a sufficient sample size within each of the three sectors, the overall sample size (138 respondents) may still be considered relatively small, particularly when attempting to generalize the findings to the broader populations within these industries. Even though the sample adheres to the central limit theorem, which allows for statistical relevance, a larger and more diverse sample might provide more robust and generalizable insights.

Demographic Imbalance: Furthermore, the demographic breakdown reveals a significant gender imbalance, with only 33 women compared to 105 men. This skewed representation may potentially introduce gender bias in the research findings and not fully capture the experiences of female professionals in these industries. Similarly, the age distribution presents a limitation, with 89.8% of respondents concentrated in the 18 to 34 age range. This narrow age bracket may not fully capture the burnout experiences of mid-career and senior professionals and limit the generalizability of the results.

Cross-Sectional Nature of the Study: The research design is cross-sectional, which means that data was collected at a single point in time. A longitudinal study, which tracks respondents over time, would allow for a deeper understanding of how burnout develops and changes, and how various factors contribute to it over the course of one's career. Without this temporal dimension, the study's findings may overlook the dynamic, evolving nature of burnout.

Self-Reported Data: Furthermore, the quantitative survey methodology inherently relies on self-reported data, which is susceptible to several potential biases. Firstly, there is a possibility of social desirability bias and thus inaccurate self-assessment (e.g. Grimm 2010). Respondents

may underreport their burnout levels due to the stigma surrounding mental health or may overstate the influence of specific stressors to align with perceived expectations. Additionally, while the use of an anonymous survey helps reducing this bias, respondents may still provide responses based on what they believe is socially acceptable, rather than their true experiences. At the same time, the anonymous nature of the survey, while protecting the privacy of participants, limits the ability to verify the authenticity of responses.

Scope of Industry Focus: This research focuses solely on the three high-stress sectors consulting, investment banking, and startups. These sectors are known for their demanding work environments. At the same time, the findings may not be directly applicable to other high-stress industries with different stress profiles, such as healthcare or education. Each industry has its own unique stressors and organizational dynamics, which may result in differing burnout patterns.

2) Future Outlook

The findings of the study provide critical insights into burnout within the outlined high-stress industries and also offer a foundation for more comprehensive future investigations. Building on the study's findings and acknowledged limitations, a number of important considerations are made to further gain knowledge on workplace burnout.

Improving Sample Characteristics and Representativeness: For future research, there is a need to address the limitations of the current sample by recruiting a larger and more diverse participant pool. While this study achieved statistical relevance, a broader survey base would enhance the generalizability and depth of the findings. Increasing the number of respondents would also allow for more robust sub-group analyses, enabling a deeper exploration of burnout dynamics, for example, across different professional levels, regions, and organizational sizes.

Addressing Demographic Imbalance: Furthermore, greater demographic diversity in terms of gender, age, and cultural background should be aimed for. A more balanced representation would

help to uncover how demographic factors influence susceptibility to burnout and ensure that findings are inclusive and applicable to a broader workforce. For example, understanding the experiences of women or underrepresented minorities in high-pressure industries could provide important insights into how gender biases, workplace structures, or cultural factors influence burnout.

Integrating Longitudinal Studies: Given the limitations of the cross-sectional approach of this study, future research should also consider adopting longitudinal designs as outlined before. Tracking participants over extended periods would allow for an examination of how burnout evolves over time and identify critical inflection points, such as transitions between roles, promotions, or periods of increased workload. Longitudinal studies would also enable a deeper understanding of the long-term effectiveness of burnout prevention and mitigation strategies, as well as the interplay between individual and organizational factors in shaping burnout patterns.

Methodological Approaches to Reduce Self-Report Bias: To mitigate the biases inherent in self-reported data, future studies could incorporate observational methodologies. By observing participants in real-world settings, objective data can be gathered on behaviors and stress responses. Nowadays, mobile apps or wearables could easily supplement self-reported data with real-time physiological and behavioral metrics. These technologies could provide further objective indicators of stress levels, for example. However, this approach introduces potential biases such as the Hawthorne effect, where individuals alter their behavior because they know they are being observed (e.g., Adair 1984).

Additionally, integrating qualitative interviews with psychologists can provide a deeper understanding of the experiences of the participants. These interviews could uncover insights that standardized surveys may miss and validate self-reported data by cross-referencing it with professional assessments.

Expanding Research Scope: Lastly, future research could benefit from incorporating participants from other high-pressure industries, such as healthcare or education. Including these

sectors would allow for direct comparisons of burnout drivers across these industries and offer new insights into commonalities and divergences. Despite the existing body of literature on burnout in fields such as healthcare, a unified comparative approach would provide a more comprehensive understanding and a better comparability of how potential industry-specific stressors influence burnout, which could guide the development of more tailored intervention strategies for diverse professional contexts.

For the development and assessment of proactive prevention measures, another focus of future research should be on the most modern technologies such as artificial intelligence, machine learning, and automation and how these can be leveraged to enable real-time monitoring of workload and stress indicators, for example. These tools could help organizations implement adaptive interventions that dynamically respond to employee needs and foster a culture of well-being while maintaining productivity.

3) Conclusion

This thesis provides valuable insights into the multifaceted nature of burnout in the three high-stress industries of consulting, investment banking, and startups in Germany.

Several key findings deserve special attention. Although the flexibility of remote work is increasingly adopted, its effect on burnout is complex and not clearly supported by the data, so the thesis fails to validate hypothesis 1. High workload and stress frequency consistently emerge as prevalent stressors across all three sectors, underscoring the omnipresence of this issue. However, there are also industry-specific stressors such as the conflict between personal and organizational values in the startup sector, which means that hypothesis 2b can be validated based on the data. Preventive measures do not show a statistically significant effect on burnout risk, highlighting the need for broader systemic changes within organizations.

Hypothesis 2a can only be partially validated, as there are no significant differences between the sectors when looking at the overall BAT score. However, if we focus on the sub-dimensions of

the BAT score, it becomes clear that both exhaustion and mental distance are significantly higher in investment banking than in the other sectors.

It is important to consider the limitations of this study. The relatively small sample size, imbalanced demographic representation, and cross-sectional nature of the data limit the generalizability of the findings. Furthermore, the use of self-reported data carries the potential for bias. Future research should address these limitations and examine other high-stress industries to improve the transferability of results to explore the potential effectiveness of various preventive measures. Finally, the incorporation of technological, data-driven tools that enable real-time monitoring of workload, stress, and other relevant factors may prove valuable in developing and implementing truly effective burnout prevention strategies.

In summary, this study provides a fundamental understanding of the complexities of burnout in these dynamic sectors. It highlights the urgent need for industry-specific, multifaceted strategies that consider individual, team, and organizational factors to effectively address the challenges of burnout and create healthier, more sustainable workplaces.

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APPENDIX 1: FIGURES

FIGURE 1: Absenteeism cases due to burnout in Germany from 2004 to 2022 (Radtke 2023a)

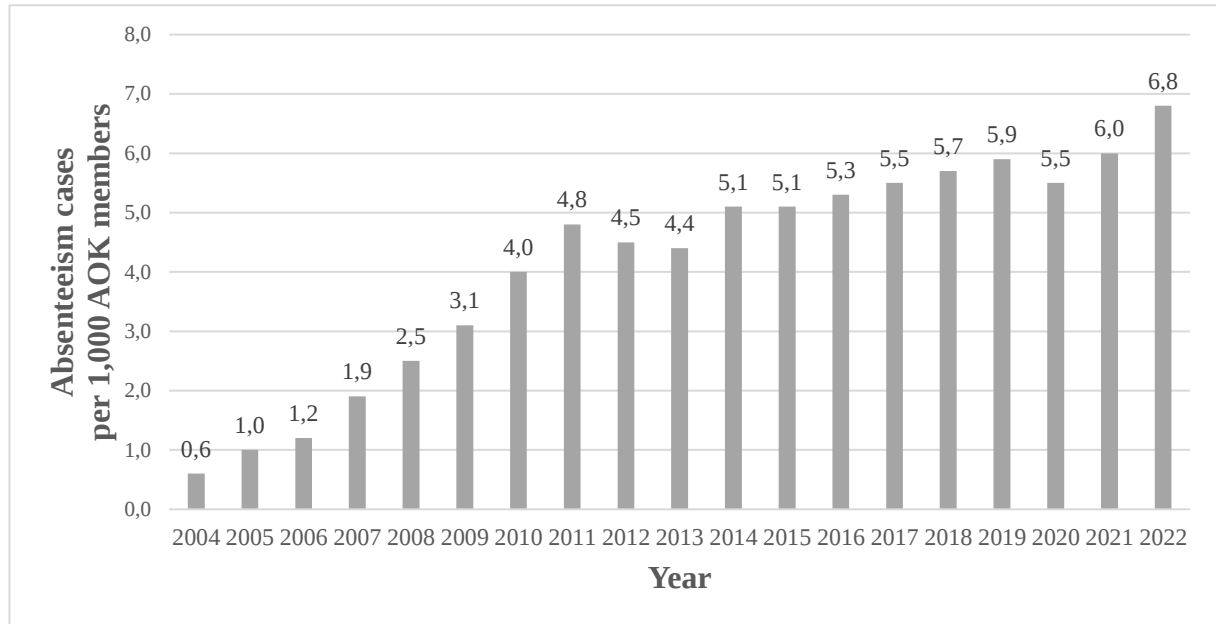


FIGURE 2: Sick leave days due to burnout in Germany from 2004 to 2022 (Radtke 2023b)

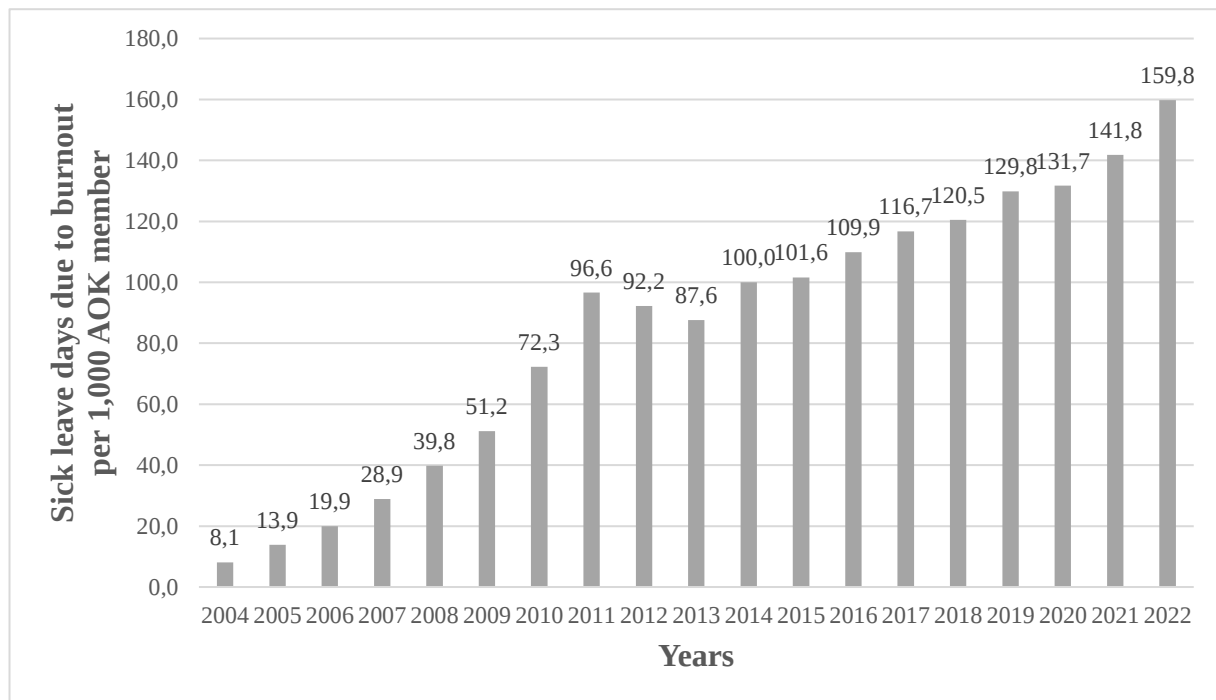


FIGURE 3: Job Demands-Resources Model (Bakker and Demerouti 2018)

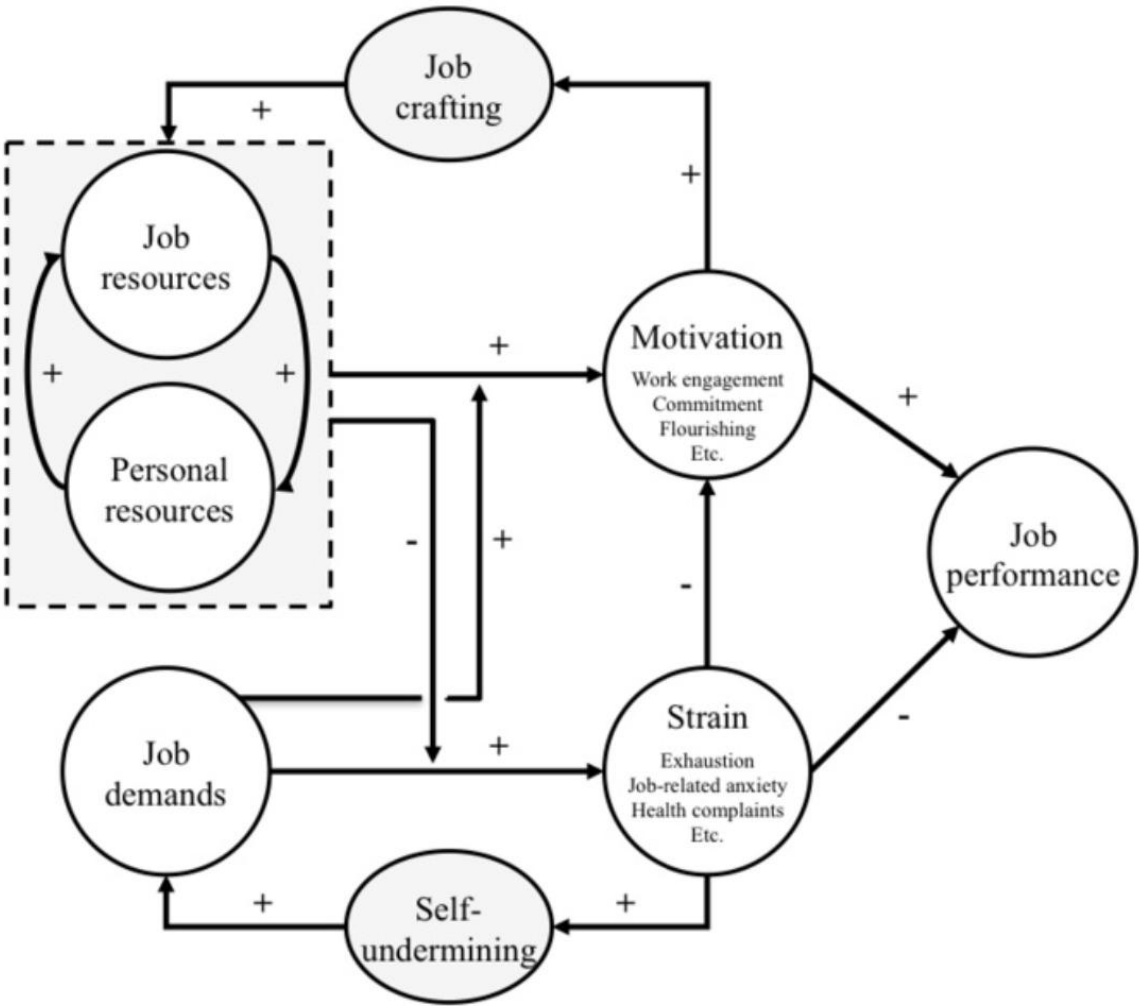


FIGURE 4: Cronbach Alpha – BAT Score (Overall)

Reliability Statistics	
Cronbach's Alpha	N of Items
.865	12

FIGURE 5: Cronbach Alpha – BAT Score (Exhaustion)

Reliability Statistics	
Cronbach's Alpha	N of Items
.818	3

FIGURE 6: Cronbach Alpha – BAT Score (Mental Distance)

Reliability Statistics	
Cronbach's Alpha	N of Items
.713	3

FIGURE 7: Cronbach Alpha – BAT Score (Cognitive Impairment)

Reliability Statistics	
Cronbach's Alpha	N of Items
.829	3

FIGURE 8: Cronbach Alpha – BAT Score (Emotional Impairment)

Reliability Statistics	
Cronbach's Alpha	N of Items
.755	3

APPENDIX 2: TABLES

Survey Results

TABLE 6: In which industry do you currently/did you most recently work?

Consulting	Investment Banking	Startup
75	33	30
54.3%	23.9%	21.7%

TABLE 7: Which of the following best describes your gender?

Male	Female	Non-binary
105	33	0
76.1%	23.9%	0.00%

TABLE 8: What is your age?

18-24	25-34	35-44	45-54	55 and above
62	62	7	6	1
44.9%	44.9%	5.1%	4.3%	0.7%

TABLE 9: What is your highest completed level of education?

High school	Bachelor	Master	MBA
4	69	57	8
2.9%	50%	41.3%	5.8%

TABLE 10: What is your current employment status?

Full-time	Part-time	Student/intern	Unemployed	Founder/Self-employed
94	18	12	11	2

86.1%	13.0%	9.4%	8.0%	1.4%
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TABLE 11: What is your annual income? (incl. bonus)

<40,000	40,000-59,999	60,000-79,999	80,000-99,999	>99,999
41	14	25	26	32
29.7%	10.1%	18.1%	18.8%	23.2%

TABLE 12: Income of 94 Full-time employees

<40,000	40,000-59,999	60,000-79,999	80,000-99,999	>99,999
2	10	24	26	32
2.1%	10.6%	25.5%	27.7%	34.0%

TABLE 13: How many years have you been working in your industry?

0-2	3-5	6-8	9-11	12 and more
95	27	3	4	9
68.8%	19.6%	2.2%	2.9%	6.5%

TABLE 14: What is the level of seniority in your current or most recent role?

Entry-Level	Mid-Level	Senior-Level	Executive Level
90	22	13	13
65.2%	15.9%	9.4%	9.4%

TABLE 15: How many people do you manage or supervise in your role?

0	1-5	6-10	11-20	21 and more
90	31	7	5	5
65.2%	22.5%	5.1%	3.6%	3.6%

TABLE 16: What are your average working hours per week?

<40h	40h-49h	50h-59h	60h-69h	70h-79h	80h or more
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18	29	32	28	15	16
13.0%	21.0%	23.2%	20.3%	10.9%	11.6%

TABLE 17: Do you work on weekends?

Yes	No	Sometimes
35	54	49
25.4%	39.1%	35.5%

TABLE 18: How many days per week do you work remotely?

								Mean
0	1	2	3	4	5	6	7	2.05 days
29	38	29	19	5	8	0	10	
21.0%	27.5%	21.0%	13.8%	3.6%	5.8%	0.0%	7.2%	

TABLE 19: Do you have the autonomy to decide to work remotely?

Yes, free choice of which and how many days	Partially, free choice of which but not how many days	No
63	58	17
45.7%	42.0%	12.3%

TABLE 20: How often do you feel work-related stress?

					Mean
Never (1)	Rarely (2)	Sometimes (3)	Often (4)	Always (5)	3.38
2	9	67	55	5	
1.4%	6.5%	48.6%	39.9%	3.6%	

TABLE 21: What factors stress you at work?

	#	%
High workload	105	76.1%
Competition within the firm	24	17.4%
Lack of positive feedback and recognition	40	29.0%
Lack of autonomy over work / Micromanagement	47	34.1%
Conflict with team members or leadership	26	18.8%
Conflict between individual and organizational values	39	28.3%
Lack of trust, openness, and respect in the workplace	25	18.1%

TABLE 22: Have you received any support from your employer?

	#	%
Workload Adaptation (e.g., flexible working models, remote work)	55	39.9%
Medical and Mental Health Support (e.g, persons of trust, psychologists, physical health initiatives)	31	22.5%
Training and Workshops (e.g., stress/time management workshops, mindfulness/meditation training)	57	41.3%
Improvement in Workplace Environment (e.g., communication/transparency initiatives, recognition/reward systems, career development opportunities)	55	39.9%
Nothing	34	24.6%
Mean of support initiatives per Employer	1.43	

TABLE 23: BAT Score - All Respondents

Area	Statement	Statement Mean	Area Mean
Exhaustion	I feel mentally exhausted	2.86	2.72
	At the end of the day, I find it hard to recover	2.72	
	I feel physically exhausted	2.58	
Mental Distance	I struggle to find any enthusiasm for my work	2.62	2.33
	I feel a strong aversion towards my job	2.03	
	I'm cynical about what my work means to others	2.36	
Cognitive Impairment	I have trouble staying focused	2.49	2.41
	I have trouble concentrating	2.48	
	I make mistakes because I have my mind on other things	2.26	
Emotional Impairment	I feel unable to control my emotions	1.80	1.79
	I do not recognize myself in the way I react emotionally	1.72	
	I may overreact unintentionally	1.85	
Overall Mean		2.31	

Reference: Schaufeli, W.B., De Witte, H. & Desart, S. (2019). User Manual – Burnout Assessment Tool (BAT) – Version 2.0. KU Leuven, Belgium: Internal report.

TABLE 24: Burnout risk of respondents according to BAT Scores

	#	%
Low risk of burnout (Average score of 1.00-2.53)	96	69.6%
Moderate risk of burnout (Average score of 2.54-2.95)	24	17.4%
High risk of burnout (Average score of 2.96-5.00)	18	13%

Reference: Schaufeli, W.B., De Witte, H. & Desart, S. (2019). User Manual – Burnout Assessment Tool (BAT) – Version 2.0.

KU Leuven, Belgium: Internal report.

Industry Comparison

TABLE 25: How often do you feel work-related stress?

	Overall	Consulting	Investment Banking	Startup
Stress Level	3.38	3.33	3.45	3.40

TABLE 26: What factors stress you at work?

Stressor	Overall	Consulting	Investment Banking	Startup
High workload	76.1%	77.3%	78.8%	70.0%
Competition within the firm	17.4%	16.0%	24.2%	13.3%
Lack of positive feedback and recognition	29.0%	30.7%	24.2%	30.0%
Lack of autonomy over work / Micromanagement	34.1%	33.3%	39.4%	30.0%
Conflict with team members or leadership	18.8%	18.7%	24.2%	13.3%
Conflict between individual and organizational values	28.3%	24.0%	36.4%	30.0%
Lack of trust, openness, and respect in the workplace	18.1%	14.7%	24.2%	20.0%

TABLE 27: Have you received any support from your employer?

Stressor	Overall	Consulting	Investment Banking	Startup
Nothing	24.6%	17.3%	36.4%	30%
Workload Adaptation	39.9%	44.0%	18.2%	53.3%
Medical and Mental Health Support	22.5%	29.3%	15.2%	13.3%
Training and Workshops	41.3%	54.7%	36.4%	13.3%
Improvement in Workplace Environment	39.9%	42.7%	39.4%	33.3%

TABLE 28: BAT Score - Consulting

Area	Statement	Statement Mean	Area Mean
Exhaustion	I feel mentally exhausted	2.76	2.62
	At the end of the day, I find it hard to recover	2.53	
	I feel physically exhausted	2.56	
Mental Distance	I struggle to find any enthusiasm for my work	2.68	2.39
	I feel a strong aversion towards my job	2.04	
	I'm cynical about what my work means to others	2.45	
Cognitive Impairment	I have trouble staying focused	2.32	2.27
	I have trouble concentrating	2.31	
	I make mistakes because I have my mind on other things	2.19	
Emotional Impairment	I feel unable to control my emotions	1.73	1.73
	I do not recognize myself in the way I react emotionally	1.68	
	I may overreact unintentionally	1.77	
Overall Mean		2.25	

Reference: Schaufeli, W.B., De Witte, H. & Desart, S. (2019). User Manual – Burnout Assessment Tool (BAT) – Version 2.0. KU Leuven, Belgium: Internal report.

TABLE 29: BAT Score - Investment Banking

Area	Statement	Statement Mean	Area Mean
Exhaustion	I feel mentally exhausted	3.06	3.07
	At the end of the day, I find it hard to recover	3.27	
	I feel physically exhausted	2.88	
Mental Distance	I struggle to find any enthusiasm for my work	2.70	2.47
	I feel a strong aversion towards my job	2.18	
	I'm cynical about what my work means to others	2.55	
Cognitive Impairment	I have trouble staying focused	2.52	2.53
	I have trouble concentrating	2.61	
	I make mistakes because I have my mind on other things	2.45	
Emotional Impairment	I feel unable to control my emotions	2.03	2.01
	I do not recognize myself in the way I react emotionally	1.91	
	I may overreact unintentionally	2.09	
Overall Mean		2.52	

Reference: Schaufeli, W.B., De Witte, H. & Desart, S. (2019). User Manual – Burnout Assessment Tool (BAT) – Version 2.0. KU Leuven, Belgium: Internal report.

TABLE 30: BAT Score - Startup

Area	Statement	Statement Mean	Area Mean
Exhaustion	I feel mentally exhausted	2.87	2.59
	At the end of the day, I find it hard to recover	2.60	
	I feel physically exhausted	2.30	
Mental Distance	I struggle to find any enthusiasm for my work	2.37	2.03
	I feel a strong aversion towards my job	1.83	
	I'm cynical about what my work means to others	1.90	
Cognitive Impairment	I have trouble staying focused	2.87	2.62
	I have trouble concentrating	2.77	
	I make mistakes because I have my mind on other things	2.23	
Emotional Impairment	I feel unable to control my emotions	1.73	1.70
	I do not recognize myself in the way I react emotionally	1.60	
	I may overreact unintentionally	1.77	
Overall Mean		2.24	

Reference: Schaufeli, W.B., De Witte, H. & Desart, S. (2019). User Manual – Burnout Assessment Tool (BAT) – Version 2.0. KU Leuven, Belgium: Internal report.

Inferential Statistics

TABLE 31: Linear regression results for BAT score – Gender (all respondents)

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	2.482	.097	25.601	<.001
	Gender	-.223	.111	-.169	.047

a. Dependent Variable: Score

TABLE 32: Linear regression results for BAT score – Gender (consulting)

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	2.346	.108	21.750	<.001
	Gender	-.128	.126	-.118	.314

a. Dependent Variable: Score

TABLE 33: Linear regression results for BAT score – Gender (investment banking)

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	3.000	.296	10.122	<.001
	Gender	-.565	.322	-.301	.089

a. Dependent Variable: Score

TABLE 34: Linear regression results for BAT score – Gender (startup)

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	2.500	.196	12.747	<.001
	Gender	-.360	.229	-.285	.127

a. Dependent Variable: Score

TABLE 35: Linear regression results for BAT score – Stress frequency (all respondents)

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1	(Constant)	.996	.198	5.025	<.001
	Stress Frequency	.390	.057	6.795	<.001

a. Dependent Variable: BATIND

TABLE 36: Linear regression results for BAT score – Stress frequency (consulting)

		Coefficients ^a			
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	1.416	.291		4.865
	Stress Frequency	.251	.086	.324	2.924
					Sig.

a. Dependent Variable: BATIND

TABLE 37: Linear regression results for BAT score – Stress frequency (investment banking)

		Coefficients ^a			
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	.552	.347		1.590
	Stress Frequency	.570	.097	.724	5.847
					Sig.

a. Dependent Variable: BATIND

TABLE 38: Linear regression results for BAT score – Stress frequency (startup)

		Coefficients ^a			
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	1.070	.402		2.663
	Stress Frequency	.343	.115	.491	2.980
					Sig.

a. Dependent Variable: BATIND

TABLE 39: Linear regression results for BAT score – Remote work autonomy (all respondents)

		Coefficients ^a			
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	2.491	.170		14.632
	Autonomy	-.076	.070	-.093	-1.092
					Sig.

a. Dependent Variable: BATIND

TABLE 40: Linear regression results for BAT score – Remote workdays (all respondents)

		Coefficients ^a			
		Unstandardized Coefficients		Standardized Coefficients	
Model		B	Std. Error	Beta	t
1	(Constant)	2.330	.070		33.213
	Days remotely	-.008	.025	-.029	-.333
					Sig.

a. Dependent Variable: BATIND

TABLE 41: Linear regression results for BAT score – Stressors (consulting)

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	1.948	.163		11.985 <.001
	High workload	.220	.150	.192	1.467 .147
	Competition within the firm	.120	.160	.092	.751 .455
	Lack of positive feedback and recognition	-.035	.128	-.034	-.277 .783
	Lack of autonomy over work / Micromanagement	.193	.129	.190	1.497 .139
	Conflict with team members or leadership	.042	.151	.034	.279 .781
	Conflict between individual and organizational values	.102	.138	.091	.735 .465
	Lack of trust, openness, and respect in the workplace	.200	.183	.147	1.092 .279

a. Dependent Variable: Score

TABLE 42: Linear regression results for BAT score – Stressors (investment banking)

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	1.583	.279		5.665 <.001
	High workload	.583	.248	.354	2.353 .027
	Competition within the firm	1.126	.230	.716	4.889 <.001
	Lack of positive feedback and recognition	-.271	.244	-.172	-1.109 .278
	Lack of autonomy over work / Micromanagement	.239	.214	.173	1.119 .274
	Conflict with team members or leadership	-.283	.257	-.180	-1.103 .281
	Conflict between individual and organizational values	.394	.218	.282	1.810 .082
	Lack of trust, openness, and respect in the workplace	.422	.286	.268	1.476 .152

a. Dependent Variable: Score

TABLE 43: Linear regression results for BAT score – Stressors (startup)

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	1.646	.236		6.964 <.001
	High workload	.512	.237	.420	2.162 .042
	Competition within the firm	.019	.335	.012	.057 .955
	Lack of positive feedback and recognition	.252	.222	.206	1.134 .269
	Lack of autonomy over work / Micromanagement	.008	.265	.006	.029 .977
	Conflict with team members or leadership	.168	.327	.102	.512 .614
	Conflict between individual and organizational values	.418	.229	.343	1.828 .081
	Lack of trust, openness, and respect in the workplace	.017	.300	.012	.057 .955

a. Dependent Variable: Score

Assumption Checks

Normality Tests

	Statistic	p
Shapiro-Wilk	0.987	0.966
Kolmogorov-Smirnov	0.0759	0.995
Anderson-Darling	0.182	0.905

Normality Tests

Statistic	p
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Heteroskedasticity Tests

	Statistic	p
Breusch-Pagan	5.41	0.611
Goldfeld-Quandt	1.02	0.489
Harrison-McCabe	0.414	0.227

TABLE 44: Linear regression results for BAT score – Prevention Measures (consulting)

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	2.332	.148		15.732	<.001
	Nothing	.120	.197	.095	.612	.543
	Workload Adaptation	.034	.121	.035	.280	.780
	Medical and Mental Health Support	-.100	.136	-.095	-.734	.465
	Training and Workshops	-.076	.140	-.079	-.543	.589
	Improvement in Workplace Environment	-.105	.125	-.108	-.843	.402

a. Dependent Variable: Score

TABLE 45: Linear regression results for BAT score – Prevention Measures (investment banking)

Coefficients ^a						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	.2346	.415		5.649	<.001
	Nothing	.370	.464	.264	.797	.433
	Workload Adaptation	-.158	.385	-.090	-.410	.685
	Medical and Mental Health Support	-.154	.420	-.082	-.368	.716
	Training and Workshops	.216	.368	.154	.588	.562
	Improvement in Workplace Environment	.035	.380	.025	.091	.928

a. Dependent Variable: Score

TABLE 46: Linear regression results for BAT score – Prevention Measures (startup)

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	1.998	.372		<.001
	Nothing	.215	.424	.176	.617
	Workload Adaptation	.234	.343	.209	.503
	Medical and Mental Health Support	-.089	.374	-.054	.814
	Training and Workshops	.091	.357	.055	.801
	Improvement in Workplace Environment	.145	.280	.123	.608

a. Dependent Variable: Score

Assumption Checks

Normality Tests

	Statistic	p
Shapiro-Wilk	0.971	0.578
Kolmogorov-Smirnov	0.0984	0.934
Anderson-Darling	0.225	0.804

Heteroskedasticity Tests

	Statistic	p
Breusch-Pagan	4.08	0.538
Goldfeld-Quandt	1.23	0.383
Harrison-McCabe	0.453	0.350

TABLE 47: One-Way Anova – Overall BAT score between industries

ANOVA					
BATIND					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1.871	2	.936	3.038	.051
Within Groups	41.571	135	.308		
Total	43.442	137			

TABLE 48: One-Way Anova – Exhaustion score between industries

ANOVA					
EX	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.358	2	2.679	4.397	.014
Within Groups	82.252	135	.609		
Total	87.610	137			

TABLE 49: One-Way Anova – Mental Distance score between industries

ANOVA					
MD	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	3.610	2	1.805	3.356	.038
Within Groups	72.612	135	.538		
Total	76.222	137			